2018

Product Guide

European
Community

North America
60Hz

South America
60Hz
International
50Hz

AERMEC

Product Guide 2018
NA 60Hz

The company

Giordano Riello, founder and chairman of Aermec, assisted by his son Alessandro and daughter Raffaella, has solidly associated the Company name with precise values:

Respect for the environment by using new eco-friendly refrigerants as well as innovative installations using water as the carrier fluid.

Noise pollution control with low-noise emission products, which undergo scrupulous testing before being put on the market.

Energy saving, the great challenge of the Third Millennium, with the development of combined heating and air conditioning systems where appliances are used only as and when necessary.

Health care special filters trap the smallest particles in suspension and the Plasmacluster system cleans the air of dust mites and moulds, making for a cleaner, healthier environment and with the new germicidal lamps eliminating all virus and batteries.

Hystory

1961 Giordano Riello sets up Riello Condizionatori, initially producing for contractors only. The story begins.

1963 The Aermec brand is born and marks all future company products designed and manufactured on site. The brand name gains a stronghold as a major product name in Italy and throughout Europe.

1970 Aermec can already supply fresh and warm air. Aermec presents the first dual section conditioner: the first "split-system". Fancoil production starts.

1973 Aermec receives European Award Gold Mercury.

1980 The Eighties sees the development of water chillers and air handling units.

1990 The Nineties mark the definitive consolidation of the company on the market. The Aermec brand is associated with advanced technology and high quality design.

1998 The name makes the company. From 1 January Aermec becomes the company name as well as product brand.

2000 The company consolidated its leadership in the production of fancoils, and laid the technological and production basis for strong growth in the field of high powered air-conditioning systems.

2002 Design and technology: Aermec launched Omnia a new generation of fancoils, designed for domestic applications. OMNIA is the result of co operation with a worldwide prestigious designer.

2004 The international market ask for number and Aermec answer. Giordano Riello make the producing system more technogical. High producing, quality and assistance: the success of Aermec is going to continue.

2006 Aermec consolidated its presence in world markets with system appliances. A series of models to meet all design engineering requirements.

2008 Aermec responds with more and more efficient units to the world challenge of energy saving with a special attention for our environment.

2010 Aermec extends the use of inverter technology on its fancoils and chillers.
The perfect integration of the new inverter technology with the most sophisticated control systems is best expressed in the VMF (Variable Multi Flow) Hydronic System - anew way to interpret comfort in the home and elsewhere.

2011 Aermec turns 50. The company has developed and enlarged, always willing to understand and anticipate the needs of the market with innovative and quality products.
Quality in innovation, in products, in pre-sales and after-sales services.
Promotion of the philosophy of "integrated design" between designer and architect.
Past success represents the commitment to the future.

2015 The news Europe's largest test facility for air conditioning applications was inaugurated.

2017 Aermec receives Innovation Award from the US Organizations ASHRAE, AHRI and AHR. Aermec receives "Prime Company" certificate for the economic strength and commercial reliability from the international rating company Dun & Bradstreet.

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FAN COILS

Aermec and fancoils: complementary names where the company identifies and product and vice versa In this area of climate control, Aermec is real leader: a major company in Italy and one of the top in Europe. A leading position gained through long-standing experience that has gained ground year after year. Special attention to detail, quality materials state-of-the-art technology ensure optimal performance with virtually imperceptible noise levels, especially at low speed; attention paid to dimensions and overall size, comparable to those of standard radiators, to enable installation in all residential and commercial environments; exclusive design, anticipating trends and in harmony with interior design requirements; new electronic control panel to enable automatic operation and achieve the most user-friendly climatisers to date. Aermec fancoils boast all these features and more.

FCX US

housing: RAL 9002
head and feet: RAL 7044

Fan coils
Vertical and horizontal
Floor, wall and ceiling installation
Cooling capacity from 2.218 to 26.001 BTU/h
Heating capacity from 3.378 to 58.075 BTU/h

60Hz | Intertek | VMF

FCX_US

- **UNIVERSAL FLOOR OR WALL CEILING MOUNTING**
- **EXTREMELY SILENT OPERATION**
- **GRILLE WITH FIXED FINS**

FEATURES

The units of the FCX series are fan coils which are suitable for air conditioning. They come with multi-speed motors and are available in various set-ups depending on the installation position, with the possibility of being ducted as well. They have ABS fans with an impeller equipped with inspectionable airfoil and scroll fins. This feature gives the machine a net reduction in the noise emission level, as well as a reduction in the motor's electrical consumption compared to traditional fans with a metal structure. The unit can be equipped with a single/double heat exchange coil (2/4 pipe system), with 3/4 rows depending on the model. The units can also be equipped with multiple accessories and can be integrated into the centralised VMF - Aermec hydronic management system.

- Versions standar coil "3-row coil" (FCX 17, 22, 32, 42, 50, 62, 82 and 102).
- Versions increased coil "4-row coil" (FCX 24, 34, 44, 54, 64 and 84).
- 3-speed ventilating unit.
- Full compliance with the accident prevention standards.
- Rounded line.
- Automatic fan coil switch-off with closure of the air distribution grille.
- Broad range of controls.
- Metallic protective cabinet with rustproofing polyester paint.
- Quiet operation.
- Low loss of charge in the heat exchange batteries.
- Electric motors with permanently inserted condensers.
- Ease of installation and maintenance.
- Air filter easy to remove and clean.
- Extractable shrouds for easy, effective cleaning.
- Water connections can be reversed during installation phase.

UNIT CONFIGURATOR

NAME	
	FCX
TYPE OF INSTALLATION	
US	Universal and floor installation
SIZE	
	17 - 22 - 24 - 32 - 34 - 36 - 42 - 44 - 50 - 54 -56 - 62 - 64 - 82 - 84 - 120
POWER SUPPLY	
120	120V/60Hz
277	277V/60Hz

E	Indicates the presence of an evaporative cooler instead of water heat exchanger
R	Indicates the presence of an additionally electric heating element for power supply 277V or an indipendently supplied 240/208V heating element for power supply 120V.

TECHNICAL DATA - 2 PIPE SYSTEMS

FCX_US - 2 PIPE SYSTEMS		17			22			24			32			34			36			42			44		
Fan speed		**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**
Hating Performance																									
Heating capacity (70°C/158°F)	(1) BTU/h	7.848	6.927	5.767	10.100	8.633	6.517	13.341	10.578	7.165	18.255	13.887	10.816	20.336	16.378	12.727	21.872	16.992	14.297	22.588	18.835	13.853	29.344	23.646	17.743
Water flow rate	(1) gpm	0,88	0,78	0,65	1.14	0.98	0.74	1.51	1.20	0.81	2.07	1.57	1.22	2.30	1.85	1.44	2,48	1,92	1,62	2.56	2.13	1.57	3.32	2.68	2.01
Pressure drops	(1) psi	0,44	0,29	0,15	0.87	0.58	0.44	0.58	0.44	0.15	2.90	1.74	1.16	1.60	1.02	0.73	3,34	2,18	1,60	2.18	1.60	0.87	3.19	2.18	1.31
Heating capacity (45°C/113°F)	(2) BTU/h	3.890	3.446	2.866	5.016	4.299	3.242	6.654	5.255	3.549	9.076	6.893	5.357	10.134	8.155	6.312	10.885	8.462	7.097	11.226	9.383	6.893	14.604	11.772	8.837
Water flow rate	(2) gpm	0,87	0,77	0,64	1.13	0.96	0.73	1.49	1.18	0.80	2.03	1.55	1.20	2.27	1.82	1.42	2,44	1,89	1,59	2.51	2.10	1.55	3.27	2.63	1.98
Pressure drops	(2) psi	0,29	0,29	0,15	0.73	0.58	0.29	0.58	0.44	0.15	2.76	1.74	1.16	1.45	1.02	0.58	3,34	2,03	1,60	2.03	1.45	0.87	3.05	2.03	1.31
Cooling Performance																									
Total cooling capacity	(3) BTU/h	3.412	2.866	2.218	5.118	4.163	2.866	5.903	4.675	3.446	8.189	6.278	5.289	9.554	7.780	6.005	9.554	7.336	6.176	11.601	9.486	7.882	15.184	12.250	9.179
Sensible cooling capacity	(3) BTU/h	2.832	2.354	1.740	4.231	3.412	2.286	4.709	3.719	2.593	6.483	5.357	3.787	7.268	5.869	4.265	7.507	6.210	4.368	9.418	7.200	5.562	11.260	9.008	6.688
Water flow rate	(3) gpm	0,76	0,63	0,49	1.14	0.92	0.63	1.31	1.04	0.77	1.82	1.39	1.18	2.12	1.73	1.33	2,12	1,63	1,37	2.58	2.10	1.75	3.37	2.72	2.04
Pressure drops	(3) psi	0,44	0,29	0,15	0.87	0.73	0.44	0.44	0.29	0.15	4.06	2.47	1.89	2.03	1.45	0.87	4,06	2,47	1,89	2.03	1.45	1.02	5.80	3.92	2.32
Fans																									
Centrifugal fans	n°	1			1			1			2			2			2			2			2		
Air flow rate	cfm	118	94	65	171	129	82	171	129	82	265	206	153	265	206	153	265	206	153	353	271	194	353	271	194
Sound level																									
Sound power	dB(A)	45	38	31	50	43	31	50	43	31	48	41	34	48	41	34	48	41	34	51	44	39	51	44	39
Sound pressure	(4) dB(A)	37	30	23	42	35	23	42	35	23	40	33	26	40	33	26	40	33	26	43	36	31	43	36	31
Hydraulic connections																									
Standard coil	Ø	1/2"			1/2"			-			1/2"			-			3/4"			3/4"			-		
Increased coil	Ø	-			-			3/4"			-			3/4"			-			-			3/4"		
Electrical data 120V~60Hz																									
FLA	A	-			-			-			-			-			-			-			-		
Electrical data 220V~60Hz																									
FLA	A	0.13			0.20			0.20			0.26			0.26			0.26			0.35			0.35		

FCX_US - 2 PIPE SYSTEMS		50			54			56			62			64			82			84			102		
Fan speed		**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**
Hating Performance																									
Heating capacity (70°C/158°F)	(1) BTU/h	27.945	25.693	17.129	34.463	29.890	21.292	32.927	28.764	20.678	44.085	37.329	28.423	48.794	39.240	29.003	51.660	45.552	36.749	58.348	49.203	38.216	58.075	52.001	42.856
Water flow rate	(1) gpm	3,17	2,91	1,94	3,90	3,38	2,41	3,72	3,26	2,34	4,99	4,23	3,21	5,52	4,44	3,28	5,85	5,16	4,16	6,60	5,57	4,32	6,57	5,89	4,85
Pressure drops	(1) psi	2,18	1,89	0,87	3,34	2,61	1,45	6,09	4,93	2,61	2,18	1,60	1,02	3,34	2,18	1,31	3,05	2,32	1,60	4,50	3,34	2,18	6,24	5,08	3,63
Heating capacity (45°C/113°F)	(2) BTU/h	13.922	12.796	8.530	17.129	14.877	10.578	16.378	14.331	10.271	21.940	18.562	14.126	24.260	19.517	14.433	25.693	22.657	18.289	29.037	24.465	19.006	28.901	25.864	21.326
Water flow rate	(2) gpm	3,11	2,86	1,91	3,84	3,33	2,37	3,67	3,21	2,30	4,91	4,16	3,17	5,43	4,37	3,23	5,75	5,07	4,09	6,50	5,48	4,26	6,47	5,79	4,77
Pressure drops	(2) psi	2,03	1,74	0,87	3,19	2,47	1,31	5,80	4,79	2,47	2,18	1,60	1,02	3,19	2,18	1,31	2,90	2,32	1,60	4,35	3,19	2,03	5,95	4,93	3,48
Cooling Performance																									
Total cooling capacity	(3) BTU/h	14.297	11.977	11.977	16.958	14.740	10.578	15.696	13.137	9.418	16.583	14.911	10.987	21.667	17.777	13.376	23.578	17.061	14.638	29.344	24.977	19.688	26.001	23.476	19.415
Sensible cooling capacity	(3) BTU/h	10.236	8.667	6.108	12.079	10.441	7.404	11.942	10.475	7.234	13.580	11.260	8.326	17.163	13.990	10.441	19.381	12.898	10.134	19.722	16.617	9.554	18.869	18.255	15.082
Water flow rate	(3) gpm	3,17	2,66	1,90	3,76	3,27	2,35	3,48	2,91	2,09	3,68	3,31	2,44	4,81	3,94	2,97	5,24	3,79	3,25	6,51	5,54	4,37	5,77	5,21	4,31
Pressure drops	(3) psi	2,76	2,03	1,16	3,77	3,05	1,74	5,51	4,06	2,18	2,47	2,03	1,16	1,89	1,31	0,87	3,19	1,74	1,31	4,35	3,19	2,18	5,37	4,50	3,19
Fans																									
Centrifugal fans	n°	2			2			2			3			3			3			3			3		
Air flow rate	cfm	424	353	235	424	353	235	424	353	235	541	424	306	541	424	306	671	547	412	671	547	412	671	547	412
Sound level																									
Sound power	dB(A)	56	51	42	56	51	42	56	51	42	57	51	42	57	51	42	62	57	51	62	57	51	66	61	56
Sound pressure	(4) dB(A)	48	43	34	48	43	34	48	43	34	49	43	34	49	43	34	54	49	43	54	49	43	58	53	48
Hydraulic connections																									
Standard coil	Ø	3/4"			-			3/4"			3/4"			-			3/4"			-			3/4"		
Increased coil	Ø	-			3/4"			-			-			3/4"			-			3/4"			-		
Electrical data 120V~60Hz																									
FLA	A	-			-			-			-			-			-			-			-		
Electrical data 220V~60Hz																									
FLA	A	0.45			0.45			0.45			0.45			0.45			0.55			0.55			0.85		

Performance of versions with upgraded motor refers to the following conditions:

(1) Room air 68°F b.s.; Water (in/out) 158°F/140°F.

(2) Room air 68°F b.s.; Water (in/out) 113°F/104°F.

(3) Room air 80.6°F b.s./66.2°F b.u.; Water (in/out) 44.6°F/53.6°F.

(4) Sound pressure level (weighted A) measured with open port in a 3 and reverberation time of 0.5 seconds room with 3002 ft.

TECHNICAL DATA - 4 PIPE SYSTEMS

FCX_US - 4 PIPE SYSTEMS			17			22			32			36			42		
Fan speed			**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**
Hating Performance																	
Heating capacity (70°C/158°F)	(1)	BTU/h	4.777	4.095	3.378	6.039	5.152	3.856	9.725	8.360	6.927	9.725	8.360	6.927	11.806	11.635	9.076
Water flow rate	(1)	gpm	0,54	0,46	0,38	0.68	0.58	0.44	1.10	0.95	0.78	1,10	0,95	0,78	1.33	1.32	1.03
Pressure drops	(1)	psi	0,44	0,29	0,29	0.87	0.73	0.44	2.32	1.74	1.16	2,32	1,74	1,16	3.05	2.90	2.03
Cooling Performance																	
Total cooling capacity	(3)	BTU/h	3.412	2.866	2.218	5.118	4.163	2.866	8.189	6.278	5.289	9.554	7.336	6.176	11.601	9.486	7.882
Sensible cooling capacity	(3)	BTU/h	2.832	2.354	1.740	4.231	3.412	2.286	6.483	5.357	3.787	7.507	6.210	4.368	9.418	7.200	5.562
Water flow rate	(3)	gpm	0,76	0,63	0,49	1.14	0.92	0.63	1.82	1.39	1.18	2,12	1,63	1,37	2.58	2.10	1.75
Pressure drops	(3)	psi	0,44	0,29	0,15	0.87	0.73	0.44	4.06	2.47	1.89	4,06	2,47	1,89	2.03	1.45	1.02
Fans																	
Centrifugal fans		n°		1			1			2			2			2	
Air flow rate		cfm	200	160	110	171	129	82	265	206	153	450	350	260	353	271	194
Sound level																	
Sound power		dB(A)	45	38	31	50	43	31	48	41	34	48	41	34	51	44	39
Sound pressure	(4)	dB(A)	37	30	23	42	35	23	40	33	26	40	33	26	43	36	31
Hydraulic connections																	
Standard coil		Ø		1/2"			1/2"			1/2"			3/4"			3/4"	
Additional heat exchanger		Ø		1/2"			1/2"			1/2"			1/2"			1/2"	
Electrical data 120V~60Hz																	
FLA		A		-			-			-			-			-	
Electrical data 220V~60Hz																	
FLA		A		0.13			0.20			0.26			0.26			0.35	

FCX_US - 4 PIPE SYSTEMS			50			56			62			82			102		
Fan speed			**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**
Hating Performance																	
Heating capacity (70°C/158°F)	(1)	BTU/h	14.945	13.444	10.987	14.945	13.444	10.987	18.733	16.037	13.205	21.872	21.496	18.084	23.237	21.258	18.528
Water flow rate	(1)	gpm	1.69	1.52	1.24	1,69	1,52	1,24	2.12	1.81	1.49	2.47	2.43	2.05	2,63	2,41	2,10
Pressure drops	(1)	psi	5.08	4.35	3.05	5,08	4,35	3,05	2.32	1.74	1.45	2.18	2.03	1.60	2,76	2,32	1,89
Cooling Performance																	
Total cooling capacity	(3)	BTU/h	14.297	11.977	11.977	15.696	13.137	9.418	16.583	14.911	10.987	23.578	17.061	14.638	26.001	23.476	19.415
Sensible cooling capacity	(3)	BTU/h	10.236	8.667	6.108	11.942	10.475	7.234	13.580	11.260	8.326	19.381	12.898	10.134	18.869	18.255	15.082
Water flow rate	(3)	gpm	3.17	2.66	1.90	3,48	2,91	2,09	3.68	3.31	2.44	5.24	3.79	3.25	5,77	5,21	4,31
Pressure drops	(3)	psi	2.76	2.03	1.16	5,51	4,06	2,18	2.47	2.03	1.16	3.19	1.74	1.31	5,37	4,50	3,19
Fans																	
Centrifugal fans		n°		2			2			3			3			3	
Air flow rate		cfm	424	353	235	720	600	400	541	424	306	671	547	412	1.140	930	700
Sound level																	
Sound power		dB(A)	56	51	42	56	51	42	57	51	42	62	57	51	66	61	56
Sound pressure	(4)	dB(A)	48	43	34	48	43	34	49	43	34	54	49	43	58	53	48
Hydraulic connections																	
Standard coil		Ø		3/4"			3/4"			3/4"			3/4"			3/4"	
Additional heat exchanger		Ø		1/2"			1/2"			1/2"			1/2"			1/2"	
Electrical data 120V~60Hz																	
FLA		A		-			-			-			-			-	
Electrical data 220V~60Hz																	
FLA		A		0.45			0.45			0.45			0.55			0.85	

Performance of versions with upgraded motor refers to the following conditions:

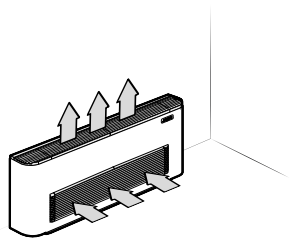
(1) Room air 68°F b.s.; Water (in/out) 158°F/140°F.

(3) Room air 80.6°F b.s./66.2°F b.u.; Water (in/out) 44.6°F/53.6°F.

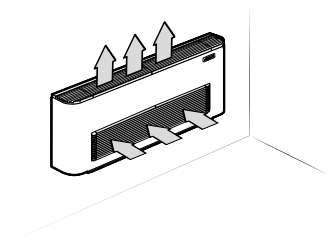
(4) Sound pressure level (weighted A) measured with open port in a 3 and reverberation time of 0.5 seconds room with 3002 ft.

CONFIGURATION AVAILABLE

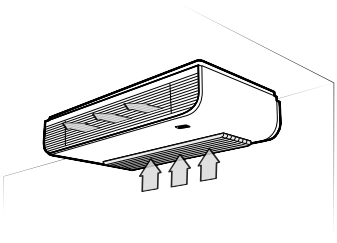
FLOOR INSTALLATION



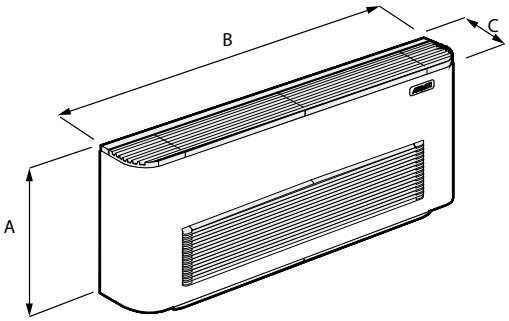
WALL INSTALLATION

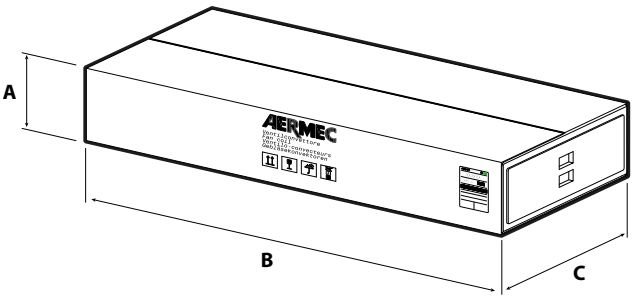


CEILING INSTALLATION



DIMENSIONS AND WEIGHT





FCX US DIMENSIONS AND WEIGHT			22	24	32	34	42	44	50	54	62	64	82	84
Height	A	in	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	23.2	23.2	23.2	23.2
Long	B	in	29.5	29.5	38.6	38.6	47.2	47.2	47.2	47.2	52.0	52.0	52.0	52.0
Deep	C	in	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7
Weight	-	lbs	33.1	32.0	44.1	44.1	52.9	52.9	52.9	52.9	75.0	80.5	75.0	80.5

FCX US PACKAGING DIMENSIONS			22	24	32	34	42	44	50	54	62	64	82	84
Height	A	in	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.6	10.6	10.6	10.6
Long	B	in	32.3	32.3	41.4	41.4	50.0	50.0	50.0	50.0	55.8	55.8	55.8	55.8
Deep	C	in	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	25.6	25.6	25.6	25.6

Aermec S.p.A.
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FCXI US

housing: RAL 9002
head and feet: RAL 7044

Fan coils with Inverter Brushless motor
Vertical and horizontal
Floor, wall and ceiling installation
Cooling capacity from 2.866 to 29.344 BTU/h
Heating capacity from 3.242 to 58.348 BTU/h

60Hz | Intertek | INVERTER | VMF

FCXI_US FCXI_USF

- **ELECTRIC SAVING EQUAL TO 50% COMPARED TO 3-SPEED MOTOR**
- **REDUCED TEMPERATURE AND HUMIDITY VARIATIONS**
- **VERY QUIET OPERATION**

FEATURES

The units of the FCXI_US series are fan coils which are suitable for air conditioning. They come with brushless inverter motors and are available in various set-ups depending on the installation position, with the possibility of being ducted as well. They have ABS fans with an impeller equipped with inspectionable airfoil and scroll fins. This feature, combined with the presence of the inverter motor, gives the machine a net reduction in the noise emission level, as well as a reduction in the motor's electrical consumption compared to traditional fans with a metal structure. The unit can be equipped with a single/double heat exchange coil (2/4 pipe system), with 3/4 rows depending on the model. The units can also be equipped with multiple accessories and can be integrated into the centralised VMF - Aermec hydronic management system.

- Fan unit with Brushless motor (continuous 0-100% speed variation).
- Full compliance with the accident prevention standards.
- Rounded line.
- Metallic protective cabinet with rustproofing polyester paint.
- Adjustable air distribution grille, for USF versions.
- Fan coil automatic power-off function with closure of the air delivery grille, for U versions.
- Quiet operation.
- Low loss of charge in the heat exchange batteries.
- Ease of installation and maintenance.
- Air filter easy to remove and clean.
- Extractable shrouds for easy, effective cleaning.
- Water connections can be reversed during installation phase.

ACCESSORIES

AMP
kit for wall mounting installation of versions FCX US.

BC
Auxiliary condensate drip tray. Use the BC 5-6 tray accessory if horizontal, or BC 4 if vertical.

BV
Single row hot water coil. Not available for 4-row versions.

VCF
The kit contains a motorized 3-way valve with insulating shell, plus coupling and pipes in insulated cooper. For 3, 4-row and 1-row coils(BV). Versions with 24V power supply.

VCFD
The kit contains a powered 2-way valve, cooper couplings and pipes. For 3, 4-row and 1-row coils (BV). Versions with 24V power supply.

VCF_X4
Valve kit for left hand connection fan coil units.

VCF_X4R
Valve kit for right hand connection fan coil units.

The valve kits are designed for fan coil units with single coil, installed in a 4 pipe system with the "Cooling" and "Heating" circuits totally separated. The kit consists of 2 valves of 3-way 4 port connection complete with electro-thermal actuators, insulating shells for the valves and associated hydraulic piping. Available in 24 V.

CONTROL PANELS
Available in 24V and 120V power supply *(contact Aermec office for compatibility).*

TECHNICAL DATA

FCXI_US/USF - 2 PIPE SYSTEMS			20			24			30			34			36			40		
Fan speed			**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**
Hating Performance																				
Heating capacity (70°C/158°F)	(1)	BTU/h	10.100	8.633	6.517	13.341	10.578	7.165	18.255	13.887	10.816	20.336	16.378	12.727	21.872	16.992	14.297	22.588	18.835	13.853
Water flow rate	(1)	gpm	1.14	0.98	0.74	1.51	1.20	0.81	2.07	1.57	1.22	2.30	1.85	1.44	2.48	1.92	1.62	2.56	2.13	1.57
Pressure drops	(1)	psi	0.87	0.58	0.44	0.58	0.44	0.15	2.90	1.74	1.16	1.60	1.02	0.73	3.34	2.18	1.60	2.18	1.60	0.87
Heating capacity (45°C/113°F)	(2)	BTU/h	5.016	4.299	3.242	6.654	5.255	3.549	9.076	6.893	5.357	10.134	8.155	6.312	10.885	8.462	7.097	11.226	9.383	6.893
Water flow rate	(2)	gpm	1.13	0.96	0.73	1.49	1.18	0.80	2.03	1.55	1.20	2.27	1.82	1.42	2.44	1.89	1.59	2.51	2.10	1.55
Pressure drops	(2)	psi	0.73	0.58	0.29	0.58	0.44	0.15	2.76	1.74	1.16	1.45	1.02	0.58	3.34	2.03	1.60	2.03	1.45	0.87
Cooling Performance																				
Total cooling capacity	(3)	BTU/h	5.118	4.163	2.866	5.903	4.675	3.446	8.189	6.278	5.289	9.554	7.780	6.005	9.554	7.336	6.176	11.601	9.486	7.882
Sensible cooling capacity	(3)	BTU/h	4.231	3.412	2.286	4.709	3.719	2.593	6.483	5.357	3.787	7.268	5.869	4.265	7.507	6.210	4.368	9.418	7.200	5.562
Water flow rate	(3)	gpm	1.14	0.92	0.63	1.31	1.04	0.77	1.82	1.39	1.18	2.12	1.73	1.33	2.12	1.63	1.37	2.58	2.10	1.75
Pressure drops	(3)	psi	0.87	0.73	0.44	0.44	0.29	0.15	4.06	2.47	1.89	2.03	1.45	0.87	4.06	2.47	1.89	2.03	1.45	1.02
Fans																				
Centrifugal fans		n.		1			1			2			2			2			2	
Air flow rate		cfm	171	129	82	171	129	82	265	206	153	265	206	153	265	206	153	353	271	194
Sound level																				
Sound power		dB(A)	50	43	31	50	43	31	48	41	34	48	41	34	48	41	34	51	44	39
Sound pressure	(4)	dB(A)	42	35	23	42	35	23	40	33	26	40	33	26	40	33	26	43	36	31
Hydraulic connections																				
Standard coil		Ø		1/2"			-			1/2"			-			3/4"			3/4"	
Increased coil		Ø		-			3/4"			-			3/4"			-			-	
Electrical data 220V~60Hz																				
FLA		A		0.70			0.70			1.00			1.00			1.00			1.00	
Electrical data 120V~60Hz																				
FLA		A																		

FCXI_US/USF - 2 PIPE SYSTEMS			44			50			54			56			80			84		
Fan speed			**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**
Hating Performance																				
Heating capacity (70°C/158°F)	(1)	BTU/h	29.344	23.646	17.743	27.945	25.693	17.129	34.463	29.890	21.292	32.927	28.764	20.678	51.660	45.552	36.749	58.348	49.203	38.216
Water flow rate	(1)	gpm	3.32	2.68	2.01	3.17	2.91	1.94	3.90	3.38	2.41	3.72	3.26	2.34	5.85	5.16	4.16	6.60	5.57	4.32
Pressure drops	(1)	psi	3.19	2.18	1.31	2.18	1.89	0.87	3.34	2.61	1.45	6.09	4.93	2.61	3.05	2.32	1.60	4.50	3.34	2.18
Heating capacity (45°C/113°F)	(2)	BTU/h	14.604	11.772	8.837	13.922	12.796	8.530	17.129	14.877	10.578	16.378	14.331	10.271	25.693	22.657	18.289	29.037	24.465	19.006
Water flow rate	(2)	gpm	3.27	2.63	1.98	3.11	2.86	1.91	3.84	3.33	2.37	3.67	3.21	2.30	5.75	5.07	4.09	6.50	5.48	4.26
Pressure drops	(2)	psi	3.05	2.03	1.31	2.03	1.74	0.87	3.19	2.47	1.31	5.80	4.79	2.47	2.90	2.32	1.60	4.35	3.19	2.03
Cooling Performance																				
Total cooling capacity	(3)	BTU/h	15.184	12.250	9.179	14.297	11.977	11.977	16.958	14.740	10.578	15.696	13.137	9.418	23.578	17.061	14.638	29.344	24.977	19.688
Sensible cooling capacity	(3)	BTU/h	11.260	9.008	6.688	10.236	8.667	6.108	12.079	10.441	7.404	11.942	10.475	7.234	19.381	12.898	10.134	19.722	16.617	9.554
Water flow rate	(3)	gpm	3.37	2.72	2.04	3.17	2.66	1.90	3.76	3.27	2.35	3.48	2.91	2.09	5.24	3.79	3.25	6.51	5.54	4.37
Pressure drops	(3)	psi	5.80	3.92	2.32	2.76	2.03	1.16	3.77	3.05	1.74	5.51	4.06	2.18	3.19	1.74	1.31	4.35	3.19	2.18
Fans																				
Centrifugal fans		n.		2			2			2			2			3			3	
Air flow rate		cfm	353	271	194	424	353	235	424	353	235	424	353	235	671	547	412	671	547	412
Sound level																				
Sound power		dB(A)	51	44	39	56	51	42	56	51	42	56	51	42	62	57	51	62	57	51
Sound pressure	(4)	dB(A)	43	36	31	48	43	34	48	43	34	48	43	34	54	49	43	54	49	43
Hydraulic connections																				
Standard coil		Ø		-			3/4"			-			3/4"			3/4"			-	
Increased coil		Ø		3/4"			-			3/4"			-			-			3/4"	
Electrical data 220V~60Hz																				
FLA		A		1.00			1.00			1.00			1.00			1.70			1.70	
Electrical data 120V~60Hz																				
FLA		A																		

Performance of versions with upgraded motor refers to the following conditions:

(1) Room air 68°F b.s.; Water (in/out) 158°F/140°F.

(2) Room air 68°F b.s.; Water (in/out) 113°F/104°F.

(3) Room air 80.6°F b.s./66.2°F b.u.; Water (in/out) 44.6°F/53.6°F.

(4) Sound pressure level (weighted A) measured with open port in a 3 and reverberation time of 0.5 seconds room with 3002 ft.

TECHNICAL DATA

FCXI_US/USF - 4 PIPE SYSTEMS			20			30			36			40		
Fan speed			**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**
Hating Performance														
Heating capacity (70°C/158°F)	(1)	BTU/h	6.039	5.152	3.856	9.725	8.360	6.927	9.725	8.360	6.927	11.806	11.635	9.076
Water flow rate	(1)	gpm	0.68	0.58	0.44	1.10	0.95	0.78	1.10	0.95	0.78	1.33	1.32	1.03
Pressure drops	(1)	psi	0.87	0.73	0.44	2.32	1.74	1.16	2.32	1.74	1.16	3.05	2.90	2.03
Cooling Performance														
Total cooling capacity	(3)	BTU/h	5.118	4.163	2.866	8.189	6.278	5.289	9.554	7.336	6.176	11.601	9.486	7.882
Sensible cooling capacity	(3)	BTU/h	4.231	3.412	2.286	6.483	5.357	3.787	7.507	6.210	4.368	9.418	7.200	5.562
Water flow rate	(3)	gpm	1.14	0.92	0.63	1.82	1.39	1.18	2.12	1.63	1.37	2.58	2.10	1.75
Pressure drops	(3)	psi	0.87	0.73	0.44	4.06	2.47	1.89	4.06	2.47	1.89	2.03	1.45	1.02
Fans														
Centrifugal fans		n.		1			2			2			2	
Air flow rate		cfm	171	129	82	265	206	153	265	206	153	353	271	194
Sound level														
Sound power		dB(A)	50	43	31	48	41	34	48	41	34	51	44	39
Sound pressure	(4)	dB(A)	42	35	23	40	33	26	40	33	26	43	36	31
Hydraulic connections														
Standard coil		Ø		1/2"			1/2"			3/4"			3/4"	
Additional heat exchanger		Ø		1/2"			1/2"			1/2"			1/2"	
Electrical data 220V~60Hz														
FLA		A		0.70			1.00			1.00			1.00	
Electrical data 120V~60Hz														
FLA		A												

FCXI_US/USF - 4 PIPE SYSTEMS			50			56			80		
Fan speed			**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**
Hating Performance											
Heating capacity (70°C/158°F)	(1)	BTU/h	14.945	13.444	10.987	14.945	13.444	10.987	21.872	21.496	18.084
Water flow rate	(1)	gpm	1.69	1.52	1.24	1.69	1.52	1.24	2.47	2.43	2.05
Pressure drops	(1)	psi	5.08	4.35	3.05	5.08	4.35	3.05	2.18	2.03	1.60
Cooling Performance											
Total cooling capacity	(3)	BTU/h	14.297	11.977	11.977	15.696	13.137	9.418	23.578	17.061	14.638
Sensible cooling capacity	(3)	BTU/h	10.236	8.667	6.108	11.942	10.475	7.234	19.381	12.898	10.134
Water flow rate	(3)	gpm	3.17	2.66	1.90	3.48	2.91	2.09	5.24	3.79	3.25
Pressure drops	(3)	psi	2.76	2.03	1.16	5.51	4.06	2.18	3.19	1.74	1.31
Fans											
Centrifugal fans		n.		2			2			3	
Air flow rate		cfm	424	353	235	424	353	235	671	547	412
Sound level											
Sound power		dB(A)	56	51	42	56	51	42	62	57	51
Sound pressure	(4)	dB(A)	48	43	34	48	43	34	54	49	43
Hydraulic connections											
Standard coil		Ø		3/4"			3/4"			3/4"	
Additional heat exchanger		Ø		1/2"			1/2"			1/2"	
Electrical data 220V~60Hz											
FLA		A		1.00			1.00			1.70	
Electrical data 120V~60Hz											
FLA		A									

Performance of versions with upgraded motor refers to the following conditions:

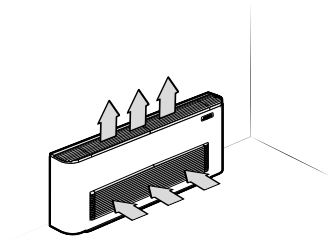
(1) Room air 68°F b.s.; Water (in/out) 158°F/140°F.

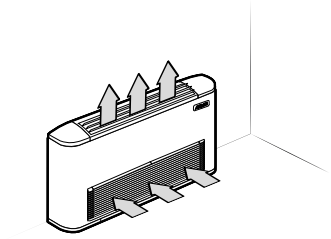
(3) Room air 80.6°F b.s./66.2°F b.u.; Water (in/out) 44.6°F/53.6°F.

(4) Sound pressure level (weighted A) measured with open port in a 3 and reverberation time of 0.5 seconds room with 3002 ft.

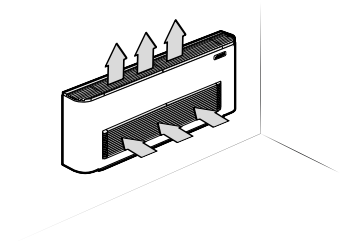
CONFIGURATION AVAILABLE

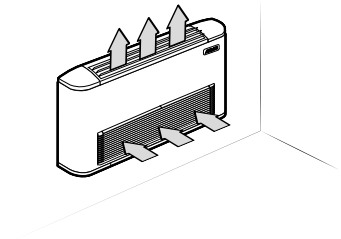
FLOOR INSTALLATION



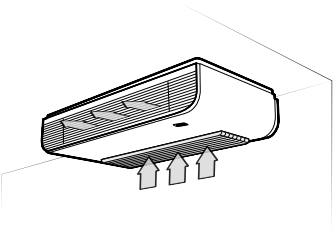


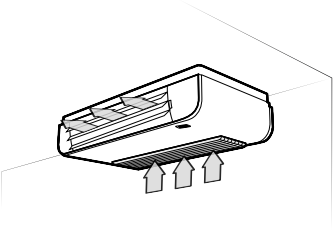
WALL INSTALLATION



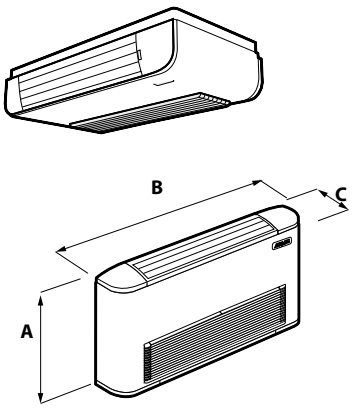


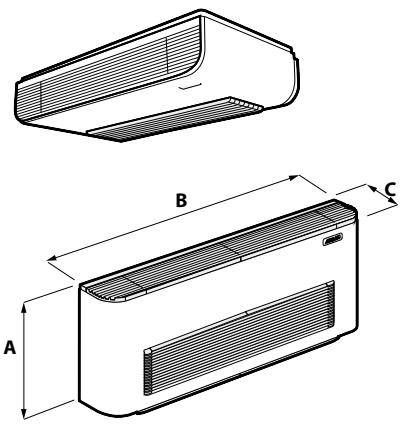
CEILING INSTALLATION

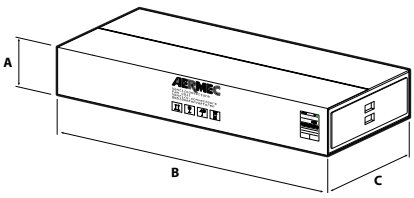




DIMENSIONS AND WEIGHT







FCXI_US/USF DIMENSIONS AND WEIGHT			20	24	30	34	36	40	44	50	54	56	80	84
Height	A	in	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	20.5	23.2	23.2
Long	B	in	29.6	29.6	38.6	38.6	38.6	47.3	47.3	47.3	47.3	47.3	52.0	52.0
Deep	C	in	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7	8.7
Weight	-	lbs	33.1	33.1	44.1	44.1	44.1	52.9	52.9	52.9	52.9	52.9	75.0	75.0

FCXI_US/USF PACKAGING DIMENSIONS			20	24	30	34	36	40	44	50	54	56	80	84
Height	A	in	10,8	10,8	10,8	10,8	10,8	10,8	10,8	10,8	10,8	10,8	10,8	10,6
Long	B	in	32,3	32,3	41,4	41,4	41,4	50,0	50,0	50,0	50,0	50,0	55,8	55,8
Deep	C	in	23,2	23,2	23,2	23,2	23,2	23,2	23,2	23,2	23,2	23,2	25,6	25,6

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FCZ P

Fan coils
concealed installation
Cooling capacity 2.200-32.400 BTU/h
Heating capacity 2.500-64.700 BTU/h

60Hz VMF

- **FULLY SILENT FUNCTIONING**
- **FULL COMFORT: REDUCED TEMPERATURE AND RELATIVE HUMIDITY OSCILLATIONS**
- **IDEAL ALSO FOR DUCTED INSTALLATION**

FEATURES

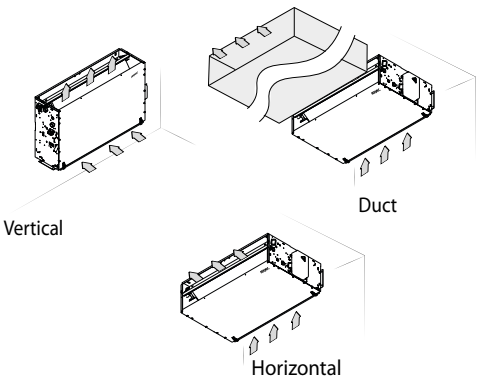
Drawing from its wide experience in the field of fan coils, Aermec presents the new series FCZ_P for duct installations.
They can be installed on any system with 2/4 pipe and it fits with any heat generator even at low temperatures, and thanks to varied versions and settings, it is easy to pick the ideal solution for any need.

Versions Without control in built,

Vertical or horizontal installation:
FCZ_P
FCZ_PO

- 3-speed ventilating unit.
- Electric motors with permanently inserted condensers
- Low loss of charge in the heat exchanger
- Easy installation and maintenance
  G2 air filter for all versions.
- Extractable shrouds for easy, effective cleaning
- Possibility to choose the hydraulic connection side through the different configurable versions, (Not reversible for secondary battery units).

VERSIONS DESCRIPTION



Versions

- **FCZ_P**
  - Concealed without cabinet
- **FCZ_PO**
  - Concealed (ideal also for ducted installation)

Vertical or horizontal installation
- For 2/4 pipe system

CHOOSING THE UNIT

By appropriately combining the variety of options available, each model can be configured in order to meet all specific system requirements.

Field	Code
1,2,3	**FCZ**
4	**Size**
	1-2-3-4-5-6-7-8-9-10
5	**Maincoil**
0	Standard
5	Oversized (1)
6	**Supplementary coil**
0	Without heat exchanger
1	Standard
2	Oversized

7,8,9	**Versions**
P	Concealed mounted without cabinet
PO	Concealed with oversized motor
	Voltage
120SA	120V - 60Hz
220SA	220V - 60Hz

(1) Oversized coil **"5"** does not allow the installation of the supplementary coil **"1 or 2"**

SIZE AVAILABLE FOR VERSION

Versions	Size available with main coil only (2 pipes)																			
FCZ	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
P	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PO	/	/	•	•	•	•	•	•	•	•	•	•	•	•	/	/	•	•	/	/

Versions	Size available with main and supplementary coil (4 pipes)																	
FCZ	101	102	201	202	301	302	401	402	501	502	601	602	701	702	801	802	901	1001
P	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PO	/	/	•	•	•	•	•	•	•	•	•	•	•	•	/	•	•	/

ACCESSORIES

PROBES AND ACCESSORY FOR CONTROL PANELS

- **SW3:** water temperature probe allowing automatic season change on electronic controllers supplied with water-side change over
- **SWA:** external probe accessory (length = 6m). The probe detects the temperature of the ambient air if connected to the connector (A) on panel FMT21; the ambient air temperature probe incorporated in the panel is automatically deactivated. Detects the temperature of the water in the system, for ventilation consent, if connected to the connector (W) of the FMT21 panel. Two SWA probes can be simultaneously connected to the panel FMT21.
- **SIT 3 - 5**: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel (selector or thermostat).
  SIT3: commands the 3 fan speeds and must be installed on each fan coil within the network; receives the commands from the selector or the SIT5 card.
  SIT5: commands the 3 fan speeds and up to 2 valves (four pipe systems); sends the thermostat's commands to the fan coil network.

VMF SYSTEM

- **VMF-E4**: Wall mounted user interface allowing control via a capacitive touch keyboard.
- **VMF-E1X**: Thermostat for serial communication.
- **VMF-SW**: Water sensor replacing that supplied with VMF-E1X thermostats for installation upstream of the valve.
- **VMF-SW1:** Additional water sensor for 4-pipe systems with E1X thermostats offering maximum control in the cooling range.

HOT WATER COIL

- **BV**: Single row hot water heat exchanger. Not available for versions with Plasmacluster.

ELECTRICAL HEATER

- **RX**: Armoured electrical coil with safety thermostat (requires a thermostat with heater management). Not available for 4-row or Plasmacluster versions

VALVE KIT (1)

- **VCZ_X4**: **Valve kits for single coil units, installed in 4 pipe systems with totally separated "Cooling" and "Heating"** circuits. The kit consists of 2 valves with 3-way 4 port connection complete with electro-thermal actuators, insulating shells for the valves and associated hydraulic piping. The VCF1X4L valve kit allows left side connection. Available with 220V~60Hz power supply.
- **VCZ or VCF**: **kit containing a motorised 3-way valve with insulating shell** plus coupling and pipes in insulated copper. Applicable for standard or oversized main coil.
- **VCZD or VCFD: Kit consisting of powered 2-way valve,** copper couplings and pipes applicable for standard or oversized main coil.
- **VJP/VJP_M: Control and balancing combination valve for 2 and 4 pipe systems to install outside the unit, supplied without fittings and hydraulic components.**
  The VJP is controlled by on-off logic with compatible control panels (accessories)
  The VJP_M is controlled by modulating logic with panels not supplied by Aermec
  The design water flow rate is crucial to refine the selection of the valve shown in the compatibility table.

ACCESSORY FOR INSTALLATION

- **AMP**: kit for the wall mounting installation.
- **BC**: Auxiliary condensate drip tray.
- **CHF**: The VentilCassaforma is a galvanised sheet steel template, for P versions, which allows you to obtain a space for housing the fan coil, directly in the wall.
- **DSC4**: Condensate drainage device for use when natural run-off is not possible.
- **PA**: Galvanised sheet steel intake plenum equipped with intake fittings for circular section ducts.
- **PA-F**: Intake plenum, which allows recovery and flow on the same side. It is suitable for all those installations outside air-conditioned rooms, in order to minimise noise and facilitate maintenance operations.
- **PM**: Galvanised sheet steel flow plenum, externally insulated, equipped with plastic flow fittings for ducts and circular sections.
- **RD**: Straight flow fitting for ducting.
- **RDA**: Straight intake fitting for ducting.
- **RP**: 90° flow fitting for ducting
- **RPA**: 90° intake fitting for ducting.

DUCTING ACCESSORIES

- **MZC:** Plenum with motor-driven dampers
- **RDA_V**: Straight intake connection with rectangular flange.
- **RDAC_V**: Straight intake connection with circular flanges.
- **RPA_V**: Intake plenum with rectangular flange.
- **RDMC_V**: Straight discharge with circular flanges. Internally insulated.
- **PA_V**: Intake plenum with circular flanges. Flanges in plastic material.
- **RPM_V**: Discharge plenum with rectangular flange. Internally insulated.
- **PM_V**: Discharge plenum with circular flanges. Internally insulated. Flanges in plastic material.
- **KFV10**: Circular flanges kit for intake/discharge plenum.

GRID

- **GA**: Intake grid with fixed louvers.
- **GAF**: Intake grid with fixed louvers with filter.
- **GM**: Flow grid with adjustable louvers.

For more details on the control panels and VMF system refer to the dedicated sheet

(1) For **120SA** versions use 24V valves only.

COMPATIBILITY OF ACCESSORIES

			Size with single Heat Exchanger																			
FCZ_P			100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
Probes and accessories for control panels																						
KTLP	P-PO		•	•	•	•	•	•	•	•	•	•	*	*	*	*	*	*	•	•	•	•
PX-PX2-PX2C6	P-PO	(1)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PXAE	P-PO		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
PXAR	P-PO		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
TPF	P-PO		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
WMT05-06-10	P-PO		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
FMT21	P-PO		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SWA	P-PO		In combination with FMT21																			
SW3	P-PO		In combination with PXAE or PXAR																			
SIT3	P-PO		In combination with FMT21 or PXAE or PXAR or PX2 or PX or PX2C6 WMT05-06-10																			
SIT5	P-PO		In combination with FMT21 or PXAE or PXAR																			
VMF System																						
VMF-E1X	P-PO		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
VMF-E4	P-PO		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
VMF-SW	P-PO		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
VMF-SW1	P-PO		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Additional coil (heating only)																						
BV117	P-PO		•																			
BV122	P-PO				•																	
BV132	P-PO						•															
BV142	P-PO								•		•											
BVZ800	P-PO												•		•		•					
BV162	P-PO																		•		•	
Electrical Heat Exchanger																						
RX17	P-PO	*	•																			
RX22	P-PO	*			•																	
RX32	P-PO	*					•															
RX42	P-PO	*							•													
RX52	P-PO	*									•											
RXZ800	P-PO	*											•		•		•					
RX62	P-PO	*																	•		•	
Water valves **																						
Valve Kit for 4 pipe systems with Main coil (220V~60Hz)																						
VCZ1X4L-R	P-PO		•	•	•	•																
VCZ2X4L-R	P-PO						•	•	•	•	•	•	•	•	•	•	•	•				
VCZ3X4L-R	P-PO																		•	•	•	•
3 way valve kit (120/220V~60Hz)																						
VCZ41/4124	P-PO	(2)	•	•	•	•																
VCZ42/4224	P-PO	(2)					•	•	•	•	•	•	•	•	•	•	•	•				
VCZ43/4324	P-PO	(2)																	•	•	•	•
2 way valve kit (120/220V~60Hz)																						
VCZD1/124	P-PO	(2)	•	•	•	•																
VCZD2/224	P-PO	(2)					•	•	•	•	•	•	•	•	•	•	•	•				
VCZD3/324	P-PO	(2)																	•	•	•	•
Combined adjustment and balancing valve independent of pressure																						
VJP060	P-PO **(220V~60Hz)**		•	•	•	•	•	•														
VJP090	P-PO **(220V~60Hz)**								•	•	•	•	•	•								
VJP150	P-PO **(220V~60Hz)**												•	•	•	•	•	•	•	•	•	•
VJP060M	P-PO **(120/220V~60Hz)**	(2)	•	•	•	•	•	•														
VJP090M	P-PO **(120/220V~60Hz)**	(2)							•	•	•	•	•	•								
VJP150M	P-PO **(120/220V~60Hz)**	(2)											•	•	•	•	•	•	•	•	•	•

PO version only available for size from 2 to 9
For more details on the control panels and VMF system refer to the dedicated sheet.
* Contact Aermec
****The water valves can be combined with the unit if it is also provided a control panel that controls**
(1) **Only for wall installation;** (PX2C6 panel PX2 in multiple 6 pz.)
(2) VCZ4124-VCZ4224-VCZ4324-VCZD124-VCZD224-VCZD324-VJP060M-VJP090M-VJP150M are 24V (valves that are not 24V are compatible only with 220V power supply)

COMPATIBILITY OF ACCESSORIES

			Size with single Heat Exchanger																			
FCZ_P			100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
Installation accessories																						
AMP20	P-PO		•	•	•	•	•	•	•	•	•	•										
AMPZ	P-PO		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DSC4	P-PO	(3)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ZX7	P-PO		•	•	•	•	•	•	•	•	•	•										
ZX8	P-PO												•	•	•	•	•	•	•	•	•	•
Auxiliary condensate drip tray																						
BC4	P-PO	(4)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•				
BC5	P-PO	(5)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•				
BC6	P-PO	(5)																	•	•	•	•
BC8	P-PO	(5)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•				
BC9	P-PO	(5)																	•	•	•	•
Ventilcassaforma																						
CHF17	P		•	•																		
CHF22	P-PO				•	•																
CHF32	P-PO						•	•														
CHF42	P-PO								•	•	•	•										
CHF62	P-PO												•	•	•	•	•	•	•	•	•	•
Grille																						
GA17	P		•	•																		
GA22	P-PO				•	•																
GA32	P-PO						•	•														
GA42	P-PO								•	•	•	•										
GA62	P-PO												•	•	•	•	•	•	•	•	•	•
GAF17	P		•	•																		
GAF22	P-PO				•	•																
GAF32	P-PO						•	•														
GAF42	P-PO								•	•	•	•										
GAF62	P-PO												•	•	•	•	•	•	•	•	•	•
GM17	P		•	•																		
GM22	P-PO				•	•																
GM32	P-PO						•	•														
GM42	P-PO								•	•	•	•										
GM62	P-PO												•	•	•	•	•	•	•	•	•	•
Accessories for installation																						
PA17	P		•	•																		
PA22	P-PO				•	•																
PA32	P-PO						•	•														
PA42	P-PO								•	•	•	•										
PA62	P												•	•	•	•	•	•	•	•	•	•
PA17F	P		•	•																		
PA22F	P-PO				•	•																
PA32F	P-PO						•	•														
PA42F	P-PO								•	•	•	•										
PA62F	P												•	•	•	•	•	•	•	•	•	•
PM17	P		•	•																		
PM22	P-PO				•	•																
PM32	P-PO						•	•														
PM42	P-PO								•	•	•	•										
PM62	P												•	•	•	•	•	•	•	•	•	•
RD17	P		•	•																		
RD22	P-PO				•	•																
RD32	P-PO						•	•														
RD42	P-PO								•	•	•	•										
RD62	P												•	•	•	•	•	•	•	•	•	•

(3) DSC4 It's not available with AMPZ. Available only for **220SA.**
(4) For vertical installation. BC4 is not available whith valve VCZ-VCZD / VCF-VCFD
(5) For horizontal installation

COMPATIBILITY OF ACCESSORIES

			Size with single Heat Exchanger																			
FCZ_P			100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
RDA17	P		•	•																		
RDA22	P-PO				•	•																
RDA32	P-PO						•	•														
RDA42	P-PO								•	•	•	•										
RDA62	P												•	•	•	•	•	•	•	•	•	•
RPA17	P		•	•																		
RPA22	P-PO				•	•																
RPA32	P-PO						•	•														
RPA42	P-PO								•	•	•	•										
RPA62	P												•	•	•	•	•	•	•	•	•	•

Plenum for duct installation																						
MZC220	PO				•	•																
MZC320	PO						•	•														
MZC530	PO								•	•	•	•										
MZC830	PO												•	•	•	•	•	•	•	•		
RDA000V	PO				•	•																
RDA100V	PO						•	•														
RDA200V	PO								•	•	•	•										
RDA300V	PO												•	•	•	•			•	•		
RPA000V	PO	(6)			•	•																
RPA100V	PO	(6)					•	•														
RPA200V	PO	(6)							•	•	•	•										
RPA300V	PO	(6)											•	•	•	•			•	•		
RDAC000V	PO				•	•																
RDAC100V	PO						•	•														
RDAC200V	PO								•	•	•	•										
RDAC300V	PO												•	•	•	•			•	•		
PA000V	PO	(6)			•	•																
PA100V	PO	(6)					•	•														
PA200V	PO	(6)							•	•	•	•										
PA300V	PO	(6)											•	•	•	•			•	•		
PM000V	PO	(6)			•	•																
PM100V	PO	(6)					•	•														
PM200V	PO	(6)							•	•	•	•										
PM300V	PO	(6)											•	•	•	•			•	•		
RPM000V	PO	(6)			•	•																
RPM100V	PO	(6)					•	•														
RPM200V	PO	(6)							•	•	•	•										
RPM300V	PO	(6)											•	•	•	•			•	•		
RDMC000V	PO				•	•																
RDMC100V	PO						•	•														
RDMC200V	PO								•	•	•	•										
RDMC300V	PO												•	•	•	•			•	•		

PO version only available for size from 2 to 9

(6) All the Plenums (RPA_V; PA_V; RPM_V; PM_V) have a circular push-outs (Ø=150mm) on both sides, which can be removed, All the can have intake/discharge either straight or downwards (straight or downwards with reference to horizontal installation).

COMPATIBILITY OF ACCESSORIES

			Sizes available for 4-pipe system (Main coil + Secondary coil)																	
FCZ_P			**101**	**102**	**201**	**202**	**301**	**302**	**401**	**402**	**501**	**502**	**601**	**602**	**701**	**702**	**801**	**802**	**901**	**1001**
Probes and accessories for control panels																				
KTLP	P-PO		•	•	•	•	•	•	•	•	•	•	*	*	*	*	*	*	•	•
PXAE	P-PO		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
TPF	P-PO		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
WMT06-10	P-PO		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
FMT21	P-PO		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
SWA	P-PO		In combination with FMT21																	
SW3	P-PO		In combination with PXAE																	
SIT3	P-PO		In combination with FMT21 or PXAE or PXAR or PX2 or PX or PX2C6 WMT05-06-10																	
SIT5	P-PO		In combination with FMT21 or PXAE or PXAR																	
VMF System																				
VMF-E1X	P-PO		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
VMF-E4	P-PO		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
VMF-SW	P-PO		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
VMF-SW1	P-PO		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Water valve**																				
3 way valve kit (120/220V~60Hz)																				
VCZ41/4124	P-PO	(2)	•	•	•	•														
VCZ42/4224	P-PO	(2)					•	•	•	•	•	•	•	•	•	•	•	•		
VCZ43/4324	P-PO	(2)																	•	•
2 way valve kit (120/220V~60Hz)																				
VCZD1/124	P-PO	(2)	•	•	•	•														
VCZD2/224	P-PO	(2)					•	•	•	•	•	•	•	•	•	•	•	•		
VCZD3/324	P-PO	(2)																	•	•
3 way valve kit for heating coil only (120/220V~60Hz)																				
VCF44/4424	P-PO	(2)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
VCF45/4524	P-PO	(2)																	•	•
2 way valve kit for heating coil only (120/220V~60Hz)																				
VCFD4/424	P-PO	(2)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Combined adjustment and balancing valve independent of pressure																				
VJP060	P-PO **(220V~60Hz)**		•	•	•	•	•	•												
VJP090	P-PO **(220V~60Hz)**								•	•	•	•	•	•						
VJP150	P-PO **(220V~60Hz)**												•	•	•	•	•	•	•	•
VJP060M	P-PO **(120/220V~60Hz)**	(2)	•	•	•	•	•	•												
VJP090M	P-PO **(120/220V~60Hz)**	(2)							•	•	•	•	•	•						
VJP150M	P-PO **(120/220V~60Hz)**	(2)											•	•	•	•	•	•	•	•
Accessories for installation																				
AMP20	P-PO		•	•	•	•	•	•	•	•	•	•								
AMPZ	P-PO		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
DSC4	P-PO	(3)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
ZX7	P-PO		•	•	•	•	•	•	•	•	•	•								
ZX8	P-PO												•	•	•	•	•	•	•	•
Auxiliary condensate drip tray																				
BC4	P	(4)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
BC5	P	(5)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
BC6	P	(5)																	•	•
BC8	P-PO	(5)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
BC9	P-PO	(5)																	•	•
Ventilcassaforma																				
CHF17	P		•	•																
CHF22	P				•	•														
CHF32	P						•	•												
CHF42	P								•	•	•	•								
CHF62	P												•	•	•	•	•	•	•	•

PO version only available for size from 2 to 9

* Contact Aermec

****The water valves can be combined with the unit if it is also provided a control panel that controls**

VJP / VJP_M The compatibility of the hot water valves with the designed air flow in a four-pipe installation is to be verified.

(2) VCZ4124-VCZ4224-VCZ4324-VCZD124-VCZD224-VCZD324-VCZ4424-VCF4524-VCFD424 are 24V (valves that are not 24V are compatible only with 220V power supply)

(3)DSC4 It's not available with AMPZ. Available only for **220SA.**

(4) For vertical installation

(5) For horizontal installation

Compatibility of accessories

		Sizes available for 4-pipe system (Main coil + Secondary coil)																	
FCZ_P		**101**	**102**	**201**	**202**	**301**	**302**	**401**	**402**	**501**	**502**	**601**	**602**	**701**	**702**	**801**	**802**	**901**	**1001**
Grille																			
GA17	P	•	•																
GA22	P-PO			•	•														
GA32	P-PO					•	•												
GA42	P-PO							•	•	•	•								
GA62	P-PO											•	•	•	•	•	•	•	•
GAF17	P	•	•																
GAF22	P-PO			•	•														
GAF32	P-PO					•	•												
GAF42	P-PO							•	•	•	•								
GAF62	P-PO											•	•	•	•	•	•	•	•
GMF17	P	•	•																
GMF22	P-PO			•	•														
GMF32	P-PO					•	•												
GMF42	P-PO							•	•	•	•								
GMF62	P-PO											•	•	•	•	•	•	•	•
Accessories for installation																			
PA17	P	•	•																
PA22	P-PO			•	•														
PA32	P-PO					•	•												
PA42	P-PO							•	•	•	•								
PA62	P-PO											•	•	•	•	•	•	•	•
PA17F	P	•	•																
PA22F	P-PO			•	•														
PA32F	P-PO					•	•												
PA42F	P-PO							•	•	•	•								
PA62F	P-PO											•	•	•	•	•	•	•	•
PM17	P	•	•																
PM22	P-PO			•	•														
PM32	P-PO					•	•												
PM42	P-PO							•	•	•	•								
PM62	P-PO											•	•	•	•	•	•	•	•
RD17	P	•	•																
RD22	P-PO			•	•														
RD32	P-PO					•	•												
RD42	P-PO							•	•	•	•								
RD62	P-PO											•	•	•	•	•	•	•	•
RDA17	P	•	•																
RDA22	P-PO			•	•														
RDA32	P-PO					•	•												
RDA42	P-PO							•	•	•	•								
RDA62	P-PO											•	•	•	•	•	•	•	•
RPA17	P	•	•																
RPA22	P-PO			•	•														
RPA32	P-PO					•	•												
RPA42	P-PO							•	•	•	•								
RPA62	P-PO											•	•	•	•	•	•	•	•
Plenum for duct installation																			
MZC220	PO			•	•														
MZC320	PO					•	•												
MZC530	PO							•	•	•	•								
MZC830	PO											•	•	•	•	•	•	•	

Compatibility of accessories

			Sizes available for 4-pipe system (Main coil + Secondary coil)																	
FCZ_P			101	102	201	202	301	302	401	402	501	502	601	602	701	702	801	802	901	1001
RDA000V	PO				•	•														
RDA100V	PO						•	•												
RDA200V	PO								•	•	•	•								
RDA300V	PO												•	•	•	•			•	
RPA000V	PO	(6)			•	•														
RPA100V	PO	(6)					•	•												
RPA200V	PO	(6)							•	•	•	•								
RPA300V	PO	(6)											•	•	•	•			•	
RDAC000V	PO				•	•														
RDAC100V	PO						•	•												
RDAC200V	PO								•	•	•	•								
RDAC300V	PO												•	•	•	•			•	
PA000V	PO	(6)			•	•														
PA100V	PO	(6)					•	•												
PA200V	PO	(6)							•	•	•	•								
PA300V	PO	(6)											•	•	•	•			•	
PM000V	PO	(6)			•	•														
PM100V	PO	(6)					•	•												
PM200V	PO	(6)							•	•	•	•								
PM300V	PO	(6)											•	•	•	•			•	
RPM000V	PO	(6)			•	•														
RPM100V	PO	(6)					•	•												
RPM200V	PO	(6)							•	•	•	•								
RPM300V	PO	(6)											•	•	•	•			•	
RDMC000V	PO				•	•														
RDMC100V	PO						•	•												
RDMC200V	PO								•	•	•	•								
RDMC300V	PO												•	•	•	•			•	

PO version only available for size from 2 to 9

(6) All the Plenums (RPA_V; PA_V; RPM_V; PM_V) have a circular push-outs (Ø=150mm) on both sides, which can be removed, All the can have intake/discharge either straight or downwards (straight or downwards with reference to horizontal installation).

TECHNICAL DATA - UNIT FOR 2 PIPE SYSTEMS (MAIN COIL)

FCZ			100			150			200			250			300			350			400			450			500			550		
Fan speed			**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**
Heating Performance																																
2 pipe systems																																
Heating capacity (70°C)	(1)	MBTU/h	8.2	6.8	5.0	9.0	7.5	5.3	12.6	10.1	6.9	13.8	10.9	7.5	18.8	15.2	11.8	21.0	16.8	12.9	24.4	19.6	14.7	26.7	21.5	15.6	29.0	24.9	18.0	33.3	28.5	19.9
Water flow rate	(1)	gpm	0.9	0.8	0.6	1.0	0.8	0.6	1.4	1.1	0.8	1.5	1.2	0.8	2.1	1.7	1.3	2.3	1.9	1.4	2.7	2.2	1.6	3.0	2.3	1.7	3.2	2.8	2.0	3.7	3.2	2.2
Pressure drop	(1)	psi	1.3	0.9	0.6	2.0	1.5	0.9	2.9	1.9	1.0	4.5	2.9	1.6	2.5	1.7	1.0	4.1	2.8	1.7	4.6	3.0	1.6	3.2	1.9	1.3	6.1	6.1	6.1	4.8	3.6	2.0
Heating capacity (45°C)	(2)	MBTU/h	4.1	3.4	2.5	4.5	3.7	2.6	6.3	5.0	3.4	6.9	5.4	3.7	9.3	7.5	5.9	10.4	8.3	6.4	12.1	9.7	7.3	13.2	10.6	7.7	14.4	12.4	8.9	16.5	14.1	9.9
Water flow rate	(2)	gpm	0.9	0.8	0.6	1.0	0.8	0.6	1.4	1.1	0.8	1.5	1.2	0.8	2.1	1.7	1.3	2.3	1.9	1.4	2.7	2.2	1.6	3.0	2.4	1.7	3.2	2.8	2.0	3.7	3.2	2.2
Pressure drop	(2)	psi	1.3	1.0	0.6	1.7	1.3	0.7	2.5	1.7	0.9	3.2	2.2	1.2	2.5	1.7	1.2	2.9	2.0	1.2	3.3	2.3	1.3	2.3	1.6	0.9	4.1	3.0	1.7	3.6	2.8	1.5
Cooling Performance																																
Total cooling capacity	(3)	MBTU/h	3.4	2.9	2.2	4.3	3.6	2.7	5.5	4.4	3.0	6.6	5.3	3.6	9.0	7.4	5.7	10.3	8.4	6.4	12.3	10.0	7.5	13.8	11.0	8.2	14.5	12.6	9.1	16.3	14.1	9.9
Sensible cooling capacity	(3)	MBTU/h	2.8	2.4	1.7	3.3	2.7	1.9	4.5	3.6	2.4	5.2	4.1	2.7	7.0	5.6	4.3	7.4	6.0	4.5	9.1	7.3	5.4	9.9	7.8	5.8	10.9	9.3	6.6	11.9	10.2	7.1
Water flow rate	(3)	gpm	0.8	0.6	0.5	1.0	0.8	0.6	1.2	1.0	0.7	1.5	1.2	0.8	2.0	1.6	1.3	2.5	2.0	1.5	2.7	2.2	1.7	3.1	2.4	1.8	3.2	2.8	2.0	3.6	3.1	2.2
Pressure drop	(3)	psi	1.2	0.9	0.6	1.9	1.7	0.9	2.6	1.7	0.9	3.6	2.5	1.2	2.6	1.7	1.2	3.6	2.5	1.6	3.5	2.3	1.5	3.2	2.2	1.3	4.2	3.2	1.9	4.1	3.0	1.6
Fans																																
Centrifugal Fans		n°	1						1						2						2						2					
Air flow rate		cfm	118	94	65	118	94	65	171	129	82	171	129	82	265	206	153	265	206	153	353	271	194	353	271	194	424	353	235	424	353	235
Sound level																																
Sound power level		dB(A)	45	38	31	45	38	31	50	43	31	50	43	31	48	41	34	48	41	34	51	44	37	51	44	37	56	51	42	56	51	42
Sound pressure level		dB(A)	37	30	23	37	30	23	42	35	23	42	35	23	40	33	26	40	33	26	43	36	29	43	36	29	48	43	34	48	43	34
Hydraulic connections																																
Main coil																																
Standard		Ø	1/2"			/			1/2"			/			3/4"			/			3/4"			/			3/4"			/		
Oversized		Ø	/			1/2"			/			1/2"			/			3/4"			/			3/4"			/			3/4"		

FCZ			600			650			700			750			800			850			900			950			1000			1050		
Fan speed			**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**
Heating Performance																																
2 pipe systems																																
Heating capacity (70°C)	(1)	MBTU/h	34.1	27.6	22.2	39.2	31.2	24.5	37.5	33.4	27.6	42.7	38.6	31.1	40.9	36.9	33.4	47.8	42.1	38.6	51.7	45.6	36.7	58.3	49.2	38.2	58.1	52.0	42.9	64.7	57.5	47.8
Water flow rate	(1)	gpm	3.9	3.1	2.5	4.4	3.5	2.8	4.2	3.7	3.1	4.7	4.3	3.4	4.5	4.1	3.7	5.3	4.7	4.3	5.8	5.2	4.2	6.6	5.7	4.3	6.6	5.9	4.8	7.3	6.5	5.4
Pressure drop	(1)	psi	3.8	2.6	1.7	4.5	2.9	1.9	5.4	4.4	3.0	2.9	2.3	1.6	6.1	5.1	4.2	3.5	2.8	2.3	3.0	2.3	1.6	4.6	3.3	2.2	6.2	4.9	3.5	7.0	5.7	4.1
Heating capacity (45°C)	(2)	MBTU/h	17.0	13.8	11.0	19.5	15.5	12.2	18.7	16.6	13.8	21.2	19.2	15.4	20.4	18.3	16.6	23.7	21.0	19.2	25.7	22.7	18.3	29.0	24.5	19.0	28.9	25.9	21.3	32.2	28.6	23.8
Water flow rate	(2)	gpm	3.8	3.1	2.5	4.4	3.5	2.7	4.2	3.7	3.1	4.8	4.3	3.5	4.6	4.1	3.7	5.3	4.7	4.3	5.8	5.1	4.1	6.5	5.5	4.3	6.5	5.8	4.8	7.2	6.4	5.3
Pressure drop	(2)	psi	3.6	2.5	1.7	4.5	2.9	1.9	4.2	3.3	2.3	2.5	2.0	1.5	4.6	3.8	3.2	3.6	2.8	2.5	3.0	2.5	1.7	4.8	3.5	2.2	5.4	4.5	3.2	6.8	5.5	3.9
Cooling Performance																																
Total cooling capacity	(3)	MBTU/h	15.9	13.3	11.0	19.3	16.4	13.5	18.8	16.7	13.4	21.0	18.2	14.6	20.8	19.3	16.5	23.6	21.5	17.9	23.6	17.1	14.6	29.3	25.0	19.7	26.0	23.5	19.4	32.4	28.9	24.3
Sensible cooling capacity	(3)	MBTU/h	13.4	10.8	8.7	14.1	11.7	9.5	14.7	12.8	10.2	16.1	13.8	10.9	16.5	15.1	12.7	18.3	16.5	13.6	19.4	12.9	10.1	19.7	16.6	13.0	18.9	18.2	15.1	21.9	19.4	16.2
Water flow rate	(3)	gpm	3.5	3.0	2.4	4.3	3.6	2.6	4.2	3.7	3.0	4.6	4.0	3.2	4.6	4.3	3.7	5.2	4.8	4.0	5.2	3.8	3.2	6.5	5.5	4.4	5.8	5.2	4.3	7.2	6.4	5.4
Pressure drop	(3)	psi	3.8	2.8	1.9	4.1	3.0	2.2	4.4	3.5	2.3	2.6	2.0	1.5	4.4	3.8	2.9	3.3	2.8	2.0	3.2	1.7	1.3	4.4	3.2	2.2	5.4	4.5	3.2	5.2	4.4	3.2
Fans																																
Centrifugal Fans		n°	3						3						3						3						3					
Air flow rate		cfm	541	424	306	541	424	306	671	547	412	671	547	412	765	659	530	765	659	530	671	547	412	671	547	412	765	659	530	765	659	530
Sound level																																
Sound power level		dB(A)	57	51	42	57	51	42	62	57	50	62	57	50	66	61	56	66	61	56	62	57	51	61	57	51	66	61	56	66	61	56
Sound pressure level		dB(A)	49	43	34	49	43	34	54	49	42	54	49	42	58	53	48	58	53	48	54	49	43	53	49	43	58	53	48	58	53	48
Hydraulic connections																																
Main coil																																
Standard		Ø	3/4"			/			3/4"			/			3/4"			/			3/4"			/			3/4"			/		
Oversized		Ø	/			3/4"			/			3/4"			/			3/4"			/			3/4"			/			3/4"		

(1) Room air temperature 68°F, d.b.; Water (in/out) 158°F/140°F;
(2) Room air temperature 68°F d.b.; Water (in/out) 113°F/104°F
(3) Room air temperature 80.6°F d.b./66.2°F w.b.; Water (in/out) 44.6°F/53.6°F
Sound pressure level (A-weighted) measured indoors with volume V=85m³, reverberation time t = 0.5 s; Direction factor Q = 2; Distance r = 98.4in

TECHNICAL DATA - UNIT FOR 4 PIPE SYSTEMS (WITH MAIN + SUPPLEMENTARY COIL)

FCZ			101			201			301			401		
Fan speed			**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**
Heating Performance														
4 pipe systems														
Heating capacity (65°C)	(1)	MBTU/h	4.0	3.5	2.6	5.5	4.6	3.5	8.7	7.5	6.2	10.7	9.0	7.3
Water flow rate	(1)	gpm	0.44	0.39	0.29	0.61	0.52	0.39	0.97	0.83	0.68	1.18	1.00	0.81
Pressure drop	(1)	psi	0.58	0.44	0.29	1.45	1.02	0.73	4.21	3.19	2.18	1.16	1.02	0.58
Cooling Performance														
Total cooling capacity	(2)	MBTU/h	3.4	2.9	2.2	5.5	4.4	3.0	9.0	7.4	5.7	12.3	10.0	7.5
Sensible cooling capacity	(2)	MBTU/h	2.8	2.4	1.7	4.5	3.6	2.4	7.0	5.6	4.3	9.1	7.3	5.4
Water flow rate	(2)	gpm	0.76	0.63	0.49	1.21	0.97	0.67	2.01	1.65	1.27	2.73	2.21	1.67
Pressure drop	(2)	psi	1.16	0.87	0.58	2.61	1.74	0.87	2.61	1.74	1.16	3.48	2.32	1.45
Fans														
Centrifugal fans		n°		1			1			2			2	
Air flow rate		cfm	118	94	65	171	129	82	265	206	153	353	271	194
Sound level														
Sound power level		dB(A)	45	38	31	50	43	31	48	41	34	51	44	39
Sound pressure level		dB(A)	37	30	23	42	35	23	40	33	26	43	36	31
Hydraulic connections														
Main coil		Ø		1/2"			1/2"			3/4"			3/4"	
Additional coil		Ø		1/2"			1/2"			1/2"			1/2"	

FCZ			501			601			701			801			901			1001		
Fan speed			**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**
Heating Performance																				
4 pipe systems																				
Heating capacity (65°C)	(1)	MBTU/h	12.8	11.4	8.8	14.9	12.5	8.6	16.9	14.6	12.5	18.2	16.3	14.4	19.6	19.2	16.2	20.8	19.0	16.5
Water flow rate	(1)	gpm	1.41	1.26	0.98	1.65	1.39	0.96	1.88	1.62	1.39	2.02	1.81	1.59	2.17	2.13	1.79	2.30	2.11	1.84
Pressure drop	(1)	psi	1.45	1.16	0.73	2.32	1.60	1.02	2.90	2.32	2.18	3.34	2.76	1.74	1.74	1.60	1.31	2.18	1.89	1.45
Cooling Performance																				
Total cooling capacity	(2)	MBTU/h	14.5	12.6	9.1	15.9	13.3	11.0	18.8	16.7	13.4	20.8	19.3	16.5	23.6	17.1	14.6	26.0	23.5	19.4
Sensible cooling capacity	(2)	MBTU/h	10.9	9.3	6.6	13.4	10.8	8.7	14.7	12.8	10.2	16.5	15.1	12.7	19.4	12.9	10.1	18.9	18.2	15.1
Water flow rate	(2)	gpm	3.22	2.79	2.03	3.52	2.95	2.44	4.17	3.70	2.97	4.62	4.29	3.67	5.24	3.79	3.25	5.77	5.21	4.31
Pressure drop	(2)	psi	4.21	3.19	1.89	3.77	2.76	1.89	4.35	3.48	2.32	4.35	3.77	2.90	3.19	1.74	1.31	5.37	4.50	3.19
Fans																				
Centrifugal fans		n°		2			3			3			3			3			3	
Air flow rate		cfm	424	353	235	541	424	306	671	547	412	765	659	530	671	547	412	765	659	530
Sound level																				
Sound power level		dB(A)	56	51	42	57	51	42	61	57	51	66	61	56	61	57	51	66	61	56
Sound pressure level		dB(A)	48	43	34	49	43	34	53	49	43	58	53	48	53	49	43	58	53	48
Hydraulic connections																				
Main coil		Ø		3/4"			3/4"			3/4"			3/4"			3/4"			3/4"	
Additional coil		Ø		1/2"			1/2"			1/2"			1/2"			1/2"			1/2"	

(1) Room air temperature 68°F d.b.; Water (in/out) 149°F/131°F;

(2) Room air temperature 80.6°F d.b./66.2°F w.b.; Water (in/out) 44.6°F/53.6°F

Sound pressure level (A-weighted) measured indoors with volume V=85m³, reverberation time t = 0.5 s; Direction factor Q = 2; Distance r = 98.4in

TECHNICAL DATA - UNIT FOR 2 PIPE SYSTEMS (MAIN COIL)

FCZ_PO			200			250			300			350			400			450			500			550		
Fan speed			**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**
Hating Performance																										
2 pipe systems																										
Heating capacity (70°C)	(1)	MBTU/h	11.3	10.2	7.2	12.3	11.1	7.8	18.6	17.2	11.9	20.8	19.1	13.0	23.0	20.5	15.3	25.2	22.6	16.3	25.9	24.6	18.0	29.6	28.2	19.8
Water flow rate	(1)	gpm	1.3	1.1	0.8	1.4	1.2	0.9	2.1	1.9	1.3	2.3	2.1	1.4	2.6	2.3	1.7	2.8	2.5	1.8	2.9	2.7	2.0	3.3	3.1	2.2
Pressure drop	(1)	psi	2.2	1.7	1.0	2.8	2.3	1.3	2.6	2.2	1.2	3.0	2.6	1.3	3.2	2.6	1.6	2.2	1.7	1.0	3.3	3.0	1.7	3.0	2.8	1.5
Heating capacity (45°C)	(2)	MBTU/h	5.6	5.1	3.6	6.1	5.5	3.9	9.2	8.5	5.9	10.3	9.5	6.4	11.4	10.2	7.6	12.6	11.2	8.1	12.9	12.2	8.9	14.7	14.0	9.9
Water flow rate	(2)	gpm	1.3	1.1	0.8	1.4	1.2	0.9	2.1	1.9	1.3	2.3	2.1	1.4	2.5	2.3	1.7	2.8	2.5	1.8	2.9	2.7	2.0	3.3	3.1	2.2
Pressure drop	(2)	psi	2.0	1.7	0.9	2.6	2.2	1.2	2.5	2.2	1.2	2.9	2.5	1.3	3.0	2.5	1.5	2.2	1.7	1.0	3.2	2.9	1.7	3.0	2.8	1.5
Cooling Performance																										
Total cooling capacity	(3)	MBTU/h	4.9	4.4	3.2	5.9	5.4	3.8	9.0	8.2	5.8	10.2	9.5	6.5	11.6	10.4	7.8	12.9	11.5	8.6	13.0	12.5	9.1	14.6	13.9	9.9
Sensible cooling capacity	(3)	MBTU/h	4.0	3.9	2.5	4.6	4.2	2.8	6.9	6.3	4.3	7.4	6.8	4.6	8.6	7.6	5.7	9.3	8.3	6.0	9.7	9.2	6.6	10.5	10.0	7.1
Water flow rate	(3)	gpm	1.1	1.0	0.7	1.3	1.2	0.8	2.0	1.8	1.3	2.3	2.1	1.4	2.6	2.3	1.7	2.9	2.6	1.9	2.9	2.8	2.0	3.2	3.1	2.2
Pressure drop	(3)	psi	2.2	1.9	1.2	3.0	2.5	1.3	2.6	2.3	1.2	3.6	3.0	1.6	3.2	2.6	1.6	2.9	2.3	1.6	3.5	3.2	1.9	3.3	3.0	1.7
Fans																										
Centrifugal Fans		n°	1						2						2						2					
Air flow rate		cfm	149	133	87	149	133	87	263	238	155	263	238	155	329	287	204	329	287	204	369	348	235	369	348	235
High static pressure		Pa	63	50	21	63	50	21	61	50	21	61	50	21	66	50	25	66	50	25	56	50	22	56	50	22
Sound level																										
Sound Power (Inlet+Radietor)		dB(A)	59	56	41	59	56	41	54	51	39	54	51	39	55	54	44	55	54	44	57	55	45	57	55	45
Sound Power (Outlet)		dB(A)	55	52	37	55	52	37	49	47	35	49	47	35	52	50	40	52	50	40	53	51	41	53	51	41
Hydraulic connections																										
Main coil																										
Standard		Ø	1/2"			/			3/4"			/			3/4"			/			3/4"			/		
Oversized		Ø	/			1/2"			/			3/4"			/			3/4"			/			3/4"		

FCZ_PO			600			650			700			750			900			950		
Fan speed			**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**
Hating Performance																				
2 pipe systems																				
Heating capacity (70°C)	(1)	MBTU/h	34.1	29.2	23.4	39.3	33.2	26.0	35.9	34.5	29.9	41.3	39.8	34.2	49.3	47.1	40.3	54.6	51.4	42.4
Water flow rate	(1)	gpm	3.8	3.2	2.6	4.4	3.7	2.9	4.0	3.8	3.3	4.6	4.4	3.8	5.5	5.2	4.5	6.1	5.7	4.7
Pressure drop	(1)	psi	3.8	2.9	1.9	4.5	3.3	2.2	3.9	3.6	2.8	2.3	2.2	1.7	2.9	2.6	2.0	4.2	3.8	2.8
Heating capacity (45°C)	(2)	MBTU/h	17.0	14.5	11.6	19.5	16.5	12.9	17.8	17.1	14.9	20.5	19.8	17.0	24.5	23.4	20.0	27.1	25.6	21.1
Water flow rate	(2)	gpm	3.8	3.2	2.6	4.3	3.7	2.9	4.0	3.8	3.3	4.6	4.4	3.8	5.4	5.2	4.4	6.0	5.7	4.7
Pressure drop	(2)	psi	3.6	2.8	1.9	4.5	3.2	2.0	3.8	3.5	2.8	2.3	2.2	1.7	2.9	2.6	2.0	4.2	3.8	2.6
Cooling Performance																				
Total cooling capacity	(3)	MBTU/h	15.9	13.9	11.5	19.3	17.1	14.2	17.7	17.0	14.5	19.8	18.9	16.0	20.3	18.2	14.9	27.5	26.0	21.7
Sensible cooling capacity	(3)	MBTU/h	13.4	11.4	9.2	14.1	12.3	10.0	13.7	13.1	11.1	15.0	14.3	12.0	16.1	14.0	10.6	18.4	17.3	14.3
Water flow rate	(3)	gpm	3.5	3.1	2.6	4.3	3.8	3.1	3.9	3.8	3.2	4.4	4.2	3.6	4.5	4.0	3.3	6.1	5.8	4.8
Pressure drop	(3)	psi	3.8	3.0	2.2	4.1	3.2	2.3	4.1	3.8	2.8	2.5	2.2	1.6	2.5	2.0	1.5	3.9	3.5	2.5
Fans																				
Centrifugal Fans		n°	3						3						3					
Air flow rate		cfm	541	453	334	541	453	334	618	576	462	618	576	462	618	576	462	618	576	462
High static pressure		Pa	71	50	27	71	50	27	58	50	32	58	50	32	58	50	32	58	50	32
Sound level																				
Sound Power (Inlet+Radietor)		dB(A)	61	56	46	61	56	46	62	60	54	62	60	54	62	60	54	62	60	54
Sound Power (Outlet)		dB(A)	60	54	44	60	54	44	61	59	52	61	59	52	61	59	52	61	59	52
Hydraulic connections																				
Main coil																				
Standard		Ø	3/4"			/			3/4"			/			3/4"			/		
Oversized		Ø	/			3/4"			/			3/4"			/			3/4"		

(1) Room air temperature 68°F, d.b.; Water (in/out) 158°F/140°F;
(2) Room air temperature 68°F d.b.; Water (in/out) 113°F/104°F
(3) Room air temperature 80.6°F d.b./66.2°F w.b.; Water (in/out) 44.6°F/53.6°F
Sound pressure level (A-weighted) measured indoors with volume V=85m³, reverberation time t = 0.5 s; Direction factor Q = 2; Distance r = 98.4in

TECHNICAL DATA - UNIT FOR 4 PIPE SYSTEMS (WITH MAIN + SUPPLEMENTARY COIL)

FCZ_PO			201			301			401		
Fan speed			**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**
Hating Performance											
4 pipe systems											
Heating capacity (65°C)	(1)	MBTU/h	5.0	4.7	3.6	8.7	8.2	6.2	10.2	9.4	7.5
Water flow rate	(1)	gpm	0.6	0.5	0.4	1.0	0.9	0.7	1.1	1.0	0.8
Pressure drop	(1)	psi	1.3	1.2	0.7	1.9	1.7	1.2	1.2	1.0	0.7
Cooling Performance											
Total cooling capacity	(2)	MBTU/h	4.9	4.5	3.2	9.0	8.3	5.8	11.6	10.4	7.8
Sensible cooling capacity	(2)	MBTU/h	4.0	3.7	2.5	6.9	6.3	4.3	8.6	7.6	5.7
Water flow rate	(2)	gpm	1.1	1.0	0.7	2.0	1.8	1.3	2.6	2.3	1.7
Pressure drop	(2)	psi	2.2	1.9	1.0	2.6	2.3	1.2	3.2	2.6	1.6
Fans											
Centrifugal Fans		n°		1			2			2	
Air flow rate		cfm	149	133	87	263	238	155	329	287	204
High static pressure		Pa	63	50	21	61	50	21	66	50	25
Sound level											
Sound Power (Inlet+Radietor)		dB(A)	59	56	41	54	51	39	55	54	44
Sound Power (Outlet)		dB(A)	55	52	37	49	47	35	52	50	40
Hydraulic connections											
Main coil		Ø		1/2"			3/4"			3/4"	
Additional coil		Ø		1/2"			1/2"			1/2"	

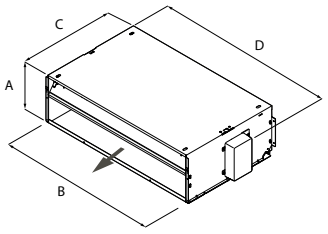
FCZ_PO			501			601			701			901		
Fan speed			**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**
Hating Performance														
4 pipe systems														
Heating capacity (65°C)	(1)	MBTU/h	11.4	11.3	8.8	14.8	13.1	10.7	15.7	15.0	14.1	19.7	19.5	17.6
Water flow rate	(1)	gpm	1.3	1.3	1.0	1.6	1.5	1.2	1.7	1.7	1.6	2.2	2.2	2.0
Pressure drop	(1)	psi	1.3	1.2	0.7	2.3	1.9	1.3	2.3	2.2	2.2	1.7	1.7	1.5
Cooling Performance														
Total cooling capacity	(2)	MBTU/h	13.0	12.5	9.1	15.9	13.9	11.5	17.7	17.0	14.5	20.3	18.2	14.9
Sensible cooling capacity	(2)	MBTU/h	9.7	9.2	6.6	13.4	11.4	9.2	13.7	13.1	11.1	16.1	14.0	10.6
Water flow rate	(2)	gpm	2.9	2.8	2.0	3.5	3.1	2.6	3.9	3.8	3.2	4.5	4.0	3.3
Pressure drop	(2)	psi	3.5	3.2	1.9	3.8	3.0	2.2	4.1	3.8	2.8	2.5	2.0	1.5
Fans														
Centrifugal Fans		n°		2			3			3			3	
Air flow rate		cfm	348	235	541	453	334	618	576	462	618	576	462	
High static pressure		Pa	50	22	71	50	27	58	50	32	58	50	32	
Sound level														
Sound Power (Inlet+Radietor)		dB(A)	57	55	45	61	56	46	62	60	54	62	60	54
Sound Power (Outlet)		dB(A)	53	51	41	60	54	44	61	59	52	61	59	52
Hydraulic connections														
Main coil		Ø		3/4"			3/4"			3/4"			3/4"	
Additional coil		Ø		1/2"			1/2"			1/2"			1/2"	

(1) Room air temperature 68°F d.b.; Water (in/out) 149°F/131°F;
(2) Room air temperature 80.6°F d.b./66.2°F w.b.; Water (in/out) 44.6°F/53.6°F
Sound pressure level (A-weighted) measured indoors with volume V=85m³, reverberation time t = 0.5 s; Direction factor Q = 2; Distance r = 98.4in

DIMENSIONS AND WEIGHTS

FCZ_P / PO		100	101	102	150	200	201	202	250	300	301	302	350	400	401	402	450	500	501	502	550
Dimensions for all versions																					
A	in	8.5				8.5				8.5				8.5				8.5			
B	in	16.2				20.6				29.7				38.3				38.3			
C	in	17.8				17.8				17.8				17.8				17.8			
D	in	17.8				22.1				31.2				39.9				39.9			
Weight	lbs	26	26	29	29	26	29	31	31	31	33	35	35	44	46	49	49	51	51	53	53

FCZ_P / PO / PPC		600	601	602	650	700	701	702	750	800	801	802	850	900	901	/	950	1000	1001	/	1050
Dimensions for all versions																					
A	in	8.5				8.5				8.5				8.5				8.5			
B	in	44.2				44.2				44.2				44.2				44.2			
C	in	17.8				17.8				17.8				22.0				22.0			
D	in	45.2				45.2				45.2				45.2				45.2			
Weight	lbs	64	66	68	68	57	60	62	62	57	60	62	62	71				71			



FCZ-P_Y_NA60_00

Aermec S.p.A.
Via Roma, 996
37040 Bevilacqua (VR) - Italy
Tel. + 39 0442 633111 - Fax +39 0442 93577

FCX USP

Fan coils
Vertical and horizontal
Concealed installation with low static pressure
Cooling capacity from 2.866 to 29.344 BTU/h
Heating capacity from 3.242 to 58.348 BTU/h

60Hz | Intertek | VMF

- **FULLY SILENT FUNCTIONING**
- **UNIVERSAL FLOOR OR WALL CEILING MOUNTING**
- **GRILLE WITH FIXED FINS**

FEATURES

The units of the FCX series are fan coils which are suitable for air conditioning. They come with multi-speed motors and are available in various set-ups depending on the installation position, with the possibility of being ducted as well. They have ABS fans with an impeller equipped with inspectionable airfoil and scroll fins. This feature gives the machine a net reduction in the noise emission level, as well as a reduction in the motor's electrical consumption compared to traditional fans with a metal structure. The unit can be equipped with a single/double heat exchange coil (2/4 pipe system), with 3/4 rows depending on the model. The units can also be equipped with multiple accessories and can be integrated into the centralised VMF - Aermec hydronic management system.

Versions:
FCX USP
Wall-mounted model without cabinet.
FCX USPO
Cabinet with 7-speed (3 of which can be selected) boosted motor.

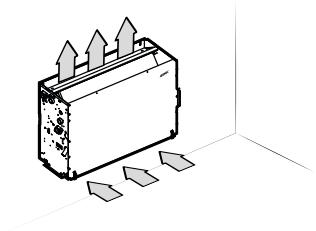
- Versions with 3-row coil (FCX 17, 22, 32, 42, 50, 62, 82, and 102).
- Versions with 4-row coil (FCX 24, 34, 44, 54, 64 and 84).
- 3-speed ventilating unit.

- **FCX configuration for 2-pipe systems.**
  • Standard main coil (reversible).
  • Larger main coil (reversible).

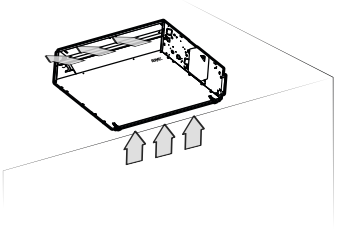
- **FCX configuration for 4-pipe systems.**
  • Standard main coil combined with VCF_X4 valve accessories. (Reversible on site).
  • Larger main coil combined with VCF_X4 valve accessories. (Reversible on site).
  • Standard main coil coupled with BV coil accessory. (Reversible on site).

CONFIGURATION AVAILABLE

CONCEALED WALL INSTALLATION



CONCEALED CEILING INSTALLATION



TECHNICAL DATA - 2 PIPE SYSTEMS

FCX_USP - 2 PIPE SYSTEMS			22			24			32			34			42			44		
Fan speed			**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**
Hating Performance																				
Heating capacity (70°C/158°F)	(1)	BTU/h	10.100	8.633	6.517	13.341	10.578	7.165	18.255	13.887	10.816	20.336	16.378	12.727	22.588	18.835	13.853	29.344	23.646	17.743
Water flow rate	(1)	gpm	1.14	0.98	0.74	1.51	1.20	0.81	2.07	1.57	1.22	2.30	1.85	1.44	2.56	2.13	1.57	3.32	2.68	2.01
Pressure drops	(1)	psi	0.87	0.58	0.44	0.58	0.44	0.15	2.90	1.74	1.16	1.60	1.02	0.73	2.18	1.60	0.87	3.19	2.18	1.31
Heating capacity (45°C/113°F)	(2)	BTU/h	5.016	4.299	3.242	6.654	5.255	3.549	9.076	6.893	5.357	10.134	8.155	6.312	11.226	9.383	6.893	14.604	11.772	8.837
Water flow rate	(2)	gpm	1.13	0.96	0.73	1.49	1.18	0.80	2.03	1.55	1.20	2.27	1.82	1.42	2.51	2.10	1.55	3.27	2.63	1.98
Pressure drops	(2)	psi	0.73	0.58	0.29	0.58	0.44	0.15	2.76	1.74	1.16	1.45	1.02	0.58	2.03	1.45	0.87	3.05	2.03	1.31
Cooling Performance																				
Total cooling capacity	(3)	BTU/h	5.118	4.163	2.866	5.903	4.675	3.446	8.189	6.278	5.289	9.554	7.780	6.005	11.601	9.486	7.882	15.184	12.250	9.179
Sensible cooling capacity	(3)	BTU/h	4.231	3.412	2.286	4.709	3.719	2.593	6.483	5.357	3.787	7.268	5.869	4.265	9.418	7.200	5.562	11.260	9.008	6.688
Water flow rate	(3)	gpm	1.14	0.92	0.63	1.31	1.04	0.77	1.82	1.39	1.18	2.12	1.73	1.33	2.58	2.10	1.75	3.37	2.72	2.04
Pressure drops	(3)	psi	0.87	0.73	0.44	0.44	0.29	0.15	4.06	2.47	1.89	2.03	1.45	0.87	2.03	1.45	1.02	5.80	3.92	2.32
Fans																				
Centrifugal fans		n°		1			1			2			2			2			2	
Air flow rate		cfm	171	129	82	171	129	82	265	206	153	265	206	153	353	271	194	353	271	194
Sound level																				
Sound power		dB(A)	50	43	31	50	43	31	48	41	34	48	41	34	51	44	39	51	44	39
Sound pressure	(4)	dB(A)	42	35	23	42	35	23	40	33	26	40	33	26	43	36	31	43	36	31
Hydraulic connections																				
Standard coil		Ø		1/2"			-			1/2"			-			3/4"			-	
Increased coil		Ø		-			3/4"			-			3/4"			-			3/4"	
Electrical data 120V~60Hz																				
FLA		A		-			-			-			-			-			-	
Electrical data 220V~60Hz																				
FLA		A		0.45			0.45			0.55			0.55			0.95			0.95	

FCX_USP - 2 PIPE SYSTEMS			50			54			62			64			82			84		
Fan speed			**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**
Hating Performance																				
Heating capacity (70°C/158°F)	(1)	BTU/h	27.945	25.693	17.129	34.463	29.890	21.292	44.085	37.329	28.423	48.794	39.240	29.003	51.660	45.552	36.749	58.348	49.203	38.216
Water flow rate	(1)	gpm	3.17	2.91	1.94	3.90	3.38	2.41	4.99	4.23	3.21	5.52	4.44	3.28	5.85	5.16	4.16	6.60	5.57	4.32
Pressure drops	(1)	psi	2.18	1.89	0.87	3.34	2.61	1.45	2.18	1.60	1.02	3.34	2.18	1.31	3.05	2.32	1.60	4.50	3.34	2.18
Heating capacity (45°C/113°F)	(2)	BTU/h	13.922	12.796	8.530	17.129	14.877	10.578	21.940	18.562	14.126	24.260	19.517	14.433	25.693	22.657	18.289	29.037	24.465	19.006
Water flow rate	(2)	gpm	3.11	2.86	1.91	3.84	3.33	2.37	4.91	4.16	3.17	5.43	4.37	3.23	5.75	5.07	4.09	6.50	5.48	4.26
Pressure drops	(2)	psi	2.03	1.74	0.87	3.19	2.47	1.31	2.18	1.60	1.02	3.19	2.18	1.31	2.90	2.32	1.60	4.35	3.19	2.03
Cooling Performance																				
Total cooling capacity	(3)	BTU/h	14.297	11.977	11.977	16.958	14.740	10.578	16.583	14.911	10.987	21.667	17.777	13.376	23.578	17.061	14.638	29.344	24.977	19.688
Sensible cooling capacity	(3)	BTU/h	10.236	8.667	6.108	12.079	10.441	7.404	13.580	11.260	8.326	17.163	13.990	10.441	19.381	12.898	10.134	19.722	16.617	9.554
Water flow rate	(3)	gpm	3.17	2.66	1.90	3.76	3.27	2.35	3.68	3.31	2.44	4.81	3.94	2.97	5.24	3.79	3.25	6.51	5.54	4.37
Pressure drops	(3)	psi	2.76	2.03	1.16	3.77	3.05	1.74	2.47	2.03	1.16	1.89	1.31	0.87	3.19	1.74	1.31	4.35	3.19	2.18
Fans																				
Centrifugal fans		n°		2			2			3			3			3			3	
Air flow rate		cfm	424	353	235	424	353	235	541	424	306	541	424	306	671	547	412	671	547	412
Sound level																				
Sound power		dB(A)	56	51	42	56	51	42	57	51	42	57	51	42	62	57	51	62	57	51
Sound pressure	(4)	dB(A)	48	43	34	48	43	34	49	43	34	49	43	34	54	49	43	54	49	43
Hydraulic connections																				
Standard coil		Ø		3/4"			-			3/4"			-			3/4"			-	
Increased coil		Ø		-			3/4"			-			3/4"			-			3/4"	
Electrical data 120V~60Hz																				
FLA		A		-			-			-			-			-			-	
Electrical data 220V~60Hz																				
FLA		A		1.00			1.00			1.05			1.05			1.00			1.00	

Performance of versions with upgraded motor refers to the following conditions:

(1) Room air 68°F b.s.; Water (in/out) 158°F/140°F.

(2) Room air 68°F b.s.; Water (in/out) 113°F/104°F.

(3) Room air 80.6°F b.s./66.2°F b.u.; Water (in/out) 44.6°F/53.6°F.

(4) Sound pressure level (weighted A) measured with open port in a 3 and reverberation time of 0.5 seconds room with 3002 ft.

TECHNICAL DATA - 4 PIPE SYSTEMS

FCX_USP - 4 PIPE SYSTEMS			22			32			42		
Fan speed			**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**
Hating Performance											
Heating capacity (70°C/158°F)	(1)	BTU/h	6.039	5.152	3.856	9.725	8.360	6.927	11.806	11.635	9.076
Water flow rate	(1)	gpm	0.68	0.58	0.44	1.10	0.95	0.78	1.33	1.32	1.03
Pressure drops	(1)	psi	0.87	0.73	0.44	2.32	1.74	1.16	3.05	2.90	2.03
Cooling Performance											
Total cooling capacity	(3)	BTU/h	5.118	4.163	2.866	8.189	6.278	5.289	11.601	9.486	7.882
Sensible cooling capacity	(3)	BTU/h	4.231	3.412	2.286	6.483	5.357	3.787	9.418	7.200	5.562
Water flow rate	(3)	gpm	1.14	0.92	0.63	1.82	1.39	1.18	2.58	2.10	1.75
Pressure drops	(3)	psi	0.87	0.73	0.44	4.06	2.47	1.89	2.03	1.45	1.02
Fans											
Centrifugal fans		n°		1			2			2	
Air flow rate		cfm	171	129	82	265	206	153	353	271	194
Sound level											
Sound power		dB(A)	50	43	31	48	41	34	51	44	39
Sound pressure	(4)	dB(A)	42	35	23	40	33	26	43	36	31
Hydraulic connections											
Standard coil		Ø		1/2"			1/2"			3/4"	
Additional heat exchanger		Ø		1/2"			1/2"			1/2"	
Electrical data 120V~60Hz											
FLA		A		n.a.			n.a.			n.a.	
Electrical data 220V~60Hz											
FLA		A		0.45			0.55			0.95	

FCX_USP - 4 PIPE SYSTEMS			50			62			82		
Fan speed			**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**
Hating Performance											
Heating capacity (70°C/158°F)	(1)	BTU/h	14.945	13.444	10.987	18.733	16.037	13.205	21.872	21.496	18.084
Water flow rate	(1)	gpm	1.69	1.52	1.24	2.12	1.81	1.49	2.47	2.43	2.05
Pressure drops	(1)	psi	5.08	4.35	3.05	2.32	1.74	1.45	2.18	2.03	1.60
Cooling Performance											
Total cooling capacity	(3)	BTU/h	14.297	11.977	11.977	16.583	14.911	10.987	23.578	17.061	14.638
Sensible cooling capacity	(3)	BTU/h	10.236	8.667	6.108	13.580	11.260	8.326	19.381	12.898	10.134
Water flow rate	(3)	gpm	3.17	2.66	1.90	3.68	3.31	2.44	5.24	3.79	3.25
Pressure drops	(3)	psi	2.76	2.03	1.16	2.47	2.03	1.16	3.19	1.74	1.31
Fans											
Centrifugal fans		n°		2			3			3	
Air flow rate		cfm	424	353	235	541	424	306	671	547	412
Sound level											
Sound power		dB(A)	56	51	42	57	51	42	62	57	51
Sound pressure	(4)	dB(A)	48	43	34	49	43	34	54	49	43
Hydraulic connections											
Standard coil		Ø		3/4"			3/4"			3/4"	
Additional heat exchanger		Ø		1/2"			1/2"			1/2"	
Electrical data 120V~60Hz											
FLA		A		n.a.			n.a.			n.a.	
Electrical data 220V~60Hz											
FLA		A		1.00			1.05			1.00	

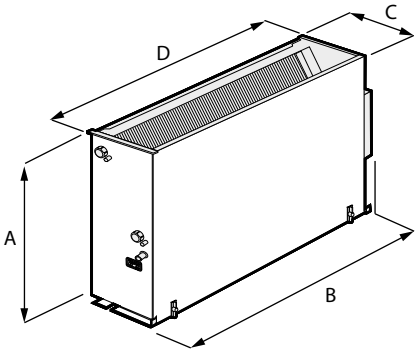
Performance of versions with upgraded motor refers to the following conditions:

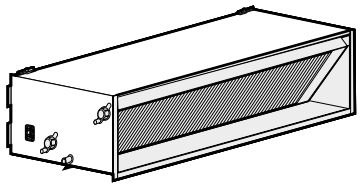
(1) Room air 68°F b.s.; Water (in/out) 158°F/140°F.

(3) Room air 80.6°F b.s./66.2°F b.u.; Water (in/out) 44.6°F/53.6°F.

(4) Sound pressure level (weighted A) measured with open port in a 3 and reverberation time of 0.5 seconds room with 3002 ft.

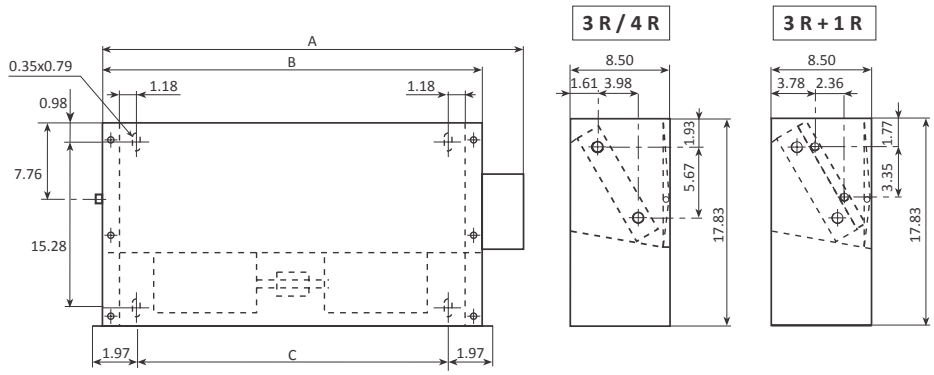
DIMENSIONS AND WEIGHT



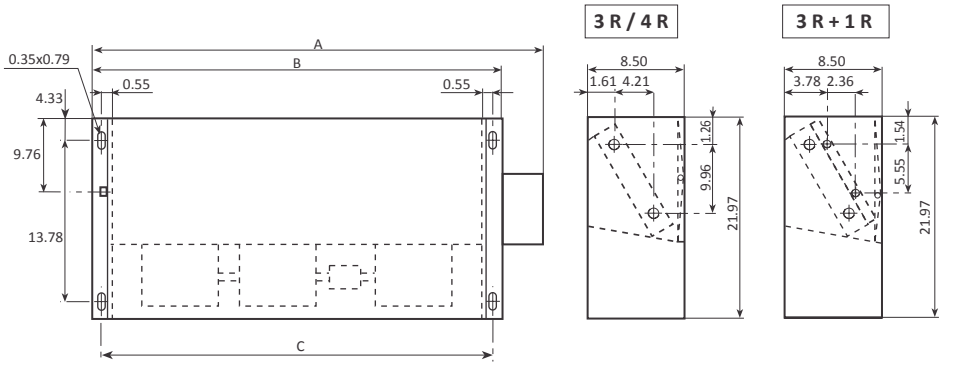


FCX_USP			22	24	32	34	42	44	50	54	62	64	82	84
Height	A	in	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	22.0	22.0	22.0	22.0
Max. Width	B	in	22.1	22.1	31.2	31.2	39.9	39.9	39.9	39.9	45.2	45.2	45.2	45.2
Width	D	in	20.6	20.6	29.7	29.7	38.3	38.3	38.3	38.3	44.2	44.2	44.2	44.2
Depht	C	in	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
Weight	-	lbs	28.7	28.7	39.7	39.7	48.5	48.5	48.5	48.5	72.8	72.8	72.8	72.8

FCX_USP / USPO: 22 - 32 - 42 - 50
FCX_USP / USPO: 24 - 34 - 44 - 54



FCX_USP / USPO: 62 - 82
FCX_USP: 102
FCX_USP / USPO: 64 - 84



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FCXI USP

Fan coils with Inverter Brushless motor
Vertical and horizontal
Concealed Wall and ceiling installation
Heating capacity from 3.856 to 58.348 BTU/h
Cooling capacity from 2.866 to 29.344 BTU/h

60Hz | Intertek | INVERTER | VMF

- **ELECTRIC SAVING EQUAL TO 50% COMPARED TO 3-SPEED MOTOR**
- **REDUCED TEMPERATURE AND HUMIDITY VARIATIONS**
- **VERY QUIET OPERATION**

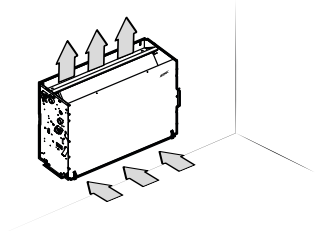
FEATURES

The units of the FCXI_US series are fan coils which are suitable for air conditioning. They come with brushless inverter motors and are available in various set-ups depending on the installation position, with the possibility of being ducted as well. They have ABS fans with an impeller equipped with inspectionable airfoil and scroll fins. This feature, combined with the presence of the inverter motor, gives the machine a net reduction in the noise emission level, as well as a reduction in the motor's electrical consumption compared to traditional fans with a metal structure. The unit can be equipped with a single/double heat exchange coil (2/4 pipe system), with 3/4 rows depending on the model. The units can also be equipped with multiple accessories and can be integrated into the centralised VMF - Aermec hydronic management system.

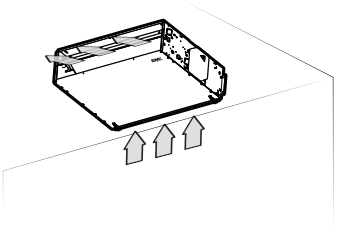
- Fan unit with Brushless motor (continuous 0-100% speed variation).
- Full compliance with the accident prevention standards.
- Rounded line.
- Metallic protective cabinet with rustproofing polyester paint.
- Adjustable air distribution grille, for USF versions.
- Fan coil automatic power-off function with closure of the air delivery grille, for U versions.
- Quiet operation.
- Low loss of charge in the heat exchange batteries.
- Ease of installation and maintenance.
- Air filter easy to remove and clean.
- Extractable shrouds for easy, effective cleaning.
- Water connections can be reversed during installation phase.

CONFIGURATION AVAILABLE

CONCEALED WALL INSTALLATION



CONCEALED CEILING INSTALLATION



TECHNICAL DATA

FCXI_USP - 2 PIPE SYSTEMS			20			24			30			34			36			40		
Fan speed			**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**
Hating Performance																				
Heating capacity (70°C/158°F)	(1)	BTU/h	10.100	8.633	6.517	13.341	10.578	7.165	18.255	13.887	10.816	20.336	16.378	12.727	21.872	16.992	14.297	22.588	18.835	13.853
Water flow rate	(1)	gpm	1.14	0.98	0.74	1.51	1.20	0.81	2.07	1.57	1.22	2.30	1.85	1.44	2.48	1.92	1.62	2.56	2.13	1.57
Pressure drops	(1)	psi	0.87	0.58	0.44	0.58	0.44	0.15	2.90	1.74	1.16	1.60	1.02	0.73	3.34	2.18	1.60	2.18	1.60	0.87
Heating capacity (45°C/113°F)	(2)	BTU/h	5.016	4.299	3.242	6.654	5.255	3.549	9.076	6.893	5.357	10.134	8.155	6.312	10.885	8.462	7.097	11.226	9.383	6.893
Water flow rate	(2)	gpm	1.13	0.96	0.73	1.49	1.18	0.80	2.03	1.55	1.20	2.27	1.82	1.42	2.44	1.89	1.59	2.51	2.10	1.55
Pressure drops	(2)	psi	0.73	0.58	0.29	0.58	0.44	0.15	2.76	1.74	1.16	1.45	1.02	0.58	3.34	2.03	1.60	2.03	1.45	0.87
Cooling Performance																				
Total cooling capacity	(3)	BTU/h	5.118	4.163	2.866	5.903	4.675	3.446	8.189	6.278	5.289	9.554	7.780	6.005	9.554	7.336	6.176	11.601	9.486	7.882
Sensible cooling capacity	(3)	BTU/h	4.231	3.412	2.286	4.709	3.719	2.593	6.483	5.357	3.787	7.268	5.869	4.265	7.507	6.210	4.368	9.418	7.200	5.562
Water flow rate	(3)	gpm	1.14	0.92	0.63	1.31	1.04	0.77	1.82	1.39	1.18	2.12	1.73	1.33	2.12	1.63	1.37	2.58	2.10	1.75
Pressure drops	(3)	psi	0.87	0.73	0.44	0.44	0.29	0.15	4.06	2.47	1.89	2.03	1.45	0.87	4.06	2.47	1.89	2.03	1.45	1.02
Fans																				
Centrifugal fans		n°		1			1			2			2			2			2	
Air flow rate		cfm	171	129	82	171	129	82	265	206	153	265	206	153	265	206	153	353	271	194
Sound level																				
Sound power		dB(A)	50	43	31	50	43	31	48	41	34	48	41	34	48	41	34	51	44	39
Sound pressure	(4)	dB(A)	42	35	23	42	35	23	40	33	26	40	33	26	40	33	26	43	36	31
Hydraulic connections																				
Standard coil		Ø		1/2"			-			1/2"			-			3/4"			3/4"	
Increased coil		Ø		-			3/4"			-			3/4"			-			-	
Electrical data 120V~60Hz																				
FLA		A		-			-			-			-			-			-	
Electrical data 220V~60Hz																				
FLA		A		0.70			0.70			1.00			1.00			1.00			1.00	

FCXI_USP - 2 PIPE SYSTEMS			44			50			54			56			80			84		
Fan speed			**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**
Hating Performance																				
Heating capacity (70°C/158°F)	(1)	BTU/h	29.344	23.646	17.743	27.945	25.693	17.129	34.463	29.890	21.292	32.927	28.764	20.678	51.660	45.552	36.749	58.348	49.203	38.216
Water flow rate	(1)	gpm	3.32	2.68	2.01	3.17	2.91	1.94	3.90	3.38	2.41	3.72	3.26	2.34	5.85	5.16	4.16	6.60	5.57	4.32
Pressure drops	(1)	psi	3.19	2.18	1.31	2.18	1.89	0.87	3.34	2.61	1.45	6.09	4.93	2.61	3.05	2.32	1.60	4.50	3.34	2.18
Heating capacity (45°C/113°F)	(2)	BTU/h	14.604	11.772	8.837	13.922	12.796	8.530	17.129	14.877	10.578	16.378	14.331	10.271	25.693	22.657	18.289	29.037	24.465	19.006
Water flow rate	(2)	gpm	3.27	2.63	1.98	3.11	2.86	1.91	3.84	3.33	2.37	3.67	3.21	2.30	5.75	5.07	4.09	6.50	5.48	4.26
Pressure drops	(2)	psi	3.05	2.03	1.31	2.03	1.74	0.87	3.19	2.47	1.31	5.80	4.79	2.47	2.90	2.32	1.60	4.35	3.19	2.03
Cooling Performance																				
Total cooling capacity	(3)	BTU/h	15.184	12.250	9.179	14.297	11.977	11.977	16.958	14.740	10.578	15.696	13.137	9.418	23.578	17.061	14.638	29.344	24.977	19.688
Sensible cooling capacity	(3)	BTU/h	11.260	9.008	6.688	10.236	8.667	6.108	12.079	10.441	7.404	11.942	10.475	7.234	19.381	12.898	10.134	19.722	16.617	9.554
Water flow rate	(3)	gpm	3.37	2.72	2.04	3.17	2.66	1.90	3.76	3.27	2.35	3.48	2.91	2.09	5.24	3.79	3.25	6.51	5.54	4.37
Pressure drops	(3)	psi	5.80	3.92	2.32	2.76	2.03	1.16	3.77	3.05	1.74	5.51	4.06	2.18	3.19	1.74	1.31	4.35	3.19	2.18
Fans																				
Centrifugal fans		n°		2			2			2			2			3			3	
Air flow rate		cfm	353	271	194	424	353	235	424	353	235	424	353	235	671	547	412	671	547	412
Sound level																				
Sound power		dB(A)	51	44	39	56	51	42	56	51	42	56	51	42	62	57	51	62	57	51
Sound pressure	(4)	dB(A)	43	36	31	48	43	34	48	43	34	48	43	34	54	49	43	54	49	43
Hydraulic connections																				
Standard coil		Ø		-			3/4"			-			3/4"			3/4"			-	
Increased coil		Ø		3/4"			-			3/4"			-			-			3/4"	
Electrical data 120V~60Hz																				
FLA		A		-			-			-			-			-			-	
Electrical data 220V~60Hz																				
FLA		A		1.00			1.00			1.00			1.00			1.70			1.70	

Performance of versions with upgraded motor refers to the following conditions:

(1) Room air 68°F b.s.; Water (in/out) 158°F/140°F.

(2) Room air 68°F b.s.; Water (in/out) 113°F/104°F.

(3) Room air 80.6°F b.s./66.2°F b.u.; Water (in/out) 44.6°F/53.6°F.

(4) Sound pressure level (weighted A) measured with open port in a 3 and reverberation time of 0.5 seconds room with 3002 ft.

TECHNICAL DATA

FCXI_USP - 4 PIPE SYSTEMS			20			30			36			40		
Fan speed			**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**
Hating Performance														
Heating capacity (70°C/158°F)	(1)	BTU/h	6.039	5.152	3.856	9.725	8.360	6.927	9.725	8.360	6.927	11.806	11.635	9.076
Water flow rate	(1)	gpm	0.68	0.58	0.44	1.10	0.95	0.78	1.10	0.95	0.78	1.33	1.32	1.03
Pressure drops	(1)	psi	0.87	0.73	0.44	2.32	1.74	1.16	2.32	1.74	1.16	3.05	2.90	2.03
Cooling Performance														
Total cooling capacity	(3)	BTU/h	5.118	4.163	2.866	8.189	6.278	5.289	9.554	7.336	6.176	11.601	9.486	7.882
Sensible cooling capacity	(3)	BTU/h	4.231	3.412	2.286	6.483	5.357	3.787	7.507	6.210	4.368	9.418	7.200	5.562
Water flow rate	(3)	gpm	1.14	0.92	0.63	1.82	1.39	1.18	2.12	1.63	1.37	2.58	2.10	1.75
Pressure drops	(3)	psi	0.87	0.73	0.44	4.06	2.47	1.89	4.06	2.47	1.89	2.03	1.45	1.02
Fans														
Centrifugal fans		n°		1			2			2			2	
Air flow rate		cfm	171	129	82	265	206	153	265	206	153	353	271	194
Sound level														
Sound power		dB(A)	50	43	31	48	41	34	48	41	34	51	44	39
Sound pressure	(4)	dB(A)	42	35	23	40	33	26	40	33	26	43	36	31
Hydraulic connections														
Standard coil		Ø		1/2″			1/2″			3/4″			3/4″	
Additional heat exchanger		Ø		1/2″			1/2″			1/2″			1/2″	
Electrical data 120V~60Hz														
FLA		A		-			-			-			-	
Electrical data 220V~60Hz														
FLA		A		0.70			1.00			1.00			1.00	

FCXI_USP - 4 PIPE SYSTEMS			50			56			80		
Fan speed			**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**
Hating Performance											
Heating capacity (70°C/158°F)	(1)	BTU/h	14.945	13.444	10.987	14.945	13.444	10.987	21.872	21.496	18.084
Water flow rate	(1)	gpm	1.69	1.52	1.24	1.69	1.52	1.24	2.47	2.43	2.05
Pressure drops	(1)	psi	5.08	4.35	3.05	5.08	4.35	3.05	2.18	2.03	1.60
Cooling Performance											
Total cooling capacity	(3)	BTU/h	14.297	11.977	11.977	15.696	13.137	9.418	23.578	17.061	14.638
Sensible cooling capacity	(3)	BTU/h	10.236	8.667	6.108	11.942	10.475	7.234	19.381	12.898	10.134
Water flow rate	(3)	gpm	3.17	2.66	1.90	3.48	2.91	2.09	5.24	3.79	3.25
Pressure drops	(3)	psi	2.76	2.03	1.16	5.51	4.06	2.18	3.19	1.74	1.31
Fans											
Centrifugal fans		n°		2			2			3	
Air flow rate		cfm	424	353	235	424	353	235	671	547	412
Sound level											
Sound power		dB(A)	56	51	42	56	51	42	62	57	51
Sound pressure	(4)	dB(A)	48	43	34	48	43	34	54	49	43
Hydraulic connections											
Standard coil		Ø		3/4″			3/4″			3/4″	
Additional heat exchanger		Ø		1/2″			1/2″			1/2″	
Electrical data 120V~60Hz											
FLA		A		-			-			-	
Electrical data 220V~60Hz											
FLA		A		1.00			1.00			1.70	

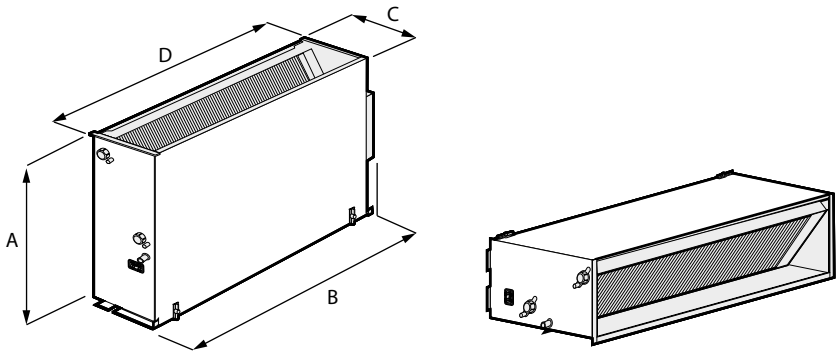
Performance of versions with upgraded motor refers to the following conditions:

(1) Room air 68°F b.s.; Water (in/out) 158°F/140°F.

(3) Room air 80.6°F b.s./66.2°F b.u.; Water (in/out) 44.6°F/53.6°F.

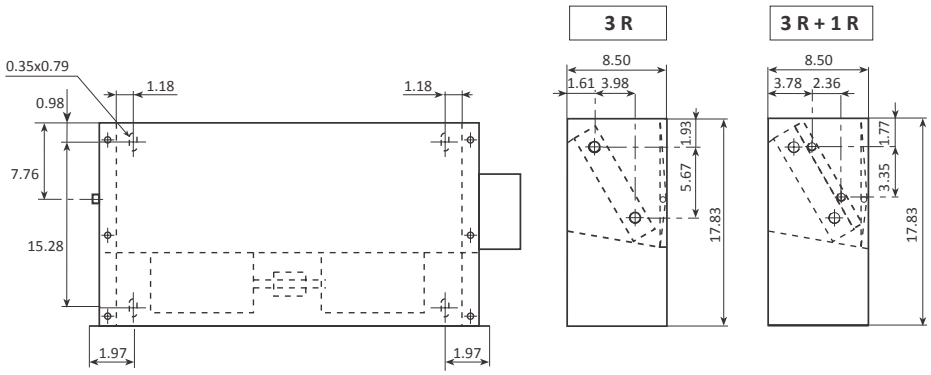
(4) Sound pressure level (weighted A) measured with open port in a 3 and reverberation time of 0.5 seconds room with 3002 ft.

DIMENSIONS AND WEIGHT

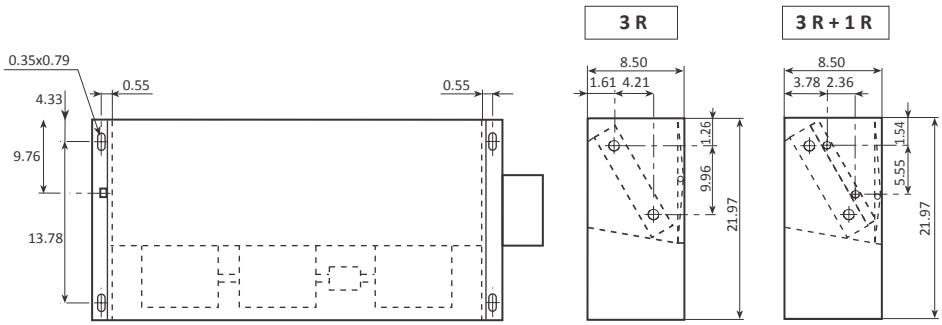


FCXI_USP			20	24	30	34	36	40	44	50	54	56	80	84
Height	A	in	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	22.0	22.0
Max. Width	B	in	22.1	22.1	31.2	31.2	31.2	39.9	39.9	39.9	39.9	39.9	45.2	45.2
Width	D	in	20.6	20.6	29.7	29.7	29.7	38.3	38.3	38.3	38.3	38.3	44.2	44.2
Depht	C	in	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
Weight	-	lbs	28.7	28.7	39.7	39.7	39.7	48.5	48.5	48.5	48.5	48.5	72.8	72.8

FCXI_USP: 20 - 30 - 34 - 36 - 40 - 44 - 50 -54 -56



FCXI_USP: 80



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VED
030/340

Fan coils
Vertical and horizontal
Concealed Wall and ceiling installation
Cooling capacity from 3.344 to 18.289 BTU/h
Heating capacity from 3.105 to 37.363 BTU/h

60Hz VMF

VED 030/340

- **HEAT EXCHANGER ONLY WITH 1 OR 2 ROWS**
- **WIDE RANGE OF USEFUL STATIC PRESSURE**
- **CENTRIFUGAL FANS IN ANTISTATIC PLASTIC**
- **ACCESSIBLE FAN ASSEMBLY**
- **5 SPEED VENTILATION UNIT**
- **AIR FILTER CLASS G3**
- **REVERSIBLE COIL**

FEATURES

The units of the VED series are fan coils which are suitable for air conditioning. Available in various versions, they can be installed either vertically or horizontally and come with multi-speed on/off motors or inverter motors. They have anti-static plastic centrifugal fans with an impeller equipped with inspectionable airfoil and scroll fins. This feature gives the machine a net reduction in the noise emission level, as well as a reduction in the motor's electrical consumption compared to traditional fans with a metal structure. The VED units come with a class G3 air filter as standard, and can also be equipped with multiple accessories and can be integrated into the centralised VMF - Aermec hydronic management system.

- Ducted air conditioning terminal unit
- Horizontal and vertical installation
- Internal installation
- Available in 8 sizes
- 3 or 4 row coils for 2-pipe systems
- 3 row main coil and heating only coil accessory for 4-pipe systems
- Reversing of hydraulic connections side on site
- Low pressure drop heat exchanger
- 3-way valve accessory
- 2-way valve accessory for variable flow systems
- 6 and 7 speed fan assembly (3 selectable)
- Large range of available static pressure
- Centrifugal fans in anti-static plastic material. Their characteristics permit energy savings compared to conventional fans
- Fans with aerofoil profile designed to achieve high airflows and pressures whilst at the same time producing low noise
- Compatible with the VMF system
- Large range of controllers
- Large range of accessories to satisfy all installation requirements
- Compatible with many accessories already available on the FCX range
- Discharge connection supplied loose
- Air filter Class G3, for easy removal and cleaning
- Internal insulation in Class 1 fire retardant material
- Protective rating IP20
- Fan housing in plastic material removable for easy and effective cleaning
- Ease of installation and maintenance
- Full compliance with safety standards

ACCESSORIES

VCF4_C_24V
Kit made up from motorised 3-way valves with isolating shell, fittings and isolated copper pipes. For main coils.
24V power supply.

VCF4_H_24V
Kit made up from motorised 3-way valves, fittings and isolated copper pipes. For heating only coils.
24V power supply.

VCF2_C_24V
Kit made up from motorised 2-way valves, with fittings and isolated copper pipes. For main coils.
24V power supply.

VCF2_H_24V
Kit made up from motorised 2-way valves, with fittings and copper pipes. For heating only coils.
24V power supply.

CONTROL PANELS
Available in 24V and 120V power supply
(contact Aermec office for compatibility).

SIT3
Thermostat interface board Mandatory accessory on the VED units coupled to thermostats different to the VMF System.

VMF-SIT 3
Thermostat Interface Board VMF. Mandatory accessory on the VED unit supplied with VMF-E1 thermostat.

BV
Single row hot water heat exchanger.

UNIT CONFIGURATOR

NAME	
VED	
POWER SUPPLY	
	220V/1/60Hz
WATER SYSTEM	
2	2 Pipes
4	4 Pipes
SIZE	
	030, 040, 130, 140, 230, 240, 330, 340
VERSION	
°	Standard

TECHNICAL DATA - 2 PIPE SYSTEMS

VED - 2 PIPE SYSTEMS		030			040			130			140			230			240			330			340		
Fan speed		H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L	H	M	L
Hating Performance																									
Heating capacity (70°C/158°F)	(1) BTU/h	12.591	11.499	6.210	13.376	12.181	8.087	21.462	19.893	15.013	22.452	20.780	15.423	24.431	22.179	18.255	26.990	24.363	19.790	35.862	31.869	26.649	37.363	34.190	28.355
Water flow rate	(1) gpm	1.42	1.30	0.70	1.51	1.38	0.91	2.43	2.25	1.70	2.54	2.35	1.74	2.77	2.51	2.06	3.06	2.76	2.24	4.06	3.61	3.02	4.23	3.87	3.21
Pressure drops	(1) psi	1.31	1.02	0.44	1.74	1.45	0.58	3.77	3.19	1.89	2.61	2.32	1.31	5.37	4.35	3.92	4.64	3.77	2.61	2.32	1.89	1.31	4.64	4.06	3.19
Heating capacity (45°C/113°F)	(2) BTU/h	6.244	5.732	3.105	6.654	6.074	4.026	10.680	9.895	7.473	11.158	10.339	7.677	12.147	11.021	9.076	13.410	12.113	9.861	17.846	15.866	13.273	18.596	16.992	14.126
Water flow rate	(2) gpm	1.40	1.28	0.69	1.49	1.36	0.90	2.39	2.22	1.67	2.50	2.32	1.72	2.72	2.47	2.03	3.01	2.71	2.21	3.99	3.55	2.97	4.16	3.81	3.16
Pressure drops	(2) psi	1.31	1.02	0.44	1.74	1.45	0.58	3.63	3.05	1.89	2.47	2.32	1.31	5.22	4.21	3.77	4.50	3.63	2.47	2.32	1.89	1.31	4.50	3.92	3.05
Cooling Performance																									
Total cooling capacity	(3) BTU/h	5.528	4.948	3.378	6.483	5.869	3.822	10.236	9.520	7.097	11.226	10.407	7.746	11.670	10.680	8.837	13.717	12.386	9.895	17.061	15.082	12.557	18.289	16.344	13.580
Sensible cooling capacity	(3) BTU/h	4.231	3.822	2.559	4.606	4.197	2.764	7.131	6.620	4.913	8.087	7.473	5.494	9.213	8.326	6.824	10.305	9.281	7.507	12.761	11.397	9.554	13.614	12.181	10.066
Water flow rate	(3) gpm	1.23	1.10	0.75	1.44	1.30	0.85	2.27	2.11	1.58	2.49	2.31	1.72	2.59	2.37	1.96	3.04	2.75	2.20	3.79	3.35	2.79	4.06	3.63	3.02
Pressure drops	(3) psi	1.31	1.02	0.44	2.03	1.74	0.73	4.50	3.92	2.18	3.34	2.90	1.60	6.38	5.22	3.63	5.37	4.50	2.32	2.61	2.03	1.45	3.77	3.05	2.32
Fans																									
Centrifugal fans	n°	1			1			2			2			2			2			3			3		
Air flow rate	cfm	168	151	95	163	147	94	255	234	169	247	227	165	347	308	245	335	300	239	474	414	337	456	403	331
High static pressure	in wg	0.24	0.20	0.08	0.24	0.20	0.08	0.24	0.20	0.10	0.24	0.20	0.11	0.26	0.20	0.13	0.25	0.20	0.13	0.26	0.20	0.13	0.26	0.20	0.14
Sound level																									
Sound power	dB(A)	54	52	44	54	52	44	55	53	47	55	53	47	57	54	49	57	54	49	58	55	49	58	55	49
Sound pressure	(4) dB(A)	50	48	40	50	48	40	50	48	42	50	48	42	52	49	44	52	49	44	54	51	45	54	51	45
Hydraulic connections																									
Standard coil "female"	Ø	3/4"			3/4"			3/4"			3/4"			3/4"			3/4"			3/4"			3/4"		
Increased coil "female"	Ø	-			-			-			-			-			-			-			-		
Electrical data 220V~60Hz																									
FLA	A	0.36			0.36			0.48			0.48			0.66			0.66			0.79			0.79		

VED - 4 PIPE SYSTEMS		030 + BV030			130 + BV130			230 + BV230			330 + BV162		
Fan speed		H	M	L	H	M	L	H	M	L	H	M	L
Hating Performance													
Heating capacity (70°C/158°F)	(1) BTU/h	6.756	6.347	4.845	11.533	10.953	8.974	13.683	12.727	11.192	17.982	16.754	14.911
Water flow rate	(1) gpm	0.77	0.72	0.55	1.30	1.24	1.01	1.55	1.44	1.26	2.03	1.89	1.68
Pressure drops	(1) psi	1.02	0.87	0.58	3.34	3.05	2.18	1.89	1.60	1.31	3.05	2.61	2.18
Cooling Performance													
Total cooling capacity	(3) BTU/h	5.425	4.845	3.344	9.998	9.315	6.927	11.533	10.509	8.735	16.754	14.877	12.454
Sensible cooling capacity	(3) BTU/h	4.163	3.719	2.491	7.404	6.483	4.777	9.110	8.155	6.756	12.557	11.260	9.486
Water flow rate	(3) gpm	1.21	1.07	0.75	2.22	2.06	1.54	2.56	2.33	1.94	3.72	3.31	2.77
Pressure drops	(3) psi	1.16	0.87	0.58	4.50	3.92	2.18	6.38	5.37	3.77	2.61	2.03	1.45
Fans													
Centrifugal fans	n°	1			2			2			3		
Air flow rate	cfm	280	250	160	423	388	280	582	513	412	790	695	568
High static pressure	in wg	0.24	0.20	0.08	0.24	0.20	0.10	0.26	0.20	0.13	0.26	0.20	0.13
Sound level													
Sound power	dB(A)	54	52	44	55	53	47	57	54	49	58	55	49
Sound pressure	(4) dB(A)	50	48	40	50	48	42	52	49	44	54	51	45
Hydraulic connections													
Standard coil "female"	Ø	3/4"			3/4"			3/4"			3/4"		
Additional heat exchanger (BV)	Ø	1/2"			1/2"			1/2"			1/2"		
Electrical data 220V~60Hz													
FLA	A	0.36			0.48			0.66			0.79		

Performance of versions with upgraded motor refers to the following conditions:

(1) Room air 68°F b.s.; Water (in/out) 158°F/140°F.

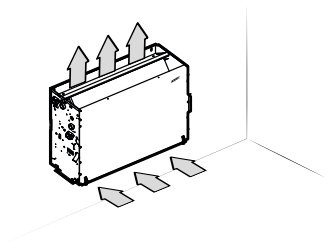
(2) Room air 68°F b.s.; Water (in/out) 113°F/104°F.

(3) Room air 80.6°F b.s./66.2°F b.u.; Water (in/out) 44.6°F/53.6°F.

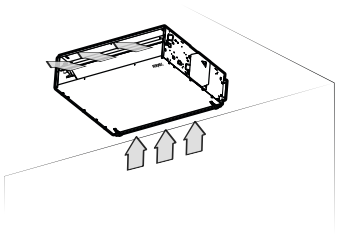
(4) Sound pressure level (weighted A) measured with open port in a 3 and reverberation time of 0.5 seconds room with 3002 ft.

CONFIGURATION AVAILABLE

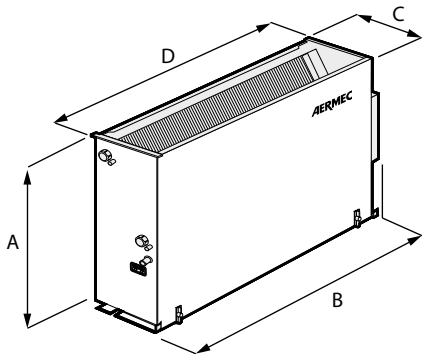
CONCEALED WALL INSTALLATION



CONCEALED CEILING INSTALLATION



DIMENSIONS AND WEIGHT



VED			030	040	130	140	230	240	330	340
Height	A	in	23,0	23,0	23,0	23,0	23,0	23,0	23,0	23,0
Max. Width	B	in	22,7	22,7	31,8	31,8	40,5	40,5	45,2	45,2
Depht	C	in	8,5	8,5	8,5	8,5	8,5	8,5	8,5	8,5
Width	D	in	21,7	21,7	30,8	30,8	39,4	39,4	44,2	44,2
Weight	-	lbs	48,5	52,9	55,1	72,8	72,8	75,0	77,2	75,0

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VED

430/741

Fan coils
Vertical and horizontal
Concealed Wall and ceiling installation
Cooling capacity from 15.969 to 54.867 BTU/h
Heating capacity from 17.777 to 108.199 BTU/h

60Hz | Intertek | VMF

- **HORIZONTAL AND VERTICAL INSTALLATION**
- **VERSIONS FOR 2/4 PIPE SYSTEMS**
- **HEAT EXCHANGER ONLY WITH 1 OR 2 ROWS**
- **WIDE RANGE OF USEFUL STATIC PRESSURE**
- **5 SPEED VENTILATION UNIT**
- **INSPECTIONABLE FAN UNIT**
- **CLASS G3 AIR FILTER**

FEATURES

The units of the VED series are fan coils which are suitable for air conditioning. Available in various versions. they can be installed either vertically or horizontally and come with multi-speed on/off motors or inverter motors. They have anti-static plastic centrifugal fans with an impeller equipped with inspectionable airfoil and scroll fins. This feature gives the machine a net reduction in the noise emission level. as well as a reduction in the motor's electrical consumption compared to traditional fans with a metal structure. The VED units come with a class G3 air filter as standard. and can also be equipped with multiple accessories and can be integrated into the centralised VMF - Aermec hydronic management system.

- Air handling terminal for ducted systems
- Horizontal and vertical installation
- Indoor installation
- Available in 4 sizes and 4 configurations
- Versions for 2 pipe systems with 3 or 4 row coil
- Versions for systems with 4 pipes with main coil with 3 or 4 rows and heating only coil with 1 or 2 rows
- Reversibility of the hydraulic connection in the installation phase
- Low pressure drop in the heat exchange coils
- 3-way valves accessories
- 2-way valves accessories for systems with variable water flow rate
- 5 speed fan unit (3 selectable)
- Wide range of useful static pressure
- Centrifugal fans in antistatic plastic. Due to their features. they allow to reduce the energy consumption with respect to normal fans
- Fans with wing-shaped profile studied to obtain high flow rate and static pressure performance and low noise emission at the same time
- Compatible with the VMF system
- Wide range of controls
- Wide range of accessories to satisfy all system requirements
- Rectangular flow flange already integrated into the framework
- Class G3 air filter with easy extraction and cleaning
- Internal insulation in Class 1 fire resistance
- IP20 protection rating
- Plastic augers. extractable for easy and efficient cleaning
- Easy installation and maintenance
- Full respect of the accident-prevention standards

ACCESSORIES

VCF4_C_24V
Kit made up from motorised 3-way valves with isolating shell. fittings and isolated copper pipes. For main coils. 24V power supply.

VCF4_H_24V
Kit made up from motorised 3-way valves. fittings and isolated copper pipes. For heating only coils. 24V power supply.

VCF2_C_24V
Kit made up from motorised 2-way valves. with fittings and isolated copper pipes. For main coils. 24V power supply.

VCF2_H_24V
Kit made up from motorised 2-way valves. with fittings and copper pipes. For heating only coils. 24V power supply.

CONTROL PANELS
Available in 24V and 120V power supply *(contact Aermec office for compatibility).*

SIT3
Thermostat interface board Mandatory accessory on the VED units coupled to thermostats different to the VMF System.

VMF-SIT 3
Thermostat Interface Board VMF. Mandatory accessory on the VED unit supplied with VMF-E1 thermostat.

BV
Single row hot water heat exchanger.

ACCESSORIES COMPATIBILITY

VED	430	432	440	441	530	532	540	541	630	632	640	641	730	732	740	741
Probes and accessories for control panels																
SIT3 (1)	In combination with PXAE or WMT05-06-10															
VMF System																
VMF-SIT3	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Water valves																
3 way valve kit																
VCF45C	•	•	•	•	•	•	•	•								
VCF47C									•	•	•	•	•	•	•	•
3 way valve kit for heating coil only																
VCF45H		•		•		•		•								
VCF47H										•		•		•		•
2 way valve kit																
VCF25C	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
2 way valve kit for heating coil only																
VCF25H		•		•		•		•		•		•		•		•
Combined adjustment and balancing valve independent of pressure																
Plenum for duct installation																
MZC5040	•	•	•	•	•	•	•	•								
MZC7050									•	•	•	•	•	•	•	•

(1) SIT3 Mandatory accessory on the VED units coupled to thermostats different to the VMF System

UNIT CONFIGURATOR

NAME	
VED	
POWER SUPPLY	
	220V/1/60Hz
WATER SYSTEM	
2	2 Pipes
4	4 Pipes
SIZE	
	430, 432, 440, 441, 530, 532, 540, 541, 630, 632, 640, 641, 730, 732, 740, 741
VERSION	
°	Standard

TECHNICAL DATA

VED			430			440			530			540			630			640			730			740		
Fan speed			**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**
Heating Performance																										
2 pipe configuration																										
Heating capacity (70°C/158°F)	(1)	BTU/h	54.492	47.258	35.725	61.794	52.410	39.069	59.951	56.198	47.088	67.936	63.432	52.479	92.196	77.353	63.568	111.543	94.653	76.603	98.952	86.532	72.269	108.199	94.346	78.070
Water flow rate	(1)	gpm	6.17	5.35	4.04	6.99	5.93	4.42	6.78	6.36	5.33	7.69	7.18	5.94	10.43	8.75	7.19	12.62	10.71	8.67	11.20	9.79	8.18	12.24	10.68	8.84
Pressure drops	(1)	psi	2.76	2.03	1.31	3.48	2.61	1.60	3.05	2.61	1.89	4.21	3.63	2.61	8.41	6.24	4.35	5.51	4.21	2.76	9.72	7.98	5.51	6.67	5.22	3.77
Heating capacity (45°C/113°F)	(2)	BTU/h	27.127	23.510	17.777	30.743	26.069	19.415	29.822	27.945	23.441	33.780	31.562	26.103	45.859	38.489	31.631	55.481	47.088	38.114	49.237	43.061	35.964	53.809	46.951	38.830
Water flow rate	(2)	gpm	6.07	5.26	3.98	6.88	5.84	4.35	6.68	6.26	5.24	7.57	7.06	5.84	10.27	8.62	7.08	12.42	10.54	8.53	11.02	9.64	8.05	12.05	10.51	8.70
Pressure drops	(2)	psi	2.61	2.03	1.31	3.34	2.47	1.60	2.90	2.47	1.89	4.06	3.48	2.47	8.12	6.09	4.21	5.37	4.06	2.61	9.43	7.69	5.37	6.53	5.08	3.63
Cooling Performance																										
Total cooling capacity	(3)	BTU/h	23.714	20.985	15.969	27.331	24.090	18.221	26.478	25.216	21.019	30.607	29.140	25.352	42.754	36.510	30.334	51.421	43.539	35.589	47.258	41.628	35.486	54.867	48.555	40.809
Sensible cooling capacity	(3)	BTU/h	18.289	16.071	12.079	19.552	17.197	12.898	20.541	19.483	16.105	22.008	20.916	17.197	35.145	29.856	24.636	36.100	30.402	24.704	39.035	34.087	28.935	38.625	34.019	28.457
Water flow rate	(3)	gpm	5.26	4.66	3.54	6.07	5.35	4.04	5.88	5.60	4.67	6.79	6.47	5.63	9.49	8.10	6.73	11.41	9.66	7.90	10.49	9.24	7.88	12.18	10.78	9.06
Pressure drops	(3)	psi	2.47	1.89	1.16	3.19	2.47	1.45	3.05	2.76	1.74	4.06	3.63	2.76	6.96	5.22	3.77	5.95	4.35	3.05	8.41	6.67	5.08	6.53	5.37	3.92
Fans																										
Fan - Centrifugal		n°	2			2			2			2			3			3			3			3		
Air flow rate		cfm	795	665	465	789	647	459	895	824	659	883	812	647	1.301	1.059	812	1.283	1.042	806	1.418	1.201	965	1.383	1.177	942
High static pressure		in wg	0.29	0.20	0.10	0.28	0.20	0.10	0.23	0.20	0.13	0.22	0.20	0.13	0.30	0.20	0.12	0.30	0.20	0.12	0.28	0.20	0.13	0.28	0.20	0.13
Sound data																										
Sound power level (inle+radiator)	(5)	dB(A)	61	57	51	61	57	51	62	59	53	62	59	53	68	64	59	68	64	62	68	66	62	68	66	62
Sound power level (outlet)		dB(A)	57	53	47	57	53	47	58	55	49	58	55	49	64	60	55	64	60	57	64	62	58	64	62	58
Diameter connections																										
Standard coil		Ø	3/4"			3/4"			3/4"			3/4"			3/4"			3/4"			3/4"			3/4"		
Additional coil		Ø	/			/			/			/			/			/			/			/		

VED			441			541			641			741		
Fan speed			**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**
Heating Performance														
4 pipe configuration														
Heating capacity (65°C/149°F)	(4)	BTU/h	24.875	22.793	18.869	26.990	25.966	22.793	41.901	37.704	32.825	44.221	40.536	36.066
Water flow rate	(4)	gpm	2.81	2.58	2.13	3.05	2.93	2.57	4.73	4.26	3.71	4.99	4.58	4.07
Pressure drops	(4)	psi	3.34	2.76	2.03	3.77	3.48	2.76	3.34	2.76	2.18	3.63	3.05	2.47
Cooling Performance														
Total cooling capacity	(3)	BTU/h	27.331	24.090	18.255	30.607	29.140	25.352	51.421	43.539	35.589	54.867	48.555	40.809
Sensible cooling capacity	(3)	BTU/h	19.552	17.197	12.898	22.008	20.916	17.197	36.100	30.402	24.704	38.625	34.019	28.457
Water flow rate	(3)	gpm	6.07	5.35	4.04	6.79	6.47	5.63	11.41	9.66	7.90	12.18	10.78	9.06
Pressure drops	(3)	psi	3.19	2.61	1.60	4.06	3.63	2.76	5.95	4.35	3.05	6.53	5.37	3.92
Fan														
Fan - Centrifugal		n°	2			2			3			3		
Air flow rate		cfm	737	624	441	855	800	624	1248	1018	789	1388	1177	942
High static pressure		in wg	0.28	0.20	0.10	0.23	0.20	0.13	0.30	0.20	0.12	0.28	0.20	0.13
Sound data														
Sound power level (inle+radiator)	(5)	dB(A)	61	57	51	62	59	53	68	64	61	68	66	62
Sound power level (outlet)		dB(A)	57	53	47	58	55	49	64	60	57	64	62	58
Diameter connections														
Standard coil		Ø	3/4"			3/4"			3/4"			3/4"		
Additional coil		Ø	1/2"			1/2"			1/2"			1/2"		

Performance of versions with upgraded motor refers to the following conditions:

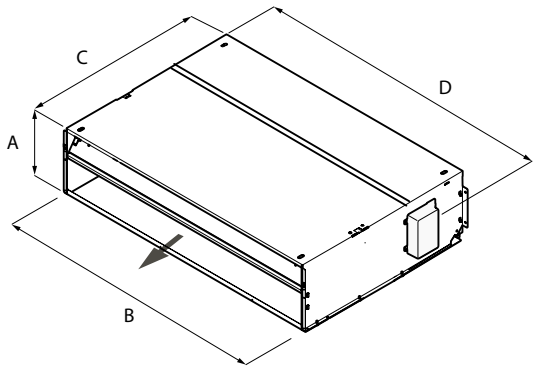
(1) Room air 68°F b.s.; Water (in/out) 158°F/140°F.

(2) Room air 68°F b.s.; Water (in/out) 113°F/104°F.

(3) Room air 80.6°F b.s./66.2°F b.u.; Water (in/out) 44.6°F/53.6°F.

(4) Sound pressure level (weighted A) measured with open port in a 3 and reverberation time of 0.5 seconds room with 3002 ft.

DIMENSIONS AND WEIGHT



VED		430	432	440	441	530	532	540	541	630	632	640	641	730	732	740	741
A	in	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8
B	in	44.6	44.6	44.6	44.6	44.6	44.6	44.6	44.6	60.4	60.4	60.4	60.4	60.4	60.4	60.4	60.4
C	in	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1
D	in	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	61.4	61.4	61.4	61.4	61.4	61.4	61.4	61.4
Peso netto	lbs	90	101	95	101	93	104	104	104	126	126	132	132	128	141	134	141

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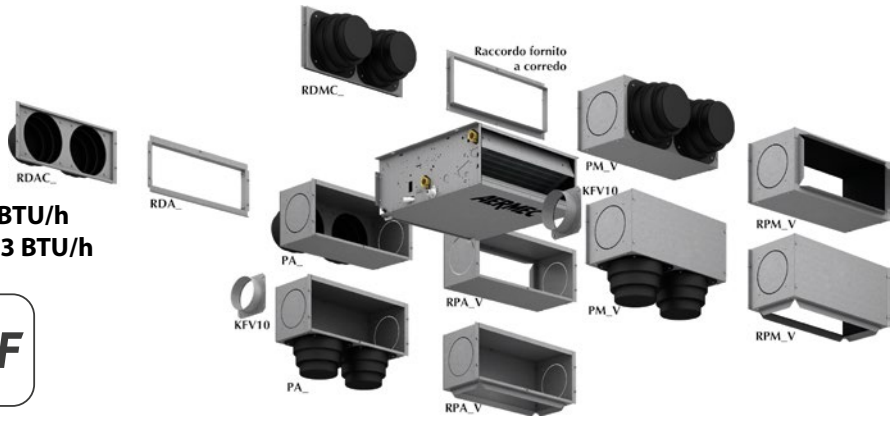
VED I

030/340

Inverter fan coils
For ducted systems
Cooling capacity from 819 to 17.982 BTU/h
Heating capacity from 3.017 to 37.363 BTU/h



- HORIZONTAL OR VERTICAL INSTALLATION
- VERSIONS FOR 2/4 PIPE SYSTEMS
- 1 ROW HEATING ONLY COIL (ACCESSORY BV)
- LARGE RANGE OF AVAILABLE STATIC PRESSURE
- CENTRIFUGAL FANS INVERTER
- ACCESSIBLE FAN ASSEMBLY
- AIR FILTER CLASS G3
- REVERSIBLE COIL

Unit selection

By choosing the appropriate options it is possible to select the model to suit the specific system requirements.

Configuration fields:

1 2 3	4	5	6	7
Code	Size	Main Coil	Main coil only hot	Inverter motor

Example:

1 2 3	4	5	6	7
VED	**0**	**3**	**0**	**I**

Characteristics

- Ducted air conditioning terminal unit
- Internal installation
- 3 or 4 row coils for 2-pipe systems
- 3 row main coil and heating only coil accessory for 4-pipe systems
- Reversing of hydraulic connections side on site
- Low pressure drop heat exchanger
- 3-way valve accessory
- 2-way valve accessory for variable flow systems
- Centrifugal fans with motor inverter
- Large range of available static pressure
- Centrifugal fans in anti-static plastic material. Their characteristics permit energy savings compared to conventional fans
- Fans with aerofoil profile designed to achieve high airflows and pressures whilst at the same time producing low noise
- Compatible with the VMF system
- Large range of controllers
- Large range of accessories to satisfy all installation requirements
- Discharge connection supplied loose
- Air filter Class G3, for easy removal and cleaning
- Internal insulation in Class 1 fire retardant material
- Protective rating IP20
- Fan housing in plastic material removable for easy and effective cleaning
- Ease of installation and maintenance
- Full compliance with safety standards.

Accessories

Control panel

A range of dedicated controllers, wall-mounted or on the machine, is available but it is essential to choose between these panels for simple and complete tuning, for more details please refer to the dedicated sheet.

Probes and accessories for control panels

- **SIT3 :** Thermostat interface board Mandatory accessory on the VED units coupled to thermostats different to the VMF System.

VMF system

- **VMF-SIT 3**: Thermostat Interface Board VMF. Mandatory accessory on the VED unit supplied with **VMF-E1** thermostat.

Hot water coil

- **BV**: Single row hot water heat exchanger.

Valve kit

- **VCF4_C**: **Kit made up from motorised 3-way valves** with isolating shell, fittings and isolated copper pipes. For main coils. 24V power supply.
- **VCF4_H**: **Kit made up from motorised 3-way valves**, fittings and isolated copper pipes. For heating only coils. 24V power supply.
- **VCF2_C: Kit made up from motorised 2-way valves**, with fittings and isolated copper pipes. For main coils. 24V power supply
- **VCF2_H: Kit made up from motorised 2-way valves,** with fittings and copper pipes. For heating only coils. 24V power supply

Accessory for Installation

- **AMP**: kit for the wall mounting installation.
- **BC**: Auxiliary condensate drip tray.
- **DSC4**: Condensate drainage device for use when natural run-off is not possible.

Ducting Accessories:

- **MZC:** Plenum with motor-driven dampers
- **RDA_V**: Straight intake connection with rectangular flange.
- **RDAC_V**: Straight intake connection with circular flanges.
- **RPA_V**: Intake plenum with rectangular flange.
- **RDMC_V**: Straight discharge with circular flanges. Internally insulated.
- **PA_V**: Intake plenum with circular flanges. Flanges in plastic material.
- **RPM_V**: Discharge plenum with rectangular flange. Internally insulated.
- **PM_V**: Discharge plenum with circular flanges. Internally insulated. Flanges in plastic material.
- **KFV10**: Circular flanges kit for intake/discharge plenum.

Grid

- **GA**: Intake grid with fixed louvers.
- **GAF**: Intake grid with fixed louvers with filter.
- **GM**: Flow grid with adjustable louvers.

For more details on the control panels and VMF system refer to the dedicated sheet

VED_I		030	040	130	140	230	240	330	340
Probes and accessories for control panels									
SIT3		•	•	•	•	•	•	•	•
VMF System									
VMF-SIT 3		•	•	•	•	•	•	•	•
Additional coil (heating only)									
BV030		•							
BV130				•					
BV230						•			
BV162								•	
Water valves									
3 way valve kit									
VCF4324	(1)	•	•	•	•	•	•	•	•
2 way valve kit									
VCFD324	(1)	•	•	•	•	•	•	•	•
3 way valve kit for heating coil only									
VCF4524		•		•		•		•	
2 way valve kit for heating coil only									
VCFD424		•		•		•		•	
Accessories for installation									
AMP		•	•	•	•	•	•	•	•
DSC4	(2)	•	•	•	•	•	•	•	•
ZX7		•	•	•	•	•	•		
ZX8								•	•
Auxiliary condensate drip tray									
BC4	(3)	•	•	•	•	•	•	•	•
BC6		•	•	•	•	•	•	•	•
BC9		•	•	•	•	•	•	•	•
Grille									
GA22		•	•						
GA32				•	•				
GA42						•	•		
GA62								•	•
GAF22		•	•						
GAF32				•	•				
GAF42						•	•		
GAF62								•	•
GM22		•	•						
GM32				•	•				

For more details on the control panels and VMF system refer to the dedicated sheet.
(1) VCF4324-VCFD324-VCF4524-VCZD424 are 24V
(2) DSC4 It's not available with AMP - BC -VMF system.
(3) BC4 is not available with valve VCZ-VCZD / VCF-VCFD

Technical data

VED_I		030	040	130	140	230	240	330	340
GM42						•	•		
GM62								•	•
SE20X	(4)	•	•						
SE30X	(4)			•	•				
SE40X	(4)					•	•		
SE80X	(4)							•	•
Plenum for duct installation									
MZC220		•	•						
MZC320				•	•				
MZC530						•	•		
MZC830								•	•
RDA000V		•	•						
RDA100V				•	•				
RDA200V						•	•		
RDA300V								•	•
RPA000V	(5)	•	•						
RPA100V	(5)			•	•				
RPA200V	(5)					•	•		
RPA300V	(5)							•	•
RDAC000V		•	•						
RDAC100V				•	•				
RDAC200V						•	•		
RDAC300V								•	•
PA000V	(5)	•	•						
PA100V	(5)			•	•				
PA200V	(5)					•	•		
PA300V	(5)							•	•
PM000V	(5)	•	•						
PM100V	(5)			•	•				
PM200V	(5)					•	•		
PM300V	(5)							•	•
RPM000V	(5)	•	•						
RPM100V	(5)			•	•				
RPM200V	(5)					•	•		
RPM300V	(5)							•	•
RDMC000V		•	•						
RDMC100V				•	•				
RDMC200V						•	•		
RDMC300V								•	•
KFV10		•	•	•	•	•	•	•	•

(4) The accessory SE require pairing with ZX

(5) All the Plenums (RPA_V; PA_V; RPM_V; PM_V) have a circular push-outs (Ø=150mm) on both sides, which can be removed, All the can have intake/discharge either straight or downwards (straight or downwards with reference to horizontal installation).

Technical data

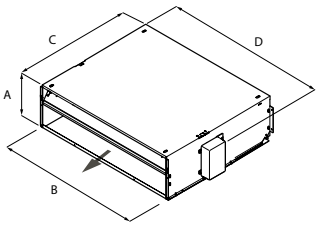
VED_I			30			40			130			140		
Fan speed			**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**
Heating Performance														
2 pipe configuration														
Heating capacity (158°F)	(1)	BTU/h	12.591	11.499	6.210	13.376	12.181	8.087	21.462	19.893	15.013	22.452	20.780	15.423
Water flow rate	(1)	gpm	1.42	1.30	0.70	1.51	1.38	0.91	2.43	2.25	1.70	2.54	2.35	1.74
Pressure drops	(1)	psi	1.31	1.02	0.44	1.74	1.45	0.58	3.77	3.19	1.89	2.61	2.32	1.31
Heating capacity (113°F)	(2)	BTU/h	6.244	5.698	3.071	6.620	6.039	3.992	10.646	9.895	7.438	11.158	10.305	7.643
Water flow rate	(2)	gpm	1.40	1.28	0.69	1.49	1.36	0.90	2.39	2.22	1.67	2.50	2.32	1.72
Pressure drops	(2)	psi	1.31	1.09	0.36	1.81	1.52	0.73	3.99	3.48	2.10	2.68	2.32	1.38
Cooling Performance														
Total cooling capacity	(3)	BTU/h	5.391	4.845	3.344	6.347	5.767	3.787	10.066	9.418	7.029	11.089	10.305	7.677
Sensible cooling capacity	(3)	BTU/h	4.095	3.685	2.525	4.470	4.095	2.730	6.995	6.517	4.845	7.916	7.370	5.425
Cooling capacity (latent)	(3)	BTU/h	1.297	1.160	819	1.877	1.672	1.058	3.071	2.900	2.184	3.173	2.934	2.252
Water flow rate	(3)	gpm	1.23	1.10	0.75	1.44	1.30	0.85	2.27	2.11	1.58	2.49	2.31	1.72
Pressure drops	(3)	psi	1.25	1.04	0.46	2.07	1.73	0.78	4.55	3.95	2.22	3.36	2.90	1.60
Fans														
Fan - Centrifugal		n°		1			1			2			2	
Air flow rate		cfm	168	151	95	163	147	94	255	234	169	247	227	165
High static pressure		in wg	0.24	0.20	0.08	0.24	0.20	0.08	0.24	0.20	0.10	0.24	0.20	0.11
Sound data														
Sound power level (inle+radiator)		dB(A)	54	52	44	54	52	44	55	53	47	55	53	47
Sound power level (outlet)		dB(A)	50	48	40	50	48	40	50	48	42	50	48	42
Diameter connections														
Standard coil		Ø		3/4"			3/4"			3/4"			3/4"	
Additional coil		Ø		/			/			/			/	

VED_I			230			240			330			340		
Fan speed			**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**
Heating Performance														
2 pipe configuration														
Heating capacity (158°F)	(1)	BTU/h	24.431	22.179	18.255	26.990	24.363	19.790	35.862	31.869	26.649	37.363	34.190	28.355
Water flow rate	(1)	gpm	2.77	2.51	2.06	3.06	2.76	2.24	4.06	3.61	3.02	4.23	3.87	3.21
Pressure drops	(1)	psi	5.37	4.35	3.92	4.64	3.77	2.61	2.32	1.89	1.31	4.64	4.06	3.19
Heating capacity (113°F)	(2)	BTU/h	12.147	11.021	9.076	13.410	12.113	9.827	17.811	15.832	13.239	18.562	16.992	13.580
Water flow rate	(2)	gpm	2.72	2.47	2.03	3.01	2.71	2.21	3.99	3.55	2.97	4.16	3.81	3.16
Pressure drops	(2)	psi	5.22	4.21	3.77	4.64	3.84	2.63	2.39	1.96	1.45	3.34	2.83	1.89
Cooling Performance														
Total cooling capacity	(3)	BTU/h	11.499	10.544	8.769	13.546	12.250	9.827	16.754	14.877	12.352	17.982	16.105	13.478
Sensible cooling capacity	(3)	BTU/h	9.042	8.189	6.756	10.100	9.110	7.438	12.420	11.158	9.452	13.307	11.977	9.963
Cooling capacity (latent)	(3)	BTU/h	2.457	2.354	2.013	3.446	3.139	2.388	4.333	3.719	2.900	4.675	4.129	3.515
Water flow rate	(3)	gpm	2.59	2.37	1.96	3.04	2.75	2.20	3.79	3.35	2.79	4.06	3.63	3.02
Pressure drops	(3)	psi	6.32	5.22	3.61	5.34	4.45	2.28	2.64	2.06	1.44	3.71	3.07	2.29
Fans														
Fan - Centrifugal		n°		2			2			3			3	
Air flow rate		cfm	347	308	245	335	300	239	474	414	337	456	403	331
High static pressure		in wg	0.26	0.20	0.13	0.25	0.20	0.13	0.26	0.20	0.13	0.26	0.20	0.14
Sound data														
Sound power level (inle+radiator)		dB(A)	57	54	49	57	54	49	58	55	49	58	55	49
Sound power level (outlet)		dB(A)	52	49	44	52	49	44	54	51	45	54	51	45
Diameter connections														
Standard coil		Ø		3/4"			3/4"			3/4"			3/4"	
Additional coil		Ø		/			/			/			/	

H max. speed; **M** med.speed; **L** min.speed
(1) Room air 68°F b.s.; Water (in/out) 158°C/140°F;
(2) Room air 68°F b.s.; Water (in/out) 113°F/104°F
(3) Room air 80.6°F b.s./66.2°F b.u.; Water (in/out) 44.6°F/53.6°F
(4) Room air 68°F b.s.; Water (in/out) 149°F/131°F

Dimensional data (in)

VED_I		030	040	130	140	230	240	330	340
A	in	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
B	in	21.7	21.7	30.8	30.8	39.4	39.4	44.2	44.2
C	in	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0
D	in	22.7	22.7	31.8	31.8	40.5	40.5	45.2	45.2
Net weight	lbs	44.1	46.3	50.7	52.9	65.0	70.5	71.7	75.0



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AERMEC

VED I

530/741

Inverter fan coils
For ducted systems
Cooling capacity from 20.643 to 54.867 BTU/h
Heating capacity from 23.407 to 108.199 BTU/h

- **HORIZONTAL OR VERTICAL INSTALLATION**
- **VERSIONS FOR 2/4 PIPE SYSTEMS**
- **1 -2 ROW HEATING ONLY COIL**
- **LARGE RANGE OF AVAILABLE STATIC PRESSURE**
- **CENTRIFUGAL FANS INVERTER**
- **ACCESSIBLE FAN ASSEMBLY**
- **AIR FILTER CLASS G3**
- **REVERSIBLE COIL**

Unit selection

By choosing the appropriate options it is possible to select the model to suit the specific system requirements.

Configuration fields:

1 2 3	4	5	6	7
Code	Size	Main Coil	Main coil only hot	Inverter motor

Example:

1 2 3	4	5	6	7
VED	**5**	**3**	**2**	**I**

Characteristics

- Ducted air conditioning terminal unit
- Internal installation
- 3 row main coil and heating only coil accessory for 4-pipe systems
- Versions for systems with 4 pipes with main coil with 3 or 4 rows and heating only coil with 1 or 2 rows
- Reversibility of the hydraulic connection in the installation phase
- Low pressure drop in the heat exchange coils
- 3-way valves accessories
- 2-way valves accessories for systems with variable water flow rate
- Centrifugal fans with motor inverter
- Wide range of useful static pressure Centrifugal fans in antistatic plastic. Due to their features, they allow to reduce the energy consumption with respect to normal fans
- Fans with wing-shaped profile studied to obtain high flow rate and static pressure performance and low noise emission at the same time
- Compatible with the VMF system
- Wide range of controls
- Wide range of accessories to satisfy all system requirements
- Rectangular flow flange already integrated into the framework
- Class G3 air filter with easy extraction and cleaning
- Internal insulation in Class 1 fire resistance
- IP20 protection rating
- Plastic augers, extractable for easy and efficient cleaning
- Easy installation and maintenance
- Full respect of the accident-prevention standards

Accessories

Control panel
A range of dedicated controllers, wall-mounted or on the machine, is available but it is essential to choose between these panels for simple and complete tuning, for more details please refer to the dedicated sheet.
Probes and accessories for control panels
- **SIT3 :** Thermostat interface board Mandatory accessory on the VED units coupled to thermostats different to the VMF System.

VMF system
- **VMF-SIT 3**: Thermostat Interface Board VMF. Mandatory accessory on the VED unit supplied with **VMF-E1** thermostat.

Hot water coil
- **BV**: Single row hot water heat exchanger.

Valve kit
- **VCF4_C**: **Kit made up from motorised 3-way valves** with isolating shell, fittings and isolated copper pipes. For main coils. 24V power supply.
- **VCF4_H**: **Kit made up from motorised 3-way valves**, fittings and isolated copper pipes. For heating only coils. 24V power supply.
- **VCF2_C: Kit made up from motorised 2-way valves**, with fittings and isolated copper pipes. For main coils. 24V power supply
- **VCF2_H: Kit made up from motorised 2-way valves,** with fittings and copper pipes. For heating only coils. 24V power supply

Accessory for Installation
- **AMP**: kit for the wall mounting installation.
- **BC**: Auxiliary condensate drip tray.
- **DSC4**: Condensate drainage device for use when natural run-off is not possible.

Ducting Accessories:
- **MZC:** Plenum with motor-driven dampers
- **RDA_V**: Straight intake connection with rectangular flange.
- **RDAC_V**: Straight intake connection with circular flanges.
- **RPA_V**: Intake plenum with rectangular flange.
- **RDMC_V**: Straight discharge with circular flanges. Internally insulated.
- **PA_V**: Intake plenum with circular flanges. Flanges in plastic material.
- **RPM_V**: Discharge plenum with rectangular flange. Internally insulated.
- **PM_V**: Discharge plenum with circular flanges. Internally insulated. Flanges in plastic material.
- **KFV10**: Circular flanges kit for intake/discharge plenum.

Grid
- **GA**: Intake grid with fixed louvers.
- **GAF**: Intake grid with fixed louvers with filter.
- **GM**: Flow grid with adjustable louvers.

For more details on the control panels and VMF system refer to the dedicated sheet

VED_I	530	532	540	541	730	732	740	741
Probes and accessories for control panels								
SIT3	•	•	•	•	•	•	•	•
VMF System								
VMF-E18	•	•	•	•	•	•	•	•
Water valves								
3 way valve kit								
VCF45C	contact head office							
VCF47C								
3 way valve kit for heating coil only								
VCF45H	contact head office							
VCF47H								
2 way valve kit								
VCF25C	contact head office							
2 way valve kit for heating coil only								
VCF25H	contact head office							
Plenum for duct installation								
MZC5040	•	•	•	•				
MZC7050					•	•	•	•
RDA 450 V	•	•	•	•				
RDA 670 V					•	•	•	•
RPA 450 V	•	•	•	•				
RPA 670 V					•	•	•	•
PA 450 V	•	•	•	•				
PA 670 V					•	•	•	•
RPM 450 V	•	•	•	•				
RPM 670 V					•	•	•	•
PM 450 V	•	•	•	•				
PM 670 V					•	•	•	•
KFV	•	•	•	•	•	•	•	•

For more details on the control panels, VMF system MZC refer to the dedicated sheet.

Technical data

VED_I			530			540			730			740		
Fan speed			**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**
Heating Performance														
2 pipe configuration														
Heating capacity (158°F)	(1)	BTU/h	59.951	56.198	47.088	67.936	63.432	52.479	98.952	86.532	72.269	108.199	94.346	78.070
Water flow rate	(1)	gpm	6,78	6,36	5,33	7,69	7,18	5,94	11,20	9,79	8,18	12,24	10,68	8,84
Pressure drops	(1)	psi	3,05	2,61	1,89	4,21	3,63	2,61	9,72	7,98	5,51	6,67	5,22	3,77
Heating capacity (113°F)	(2)	BTU/h	29.822	27.945	23.407	33.780	31.528	26.103	48.521	43.027	35.930	53.946	46.917	38.694
Water flow rate	(2)	gpm	6,62	6,20	5,20	7,50	7,00	5,79	10,77	9,55	7,97	11,97	10,41	8,59
Pressure drops	(2)	psi	2,97	2,68	1,96	4,28	3,63	3,05	9,50	7,47	5,44	6,60	5,15	3,70
Cooling Performance														
Total cooling capacity	(3)	BTU/h	25.216	24.738	20.643	29.686	28.662	24.943	45.996	40.809	34.974	53.605	47.736	40.297
Sensible cooling capacity	(3)	BTU/h	20.541	19.006	15.730	21.087	20.439	16.822	37.772	33.268	28.423	37.363	33.200	27.945
Cooling capacity (latent)	(3)	BTU/h	4.675	5.732	4.913	8.599	8.223	8.121	8.223	7.541	6.551	16.242	14.536	12.352
Water flow rate	(3)	gpm	5,60	5,49	4,58	6,59	6,36	5,53	10,21	9,06	7,76	11,90	10,59	8,94
Pressure drops	(3)	psi	3,05	2,76	1,74	4,06	3,63	2,76	8,41	6,67	5,08	6,53	5,37	3,92
Fans														
Fan - Centrifugal		n°		2			2			3			3	
Air flow rate		cfm	895	824	659	883	812	647	1.418	1.201	965	1.388	1.177	942
High static pressure		in wg	0,23	0,20	0,13	0,22	0,20	0,13	0,28	0,20	0,13	0,28	0,20	0,13
Sound data														
Sound power level (inle+radiator)		dB(A)	62	59	53	62	59	53	68	66	62	68	66	62
Sound power level (outlet)		dB(A)	58	55	49	58	55	49	64	62	58	64	62	58
Diameter connections														
Standard coil		Ø		3/4"			3/4"			3/4"			3/4"	
Additional coil		Ø		/			/			/			/	

VED_I			541			741		
Fan speed			**H**	**M**	**L**	**H**	**M**	**L**
Heating Performance								
4 pipe configuration								
Heating capacity (149°F)	(4)	BTU/h	26.956	26.001	22.861	44.221	40.536	36.066
Water flow rate	(4)	gpm	407	392	344	667	612	544
Pressure drops	(4)	psi	3,77	3,48	2,76	3,63	3,05	2,47
Cooling Performance								
Total cooling capacity	(3)	BTU/h	30.607	29.140	25.352	54.867	48.555	40.809
Sensible cooling capacity	(3)	BTU/h	22.008	20.916	17.197	38.625	34.019	28.457
Cooling capacity (latent)	(3)	BTU/h	8.599	8.223	8.155	16.242	14.536	12.352
Water flow rate	(3)	gpm	6,79	6,47	5,63	12,18	10,78	9,06
Pressure drops	(3)	psi	4,21	3,92	3,05	6,60	5,29	3,92
Fan								
Fan - Centrifugal		n°		2			3	
Air flow rate		cfm	859	800	624	1.383	1.177	942
High static pressure		in wg	0,22	0,20	0,13	0,28	0,20	0,13
Sound data								
Sound power level (inle+radiator)		dB(A)	62	59	53	68	66	62
Sound power level (outlet)		dB(A)	58	55	49	64	62	58
Diameter connections								
Standard coil		Ø		3/4"			3/4"	
Additional coil		Ø		1/2"			1/2"	

H max. speed; **M** med.speed; **L** min.speed

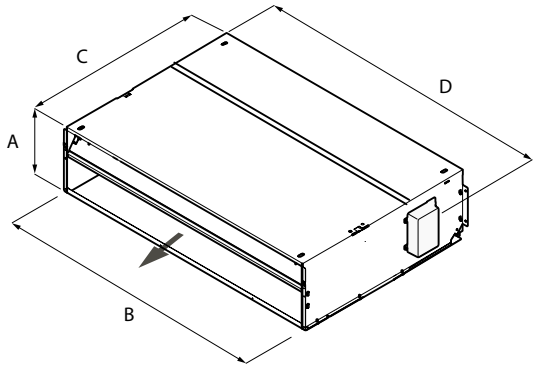
(1) Room air 68°F d.b.; Water (in/out) 158°F/140°F;

(2) Room air 68°F d.b.; Water (in/out) 113°F/104°F

(3) Room air 80.6°F d.b./66.2°F w.b.; Water (in/out) 44.6°F/53.6°C

(4) Room air 68°F d.b.; Water (in/out) 149°F/131°F

Dimensional data (mm)



VED_I		530	532	540	541	730	732	740	741
A	in	11,8	11,8	11,8	11,8	13,8	13,8	13,8	13,8
B	in	44,6	44,6	44,6	44,6	60,4	60,4	60,4	60,4
C	in	29,0	29,0	29,0	29,0	31,1	31,1	31,1	31,1
D	in	45,6	45,6	45,6	45,6	61,4	61,4	61,4	61,4
Weight	lbs	92,6	103,6	97,0	103,6	127,9	127,9	134,5	134,5

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37040 Bevilacqua (VR) - Italy
Tel. + 39 0442 633111 - Fax +39 0442 93577

FCL

Fan coils
Cassette
Ceiling and false ceiling installation
Cooling capacity from 9.418 to 29.447 BTU/h
Heating capacity from 9.963 to 74.214 BTU/h

60Hz | TÜV NRTL C US | VMF

GLL
☐ White RAL 9010

FCLMC
☐ White RAL 9010

Remote Control included
for GLL10M
GLL10R - GLL20R

- **STANDARD INTERNAL 3-WAY VALVE**
- **VERSION WITH 2-WAY VALVE FOR VARIABLE WATER FLOW RATE SYSTEMS**
- **VERSIONS WITHOUT VALVS**
- **FAN PURPOSELY DESIGNED FOR LOW SOUND EMISSIONS**
- **VERSIONS FOR 2-PIPE AND 4-PIPE SYSTEMS**
- **ALSO AVAILABLE WITH ELECTRIC HEATER FOR HEATING**

Features

The units of the FCL range are cassette fan coils designed for air-conditioning. They can be installed in false ceilings and have a multispeed motor (including 3 selectable speeds). They have antistatic plastic centrifugal fans with an impeller with wing-shaped fins and an Archimedean screw that can be inspected. This material ensures a notable noise reduction as well as reduced electricity consumption in comparison with traditional metal fans. FCL units have an electrostatically pre-charged air filter that's easy to remove and clean, and can be equipped with various accessories and integrated in the VMF - Aermec centralised hydronic management system.

- 2-pipe versions:
  FCL 82-102-122
- 4-pipe versions:
  FCL 84-104-124
- Standard preparation with standard internal three-way valve, with fast connection actuator and position visual signalling.
- FCL_VL preparation (available upon request), without internal valve.
- Grille dimensions perfectly integrable in standard suspended ceiling panels of 600x600mm and 840x840mm for the most powerful units.
  For more details refer to the accessories
- Fan designed for low sound emissions.
- 3-speed and 4-speed mixed flow (axial + centrifugal) fan unit for larger sizes (FCL 82-84-102-104-122-124), in order to select the 3 speeds that best meet delivered power and quiet operation requirements.
- Structure made entirely of galvanised steel, containing insulation elements in closed cell expanded polystyrene and externally covered with anti-condensate felt (FCL 82-84-102-104-122-124).
- Condensation drip tray in one piece, with V0 self-extinguishing level and overmoulding to insulation in expanded polystyrene with flame retardant additive.
- Heat exchanger with shaped profile to increase the exchange surface, and easily accessible drain valves.
- Continuous fan operation to prevent stratification of room air.
- Possibility of direct release of external air regardless of indoor unit ventilation.
- Possibility to control the climate of adjacent rooms as well. The versions FCL 82-84-102-104-122-124 allow 3-direction delivery.
- Air filter easily removed and cleaned, self-supporting structure, characterised by a high efficiency and low pressure drops, with class-V0 fire resistance (UL 94).V
- Full compliance with safety regulations.
- Easy installation and maintenance.

Accessories

Compulsory accessories GLF and GLL, are essential for the operation of the units:

- **GLL20R (840x840)**
  Delivery grille with louvers manually adjustable and air intake. With remote control, supplied with an infrared receiver with emergency operation switch. White RAL 9010.
- **GLL20 (840x840)**
  Delivery grille with louvers manually adjustable and air intake. Combined with wall-mounted control panel. White RAL 9010.
- **GLL20N (840x840)**
  Delivery grille with Manually adjustable fins and air intake, with "VMF System" advanced electronic thermostat. Individual units, or network master also requires a wired control panel **(VMF-E4 compulsory accessory). White RAL 9010.**

Control panel

A range of dedicated controllers, wall-mounted or on the machine, is available but it is essential to choose between these panels for simple and complete tuning, for more details please refer to the dedicated sheet.

Probes and accessory for control panels

- **SW3:** water temperature probe allowing automatic season change on electronic controllers supplied with water-side change over
- **SW4** : Minimum water temperature probe, to be used with the units fitted with a grille with remote control. **Conpulsury with GLL_M, GLL_R, GLL_N**
- **SWA:** external probe accessory (length = 6m). The probe detects the temperature of the ambient air if connected to the connector (A) on panel FMT21; the ambient air temperature probe incorporated in the panel is automatically deactivated. Detects the temperature of the water in the system, for ventilation consent, if connected to the connector (W) of the FMT21 panel. Two SWA probes can be simultaneously connected to the panel FMT21.
- **SIT 3 - 5**: Thermostat Interface Card allowing the creation of a network of fan coils (max. 10) commanded by a central control panel (selector or thermostat).
  SIT3: commands the 3 fan speeds and must be installed on each fan coil within the network; receives the commands from the selector or the SIT5 card.
  SIT5: commands the 3 fan speeds and up to 2 valves (four pipe systems); sends the thermostat's commands to the fan coil network.

VMF system

- **VMF-E4**: Wall mounted user interface allowing control via a capacitive touch keyboard.

Electrical heater

- **RXLE - RXLE20** : electric heater for heating, can be installed on the single-fan FCL units.

Valve kit

- **VHL1 - VHL20** : **motor-driven three-way valve** for the heating battery in 4-pipe systems. **Obligatory accessory in 4-pipe systems.**
- **VHL2 - VHL22** : **motor-driven two-way** valve for the heating battery in 4-pipe systems. **Obligatory accessory in 4-pipe systems with variable flow rates.**

Accessory for Installation

- **KFL20**: delivery flange, allowing the air to be directed to an adjacent room. **Up to three KFL20 can be assembled on a single unit.**
- **KFLD20**: suction flange, allows to introduce external air directly into the room without mixing. **Up to two KFL20D can be assembled on a single unit.**
- **FCLMC20**
  is a perimeter case in galvanised and painted sheet steel, which is used when the fan coil is installed outside the suspended ceiling. **It is used for aesthetics and protection, therefore the technical features of the FCL remain unvaried.**

For more details on the control panels and VMF system refer to the dedicated sheet

FCL		82	84	102	104	122	124
COMPULSARY GLL ACCESSORIES, ESSENTIAL FOR UNIT OPERATION: GLFI e GLLI and dedicated accessories							
GLL20		•	•	•	•	•	•
GLL20N		•	•	•	•	•	•
VMF-E4		•	•	•	•	•	•
RXLE20		•	•	•	•	•	•
GLL20R		•	•	•	•	•	•
RXLE20		•	-	•	-	•	-
Probes and accessories for control panels							
PX-PX2-PX2C6*	(1)	•	•	•	•	•	•
PXAE	(1)	•	•	•	•	•	•
TPF	(1)	•	•	•	•	•	•
WMT10	(1)	•	•	•	•	•	•
FMT10	(1)	•	•	•	•	•	•
TPFW	(1)	•	•	•	•	•	•
SW3	(1)	In combination with PXAE					
SIT3	(1)	In combination with TPFW or PXAE o PX2 or PX or PX2C6 WMT10					
SIT5	(1)	In combination with TPFW or PXAE					
SW4	(1)	•	•	•	•	•	•
3 way valve kit for 4 pipe systems							
VHL20		-	•	-	•	-	•
2 way valve kit for 4 pipe systems							
VHL22		-	•	-	•	-	•
Installation accessories							
KFL20	(2)	•	•	•	•	•	•
KFLD20	(2)	•	•	•	•	•	•
Perimeter case							
FCLMC20		•	•	•	•	•	•

(1) Accessories that can only be used in combination with GLL20 grilles.
(2) Compulsory with GLL_M, GLL_R, GLL_N
* PX2C6, PX2 panel in multiple 6-piece pack, **for only wall installations**

Technical data (mm)

FCL			82			84			102			104			122			124		
Fan speed			**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**	**H**	**M**	**L**
Heating Performance																				
2 pipe configuration																				
Heating capacity (70°C/158°F)	(1)	BTU/h	40.536	27.707	20.063	/	/	/	60.497	39.956	28.321	/	/	/	74.214	50.261	35.930	/	/	/
Water flow rate	(1)	gpm	4.57	3.13	2.26	/	/	/	6.83	4.51	3.20	/	/	/	8.38	5.68	4.06	/	/	/
Pressure drops	(1)	psi	3.8	1.9	1.0	/	/	/	3.6	1.7	0.9	/	/	/	6.1	3.0	1.6	/	/	/
Heating capacity (45°C)	(2)	BTU/h	20.132	13.751	9.963	/	/	/	30.061	19.859	14.058	/	/	/	36.851	24.977	17.846	/	/	/
Water flow rate	(2)	gpm	4.51	3.09	2.23	/	/	/	6.74	4.45	3.15	/	/	/	8.26	5.60	4.00	/	/	/
Pressure drops	(2)	psi	3.3	1.7	1.0	/	/	/	2.2	1.0	0.6	/	/	/	5.1	2.5	1.4	/	/	/
4 Pipe configuration with Additional Heat Exchanger																				
Heating capacity (65°C)	(3)	BTU/h	/	/	/	25898	19483	16139	/	/	/	30470	22281	17982	/	/	/	38114	28355	21496
Water flow rate	(3)	gpm	/	/	/	2.92	2.20	1.82	/	/	/	3.44	2.51	2.03	/	/	/	4.30	3.20	2.43
Pressure drops	(3)	psi	/	/	/	1.7	1.1	0.8	/	/	/	2.4	1.4	0.9	/	/	/	3.6	2.1	1.3
Cooling Performance																				
Total cooling capacity	(4)	BTU/h	19.961	13.546	9.418	19.961	13.546	9.418	30.197	19.859	13.649	24.056	16.515	11.772	36.953	25.250	18.118	29.447	20.848	15.423
Sensible cooling capacity	(4)	BTU/h	13.819	9.179	6.347	13.819	9.179	6.347	22.213	14.399	9.861	17.573	11.772	8.292	28.321	19.210	13.614	22.520	15.593	11.328
Cooling capacity (latent)	(4)	BTU/h	6.142	4.368	3.071	6.142	4.368	3.071	7.984	5.459	3.787	6.483	4.743	3.480	8.633	6.039	4.504	6.927	5.255	4.095
Water flow rate	(4)	gpm	4.54	3.06	2.12	4.54	3.06	2.12	6.81	4.46	3.07	5.45	3.72	2.65	8.33	5.69	4.06	6.66	4.70	3.46
Pressure drops	(4)	psi	4.1	2.0	1.0	3.6	1.7	0.9	4.1	1.9	1.0	3.8	1.9	1.0	5.5	2.8	1.5	5.5	3.2	1.7
Fans																				
Fan - Centrifugal		n°	1																	
Air flow rate		cfm	647	400	271	647	400	271	795	489	330	795	489	330	1030	647	441	1030	647	441
Sound data																				
Sound power level	(5)	dB(A)	50	43	39	50	43	39	54	45	40	54	45	40	60	50	44	60	50	46
Sound pressure level		dB(A)	41	34	30	41	34	30	45	36	31	45	36	31	51	41	35	51	41	35
Diameter connections																				
Standard coil		Ø	3/4"			3/4"			3/4"			3/4"			3/4"			3/4"		
Additional coil		Ø	/			1/2"			/			1/2"			/			1/2"		
Electrical Features																				
Absorbed power		W	please contact us																	
Electrical wiring			V4	V2	V1	V4	V2	V1	V4	V2	V1	V4	V2	V1	V4	V2	V1	V4	V2	V1

EU 2016/2281

H max. speed; **M** med.speed; **L** min.speed

(1) Room air 68°F d.b.; Water (in/out) 158°F/140°F;

(2) Room air 68°F d.b.; Water (in/out) 113°F/104°F

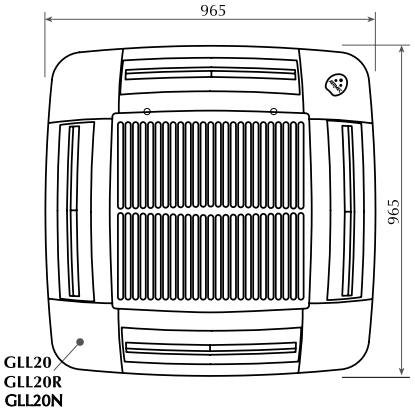
(3) Room air 68°F d.b.; Water (in/out) 149°F/131°F

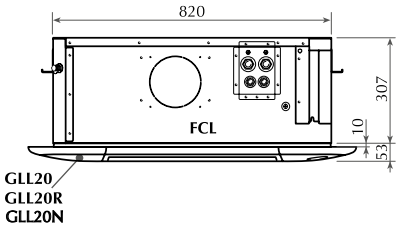
(4) Room air 80.6°F d.b./19°C w.b.; Water (in/out) 44.6°F/53.6°F

(5) Sound pressure level (A-weighted) measured in the room with volume V=3531 ft³, reverberation time t = 0.5 s; Direction factor Q = 2; Distance r = 3002 ft.

Dimensions (mm)

FCL 82 - 84 - 102 - 104 - 122 - 124
FCL 82 V2 - 84 V2 - 102 V2 - 104 V2 - 122 V2 - 124 V2
FCL 82 VL - 84 VL - 102 VL - 104 VL - 122 VL - 124 VL





Mod. FCL		82	84	102	104	122	124
Weight	lbs	77,2	79,4	79,4	79,4	79,4	79,4

Mod. FCL		82 V2	84 V2	102 V2	104 V2	122 V2	124 V2
Weight	lbs	77,2	79,4	79,4	79,4	79,4	79,4

Mod. FCL		32 VL	34 VL	102 VL	104 VL	122 VL	124 VL
Weight	lbs	75,0	77,2	77,2	77,2	77,2	77,2

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VENTILCASSAFORMA

Template for recessed
Installation of fan coils in the wall

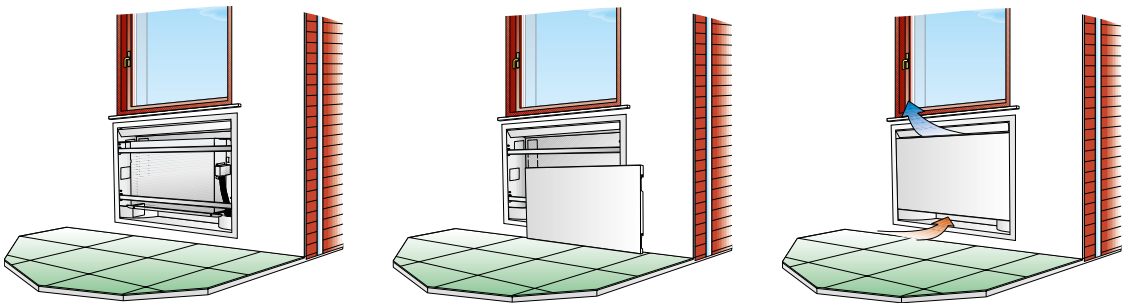
- **VENTILCASSAFORMA: has been designed to respond to the needs to rationalise spaces to suit modern interior architecture.**
- **VENTILCASSAFORMA: is a galvanised template that makes it possible to make a space to house fan coils in the wall. The template will make masonry work easier during the construction of a niche where the fan coil will be installed. When the work is finished, the fan coil will be completely hidden from view.**
- **VENTILCASSAFORMA: is available for fan coils in the FCX-USP series in 2/4 pipe systems.**

FEATURES

Ventilcassaforma is designed to meet the need for rationalised spaces, in keeping with modern interior architecture criteria. Ventilcassaforma is a galvanised metal template for creating a space directly in the wall for housing the fan coil. The template facilitates masonry work during the construction of the niche where the fan coil will be installed. When the work is finished, the fan coil will be completely hidden from sight.
Ventilcassaforma is made up of several elements ready for assembly: a flush-mounting box, a closure panel, an external frame with deflector, cover feet, crossbars and covers. Ventilcassaforma can be integrated in the VMF - Aermec centralised hydronic management system.

- Available for fan coils: CHF Ventilcassaforma for FCX-USP.
- **Compatible with VMF System**
- **Ventilcassaforma** is made up of the following parts to be assembled:
  - Recess box;
  - Closure panel;
  - Outer frame with deflector;
  - Cover bases, cross-members, covers.

  All parts are made of galvanised steel and treated with epoxy-polyester resin-based thermo-hardening base paint in grey with rough glazed finish in order to hold the paint. The final colour can be chosen by the client.
- **Closure Panel:** Made of galvanised steel, this is the box housing the fan coil. The box is recessed in the wall during building work making the construction of a niche where the fan coils will be installed much easier. Holes for fitting the fan coil and preparing an electric plant with a socket and GEWISS fuse holder are already present on the back panel. The box can accommodate the hydraulic system pipes and condensation drain pipes thanks to the presence of several easily-removable elements on the sides and base.
- **Closure Panel:** made of steel pre-treated with base paint and no slots present.
  Easily removable for servicing and cleaning the air filter.
- **Outer Frame:** the perimeter of the box has an outer frame made of pre-treated steel making it possible to cover the perimeter part of the wall and hide any imperfections that overtime show possible crumbling on the edge of the plaster work.
- **Deflector:** manual, with which the flow of air can be directed into the room. The deflector is incorporated in the frame.



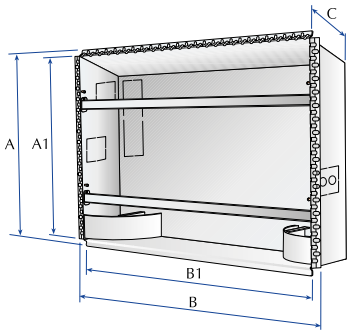
VENTILCASSAFORMA COMBINATION

	Ventilcassaforma CHF - FCX P / FCX PV / FCXI P / FCZ P / FCZI P				
Ventilcassaforma	CHF 17	CHF 22	CHF 32	CHF 42	CHF 62
Fan coil	FCX 17 USP	FCX 22 USP FCX 24 USP	FCX 32 USP FCX 34 USP	FCX 42 USP FCX 44 USP FCX 50 USP FCX 54 USP	FCX 62 USP FCX 64 USP FCX 82 USP FCX 84 USP

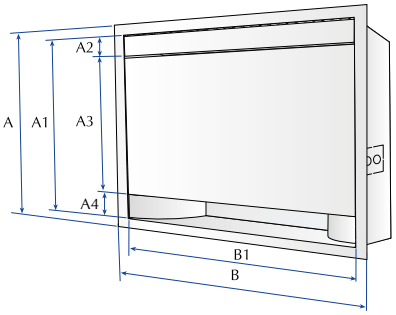
The fan coils FCX USP can be inserted into 2 pipe systems, 2 pipe systems with resistance and 4 pipe systems

DIMENSIONS

CHF			17	22	32	42	62
Height	in	A	28,68	28,68	28,68	28,68	32,82
		A1	26,95	26,95	26,95	26,95	31,09
Width	in	B	28,84	33,17	42,28	50,94	55,71
		B1	26,95	31,28	40,39	49,05	53,82
Depth	in	C	9,46	9,46	9,46	9,46	9,46



CHF			17	22	32	42	62
Height	in	A	29,94	29,94	29,94	29,94	34,08
		A1	26,79	26,79	26,79	26,79	30,93
		A2	3,66	3,66	3,66	3,66	3,66
		A3	19,42	19,42	19,42	19,42	23,56
		A4	3,70	3,70	3,70	3,70	3,70
Width	in	B	29,67	34,00	43,10	51,77	56,54
		B1	26,52	30,85	39,95	48,62	53,39



VC_Y_NA60_00

Aermec S.p.A.
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AIR/WATER CHILLERS AND HEAT PUMPS

Aermec plant engineering really comes into its own in the field of machines and technology for centralised systems. Aermec offer a full range of chillers and heat pumps from the small domestic system up to that of the large size for the service industry.
The cooling capacity range is extremely wide, and the fittings solutions are equally diverse, for scroll, screw or centrifugal compressor applications.
The careful selection of materials and the close attention paid to every detail of assembly coupled with the huge selection of accessories complete the industry-leading products designed for use in this sector, making Aermec units a real "must" in the world of Italian and European climate control.

ANK

Reversible heat pump
Air/Water for indoor installation
Scroll compressors, Plate exchangers, Axial fan
Cooling capacity from 2.5 to 4.0 ton
Heating capacity from 37.670 to 57.598 BTU/h

60Hz | HFC Refrigerant R410A | Intertek

ANK-H°

ANK-HA

- **PRODUCTION OF HOT WATER UP TO 140°F**
- **AVAILABLE VERSION WITH BUILT-IN HYDRONIC KIT**
- **DHW PRODUCTION WITH EXTERNAL TEMPERATURES FROM -4°F TO 107.6°F**

FEATURES

Reversible air/water heat pumps for outdoor installation. Suitable for air-conditioning and heating, and the production of domestic hot water for small/medium services. ANK is a single-circuit reversible heat pump charged with R410a gas. It has axial fans to ensure the quietest possible machine operation, scroll compressors with a high yield and low electricity absorption, a plate heat exchanger and a finned pack copper/aluminium coil. Particular attention is paid to winter operation: thanks to certain technological expedients, the operating limits are wider than those of traditional heat pumps. In addition, ANK can also produce domestic hot water, so it's ideal for residential and commercial contexts. It can be equipped with a hydronic kit (system side) including an expansion tank, safety valve (water side) and drain valve. The basement, the structure and the panelling are in steel treated with polyester anti-corrosion paint.

Version:
- ANK_H° Without pump
- ANK_HP With standard pump
- ANK_HA With buffer tank and standard pump

ACCESSORIES

MECHANICAL ACCESSORIES:
VT
Group of anti-vibration supports.
Select the VT model from the compatibility table.

ELECTRICAL ACCESORIES:

MODU-485BL
RS-485 interface for supervising systems with MODBUS protocol.
Accessories are mandatory for the management and production of DHW.

AERSET
AERSET accessory allows the automatic compensation of the operating setpoint of the unit to which it is connected, based on a 0-10V MODBUS input signal.
Mandatory accessory: MODU-485BL.

AERWEB300
Accessory AERWEB allows remote control of a chiller through a common PC and an ethernet connection over a common browser; 4 versions available:
AERWEB300-6
Web server to monitor and remote control max. 6 units in RS485 network;
AERWEB300-18
Web server to monitor and remote control max. 18 units in RS485 network;
AERWEB300-6G
Web server to monitor and remote control max. 6 units in RS485 network with integrated GPRS modem;
AERWEB300-18G
Web server to monitor and remote control max. 18 units in RS485 network with integrated GPRS modem;

MULTICONTROL
Allows the simultaneous control of several chillers or heat pumps (up to 4) fitted with our MODUCONTROL controller and installed in the same hydraulic system.
For complete control the following accessories are available:

SPLW
System water temperature sensor. In most cases the loose supplied sensors for each chiller/heat pump are sufficient. In cases of a common flow/return header this sensor can be used to control the common system supply water temperature for the chillers connected to the header, or it can be used for temperature monitoring.

SDHW
Domestic hot water temperature sensor. Used with the storage tank to control the temperature of water produced.

PR3
Simplified remote panel. Permits control of the basic unit functions (on/off and change of operating mode, diagnostics and alarm reset). Maximum distance permitted is 492ft with screened cable.

DCPX_ANK_UL
Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

ACCESSORIES CAN ONLY BE FITTED IN THE FACTORY:
BDX
Condensate drip tray whit electric heater.

KRB
Electric anti-freeze heater for the base.
Prevents the formation of ice on the base.

ACCESSORIES COMPATIBILITY

ANK		030	045	050
MECHANICAL ACCESSORIES:				
	Versions			
VT	**°**	9	9	9
VT	**P**	9	9	9
VT	**A**	15A	15A	15A
ELECTRICAL ACCESORIES:				
MODU-485BL		•	•	•
AERSET		•	•	•
AERWEB300		•	•	•
MULTICONTROL		•	•	•
SPLW		•	•	•
SDHW		•	•	•
PR3		•	•	•
DCPX_ANK_UL		•	•	•
ACCESSORIES CAN ONLY BE FITTED IN THE FACTORY:				
BDX		9	9	9
KRB		•	•	•

UNIT CONFIGURATOR

NAME	ANK
SIZE	030 - 045 - 050
MODEL	
H	Heat pump
VERSION	
°	standard
P	with pump
A	with storage tank and pump
HEAT RECOVERY	
°	without heat recovery
COILS	
°	alluminium
WORKING FIELDS	
°	temperature of water produced down to 39.2°F / 4°C
EVAPORATOR	
°	standard, PED normative
POWER SUPPLY	
5	1~220-60Hz

TECHNICAL DATA

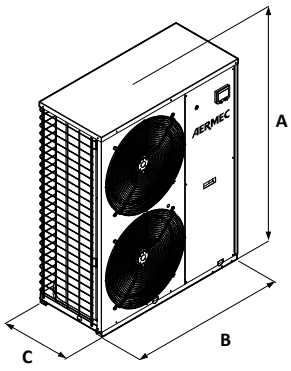
ANK	VERSION		030	045	050
Cooling					
Cooling capacity	All	ton	2.5	3.3	4.0
Total input power	H	kW	2.8	3.9	4.3
	HP-HA	kW	3.0	4.1	4.6
EER	H	BTU/W	10.71	10.44	11.16
	HP-HA	BTU/W	9.90	9.81	10.54
IPLV	All	kW/ton	14.89	14.52	15.47
Water flow rate	All	gpm	6	8	10
Total pressure drop without pump	H	p.s.i.	1.10	1.31	2.00
Usefoul static head	HP-HA	p.s.i.	10.15	9.57	8.56
Heating					
Heating capacity	All	BTU/h	37.670	51.967	57.598
Total input power	H	kW	3.1	4.0	4.3
	HP-HA	kW	3.3	4.2	4.6
COP	H	BTU/W	12.35	13.00	13.30
	HP-HA	BTU/W	11.50	12.28	12.60
Water flow rate	All	gpm	8	10	12
Total pressure drop without pump	H	p.s.i.	1.7	2.2	2.9
Usefoul static head	HP-HA	p.s.i.	9.46	8.41	7.44
Power supply	All		1~220-60Hz		
Input current cooling mode	H	A	13	16	18
	HP-HA	A	14	17	19
Input current heating mode	H	A	14	17	18
	HP-HA	A	15	18	19
Compressor					
Scroll compressor	All	n.	1	1	2
Circuit	All	n.	1	1	1
Refrigerant	All	Type	R410A	R410A	R410A
Exchanger					
Plate exchanger	All	n.	1	1	1
Inlet/outlet	All	Ø	1" 1/4	1" 1/4	1" 1/4
Storage tank					
Storage tank	HA	n.	1	1	1
Water content	HA	gal	26.4	26.4	26.4
Fan					
Axial fan	All	n.	2	2	2
Air flow	All	cfm	244	244	244
Sound data					
Sound pressure	All	dB(A)	70.5	70.5	70.5
Sound power	All	dB(A)	39.5	39.5	39.5

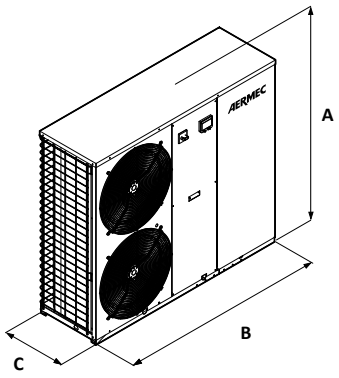
COOLING MODE: AHRI CONDITION std 550/551
Evaporator water temperature (in/out): 12.3°C, 54.0°F / 6.7°C, 44.0°F - Dry bulb ambient air temperature: 35.0°C, 95.0°F

HEATING MODE
Evaporator water temperature (in/out): 40°C, 104°F / 45°C, 113°F - Dry bulb ambient air temperature: 7°C, 44.6°F

(The data indicated can be modified at any time by Aermec if deemed necessary).

DIMENSIONS AND WEIGHT





DIMENSIONS AND WEIGHT				030	045	050
Height	H - HP	A	in	50	50	50
Long	H - HP	B	in	39	39	39
Deep	H - HP	C	in	18	18	18
Empty weight	H	-	lbs	328	364	379
Empty weight	HP	-	lbs	340	386	401

DIMENSIONS AND WEIGHT				030	045	050
Height	HA	A	in	50	50	50
Long	HA	B	in	57	57	57
Deep	HA	C	in	18	18	18
Empty weight	HA	-	lbs	465	511	525

Aermec S.p.A.
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ANL

Reversible heat pump
Air/Water for indoor installation
Scroll compressors, Plate exchangers, Axial fan
Cooling capacity from 6.6 to 8.2 ton
Heating capacity from 94.755 to 111.850 BTU/h

60Hz | HFC Refrigerant R410A | Intertek

- **DHW PRODUCTION UP TO 107.6°F**
- **EXTERNAL AIR TEMPERATURE UP TO 14°F**
- **AVAILABLE VERSION WITH BUILT-IN HYDRONIC KIT**

FEATURES

Reversible heat pumps for external installation for the production of chilled/ heated water with high performance and low electric absorbtion scroll compressors , axial fans, external copper coils with aluminium fins, system-side plate heat exchanger. In the units with desuperheater, but in coolingonly operation, it is possible to produce free hot water. The basement, the structure and the panelling are in steel treated with polyester anti-corrosion paint.

Version:
- Without hydronic kit system side.
- ANL_H° Without pump
- ANL_HP With standard pump
- ANL_HA With buffer tank and standard pump

Skills:
- High efficiency scroll compressors with low power input
- High efficiency heat exchangers
- Axial flow fan units for extremely quiet operation
- Water filter
- Possibility of integrated hydronic kit which includes the main hydraulic components; it is available in different configurations with or without buffer tank, one pumps high or low head.
- Electronic controller (Modu_control)

ACCESSORIES

MECHANICAL ACCESSORIES:
VT
Group of anti-vibration supports.
Select the VT model from the compatibility table.

ELECTRICAL ACCESORIES:

MODU-485BL
RS-485 interface for supervising systems with MODBUS protocol.
Accessories are mandatory for the management and production of DHW.

AERWEB300
Accessory AERWEB allows remote control of a chiller through a common PC and an ethernet connection over a common browser; 4 versions available:
AERWEB300-6
Web server to monitor and remote control max. 6 units in RS485 network;
AERWEB300-18
Web server to monitor and remote control max. 18 units in RS485 network;
AERWEB300-6G
Web server to monitor and remote control max. 6 units in RS485 network with integrated GPRS modem;
AERWEB300-18G
Web server to monitor and remote control max. 18 units in RS485 network with integrated GPRS modem;

MULTICONTROL
Allows the simultaneous control of several chillers or heat pumps (up to 4) fitted with our MODUCONTROL controller and installed in the same hydraulic system.
For complete control the following accessories are available:

SPLW
System water temperature sensor. In most cases the loose supplied sensors for each chiller/heat pump are sufficient. In cases of a common flow/return header this sensor can be used to control the common system supply water temperature for the chillers connected to the header, or it can be used for temperature monitoring.

SDHW
Domestic hot water temperature sensor. Used with the storage tank to control the temperature of water produced.

PR3
Simplified remote panel. Permits control of the basic unit functions (on/off and change of operating mode, diagnostics and alarm reset). Maximum distance permitted is 492ft with screened cable.

DCPX_ANL_UL
Device for condensation temperature control, with continuous speed modulation of fans by using a pressure transducer.

ACCESSORIES CAN ONLY BE FITTED IN THE FACTORY:

DRE5
Electronic soft starter.

ACCESSORIES COMPATIBILITY

ANL	Versions	100	150
MECHANICAL ACCESSORIES:			
VT	all	15	15
ELECTRICAL ACCESORIES:			
MODU-485BL	all	•	•
AERWEB300	all	•	•
MULTICONTROL	all	•	•
SPLW	all	•	•
SDHW	all	•	•
PR3	all	•	•
DCPX_ANL_UL	all	•	•
ACCESSORIES CAN ONLY BE FITTED IN THE FACTORY:			
DRE5	all	•	•

UNIT CONFIGURATOR

Name	ANL
Size	100, 150
Model	
H	Heat pump
Version	
°	Standard
P	With pump
A	With storage tank and pump
Heat recovery	
°	Without heat recovery units
Coils	
°	Alluminium
Field of use	
°	Standard
Evaporaor	
°	Standard, PED Normative
Power supply	
6	220-3-60Hz
7	460-3-60Hz

TECHNICAL DATA

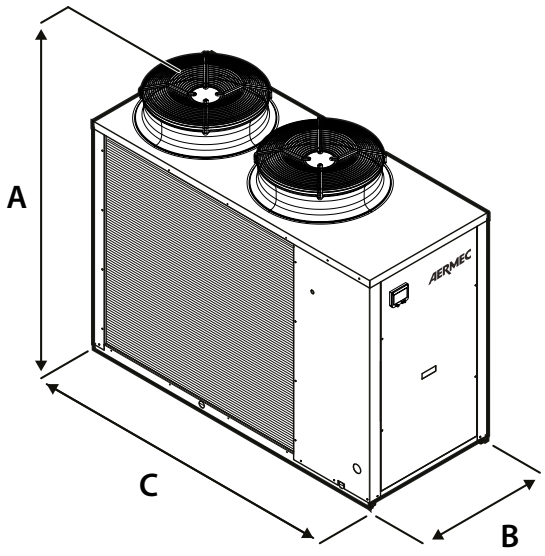
ANL H	VERSION		100	150
Cooling				
Cooling capacity	All	ton	6.6	8.2
Total input power	H	kW	8.2	9.5
	HP-HA	kW	9.0	11.0
EER	H	BTU/Wat	9.58	10.34
	HP-HA	BTU/Wat	8.78	8.93
IPLV	All	kW/ton	16.4	17.7
Water flow rate	All	gpm	16	20
Total pressure drop without pump	H	p.s.i.	4.4	4.4
Usefoul static head	HP-HA	p.s.i.	14.6	19.1
Heating				
Heating capacity	All	BTU/h	94.755	111.850
Total input power	H	kW	8.3	9.6
	HP-HA	kW	9.0	11.1
COP	H	BTU/Wat	11.44	11.70
	HP-HA	BTU/Wat	10.49	10.11
Water flow rate	All	gpm	19	23
Total pressure drop without pump	H	p.s.i.	6.4	5.1
Usefoul static head	HP-HA	p.s.i.	10.4	14.9
Compressor				
Scroll compressor	All	n.	2	2
Circuit	All	n.	1	1
Refrigerant	All	Type	R410A	R410A
Exchanger				
Plate exchanger	All	n.	1	1
Inlet/outlet	All	Ø	1¼	1¼
Fan				
Axial fan	All	n.	2	2
Air flow	All	cfm	8.240	7.946
Sound data				
Sound pressure	dB(A)	Alls	44.0	45.0
Sound power	dB(A)	Alls	76.0	77.0

COOLING MODE: AHRI CONDITION std 550/551
Evaporator water temperature (in/out): 12.26°C, 54.07°F / 6.67°C, 44.01°F - Dry bulb ambient air temperature: 35°C, 95°F

HEATING MODE
Evaporator water temperature (in/out): 40°C, 104°F / 45°C, 113°F - Dry bulb ambient air temperature: 7°C, 44.6°F

(The data indicated can be modified at any time by Aermec if deemed necessary).

DIMENSIONS AND WEIGHT



ANL DIMENSIONS AND WEIGHT				100	150
Height	All	A	in	53	53
Long	All	B	in	30	30
Deep	All	C	in	69	69
Empty weight	H	-	lbs	650	710
Empty weight	HP	-	lbs	690	756
Empty weight	HA	-	lbs	800	866

Aermec S.p.A.
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Tel. + 39 0442 633111 - Fax +39 0442 93577

NRK
0150/0700

Reversible heat pump
Air/Water for outdoor installation
Scroll compressors, Plate exchangers, Axial fans
Cooling capacity from 8.8 to 39.7 ton
Heating capacity from 116.866 to 593.235 BTU/h

60Hz | HFC Refrigerant R410A | Intertek

- **AIR COOLED REVERSIBLE HEAT PUMP**
- **PRODUCTION OF HOT WATER UP TO 149°F**
- **OPTIMIZED FOR OPERATION IN HEATING MODE**
- **HEATING OPERATION WITH EXTERNAL TEMPERATURES DOWN TO -4°F**
- **OPTION VERSION WITH BUILT-IN HYDRONIC KIT**

FEATURES

NRK is a dual-circuit heat pump charged with R410A gas and optimised for heating. It has axial fans to ensure the quietest possible machine operation, scroll compressors with a high yield and low electricity absorption and steam injection, a plate heat exchanger and finned pack copper/aluminium coils. The machine cools/heats water to supply the distribution system that is usually connected to fan coil type terminals or to a low-temperature radiant system. In addition, NRK can also produce hot water if it is fitted with a desuperheater, so it's ideal for residential and commercial contexts, especially the replacement of centralised boilers during the requalification of buildings.

Models
- NRK H Reversible heat pump

Version
- NRK H A High efficiency

- High efficiency scroll compressors with low power input, with steam injection.
- Heat exchangers optimised to benefit from the excellent heat transfer characteristics of R410A.
- Flow switch as standard supply.
- Water filter.
- Low and high pressure transducers.
- The built-in hydronic kit already contains the main water circuit components; for achieving both low or high head, and buffer tank.
- Fans for extremely quiet operation.
- Availables fans equipped with inverter technology, units fitted as standard with fan speed controller.
- Microprocessor controls.
- Control from the leaving water temperature, with the possibility of selecting control of the entering water temperature.
- Condensing control in summer modulating signal based on pressure and compensated for external air temperature.
- Automatic rotation of compressors and pumps based on operating hours.
- Load limiting safety control.
- Metallic protective cabinet with anti-corrosion polyester paint.

ACCESSORIES

ACCESSORIES:

AER 485P1
RS-485 interface for supervising systems with MODBUS protocol.

AERWEB300UL
AERWEB device allows the remote control of a chiller by means of a common PC through Ethernet connection, via a common browser; 4 models available:
AERWEB300UL-6: Web server for monitoring and controlling maximum 6 RS485 network devices;
AERWEB300UL-18: Web server for monitoring and controlling maximum 18 RS485 network devices;
AERWEB300UL-6G: Web server for monitoring and controlling maximum 6 RS485 network devices with integrated GPRS modem;
AERWEB300UL-18G: Web server for monitoring and controlling maximum 18 RS485 network devices with integrated GPRS modem;

PGD1
Allows you to control the chiller at a distance.

MULTICHILLER_UL
Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

VT
Group of anti-vibration supports.

ACCESSORIES MOUNTED IN THE FACTORY:

GP
kit with anti-intrusion grid for the short side of the unit.

DRENRK
It permits the reduction of the starting current needed by the machine in the start up phase..

RIFNRK
Current power factor correction. Connected in parallel to the motor, it allows a reduction of the input current (approx. 10%).

RESNRK
Anti-freeze electric resistance board. Installed inside the electric panel.

CRATE
Special wood cover for transport.

ACCESSORIES COMPATIBILITY

NRK		0150	0300	0330	0350	0550	0600	0650	0700
AER485P1		n.a.	•	•	•	•	•	•	•
AERWEB300UL		•	•	•	•	•	•	•	•
PGD1		n.a.	•	•	•	•	•	•	•
MULTICHILLER_UL		n.a.	•	•	•	•	•	•	•
VT	00	15	•	•	•	•	•	•	•
	P1-P4	15	•	•	•	•	•	•	•
	01-04	15	•	•	•	•	•	•	•

ACCESSORIES MOUNTED IN THE FACTORY								
GP	n.a.	4	2 (x2)	2 (x2)	2 (x2)	2 (x3)	2 (x3)	2 (x3)
DRENRK	•	03007	03307	35557	35557	60657	60657	07007
RIFNRK	•	03007	03307	35557	35557	60657	60657	07007
RESNRK	•	03007	33707	33707	33707	33707	33707	33707
CRATE	n.a.	02	02	02	02	03	03	03

• Available
n.a. Not available.

UNIT CONFIGURATOR

NAME	NRK
SIZE	0150 - 0300 - 0330 - 0350 - 0550 - 0600 - 0650 - 0700
THERMOSTATIC VALVE	
°	Mechanical, standard operations (produced water down to +4°C/39.2°F)
MODELS	
H	Reversible heat pump
HEATHING RECOVERY	
°	Without recovery
D	With desuperheater
VERSION	
A	High efficiency
COILS	
°	Alluminium
R	Copper
S	Copper tin plated
V	Epoxy coated
FANS	
°	AC Type ***(Only for NRK 0150)***
J	Inverter fan

POWER SUPPLY	
7	460/3/60Hz with magnetic circuit breakers
HYDRONIC KIT	
00	Without hydronic kit
01	With storage tank and single low head pump
02	With storage tank and twin low head pumps (duty + standby)
03	With storage tank and single high head pump
04	With storage tank and twin high head pumps (duty + standby)
P1	With single low head pump
P2	With twin low head pumps (duty + standby)
P3	With single high head pump
P4	With twin high head pumps (duty + standby)

NRK	0150	0300	0330	0350	0550	0600	0650	0700
00	•	•	•	•	•	•	•	•
01	•	•	•	•	•	•	•	•
02	n.a.	•	•	•	•	•	•	•
03	•	•	•	•	•	•	•	•
04	n.a.	•	•	•	•	•	•	•
P1	•	•	•	•	•	•	•	•
P2	n.a.	•	•	•	•	•	•	•
P3	•	•	•	•	•	•	•	•
P4	n.a.	•	•	•	•	•	•	•

TECHNICAL DATA

NRK		0150	0300	0330	0350	0550	0600	0650	0700
Cooling capacity	ton	8.8	16.1	19.0	21.5	24.0	32.3	36.6	39.7
Total input power	kW	9.6	20.2	23.7	27.0	29.9	40.3	49.9	58.1
EER	BTU/W	11.03	9.56	9.62	9.57	9.62	9.63	8.82	8.20
IPLV	BTU/W	14.92	13.51	13.61	13.42	13.37	13.79	12.74	11.24
Water flow rate	gpm	21	39	46	52	58	78	88	95
Total pressure drop without pump	p.s.i.	7.8	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Heating capacity	BTU/h	116.866	231.872	275841	304.206	340.426	463.802	539.671	593.235
Total input power	kW	10.0	21.0	26.4	29.2	31.9	43.5	51.3	57.2
COP	BTU/W	11.7	11.1	10.4	10.4	10.7	10.7	10.5	10.4
Water flow rate	gpm	26.2	52.0	61.9	68.2	76.3	104.0	121.0	133.0
Total pressure drop without pump	p.s.i.	11.9	4.5	4.6	4.3	4.4	4.5	4.7	4.9
ELECTRICAL DATA									
Power supply 460V/3~/60Hz									
Input current cooling mode	A	20	34	38	48	51	64	79	100
Input current heating mode	A	21	34	42	52	54	69	81	101
[LRA]	A	134	165	184	222	223	199	234	278
[MCA]	A	30	59	57	72	71	88	103	123
[MOP]	A	47	76	78	97	96	105	124	148
Recom fuse	A	45	75	75	90	90	100	110	125
GENERAL DATA									
COMPRESSOR									
Compressor	Type	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Compressor	n°	1	2	2	2	2	4	4	4
Circuit	n°	1	2	2	2	2	2	2	2
Refigerant gas	Type	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
EXCHANGER									
Exchanger	Type	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate
Quantity	n°	1	1	1	1	1	1	1	1
Min. water flow	gpm	contact us	8.6	11.9	15.9	15.9	22.2	22.2	23.8
Max. water flow	gpm	61.6	263.3	263.3	263.3	263.3	263.3	263.3	263.3
Water content	gal	0.5	1.7	2.2	2.9	2.9	3.9	3.9	4.1
Water connection (in/out)	ø	contact us							
Crankcase heater	n°/W	1/40	1/150	1/150	1/150	1/150	1/150	1/150	1/150
FANS (°)									
Fans	Type	Axial	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Numbers	n°	2	contact us	contact us	contact us	contact us	contact us	contact us	contact us
Air flow rate in cooling mode	cfm	8064	contact us	contact us	contact us	contact us	contact us	contact us	contact us
FANS (J)									
Fans	Type	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial
Numbers	n°	2	8	2	2	2	3	3	3
Air flow rate in cooling mode	cfm	8064	23190	22366	21954	21954	33314	37904	37904
SOUND DATA									
Sound power	dB(A)	contact us	contact us	contact us	contact us	contact us	contact us	contact us	contact us
Sound pressure 10m/33ft	dB(A)	contact us	contact us	contact us	contact us	contact us	contact us	contact us	contact us

COOLING MODE: AHRI CONDITION std 550/551
Evaporator water temperature (in/out): 12.26°C, 54.1°F / 6.67°C, 44.1°F - Dry bulb ambient air temperature: 35°C, 95°F

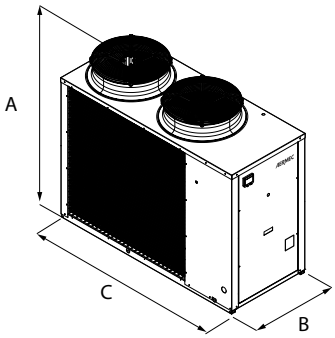
HEATING MODE:
Evaporator water temperature (in/out): 40°C, 104°F / 45°C, 113°F - Dry bulb ambient air temperature: 7°C, 44.6°F

n.a. Not Available

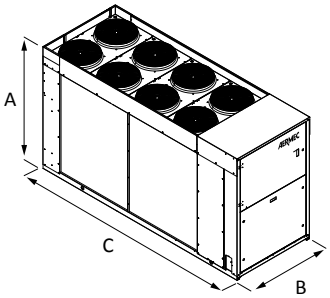
(The data indicated can be modified at any time by Aermec if deemed necessary).

DIMENSIONS AND WEIGHT

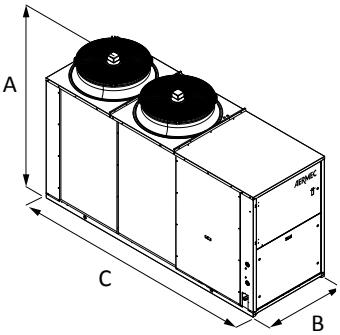
NRK 0150



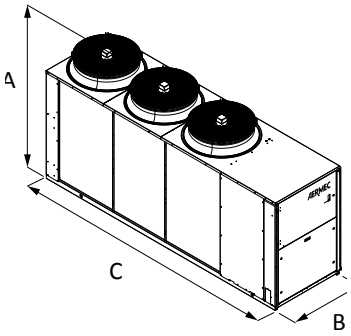
NRK 0300



NRK 0330-0350-0550



NRK 0600-0650-0700



The designs are representative of some structural work, more information is available in the technical documentation

NRK	hydronic kit			0150	0300	0330	0350	0550	0600	0650	0700
Height	00	A	in	62,3	63,3	73,9	73,9	73,9	73,9	73,9	73,9
Width	00	B	in	34,3	43,3	43,3	43,3	43,3	43,3	43,3	43,3
Depth	00	C	in	72,9	128,1	131,2	131,2	131,2	170,6	170,6	170,6
Weight	00	-	lbs	please contact us							

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NRL
028/075

Chiller
Air/Water for outdoor installation
Scroll compressors, Plate exchangers, Axial fans
Cooling capacity from 13.7 to 49.9 ton

60Hz | HFC Refrigerant R410A | Intertek | AHRI

- **HIGH EFFICIENCIES ALSO AT PARTIAL LOADS**
- **EASY AND FAST INSTALLATION**
- **COMPACT VERSION**

FEATURES

NRL is the range of chillers for external installation for chilled water production with high performance scroll compressors and low electric absorption, axial fans, external copper coils with aluminum fins, plate heat exchangers.
In the units (with desuperheater or total recovery) it is also possible to produce free-hot water. The basement, the structure and the panelling are in steel treated with polyester anti-corrosion paints.

Models
- NRL ° Cooling only
- NRL C Without evaporator

Versions
- NRL A High efficiency
- NRL E Low noise high efficiency

Operating range:
- Work at full load up to 46°C/114.8°F dry bulb external air temperature.
- Work at full load up to -10°C/14°F outlet water temperature.
  (for more details please refer to the technical documentation).

Units with two refrigerant circuits designed to grant the maximum performance at full load, ensuring high efficiencies also at partial loads and giving continuity in case of stop of one of the two circuit.

- Standard Flow-switch, water filter and high and low pressure transducer.
- Possibility of integrated hydronik -kit, which includes the main hydraulic components; it is available in different configurations with or without buffer tank, one or two high and low head pumps.
- Microprocessor adjustment, with keyboard and LCD display, for easy consultation and intervention on the unit via a menu available in several languages.
- Adjustment includes complete management of the alarms and their log.
- The presence of a programmable timer allows setting time bands of operation and a possible second set-point.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- Night Mode: it is possible to set a silenced operation profile.
- Perfect for night operation, since it guarantees greater acoustic comfort in the evenings, and a high efficiency in the time of greater load.

ACCESSORIES

MECHANICAL ACCESSORIES:
VT
Group of anti-vibration supports.
Select the VT model from the compatibility table.

GP
Protection grille, protects the external coil from accidental knocks.

ELECTRICAL ACCESORIES:
AER485P1
RS-485 interface for supervision systems with MODBUS protocol.

AERWEB300
Accessory AERWEB allows remote control of a chiller through a common PC and an ethernet connection over a common browser; 4 versions available:
AERWEB300-6
Web server to monitor and remote control max. 6 units in RS485 network;
AERWEB300-18
Web server to monitor and remote control max. 18 units in RS485 network;
AERWEB300-6G
Web server to monitor and remote control max. 6 units in RS485 network with integrated GPRS modem;
AERWEB300-18G
Web server to monitor and remote control max. 18 units in RS485 network with integrated GPRS modem;

DRE
It allows the reduction of peak power necessary for the machine during start-up phase.

RIF
Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

ACCESSORIES CAN ONLY BE FITTED IN THE FACTORY:
MULTICHILLER_PCO
Control system to switch the individual chillers on and off, and command them, in a system in which several units are installed in parallel, always ensuring a constant delivery to the evaporators.

PRM1
It is a manual pressure switch electrically wired in series with the existing automatic high pressure switch on the compressor discharge pipe.

CRATE
Special wood cover for transport.

For more information please contact us.

ACCESSORIES COMPATIBILITY

NRL		028E	030E	033E	035E	050A	055A	060A	065A	070A	075A
MECHANICAL ACCESSORIES:											
	Hydronic Kit										
VT	**00**	17	17	17	17	13	13	22	22	22	23
VT	**P2 / P4**	17	17	17	17	13	13	22	22	22	23
VT	**P1 / P3**	17	17	17	17	13	13	22	22	22	23
VT	**02 / 04**	13	13	13	13	10	10	22	22	22	23
VT	**01 / 03**	13	13	13	13	10	10	22	22	22	23
GP		3	4	4	4	2	2	2	2	2	10
ELECTRICAL ACCESORIES:											
AER485P1		•	•	•	•	•	•	•	•	•	•
AERWEB300		•	•	•	•	•	•	•	•	•	•
ACCESSORIES CAN ONLY BE FITTED IN THE FACTORY:											
DRE		281	301	331	351	501	551	601	651	701	751
RIF		50	50	50	51	52	52	53	53	53	53
MULTICHILLER_PCO		•	•	•	•	•	•	•	•	•	•
PRM1		•	•	•	•	•	•	•	•	•	•
CRATE		01	02	02	02	02	02	03	03	03	04

UNIT CONFIGURATOR

NAME	NRL
SIZE	028 - 030 - 033 - 035 - 050 - 055 - 060 - 065 - 070 - 075
COMPRESSOR	
0	R410A standard compressor
THERMOSTATIC VALVE	
°	Standard mechanical thermostatic valve with produced water up to 39.2°F / +4°C
Y	Mechanical thermostatic valve with produced water from 39.2°F / +4°C to 14°F / -10°C **(1)**
X	Electronic thermostatic valve min. Water out temp 39.2°F / +4°C, (contact the factory for lower temperatures) **(1)**
MODELS	
°	Cooling only
C	Without evaporator (data on demand) **(2)**
HEATHING RECOVERY	
°	Without Recovery
D	With Desuperheater **(1) (3)**
T	With Total Heat Recovery **(1)**
VERSION	
A	High efficiency (available only for size 050 ÷ 075)
E	High efficiency low noise (available only for size 028 ÷ 035)
COILS	
°	Alluminium
R	Copper
S	Copper tin plated
V	Epoxy coated
FANS	
°	Standard **(4)**
I	Fan speed modulating for condensation control **(5)**
POWER SUPPLY	
6	230/3/60 With magnet circuit breakers
7	460/3/60 With magnet circuit breakers
8	575/3/60 With magnet circuit breakers
9	208/3/60 With magnet circuit breakers **(5)**
HYDRONIC KIT	
00	Without hydronic kit
01	Tank and single low head pump
02	Tank and single low head pump and reserve pump
03	Tank and single high head pump
04	Tank and single high head pump and reserve pump
P1	Single low head pump
P2	Single low head pump and reserve pump
P3	Single high head pump
P4	Single high head pump and reserve pump

(1) **Options D, T, C are not compatible with thermostatic valve Y, X.**

(2) **The condensing unit (C) is not available with hydronic kit and heathing recovery D, T.**

(3) **With desuperheater (D) the inverter fans (I) are mandatory.**

(4) **The standard fans are not available for version 208/3/60.**

(5) **The inverter fans (I) is mandatory for version 208/3/60.**

TECHNICAL DATA

NRL		028E	030E	033E	035E	050A	055A	060A	065A	070A	075A
Cooling capacity	ton	13.7	16.0	18.4	23.5	25.5	30.1	37.2	41.7	46.9	49.9
Total input power	kW	15.5	18.1	20.7	26.9	29.9	35.2	42.7	49.1	54.8	59.0
EER	BTU/Wat	10.59	10.65	10.65	10.51	10.24	10.28	10.45	10.22	10.28	10.15
IPLV	BTU/Wat	14.44	14.44	14.49	14.44	15.84	15.99	16.03	15.57	15.14	14.69
Water flow rate	gpm	32.8	38.3	44.0	55.8	61.0	72.1	88.9	99.8	112.1	119.3
Total pressure drop without pump	p.s.i.	4.2	4.1	3.6	5.8	4.9	5.2	7.8	8.6	8.7	10.2
ELECTRICAL DATA											
Power supply 230V/3~/60Hz with standard fan											
Imput current	A	54	61	70	88	98	112	139	158	175	190
[LRA]	A	226	274	282	361	368	380	359	437	473	518
[MCA]	A	69	76	84	125	132	144	161	202	237	248
[MOP]	A	97	110	118	176	184	195	195	253	289	303
Recom fuse	A	90	100	110	175	175	175	175	250	250	300
Power supply 460V/3~/60Hz with standard fan											
Imput current	A	31	34	40	47	49	57	71	79	86	95
[LRA]	A	127	154	161	191	185	196	192	222	231	264
[MCA]	A	43	51	59	69	64	74	90	100	109	118
[MOP]	A	56	69	76	91	86	96	108	122	131	144
Recom fuse	A	50	60	75	90	80	90	100	110	125	125
Power supply 575V/3~/60Hz with standard fan											
Imput current	A	25	28	34	40	40	46	58	65	71	78
[LRA]	A	100	104	109	145	137	143	130	166	180	207
[MCA]	A	34	40	45	61	52	59	66	82	96	105
[MOP]	A	44	52	58	81	72	79	79	102	116	129
Recom fuse	A	40	50	50	80	70	75	75	100	110	125
Power supply 208V/3~/60Hz with inverter fan											
Imput current	A	-	-	-	-	-	-	-	-	-	-
[LRA]	A	235	283	294	375	376	389	373	454	494	539
[MCA]	A	82	90	101	146	148	161	180	225	265	277
[MOP]	A	113	128	138	203	205	218	218	283	323	339
Recom fuse	A	110	125	125	200	200	200	200	250	300	300
GENERAL DATA											
COMPRESSOR											
Compressor	Type	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Compressor / Circuit	n°	2/2	2/2	2/2	2/2	3/2	3/2	4/2	4/2	4/2	4/2
Refigerant gas	Type	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
EXCHANGER											
Exchanger	Type	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate
Quantity	n°	1	1	1	1	1	1	1	1	1	1
Min. water flow	gpm	-	-	-	-	-	-	-	-	-	-
Max. water flow	gpm	-	-	-	-	-	-	-	-	-	-
Water content	gal	1.1	1.3	1.7	1.7	2.2	2.9	2.9	3.4	4.8	3.7
Water connection (in/out)	ø	2"½	2"½	2"½	2"½	2"½	2"½	2"½	2"½	2"½	3"
FANS											
Fans	Type	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial
Numbers	n°	6	6	8	8	2	2	3	3	3	3
Air flow rate	cfm	13.570	14.632	18.408	17.422	23.600	23.246	36.344	36.344	35.164	35.v754
SOUND DATA											
Sound power	dB(A)	74	75	77	78	83	84	85	86	86	86
Sound pressure 10m/33ft	dB(A)	42	43	45	46	51	52	53	54	54	54

COOLING MODE: AHRI CONDITION std 550/551

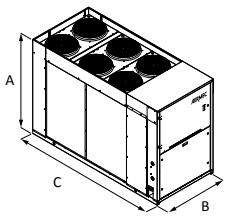
Evaporator water temperature (in/out): 12.26°C, 54.1°F / 6.67°C, 44.1°F - Dry bulb ambient air temperature: 35°C, 95°F

(The data indicated can be modified at any time by Aermec if deemed necessary).

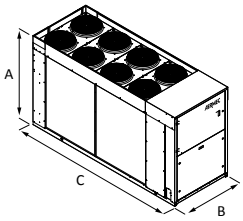
DIMENSIONS AND WEIGHT

NRL			028E	030E	033E	035E	050A	055A	060A	065A	070A	075A
Height	A	in	63	63	63	63	74	74	74	74	74	78
Width	B	in	43	43	43	43	43	43	43	43	43	59
Depth	C	in	97	116	116	116	119	119	158	158	158	172
Weight		lbs	1400	1548	1565	1711	1870	2075	2423	2445	2445	3569

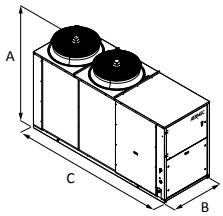
• NRL 028 E
• NRL 030 E



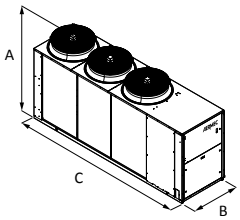
• NRL 033 - 035 E



• NRL 050 - 055 A



• NRL 060 - 065 - 070 - 075 A



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NRL
028/075

Reversible heat pump
Air/Water for outdoor installation
Scroll compressors, Plate exchangers, Axial fans
Cooling capacity from 13.05 to 49.56 ton
Heating capacity 166.000-600.600 BTU/h

60Hz | HFC Refrigerant R410A | Intertek | AHRI

- **HIGH EFFICIENCIES ALSO AT PARTIAL LOADS**
- **EASY AND FAST INSTALLATION**
- **COMPACT VERSION**

FEATURES

NRL_H is the range of reversible heat pumps for external installation for the chilled/heated water production with high performance scroll compressors and low electric absorption, axial fans, external copper coils with aluminum fins, plate heat exchangers.
IIn the units with desuperheater, but in cooling-only operation, it is possible to produce free hot water. The basement, the structure and the panelling are in steel treated with polyester anti-corrosion paint.

Models
- NRL_H Reversible heat pump

Versions
- NRL_HA High efficiency
- NRL_HE Low noise high efficiency

Operating range:
- Work at full load up to -15°C/5°F dry bulb external air temperature in winter season, up to 46°C/114,8°F in summer season.
- Hot water production up to 55°C/131°F. *(For more details please refer to the technical documentation).*

Units with two refrigerant circuits designed to grant the maximum performance at full load, ensuring high efficiencies also at partial loads and giving continuity in case of stop of one of the two circuit.

- Standard Flow-switch, water filter and high and low pressure transducer.
- Possibility of integrated hydronik -kit, which includes the main hydraulic components; it is available in different configurations with or without buffer tank, one or two high and low head pumps.
- Microprocessor adjustment, with keyboard and LCD display, for easy consultation and intervention on the unit via a menu available in several languages.
- Adjustment includes complete management of the alarms and their log.
- The presence of a programmable timer allows setting time bands of operation and a possible second set-point.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- Night Mode: it is possible to set a silenced operation profile.
- Perfect for night operation, since it guarantees greater acoustic comfort in the evenings, and a high efficiency in the time of greater load.

ACCESSORIES

MECHANICAL ACCESSORIES:
VT
Group of anti-vibration supports.
Select the VT model from the compatibility table.

AVX
Sprung anti-vibration supports. Select the AVX model from the compatibility table.

GP
Protection grille, protects the external coil from accidental knocks.

ELECTRICAL ACCESORIES:
AER485P1
RS-485 interface for supervision systems with MODBUS protocol.

AERWEB300
Accessory AERWEB allows remote control of a chiller through a common PC and an ethernet connection over a common browser; 4 versions available:

AERWEB300-6
Web server to monitor and remote control max. 6 units in RS485 network;
AERWEB300-18
Web server to monitor and remote control max. 18 units in RS485 network;
AERWEB300-6G
Web server to monitor and remote control max. 6 units in RS485 network with integrated GPRS modem;
AERWEB300-18G
Web server to monitor and remote control max. 18 units in RS485 network with integrated GPRS modem;

ACCESSORIES CAN ONLY BE FITTED IN THE FACTORY:
DRE
It allows the reduction of peak power necessary for the machine during start-up phase.

RIF
Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

MULTICHILLER_PCO
Control system to switch the individual chillers on and off, and command them, in a system in which several units are installed in parallel, always ensuring a constant delivery to the evaporators.

PRM1
It is a manual pressure switch electrically wired in series with the existing automatic high pressure switch on the compressor discharge pipe.

CRATE
Special wood cover for transport.

KRB
Electric anti-freeze resistance kit for coils, prevents the formation of ice.

For more information please contact us.

ACCESSORIES COMPATIBILITY

NRL_H		028HE	030HE	033HE	035HE	050HA	055HA	060HA	065HA	070HA	075HA
MECHANICAL ACCESSORIES:											
	Hydronic Kit										
VT/AVX	**00**	VT 17	VT 17	VT 17	VT 17	VT 13	VT 13	VT 22	VT 22	VT 22	AVX 7001
VT/AVX	**P2 / P4**	VT 17	VT 17	VT 17	VT 17	VT 13	VT 13	VT 22	VT 22	VT 22	AVX 7001
VT/AVX	**P1 / P3**	VT 17	VT 17	VT 17	VT 17	VT 13	VT 13	VT 22	VT 22	VT 22	AVX 7001
VT/AVX	**02 / 04**	VT 13	VT 13	VT 13	VT 13	VT 10	VT 10	VT 22	VT 22	VT 22	AVX 7002
VT/AVX	**01 / 03**	VT 13	VT 13	VT 13	VT 13	VT 10	VT 10	VT 22	VT 22	VT 22	AVX 7002
GP		3	4	4	4	2	2	2	2	2	10
ELECTRICAL ACCESORIES:											
AER485P1		•	•	•	•	•	•	•	•	•	•
AERWEB300		•	•	•	•	•	•	•	•	•	•
ACCESSORIES CAN ONLY BE FITTED IN THE FACTORY:											
DRE		281	301	331	351	501	551	601	651	701	751
RIF		50	50	50	51	52	52	53	53	53	53
MULTICHILLER_PCO		•	•	•	•	•	•	•	•	•	•
PRM1		•	•	•	•	•	•	•	•	•	•
CRATE01		•									
CRATE02			•	•	•	•	•				
CRATE03								•	•	•	
CRATE04											•
	Power supply										
KRB	**230/3/60**	611	612	612	612	613	613	614	614	614	615
KRB	**460/3/60**	811	812	812	812	813	813	814	814	814	815
KRB	**575/3/60**	811	812	812	812	813	813	814	814	814	815
KRB	**208/3/60**	911	912	912	912	913	913	914	914	914	915

UNIT CONFIGURATOR

NAME	**NRL**
SIZE	028 - 030 - 033 - 035 - 050 - 055 - 060 - 065 - 070 - 075
COMPRESSOR	
0	R410A standard compressor
THERMOSTATIC VALVE	
°	Standard mechanical thermostatic valve with produced water up to 39,2°F / +4°C
X	Electronic thermostatic valve with produced water up to 14°F / -10°C **(1)**
MODELS	
H	Heat pump
HEATHING RECOVERY	
°	Without Recovery
D	With Desuperheater **(2)**
VERSION	
A	High efficiency (not available for size 028 ÷ 035)
E	High efficiency low noise (data on demand for size 050 ÷ 075)
COILS	
°	Alluminium
R	Copper
S	Copper tin plated
V	Epoxy coated

FANS	
°	Standard **(3)**
I	Inverter fan, speed modulating for condensation control **(4)**
POWER SUPPLY	
6	230/3/60 With magnet circuit breakers
7	460/3/60 With magnet circuit breakers
8	575/3/60 With magnet circuit breakers
9	208/3/60 With magnet circuit breakers
HYDRONIC KIT	
00	Without hydronic kit
01	Tank and single low head pump
02	Tank and single low head pump and reserve pump
03	Tank and single high head pump
04	Tank and single high head pump and reserve pump
P1	Single low head pump
P2	Single low head pump and reserve pump
P3	Single high head pump
P4	Single high head pump and reserve pump

(1) Contact the factory for temperatures below 4°C/39.2°F.
(2) With heating recovery Desuperheater, the inverter fans (I) are mandatory.
(2) D are not compatible with (X) thermostatic valve.
(3) Standard fans are not available for power supply 208/3/60.
(4) Inverter fan is mandatory for power supply 208/3/60.

TECHNICAL DATA

NRL H		028HE	030HE	033HE	035HE	050HA	055HA	060HA	065HA	070HA	075HA
Cooling capacity	ton	13.05	15.44	17.54	22.15	24.85	28.95	35.15	40.78	45.13	49.56
Total input power	kW	15.05	17.46	20.07	25.85	29.03	34.39	41.28	47.66	53.57	58.51
EER	BTU/W	10.41	10.62	10.50	10.29	10.28	10.11	10.23	10.28	10.12	10.17
IPLV	BTU/W	14.33	14.44	14.41	14.22	15.87	15.55	15.79	15.67	14.82	14.68
Water flow rate	gpm	31.21	36.92	41.94	52.97	59.43	69.23	84.06	97.52	107.92	118.52
Total pressure drop without pump	ft H2O	4.35	6.02	5.69	6.69	7.03	8.36	12.04	15.05	18.73	20.41
Heating capacity	BTU/h	166.000	196.700	220.600	267.300	310.800	358.600	430.900	482.000	549.900	600.600
Total input power	kW	16.08	19.08	21.39	28.45	31.48	37.69	44.70	51.04	58.10	61.35
COP	kW/kW	3.025	3.021	3.022	2.754	2.893	2.788	2.825	2.768	2.774	2.869
Water flow rate	gpm	37.23	44.12	49.47	59.96	69.71	80.43	96.65	108.11	123.30	134.70
Total pressure drop without pump	ft H2O	6.17	8.57	7.89	8.55	9.64	11.30	15.90	18.40	24.40	26.30
ELECTRICAL DATA											
Power supply 230V/3~/60Hz											
Input current cooling mode	A	53	61	68	86	96	112	135	154	173	191
Input current heating mode	A	47	61	60	90	93	112	132	152	160	174
[LRA]	A	227	278	288	358	372	392	377	447	465	527
[MCA]	A	69	79	84	125	132	144	161	202	237	254
[MOP]	A	97	112	118	176	184	195	195	253	289	310
Recom fuse	A	90	110	110	175	175	175	175	250	250	300
Power supply 460V/3~/60Hz											
Input current cooling mode	A	30	35	39	46	49	56	70	77	85	96
Input current heating mode	A	22	31	29	45	46	56	66	76	80	87
[LRA]	A	122	150	154	184	186	195	191	220	228	268
[MCA]	A	38	47	52	62	63	73	89	99	108	121
[MOP]	A	51	65	70	85	85	95	107	122	131	147
Recom fuse	A	50	60	70	80	80	90	100	110	125	125
Power supply 575V/3~/60Hz											
Input current cooling mode	A	25	30	33	39	39	46	57	64	70	79
Input current heating mode	A	22	25	27	36	37	44	54	62	65	75
[LRA]	A	95	100	103	135	137	144	132	164	171	203
[MCA]	A	29	35	38	54	52	58	66	81	96	107
[MOP]	A	38	48	51	74	72	78	78	101	115	131
Recom fuse	A	35	45	50	70	70	75	75	100	110	125
Power supply 208V/3~/60Hz											
Input current cooling mode	A	-	-	-	-	-	-	-	-	-	-
Input current heating mode	A	-	-	-	-	-	-	-	-	-	-
[LRA]	A	-	-	-	-	-	-	-	-	-	-
[MCA]	A	-	-	-	-	-	-	-	-	-	-
[MOP]	A	-	-	-	-	-	-	-	-	-	-
Recom fuse	A	-	-	-	-	-	-	-	-	-	-
GENERAL DATA											
COMPRESSOR											
Compressor	Type	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Compressor	n°	2	2	2	2	3	3	4	4	4	4
Circuit	n°	2	2	2	2	2	2	2	2	2	2
Refigerant gas	Type	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
EXCHANGER											
Exchanger	Type	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate
Quantity	n°	1	1	1	1	1	1	1	1	1	1
Min. water flow	gpm	22.34	26.13	28.78	32.56	39.00	41.65	51.12	57.55	64.75	77.24
Max. water flow	gpm	74.47	87.09	95.93	108.54	130.00	138.84	170.39	191.85	215.83	257.48
Water content	gal										
Water connection (grooved in/out)	ø	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	2"1/2	3"
Crankcase heater	n°/W										
FANS											
Fans	Type	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial
Numbers	n°	6	8	8	8	2	2	3	3	3	4
Air flow rate in cooling mode	cfm	14.597	19.305	19.305	18.717	24.956	24.956	37.669	37.669	37.669	51.206
SOUND DATA											
Sound power	dB(A)	74	76	77	78	83	84	85	86	86	87
Sound pressure 10m/33ft	dB(A)	42	44	45	46	51	52	53	54	54	55

COOLING MODE: AHRI CONDITION std 550/590 (I-P)
Evaporator water temperature (in/out): 12.26°C, 54.1°F / 6.67°C, 44.1°F - Dry bulb ambient air temperature: 35°C, 95°F

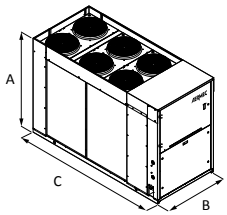
HEATING MODE:
Evaporator water temperature (in/out): 40°C, 104°F / 45°C, 113°F - Dry bulb ambient air temperature: 7°C, 44.6°F

(The data indicated can be modified at any time by Aermec if deemed necessary).

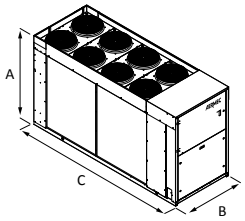
DIMENSIONS AND WEIGHT

NRL			028HE	030HE	033HE	035HE	050HA	055HA	060HA	065HA	070HA	075HA
Height	A	in	63	63	63	63	74	74	74	74	74	78
Width	B	in	43	43	43	43	43	43	43	43	43	59
Depth	C	in	97	116	116	116	119	119	158	158	158	211
Weight		lbs	1.590	1.766	1.775	1.949	2.178	2.218	2.864	2.996	2.930	4.542

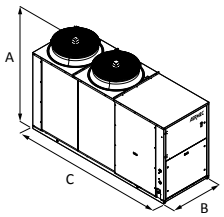
• NRL 028 HE



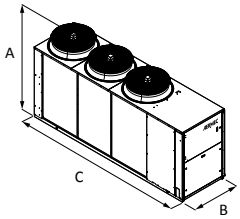
• NRL 0330 - 033 - 035 HE



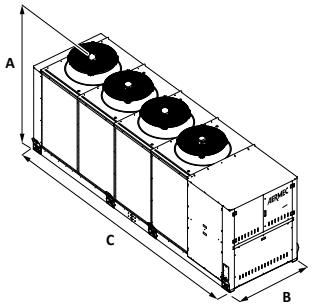
• NRL 050 - 055 HA



• NRL 060 - 065 - 070 HA



• NRL 075 HA



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NRL
080/180

Chiller
Air/Water for outdoor installation
Scroll compressors, Plate exchangers, Axial fans
Cooling capacity from 13.7 to 49.9 ton

- **HIGH EFFICIENCIES ALSO AT PARTIAL LOADS**
- **EASY AND FAST INSTALLATION**
- **2/4 REFRIGERANT CIRCUITS**

FEATURES

NRL is the range of chillers for external installation for chilled water production with high performance scroll compressors and low electric absorption, axial fans, external copper coils with aluminum fins, plate heat exchangers.
In the units (with desuperheater or total recovery) it is also possible to produce free-hot water. The basement, the structure and the panelling are in steel treated with polyester anti-corrosion paints.

Models
- NRL ° Cooling only
- NRL C Without evaporator

Versions
- NRL A High efficiency
- NRL E Low noise high efficiency

Operating range:
- Work at full load up to 46°C/114.8°F dry bulb external air temperature.
- Work at full load up to -10°C/14°F outlet water temperature.
  (for more details please refer to the technical documentation).

Units with two refrigerant circuits designed to grant the maximum performance at full load, ensuring high efficiencies also at partial loads and giving continuity in case of stop of one of the two circuit.

- Standard Flow-switch, water filter and high and low pressure transducer.
- Possibility of integrated hydronik -kit, which includes the main hydraulic components; it is available in different configurations with or without buffer tank, one or two high and low head pumps.
- Microprocessor adjustment, with keyboard and LCD display, for easy consultation and intervention on the unit via a menu available in several languages.
- Adjustment includes complete management of the alarms and their log.
- The presence of a programmable timer allows setting time bands of operation and a possible second set-point.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- Night Mode: it is possible to set a silenced operation profile.
- Perfect for night operation, since it guarantees greater acoustic comfort in the evenings, and a high efficiency in the time of greater load.

ACCESSORIES

MECHANICAL ACCESSORIES:
AVX
Sprung anti-vibration supports.
Select the AVX model from the compatibility table.

GP
Protection grille, protects the external coil from accidental knocks.

ELECTRICAL ACCESORIES:
AER485P1
RS-485 interface for supervision systems with MODBUS protocol.

AERWEB300
Accessory AERWEB allows remote control of a chiller through a common PC and an ethernet connection over a common browser; 4 versions available:
AERWEB300-6
Web server to monitor and remote control max. 6 units in RS485 network;
AERWEB300-18
Web server to monitor and remote control max. 18 units in RS485 network;
AERWEB300-6G
Web server to monitor and remote control max. 6 units in RS485 network with integrated GPRS modem;
AERWEB300-18G
Web server to monitor and remote control max. 18 units in RS485 network with integrated GPRS modem;

DRE
It allows the reduction of peak power necessary for the machine during start-up phase.

RIF
Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

ACCESSORIES CAN ONLY BE FITTED IN THE FACTORY:

MULTICHILLER_PCO
Control system to switch the individual chillers on and off, and command them, in a system in which several units are installed in parallel, always ensuring a constant delivery to the evaporators.

PRM1
It is a manual pressure switch electrically wired in series with the existing automatic high pressure switch on the compressor discharge pipe.

CRATE
Special wood cover for transport.

FL-UL
Flow switch monitors the flow rate and stops the unit in case of insufficient flows.

For more information please contact us.

ACCESSORIES COMPATIBILITY

NRL		080	090	100	125	140	150	165	180
MECHANICAL ACCESSORIES:									
	Hydronic Kit								
AVX	**00**	704	710	716	7012	7009	7009	734	737
AVX	**P2 / P4**	706	712	712	7014	7009	7009	736	736
AVX	**P1 / P3**	706	712	712	7014	7009	7009	736	736
AVX	**02 / 04**	705	711	711	7013	7010	7010	735	738
AVX	**01 / 03**	705	711	711	7013	7010	7010	735	738
GP		260	260	260	500	500	500	500	500
ELECTRICAL ACCESORIES:									
AER485P1		•	•	•	•	•	•	•	•
AERWEB300		•	•	•	•	•	•	•	•
ACCESSORIES CAN ONLY BE FITTED IN THE FACTORY:									
DRE		801	901	1001	1251	1404	1504	1655	1801
RIF		88	90	92	92	92	92	93	94
MULTICHILLER_PCO		•	•	•	•	•	•	•	•
PRM1		•	•	•	•	•	•	•	•
CRATE									
FL-UL		•	•	•	•	•	•	•	•

UNIT CONFIGURATOR

Field **DESCRIPTION**

1,2,3 **NRL**

4, 5, 6 **SIZE**

080 - 090 - 100 - 125 - 140 - 150 - 165 - 180

7 **COMPRESSOR**

0 R410A standard compressor

8 **THERMOSTATIC VALVE**

° standard mechanical thermostatic valve (min. water out temp 39 °F)

Y mechanical thermostatic valve (water out temp range 21 ÷ 39 °F)

X electronic thermostatic valve (min. water out temp 39 °F, contact the factory for lower

9 **MODELS**

° Cooling only

C Without Evaporator (data on demand)

10 **Heat recovery**

° without recovery

D with desuperheater

T with total heat recovery

11 **VERSION**

A High efficiency

E High efficiency low noise (data on demand)

12 **COILS**

° Alluminium

R Copper

S Copper tin plated

V Epoxy coated

13 **FANS**

° Standard

I Fan speed modulating for condensation control

14 **SUPPLY**

6 230/3/60 with magnet circuit breakers (only for size 100 to 180)

7 460/3/60 with magnet circuit breakers

8 575/3/60 with magnet circuit breakers

15,16 **HYDRONIC KIT**

00 without hydronic kit

01 tank and single low head pump

02 tank and single low head pump and reserve pump

03 tank and single high head pump

04 tank and single high head pump and reserve pump

P1 single low head pump

P2 single low head pump and reserve pump

P3 single high head pump

P4 single high head pump and reserve pump

Configurations not allowed:

YD / YT / Y

CT / CD

T01 / T02 / T03 / T04

"I" ventilation mandatory for Desuperheater "D" option

NRL		080	090	100	125	140	150	165	180
Cooling capacity	ton	53.7	62.7	72.4	94.1	102.4	110.5	120.7	130.9
Total input power	kW	63.4	71.7	85.9	111.3	119.0	126.6	143.4	155.5
EER	BTU/Wat	10.17	10.51	10.12	10.15	10.34	10.49	10.11	10.11
IPLV	BTU/Wat	14.27	14.62	14.32	14.38	14.53	14.57	13.87	13.73
Water flow rate	gpm	128.0	150	173	225	245	264	289	313
Total pressure drop without pump	p.s.i.	8.0	7.0	5.0	6.0	6.0	7.0	8.0	9.0
ELECTRICAL DATA									
Power supply 230V/3~/60Hz with standard fan									
Imput current	A	-	-	-	-	-	-	-	-
[LRA]	A	559	732	747	927	948	1003	1038	1107
[MCA]	A	263	304	340	414	469	518	554	585
[MOP]	A	319	378	414	500	579	627	664	670
Recom fuse	A	300	350	400	500	500	600	600	600
Power supply 460V/3~/60Hz with standard fan									
Imput current	A	-	-	-	-	-	-	-	-
[LRA]	A	283	333	340	427	477	502	518	509
[MCA]	A	129	138	147	211	239	264	281	295
[MOP]	A	155	169	177	253	294	319	336	337
Recom fuse	A	150	150	175	250	250	300	300	300
Power supply 575V/3~/60Hz with standard fan									
Imput current	A	86	99	110	149	157	164	191	218
[LRA]	A	214	265	270	360	371	390	403	423
[MCA]	A	116	118	120	176	209	238	244	246
[MOP]	A	139	142	144	211	258	287	293	281
Recom fuse	A	125	125	125	200	250	250	250	250
Power supply 208V/3~/60Hz with standard fan									
Imput current	A	-	-	-	-	-	-	-	-
[LRA]	A	-	-	-	-	-	-	-	-
[MCA]	A	-	-	-	-	-	-	-	-
[MOP]	A	-	-	-	-	-	-	-	-
Recom fuse	A	-	-	-	-	-	-	-	-
GENERAL DATA									
COMPRESSOR									
Compressor	Type	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Compressor / Circuit	n°	4/2	4/2	4/2	4/2	4/2	4/2	4/2	4/2
Refigerant gas	Type	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
EXCHANGER									
Exchanger	Type	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate
Quantity	n°	-	-	-	-	-	-	-	-
Min. water flow	gpm	-	-	-	-	-	-	-	-
Max. water flow	gpm	-	-	-	-	-	-	-	-
Water content	gal	3.4	4.4	7.0	8.0	8.7	8.7	8.7	8.7
Water connection (in/out)	ø	3"	3"	4"	4"	4"	4"	4"	4"
FANS									
Fans	Type	Axial	Axial	Axial	Axial	Axial	Axial	Axial	Axial
Numbers	n°	4	4	4	8	8	8	8	8
Air flow rate	cfm	48.499	47.793	47.557	96.056	94.408	92.760	92.760	92.760
SOUND DATA									
Sound power	dB(A)	88	89	89	94	95	96	96	96
Sound pressure 10m/33ft	dB(A)	56	57	57	62	63	64	64	64

COOLING MODE: AHRI CONDITION std 550/551

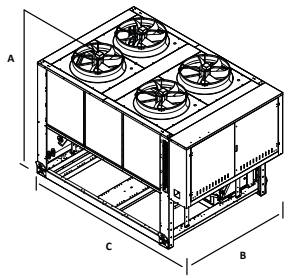
Evaporator water temperature (in/out): 12.26°C, 54.1°F / 6.67°C, 44.1°F - Dry bulb ambient air temperature: 35°C, 95°F

(The data indicated can be modified at any time by Aermec if deemed necessary).

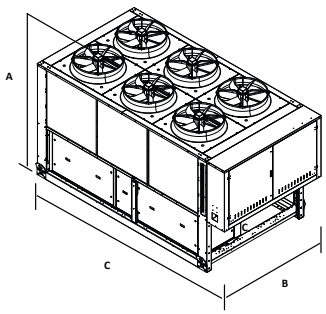
DIMENSIONS AND WEIGHT

Mod. NRL				080	090	100	125	140	150	165	180
Height	A	All	in	96	96	96	96	96	96	96	96
Width	B	All	in	87	87	87	87	87	87	87	87
Depth	C	A	in	134	134	134	226	226	226	226	226
Weight	-	A	lbs	4134	4475	4850	7275	7496	7760	8113	8422

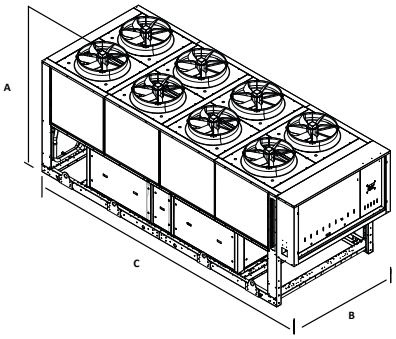
• **NRL 800 - 900 - 1000 A**



• **NRL 800 - 900 - 1000 A**



• **NRL 1250 - 1400 - 1500 - 1650 - 1800 A**



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NRL
080/180

Reversible heat pump
Air/Water for outdoor installation
Scroll compressors, Plate exchangers, Axial fans
Cooling capacity from 54.30 to 123.05 ton
Heating capacity from 666.703 to 1.701.940 BTU/h

60Hz | HFC Refrigerant R410A | Intertek | AHRI

- **HIGH EFFICIENCIES ALSO AT PARTIAL LOADS**
- **EASY AND FAST INSTALLATION**
- **2/4 REFRIGERANT CIRCUITS**

FEATURES

NRL_H is the range of reversible heat pumps for external installation for the chilled/heated water production with high performance scroll compressors and low electric absorption, axial fans, external copper coils with aluminum fins, plate heat exchangers.
IIn the units with desuperheater, but in cooling-only operation, it is possible to produce free hot water. The basement, the structure and the panelling are in steel treated with polyester anti-corrosion paint.

Models
- NRL_H Reversible heat pump

Versions
- NRL_HA High efficiency
- NRL_HE Low noise high efficiency

Operating range:
- Work at full load up to -15°C/5°F dry bulb external air temperature in winter season, up to 46°C/114,8°F in summer season.
- Hot water production up to 55°C/131°F. *(For more details please refer to the technical documentation).*

Units with two refrigerant circuits designed to grant the maximum performance at full load, ensuring high efficiencies also at partial loads and giving continuity in case of stop of one of the two circuit.

- Standard Flow-switch, water filter and high and low pressure transducer.
- Possibility of integrated hydronik -kit, which includes the main hydraulic components; it is available in different configurations with or without buffer tank, one or two high and low head pumps.
- Microprocessor adjustment, with keyboard and LCD display, for easy consultation and intervention on the unit via a menu available in several languages.
- Adjustment includes complete management of the alarms and their log.
- The presence of a programmable timer allows setting time bands of operation and a possible second set-point.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- Night Mode: it is possible to set a silenced operation profile.
- Perfect for night operation, since it guarantees greater acoustic comfort in the evenings, and a high efficiency in the time of greater load.

ACCESSORIES

MECHANICAL ACCESSORIES:
AVX
Sprung anti-vibration supports.
Select the AVX model from the compatibility table.

GP
Protection grille, protects the external coil from accidental knocks.

ELECTRICAL ACCESORIES:
AER485P1
RS-485 interface for supervision systems with MODBUS protocol.

AERWEB300
Accessory AERWEB allows remote control of a chiller through a common PC and an ethernet connection over a common browser; 4 versions available:
AERWEB300-6
Web server to monitor and remote control max. 6 units in RS485 network;

AERWEB300-18
Web server to monitor and remote control max. 18 units in RS485 network;
AERWEB300-6G
Web server to monitor and remote control max. 6 units in RS485 network with integrated GPRS modem;
AERWEB300-18G
Web server to monitor and remote control max. 18 units in RS485 network with integrated GPRS modem;

DRE
It allows the reduction of peak power necessary for the machine during start-up phase.

RIF
Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

ACCESSORIES CAN ONLY BE FITTED IN THE FACTORY:
MULTICHILLER_PCO
Control system to switch the individual chillers on and off, and command them, in a system in which several units are installed in parallel, always ensuring a constant delivery to the evaporators.

PRM1
It is a manual pressure switch electrically wired in series with the existing automatic high pressure switch on the compressor discharge pipe.

CRATE
Special wood cover for transport.

FL-UL
Flow switch monitors the flow rate and stops the unit in case of insufficient flows.

For more information please contact us.

ACCESSORIES COMPATIBILITY

Hydronic Kit	NRL -HA 080	NRL -HA 090	NRL -HA 100	NRL -HA 125	NRL -HA 140	NRL -HA 150	NRL -HA 165	NRL -HA 180
00	AVX 7003	AVX 7006	AVX 7006	AVX 7009	AVX 7009	AVX 7009	AVX 734	AVX 737
P2 / P4	AVX 7005	AVX 7008	AVX 7008	AVX 7011	AVX 7011	AVX 7011	AVX 736	AVX 736
P1 / P3	AVX 7005	AVX 7008	AVX 7008	AVX 7011	AVX 7011	AVX 7011	AVX 736	AVX 736
02 / 04	AVX 7004	AVX 7007	AVX 7007	AVX 7010	AVX 7010	AVX 7010	AVX 735	AVX 738
01 / 03	AVX 7004	AVX 7007	AVX 7007	AVX 7010	AVX 7010	AVX 7010	AVX 735	AVX 738

UNIT CONFIGURATOR

Field **DESCRIPTION**

1,2,3 **NRL**

4, 5, 6 **SIZE**
080 - 090 - 100 - 125 - 140 - 150 - 165 - 180

7 **COMPRESSOR**
- **0** R410A standard compressor

8 **THERMOSTATIC VALVE**
- **°** standard mechanical thermostatic valve (min. water out temp 39 °F)
- **Y** mechanical thermostatic valve (water out temp range 21 ÷ 39 °F)
- **X** electronic thermostatic valve (min. water out temp 39 °F, contact the factory for lower

9 **MODELS**
- **H** Heat Pump

10 **Heat recovery**
- **°** without recovery
- **D** with desuperheater
- **T** with total heat recovery

11 **VERSION**
- **A** High efficiency
- **E** High efficiency low noise (data on demand)

12 **COILS**
- **°** Alluminium
- **R** Copper
- **S** Copper tin plated
- **V** Epoxy coated

13 **FANS**
- **°** Standard
- **I** Fan speed modulating for condensation control

14 **SUPPLY**
- **6** 230/3/60 with magnet circuit breakers (only for size 100 to 180)
- **7** 460/3/60 with magnet circuit breakers
- **8** 575/3/60 with magnet circuit breakers

15,16 **HYDRONIC KIT**
- **00** without hydronic kit
- **01** tank and single low head pump
- **02** tank and single low head pump and reserve pump
- **03** tank and single high head pump
- **04** tank and single high head pump and reserve pump
- **P1** single low head pump
- **P2** single low head pump and reserve pump
- **P3** single high head pump
- **P4** single high head pump and reserve pump

Configurations not allowed:
YD / YT / YH
HT / HC
CT / CD
T01 / T02 / T03 / T04
"I" ventilation mandatory for Desuperheater "D" option

TECHNICAL DATA

Mod. NRL	Vers.		080	090	100	125	140	150	165	180
Cooling capacity	HA	Tons	54.30	61.91	70.91	91.94	98.72	106.01	113.34	123.05
Total power input	HA	(kW)	65.70	76.00	87.00	112.10	121.40	130.90	151.99	173.32
Water flow rate	HA	gpm	130	148	170	220	236	254	271	294
Pressure drop	HA	psi	6	6	7	5	5	5	6	7
ENERGY INDICES										
EER	All	W/W	9,91	9,77	9,77	9,83	9,75	9,71	8,94	8,51
IPLV	All	BTU/W	13,93	13,66	13,90	13,93	13,73	13,52	13,25	12,84
Heating capacity	HA	BTU/h	666.703	786.738	886.417	1.119.532	1.214.852	1.311.794	1.528.820	1.701.940
Total power input	HA	(kW)	66.15	77.99	89.71	116.69	126.91	134.47	157.41	173.40
Water flow rate	HA	(gpm)	148	174	197	248	269	291	339	377
Pressure drop	HA	p.s.i.	7	8	9	6	7	7	10	12
ENERGY INDICES										
COP	All	W/W	2.95	2.95	2.89	2.81	2.80	2.86	2.84	2.87
IPLV	All	BTU/W	13,93	13,66	13,90	13,93	13,73	13,52	13,25	12,84

Mod. NRL	Vers.		080	090	100	125	140	150	165	180
SCROLL COMPRESSORS										
Quantity / circuits	All	n°/ n°	4/2	4/2	4/2	4/2	4/2	4/2	5/2	6/2
Refrigerant	type	All	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Charges	HA	lbs C1	120,59	121,47	122,80	180,56	180,56	187,39	187,39	187,39
	HA	lbs C2	120,59	121,47	122,80	180,56	180,56	187,39	187,39	187,39
Exchangers user side										
Water connections (in/out)	All	Ø	3"	3"	4"	4"	4"	4"	4"	4"
STANDARD FANS °										
Numbers	HA	n°	6	6	6	8	8	8	8	8
Air flow rate	HA	cfm	73632	73632	73632	99592	99592	99592	99120	97704
SOUND DATA										
Sound pressure	HA	dB(A)	57	60	61	62	63	64	64	64
Sound power	HA	dB(A)	89	92	93	94	95	96	96	96

COOLING (AHRI CONDITIONS)
Outlet water temperature 6,7°C / 44,6°F
Flow rate 0,043l/s per kW
External temperature 35°C / 95°F

HEATING (AHRI CONDITIONS)
Inlet water temperature 40°C / 104°F
Outlet water temperature 45°C / 113°F
External air temperature 7°C d.b / 6°C w.b.

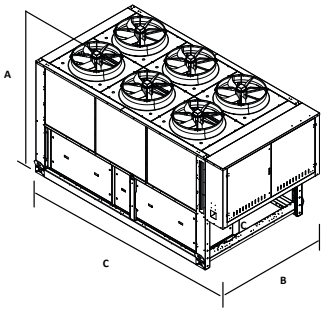
AHRI CONDITIONS
leaving water 6.7°C/44.6°F
flow rate 0.043 l/s per kW (full load)
Load 100% air 35°C /95°F
Load 75% air 26.7°C/80.06°F
Load 50% air 18.3°C /64.94°F
Load 25% air 12.8°C/55.04°F

SOUND PRESSURE
Sound pressure in free field, at 33 ft distance from the external surface of the unit.
Note: For more information, refer to the selection program Magellano or the technical documentation available on the website www.aermec.com

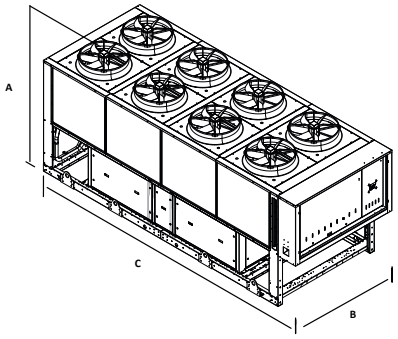
DIMENSIONS AND WEIGHT

Mod. NRL				080	090	100	125	140	150	165	180
Height	A	All	in	96	96	96	96	96	96	96	96
Width	B	All	in	87	87	87	87	87	87	87	87
Depth	C	HA	in	167	167	167	226	226	226	226	226
Weight		HA	lbs	5732	5952	6129	8113	8179	8223	8554	8818

• NRL 800 - 900 - 1000 HA



• NRL 1250 - 1400 - 1500 - 1650 - 1800 HA



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NRL
200/360

Chiller
Air/Water for outdoor installation
Scroll compressors, Plate exchangers, Axial fans
Cooling capacity from 145.0 to 261.0 ton

60Hz | HFC Refrigerant R410A | Intertek | AHRI

- **HIGH EFFICIENCIES ALSO AT PARTIAL LOADS**
- **EASY AND FAST INSTALLATION**
- **4 REFRIGERANT CIRCUITS**

FEATURES

NRL is the range of chillers for external installation for chilled water production with high performance scroll compressors and low electric absorption, axial fans, external copper coils with aluminum fins, plate heat exchangers.
In the units (with desuperheater or total recovery) it is also possible to produce free-hot water. The basement, the structure and the panelling are in steel treated with polyester anti-corrosion paints.

Models
- NRL ° Cooling only
- NRL C Without evaporator

Versions
- NRL A High efficiency
- NRL E Low noise high efficiency

Operating range:
- Work at full load up to 46°C/114.8°F dry bulb external air temperature.
- Work at full load up to -10°C/14°F outlet water temperature.
  (for more details please refer to the technical documentation).

Units with two refrigerant circuits designed to grant the maximum performance at full load, ensuring high efficiencies also at partial loads and giving continuity in case of stop of one of the two circuit.

- Standard Flow-switch, water filter and high and low pressure transducer.
- Possibility of integrated hydronik -kit, which includes the main hydraulic components; it is available in different configurations with or without buffer tank, one or two high and low head pumps.
- Microprocessor adjustment, with keyboard and LCD display, for easy consultation and intervention on the unit via a menu available in several languages.
- Adjustment includes complete management of the alarms and their log.
- The presence of a programmable timer allows setting time bands of operation and a possible second set-point.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- Night Mode: it is possible to set a silenced operation profile.
- Perfect for night operation, since it guarantees greater acoustic comfort in the evenings, and a high efficiency in the time of greater load.

ACCESSORIES

MECHANICAL ACCESSORIES:
AVX
Sprung anti-vibration supports.
Select the AVX model from the compatibility table.

GP
Protection grille, protects the external coil from accidental knocks.

ELECTRICAL ACCESORIES:
AER485P1
RS-485 interface for supervision systems with MODBUS protocol.

AERWEB300
Accessory AERWEB allows remote control of a chiller through a common PC and an ethernet connection over a common browser; 4 versions available:
AERWEB300-6
Web server to monitor and remote control max. 6 units in RS485 network;
AERWEB300-18
Web server to monitor and remote control max. 18 units in RS485 network;
AERWEB300-6G
Web server to monitor and remote control max. 6 units in RS485 network with integrated GPRS modem;
AERWEB300-18G
Web server to monitor and remote control max. 18 units in RS485 network with integrated GPRS modem;

DRE
It allows the reduction of peak power necessary for the machine during start-up phase.

RIF
Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

ACCESSORIES CAN ONLY BE FITTED IN THE FACTORY:
MULTICHILLER_PCO
Control system to switch the individual chillers on and off, and command them, in a system in which several units are installed in parallel, always ensuring a constant delivery to the evaporators.

PRM1
It is a manual pressure switch electrically wired in series with the existing automatic high pressure switch on the compressor discharge pipe.

CRATE
Special wood cover for transport.

FL-UL
Flow switch monitors the flow rate and stops the unit in case of insufficient flows.

For more information please contact us.

ACCESSORIES COMPATIBILITY

NRL		200	225	250	280	300	330	360
MECHANICAL ACCESSORIES:								
	Hydronic Kit							
AVX	**00**	767	7022	7024	7027	7027	798	798
AVX	**P2 / P4**	769	7022	7026	7029	7029	800	800
AVX	**P1 / P3**	769	7022	7026	7029	7029	800	800
AVX	**02 / 04**	768	7023	7025	7028	7028	799	799
AVX	**01 / 03**	768	7023	7025	7028	7028	799	799
GP								
ELECTRICAL ACCESORIES:								
AER485P1		•	•	•	•	•	•	•
AERWEB300		•	•	•	•	•	•	•
ACCESSORIES CAN ONLY BE FITTED IN THE FACTORY:								
DRE		•	•	•	•	•	•	•
RIF								
MULTICHILLER_PCO		•	•	•	•	•	•	•
PRM1								
CRATE		•	•	•	•	•	•	•
FL-UL		•	•	•	•	•	•	•

UNIT CONFIGURATOR

NAME	**NRL**
SIZE	200 - 225 - 250 - 280 - 300 - 330 - 360
COMPRESSOR	
0	R410A standard compressor
THERMOSTATIC VALVE	
°	Standard mechanical thermostatic valve with produced water up to 39,2°F / +4°C
Y	Mechanical thermostatic valve with produced water from 39,2°F / +4°C to 14°F / -10°C **(1)**
X	Electronic thermostatic valve min. Water out temp 39,2°F / +4°C, (contact the factory for lower temperatures) **(1)**
MODELS	
°	Cooling only
C	Without evaporator (data on demand) **(2)**
HEATHING RECOVERY	
°	Without Recovery
D	With Desuperheater **(1) (3)**
T	With Total Heat Recovery **(1)**
VERSION	
A	High efficiency
E	High efficiency low noise (data on demand)
COILS	
°	Alluminium
R	Copper
S	Copper tin plated
V	Epoxy coated

FANS	
°	Standard **(4)**
I	Fan speed modulating for condensation control **(5)**
POWER SUPPLY	
6	230/3/60 With magnet circuit breakers
7	460/3/60 With magnet circuit breakers
8	575/3/60 With magnet circuit breakers
9	208/3/60 With magnet circuit breakers **(5)**
HYDRONIC KIT	
00	Without hydronic kit
01	Tank and single low head pump
02	Tank and single low head pump and reserve pump
03	Tank and single high head pump
04	Tank and single high head pump and reserve pump
P1	Single low head pump
P2	Single low head pump and reserve pump
P3	Single high head pump
P4	Single high head pump and reserve pump

(1) Options D, T, C are not compatible with thermostatic valve Y, X.
(2) The condensing unit (C) is not available with hydronic kit and heathing recovery D, T.
(3) With desuperheater (D) the inverter fans (I) are mandatory.
(4) The standard fans are not available for version 208/3/60.
(5) The inverter fans (I) is mandatory for version 208/3/60.

NRL		200	225	250	280	300	330	360
Cooling capacity	ton	145.0	166.0	189.0	204.0	220.0	241.0	261.0
Total input power	kW	171.8	197.0	224.1	238.2	253.3	286.3	310.0
EER	BTU/Wat	10.14	10.12	10.13	10.29	10.43	10.11	10.11
IPLV	BTU/Wat	13.95	14.75	15.23	15.50	15.66	15.15	14.43
Water flow rate	gpm	346	398	450	490	529	578	626
Total pressure drop without pump	p.s.i.	5.0	6.0	6.0	6.0	7.0	8.0	9.0
ELECTRICAL DATA								
Power supply 230V/3~/60Hz with standard fan								
Imput current	A	-	-	-	-	-	-	-
[LRA]	A	-	-	-	-	-	-	-
[MCA]	A	-	-	-	-	-	-	-
[MOP]	A	-	-	-	-	-	-	-
Recom fuse	A	-	-	-	-	-	-	-
Power supply 460V/3~/60Hz with standard fan								
Imput current	A							
[LRA]	A	476	572	635	711	761	795	803
[MCA]	A	289	353	416	469	519	553	583
[MOP]	A	319	395	457	523	574	607	625
Recom fuse	A	300	350	450	500	500	600	600
Power supply 575V/3~/60Hz with standard fan								
Imput current	A	219	259	298	314	329	382	436
[LRA]	A	385	486	541	586	645	656	680
[MCA]	A	235	292	347	409	467	478	486
[MOP]	A	260	326	382	458	517	528	521
Recom fuse	A	250	300	350	450	500	500	500
Power supply 208V/3~/60Hz with inverter fan								
Imput current	A	-	-	-	-	-	-	-
[LRA]	A	-	-	-	-	-	-	-
[MCA]	A	-	-	-	-	-	-	-
[MOP]	A	-	-	-	-	-	-	-
Recom fuse	A	-	-	-	-	-	-	-
GENERAL DATA								
COMPRESSOR								
Compressor	Type	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Compressor / Circuit	n° / n°	8/4	8/4	8/4	8/4	8/4	10/4	12/4
Refigerant gas	Type	R410A	R410A	R410A	R410A	R410A	R410A	R410A
EXCHANGER								
Exchanger	Type	Plate	Plate	Plate	Plate	Plate	Plate	Plate
Quantity	n°	-	-	-	-	-	-	-
Min. water flow	gpm	-	-	-	-	-	-	-
Max. water flow	gpm	-	-	-	-	-	-	-
Water content	gal	-	-	-	-	-	-	-
Water connection (in/out)	ø	-	-	-	-	-	-	-
FANS (STANDARD °)								
Fans	Type	on-off	on-off	on-off	on-off	on-off	on-off	on-off
Numbers	n°	8	12	16	16	16	16	16
Air flow rate	cfm	95114	143613	192112	188816	185520	185520	185520
SOUND DATA								
Sound power	dB(A)	92	95	97	98	99	99	99
Sound pressure 10m/33ft	dB(A)	60	63	65	66	67	67	67

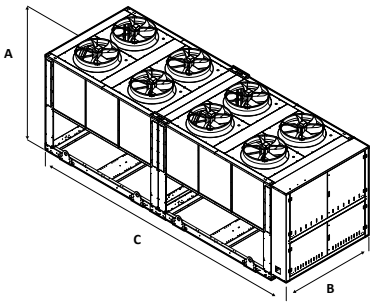
COOLING MODE: AHRI CONDITION std 550/551
Evaporator water temperature (in/out): 12.26°C, 54.1°F / 6.67°C, 44.1°F - Dry bulb ambient air temperature: 35°C, 95°F

(The data indicated can be modified at any time by Aermec if deemed necessary).

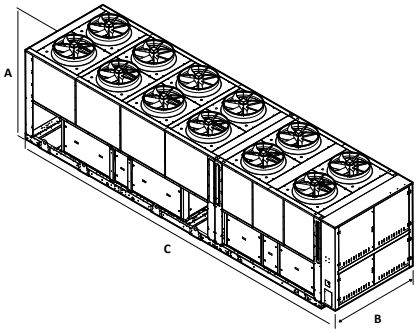
DIMENSIONS AND WEIGHT

NRL			200	225	250	280	300	330	360
Height	A	in	97	97	97	97	97	97	97
Width	B	in	87	87	87	87	87	87	87
Depth	C	in	252	345	437	437	437	437	437
Weight		lbs	9.877	12.346	14.771	15.300	15.785	16.248	16.976

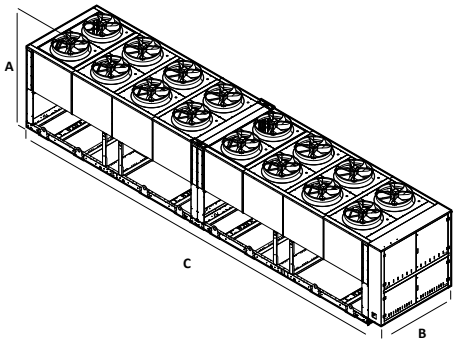
NRL 200



NRL 225



NRL 250 -280 - 300 - 330 - 360



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NRL
200/360

Reversible Heat Pump
Air/Water for outdoor installation
Scroll compressors, Plate exchangers, Axial fans
Cooling capacity from 141.6 to 245.6 ton
Heating capacity from 1.771.379 to 3.401.018 BTU/h

60Hz | HFC Refrigerant R410A | Intertek | AHRI

- **HIGH EFFICIENCY VERSION**
- **LOW NOISE HIGH EFFICIENCY VERSION**
- **2/4 REFRIGERANT CIRCUITS**
- **VERSION WITH BUILT-IN HYDRONIC KIT**

VERSION AND FEATURES

MODELS
- **NRL_H** Heat pump

VERSIONS
Without hydronic kit system side.
- **NRL_A** High efficincy chillers
- **NRL_E** High efficincy Low noise chillers

RECOVERY
- **NRL"A-E"_D** with desuperheater
- **NRL"A-E"_T** with total heat recovery

OPERATING LIMIT
Cooling mode
Max. external air temperature 114,8°F
Min. temperature of water produced 17,6°F
Heating mode
Max. external air temperature 107,6°F
Max. temperature of water produced 131°F

FEATURES
- High-efficiency scroll compressor with crank case heater
- High efficiency heat exchangers with trace heating as standard
- Axial flow fans for quiet operation
- Microprocessor control system:
  - Control from the entering water temperature, with the possibility of selecting control of the leaving water temperature.
  - Condensing control in summer with a 0-10 V modulating signal based on pressure and compensated for external air temperature (with DCPX accessory)
  - Automatic rotation of compressors and pumps based on operating hours
  - Load limiting safety control
  - Low and high pressure transducers (standard for all units)
  - Automatic reset of alarms before tripping
  - Display in 4 languages
  - Alarm history
- Metal enclosure with anti-corrosion polyester paint.

ACCESSORIES

MECHANICAL ACCESSORIES
- **AVX:** Sprung anti-vibration supports. Select the AVX model from the compatibility table.
- **GP:** Protection grille, protects the external coil from accidental knocks.

ELECTRICAL ACCESORIES
- **AER485**: RS-485 interface for supervision systems with MODBUS protocol.
- **AERWEB300**
  Accessory AERWEB allows remote control of a chiller through a common PC and an ethernet connection over a common browser; 4 versions available:
  AERWEB300-6: Web server to monitor and remote control max. 6 units in RS485 network;
  AERWEB300-18: Web server to monitor and remote control max. 18 units in RS485 network;
  AERWEB300-6G: Web server to monitor and remote control max. 6 units in RS485 network with integrated GPRS modem;
  AERWEB300-18G: Web server to monitor and remote control max. 18 units in RS485 network with integrated GPRS modem;
- **DRE:** It allows the reduction of peak power necessary for the machine during start-up phase.
  Accessories can only be fitted in the factory.
- **DUALCHILLER:** Simplified control system to switch on and off, and command, two chillers (using Aermec GR3 command) in a single system, as if they were a single unit.
- **MULTICHILLER:**
  Control system to switch the individual chillers on and off, and command them, in a system in which several units are installed in parallel, always ensuring a constant delivery to the evaporators.
- **PGS:** Daily/Weekly Programmer.
  Allows you to programme two time bands per day (two switch on/off cycles) and to have differentiated programming for each day of the week.
- **PRM1-PRM2 FACTORY FITTED ACCESSORY.** It is a manual pressure switch electrically wired in series with the existing automatic high pressure switch on the compressor discharge pipe.

Compatibility with the VMF system.
For further system information please refer to the specific documentation.

For more information please contact us.

ACCESSORY COMPATIBILITY

Hydronic Kit	NRL-H 200	NRL-H 225	NRL-H 250	NRL-H 280	NRL-H 300	NRL-H 330	NRL-H 360
00	AVX 7015	AVX 7017	AVX 7019	AVX 7019	AVX 7019	AVX 798	AVX 798
P2 / P4	AVX 7015	AVX 7017	AVX 7021	AVX 7021	AVX 7021	AVX 800	AVX 800
P1 / P3	AVX 7015	AVX 7017	AVX 7021	AVX 7021	AVX 7021	AVX 800	AVX 800
02 / 04	AVX 7016	AVX 7018	AVX 7020	AVX 7020	AVX 7020	AVX 799	AVX 799
01 / 03	AVX 7016	AVX 7018	AVX 7020	AVX 7020	AVX 7020	AVX 799	AVX 799

UNIT CONFIGURATOR

Field **DESCRIPTION**

1,2,3 **NRL**

4, 5, 6 **SIZE**

200 - 225 - 250 - 280 - 300 - 330 - 360

7 **COMPRESSOR**

0 R410A standard compressor

8 **THERMOSTATIC VALVE**

° standard mechanical thermostatic valve (min. water out temp 39 °F)

X electronic thermostatic valve (min. water out temp 39 °F, contact the factory for lower

9 **MODELS**

H Heat Pump

10 **Heat recovery**

° without recovery

D with desuperheater

11 **VERSION**

A High efficiency

E High efficiency low noise (data on demand)

12 **COILS**

° Alluminium

R Copper

S Copper tin plated

V Epoxy coated

13 **FANS**

° Standard

I Fan speed modulating for condensation control

14 **SUPPLY**

6 230/3/60 with magnet circuit breakers (only for size 100 to 180)

7 460/3/60 with magnet circuit breakers

8 575/3/60 with magnet circuit breakers

15,16 **HYDRONIC KIT**

00 without hydronic kit

01 tank and single low head pump

02 tank and single low head pump and reserve pump

03 tank and single high head pump

04 tank and single high head pump and reserve pump

P1 single low head pump

P2 single low head pump and reserve pump

P3 single high head pump

P4 single high head pump and reserve pump

Configurations not allowed:

"I" ventilation mandatory for Desuperheater "D" option

TECHNICAL DATA

Mod. NRL H	Vers.		200	225	250	280	300	330	360
Cooling capacity	HA	Tons	141.55	162.53	183.52	197.05	211.16	226.24	245.62
Total power input	HA	(kW)	174.00	199.10	224.20	242.80	261.80	303.98	346.65
Water flow rate	HA	gpm	339	390	440	472	507	542	589
Pressure drop	HA	psi	7	5	5	5	5	6	7
ENERGY INDICES									
EER	All	Watt/Watt	9.77	9.81	9.83	9.75	9.71	8.94	8.51
IPLV	All	BTU/Watt	13.75	13.70	13.74	13.61	13.52	13.32	12.94
Heating capacity	HA	BTU/h	1.771.379	2.004.292	2.237.205	2.427.671	2.621.412	3.055.095	3.401.018
Total power input	HA	(kW)	179.42	206.40	233.38	253.82	268.94	314.82	346.80
Water flow rate	HA	(gpm)	393	445	497	539	582	678	775
Pressure drop	HA	p.s.i.	9	6	6	7	7	10	12
ENERGY INDICES									
COP	All	Watt/Watt	2.89	2.85	2.81	2.82	2.86	2.84	2.87
IPLV	All	BTU/Watt	13.75	13.70	13.74	13.61	13.52	13.32	12.94

Mod. NRL	Vers.		200	225	250	280	300	330	360
SCROLL COMPRESSORS									
Quantity / circuits	All	n°/ n°	8/4	8/4	8/4	8/4	8/4	10/4	12/4
Refrigerant	type	All	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Charges	A	lbs C1	77.16	77.16	121.25	121.25	160.94	160.94	160.94
	A	lbs C2	77.16	77.16	121.25	160.94	160.94	160.94	160.94
	A	lbs C3	77.16	121.25	121.25	121.25	160.94	160.94	160.94
	A	lbs C4	77.16	121.25	121.25	160.94	160.94	160.94	160.94
	HA	lbs C1	123.46	123.46	180.78	180.78	187.39	187.39	187.39
	HA	lbs C2	123.46	123.46	180.78	180.78	187.39	187.39	187.39
	HA	lbs C3	123.46	180.78	180.78	180.78	187.39	187.39	187.39
	HA	lbs C4	123.46	180.78	180.78	180.78	187.39	187.39	187.39
EXCHANGERS USER SIDE									
Water connections (in/out)	All	Ø	4"	4"	4"	4"	4"	4"	4"
STANDARD FANS °									
Numbers	A	n°	8	12	16	16	16	16	16
	HA	n°	12	14	16	16	16	16	16
Air flow rate	A	cfm	95344	143960	192576	189272	185968	185968	185968
	HA	cfm	147264	173224	199184	199184	199184	198240	195408
SOUND DATA									
Sound pressure	A	dB(A)	60	63	65	66	67	67	67
	HA	dB(A)	96	96	97	98	99	99	99
Sound power	A	dB(A)	92	95	97	98	99	99	99
	HA	dB(A)	64	64	65	66	67	67	67

COOLING (AHRI CONDITIONS)

Outlet water temperature	6.7°C / 44.6°F
Flow rate	0.043l/s per kW
External temperature	35°C / 95°F

HEATING (AHRI CONDITIONS)

Inlet water temperature	40°C / 104°F
Outlet water temperature	45°C / 113°F
External air temperature	7°C d.b / 6°C w.b.

AHRI CONDITIONS

leaving water 6.7°C/44.6°F
flow rate 0.043 l/s per kW (full load)
Load 100% air 35°C /95°F
Load 75% air 26.7°C/80.06°F
Load 50% air 18.3°C /64.94°F
Load 25% air 12.8°C/55.04°F

SOUND PRESSURE

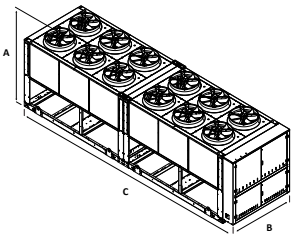
Sound pressure in free field, at 33ft distance from the external surface of the unit.

Note: For more information, refer to the selection program Magellan or the technical documentation available on the website www.aermec.com

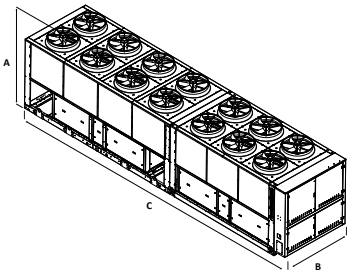
Dimensions

Mod. NRL H				200	225	250	280	300	330	360
Height	A	All	in	96	96	96	96	96	96	96
Width	B	All	in	87	87	87	87	87	87	87
Depth	C	A	in	252	344	437	437	437	437	437
		HA	in	319	378	437	437	437	437	437
Weight (kg)		A	lbs	9.878	12.348	14.774	15.303	15.788	16.251	16.979
		HA	lbs	12.458	14.399	16.317	16.405	16.405	17.023	17.750

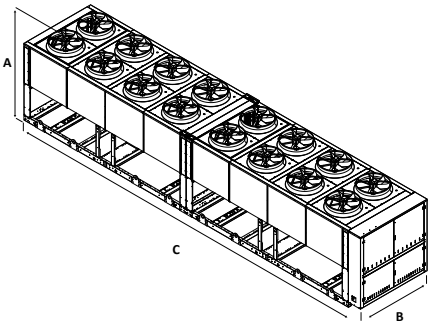
NRL 200 HA



NRL 225 HA



NRL 250-280-300-330-360 HA



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NYB

Chiller
Air/Water for outdoor installation
Scroll compressors, Plate exchangers, Axial fans
Cooling capacity from 29 ton

60Hz | HFC Refrigerant R410A | Intertek | AHRI

- **MICROCHANNEL COILS**
- **COMPACT MODULE, EASY AND QUICK TO INSTALL**
- **RELIABLE AND MODULAR**

FEATURES

NYB is made of independent 29 ton, modules which can be connected together up to 261 ton cooling capacity. Every single module is an external chiller producing chilled water with high efficiency scroll compressors, axial fans, microchannel coils, system side plate heat exchanger. Units with the desuperheater option can also produce hot water for free. The base, the structure and the panels are made of treated galvanised steel with rustproof polyester paint.
With NYB it is possible to couple up to 9 chillers designed to reduce overall unit dimensions to a minimum. This modularity adapts the installation to actual system development requirements. This way, the cooling capacity can be increased over time in a simple and economic manner.

Model
NYB_° Cooling Only

Operating range: Operation at up to 115 °F outdoor air temperature at full load.

- NYB is made of 2 chiller circuits to ensure continuity even if one of the two is stopped. The careful choice of components, the particular configuration and the option of connecting multiple independent modules and managing them as if they were a single unit, allows maximum yield at full load, but also with partial loads thanks to the partialisation steps that increase as the connected modules increases, ensuring continual adaptation to actual system requests.
- The electrical control panel, present in every unit, together with the control logic implemented, allows each module to operate in synergy with the others, whilst ensuring continued operation if one or more modules fail. Modularity is essential for component redundancy, as it allows a safer system design and increased reliability.
- The modules are easy to install and can be connected together, both from the hydraulic and the electrical point of view, making it possible to fine tune the system. Hydraulic connections are facilitated by quick connect couplings, while electrical connections are simplified by the presence of a hinged electrical control panel on each unit.
- The chiller module uses aluminium microchannel coils, ensuring very high levels of efficiency. These coils use less refrigerant compared to traditional copper/aluminium coils.
- To respond to multiple system requirements, a Freecooling version is also available, particularly indicated if the requirement for chilled water is significant even during the winter period. In fact, the greater the difference between the outside air and requested water temperature, the greater the economical advantage of using freecooling.
- The NYB module is already supplied with a water filter and interception valves to facilitate cleaning and maintenance. As an accessory, an air filter protecting the coil facilitates cleaning and guarantees la good heat exchange.
- The microprocessor, with keyboard and LCD display, allows easy consultation and intervention on the unit via a menu, available in several languages. Adjustment includes complete management of the alarms and their log.
- The presence of a programmable timer allows operation time bands setting and programming of a possible second set-point.
- The temperature control takes place with the
- integral proportional logic, based on the water
- outlet temperature.
- With night Mode it is possible to set a silent mode profile.
  Perfect for night operation, it guarantees greater acoustic comfort, nonetheless offering, a high efficiency in the time of greater load.
  NB: The "J" inverter fan is compulsory for the Night Mode

ACCESSORIES

ACCESSORIES:

AER485P1
RS-485 interface for supervising systems with MODBUS protocol.

PGD1
Remote chiller controlling.

MULTICHILLER_UL
Control system for control, switch-on and switch-off of single chillers in a plant where multiple units are installed in parallel,always ensuring constant flow to the evaporators.

FB1
Air filter protecting micro channel coils. composed of a frame and a composite structure of micro-expanded aluminium mesh, with very low pressure drops.

ACCESSORIES MOUNTED IN THE FACTORY:

DRE
Plate peak current reduction electronic device.

RIF
Current power factor correction. Connected in parallel to the motor, it allows a reduction of the input current (approx. 10%).

KREC-7-8 / KREC-6-9

KNYB
Pair of caps with grooved joints assembled on the unit manifold.

GPNYB_BACK / GPNYB_SIDE
Anti-intrusion grid.

ACCESSORIES COMPATIBILITY

NYB	0500
AER485P1	•
PGD1	•
MULTICHILLER_UL	•
FB1	•

NYB		0500
Accessories mounted in the factory		
DRE	*(*)*	•
RIF	*(*)*	•
KREC-7-8		•
KREC-6-9		•
KNYB	*(*)*	•
GPNYB_BACK	*(*)*	•
GPNYB_SIDE	*(*)*	•

(*) Contact supplier

UNIT CONFIGURATOR

Field	Description
1,2,3	NYB
4,5,6,7	**Size**
	0500
8	**Scope of application**
°	Standard (produced water down to +39.2 °F)
9	**Model**
°	Cooling Only
10	**Heat recovery**
°	Without heat recovery
D	With desuperheater
11	**Version**
A	High efficiency
12	**Coils**
°	Aluminium microchannel
O	Painted aluminium microchannel
R	Copper - Copper
S	Copper - Tinned
13	**Fans**
°	Standard
J	Inverter *(1)*
14	**Power supply**
6	230/3/60Hz with magnetic circuit breakers
7	460/3/60Hz with magnetic circuit breakers
8	575/3/60Hz with magnetic circuit breakers
9	208/3/60Hz with magnetic circuit breakers
15-16	**Integrated hydronic kit**
00	Without hydronic kit

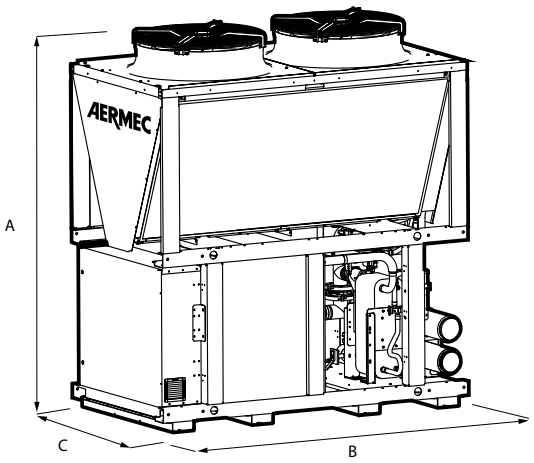
(1) As standard for 208/3/60Hz power supply

NYB		0500
COOLING ONLY MODE		
Cooling capacity	ton	29.0
Total input power	kW	32.9
EER	BTU/W	10.57
IPLV (standard fan)	BTU/W	12.49
Water flow rate	gpm	69
Total pressure drop without pump	p.s.i.	3.2
Power supply 460V-3-60Hz with standard fan		
Imput current	A	60
[LRA]	A	218
[MCA]	A	69
[MOP]	A	95
GENERAL DATA		
Compressors	Type	Scroll
N. compressors	N.	2
N. circuit	N.	2
Unit Part Load	%	50%
Gas type	Type	R410A
Refrigerant charge	lbs	31
Exchangers user side	Type	Plate
Quantity	N.	1
Water connection (in/out)	ø	6"
Water content (Cooling only)	gal	20
Fans (Standard - Inverter) Cooling only mode		
Fans type	Type	Axial
Quantity	N.	2
Air fl ow (unitary)	cfm	23543
Static pressure	Pa	0
Sound data Cooling Only mode		
Sound power	dB(A)	89.4
Sound pressure (10m/33ft)	dB(A)	57.5

COOLING MODE: AHRI CONDITION std 550/551
Evaporator water temperature (in/out): 12.26°C, 54.1°F / 6.67°C, 44.1°F - Dry bulb ambient air temperature: 35°C, 95°F - Free-cooling 0%.

(The data indicated can be modified at any time by Aermec if deemed necessary).

DIMENSIONS AND WEIGHT



NYB			0500
Height	A	in	96.5
Widht	B	in	86.7
Depth	C	in	46.9
Weights (empty)		lbs	2046
Weights (running mode)		lbs	2213

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NLC
0280/1250

Chiller
Air/Water for indoor installation
Scroll compressors, Plate exchangers, Plug fans
Cooling capacity from 14.5 to 87.2 ton

60Hz | HFC Refrigerant R410A | Intertek

NLC without hydronic kit configuration

NLC with hydronic kit configuration

- **AIR COOLED CHILLER**
- **HIGH EFFICIENCY ALSO AT PARTIAL LOADS**
- **COOLING CIRCUIT WITH CASING**
- **COMPLETE AIR FLOW VERSATILITY**
- **HIGH EFFICIENCY PLUG-FANS**
- **INDOOR UNITS**
- **NIGHT MODE**

FEATURES

NLC is a single or dual refrigerant circuit chiller charged with R410a gas. It has directly coupled plug fans with an EC inverter motor to ensure the quietest possible machine operation, scroll compressors with a high yield and low electricity absorption, a plate heat exchanger and a finned coil. The machine cools water to supply the distribution system that is usually connected to fan coil type terminals. In addition, NLC can also produce hot water if it is fitted with a desuperheater or total recovery system, so it's ideal for residential and commercial contexts. It can be equipped with a hydronic kit including an expansion tank, safety valve (water side) and drain valve.

Models
- NLC ° Chiller Cooling only

Versions
- NLC A High efficiency

- The range includes units with 2 compressors in single circuit and units with 4 compressors divided into two independent circuits.
- The possibility of using the electronic thermostatic valve brings significant benefits, especially when the heat pump is working at partial loads to the benefit of the unit's energy efficiency.
- Electric resistance for the evaporator as standard.
- Possibility of integrated hydronic kit that encloses the main hydraulic components; it is available in different configurations with one or two pumps, with different static pressures available, with or without storage tank.
- The units are equipped with plug-fans and inverter motors coupled directly with the fan, with the electronic condensation control as standard, which adjusts the air flow according to the actual system requirements, with benefits in terms of consumption and noise reduction. In addition, compared to conventional centrifugal fans, they do not feature belt and pulley transmission, resulting in easy flow adjustment, compactness, versatility, easy maintenance and no vibrations.
- Horizontal or vertical air flow.
- Microprocessor adjustment, with keyboard and LCD display, for easy consultation and intervention on the unit via a menu available in several languages.
- Adjustment includes complete management of the alarms and their log.
- The presence of a programmable timer allows setting time bands of operation and a possible second set-point.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- Night Mode: it is possible to set a silenced operation profile.
- Perfect for night operation, since it guarantees greater acoustic comfort in the evenings, and a high efficiency in the time of greater load.

ACCESSORIES

ACCESSORIES:

AER 485P1
RS-485 interface for supervising systems with MODBUS protocol.

AERWEB300
AERWEB device allows the remote control of a chiller by means of a common PC through Ethernet connection, via a common browser; 4 models available:
AERWEB300-6: Web server for monitoring and controlling maximum 6 RS485 network devices;
AERWEB300-18: Web server for monitoring and controlling maximum 18 RS485 network devices;
AERWEB300-6G: Web server for monitoring and controlling maximum 6 RS485 network devices with integrated GPRS modem;
AERWEB300-18G: Web server for monitoring and controlling maximum 18 RS485 network devices with integrated GPRS modem;

PGD1
Allows you to control the chiller at a distance.

MULTICHILLER_UL
Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

AVX
Spring anti-vibration mounts.

VT
Group of anti-vibration supports.

FLG
Flanges for ducts.

FL_UL
Flow switch.

FILTRO W
Water filter.
Attention, the flow switch and the water filter must be mounted; failure to do so will void the warranty.

ACCESSORIES MOUNTED IN THE FACTORY:

DRE
Plate peak current reduction electronic device.

RIFNLC
Current power factor correction. Connected in parallel to the motor, it allows a reduction of the input current (approx. 10%).

KRQ
Anti-condensate electric board resistance.

CRATE
Special wood cover for transport.

ACCESSORIES COMPATIBILITY

NLC		0280	0300	0330	0350	0550	0600	0650	0675	0750	0800	0900	1000	1100	1250
AER485P1		•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERWEB300		•	•	•	•	•	•	•	•	•	•	•	•	•	•
PGD1		•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER_UL		•	•	•	•	•	•	•	•	•	•	•	•	•	•
AVX	00	n.a.	n.a.	n.a.	n.a.	•	•	•	•	•	•	•	•	•	•
	P1-P4	n.a.	n.a.	n.a.	n.a.	•	•	•	•	•	•	•	•	•	•
	01-04	n.a.	n.a.	n.a.	n.a.	•	•	•	•	•	•	•	•	•	•
VT	00	•	•	•	•	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	P1-P4	•	•	•	•	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	01-04	•	•	•	•	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
FLG		1	1	1	1	2 (x2)	2 (x2)	2 (x2)	2 (x2)	1+2 (x2)	2 (x4)	2 (x4)	2 (x4)	2 (x4)	2 (x4)
FL_UL		•	•	•	•	•	•	•	•	•	•	•	•	•	•
FILTRO W		DN50	DN50	DN50	DN50	DN65	DN65	DN65	DN65	DN65	DN80	DN80	DN80	DN80	DN80
ACCESSORIES MOUNTED IN THE FACTORY															
DRE		•	•	•	•	•	•	•	•	•	•	•	•	•	•
RIFNLC	7	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	6/8/9	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
KRQ		•	•	•	•	•	•	•	•	•	•	•	•	•	•
CRATE	00	•	•	•	•	•	•	•	•	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	P1-P4	•	•	•	•	•	•	•	•	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	01-04	•	•	•	•	•	•	•	•	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

n.a.: not available

UNIT CONFIGURATOR

NAME	NLC
SIZE	0280 - 0300 - 0330 - 0350 - 0550 - 0600 - 0650 - 0675 - 0750 - 0800 - 0900 - 1000 - 1100 - 1250
THERMOSTATIC VALVE	
°	Mechanical, standard operations (produced water down to +4 °C)
Z	Mechanical, low temperature operations (produced water range from 0 to +4 °C)
Y	Mechanical, low temperature operations (produced water range from -8 to +4 °C)
X	Electronic, standard operations (produced water down to +4 °C)
MODELS	
°	Chiller cooling only
HEATHING RECOVERY	
°	Without recovery
D	With desuperheater
T	With total recovery
VERSION	
A	High efficiency
COILS	
°	Alluminium
R	Copper
S	Copper tin plated
V	Epoxy coated

FANS	
J	Inverter fan
POWER SUPPLY	
6	230/3/60Hz with magnetic circuit breakers
7	460/3/60Hz with magnetic circuit breakers
8	575/3/60Hz with magnetic circuit breakers
9	208/3/60Hz with magnetic circuit breakers
HYDRONIC KIT	
00	Without hydronic kit
01	With storage tank and single low head pump
02	With storage tank and twin low head pumps (duty + standby)
03	With storage tank and single high head pump
04	With storage tank and twin high head pumps (duty + standby)
P1	With single low head pump
P2	With twin low head pumps (duty + standby)
P3	With single high head pump
P4	With twin high head pumps (duty + standby)

Options are not compatible: YD, YT, ZD, ZT, T with hydronic kit.

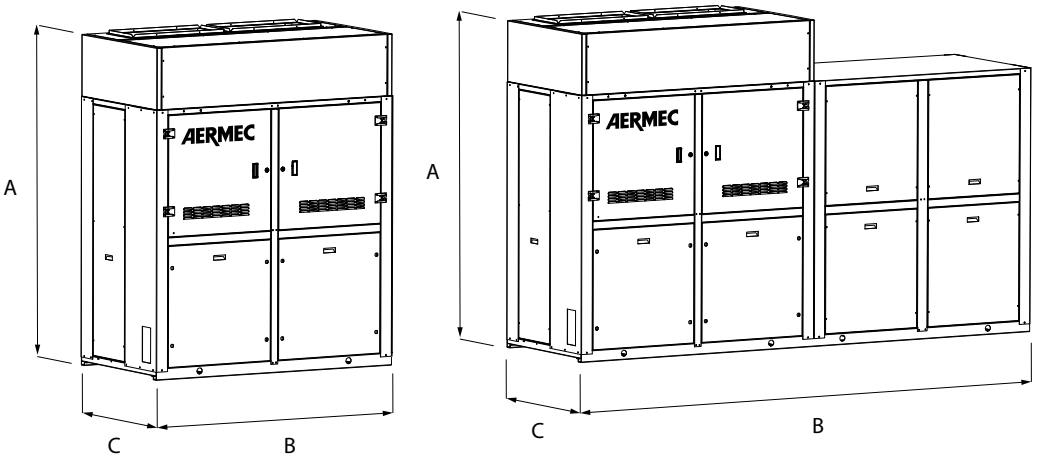
TECHNICAL DATA

NLC		0280	0300	0330	0350	0550	0600	0650	0675	0750	0800	0900	1000	1100	1250
Cooling capacity	ton	14.5	18.8	21.2	23.5	28.7	36.7	40.7	44.0	51.6	56.5	64.7	73.0	80.2	87.2
Total input power	kW	17.1	24.6	26.9	31.2	34.5	45.5	53.1	60.8	66.0	68.4	79.3	90.4	105.2	120.8
EER	BTU/W	10.21	9.16	9.44	9.06	10.01	9.70	9.20	8.69	9.38	9.92	9.79	9.70	9.16	8.67
IPLV	BTU/W	14.78	13.51	14.36	14.01	15.61	14.90	14.81	13.77	14.57	15.77	15.62	15.58	14.70	13.87
Water flow rate	gpm	35	45	51	56	69	88	98	106	124	135	155	175	193	209
Total pressure drop without pump	p.s.i.	2.4	2.8	3.7	4.1	2.3	2.9	3.0	3.5	3.7	3.6	3.5	3.9	4.6	5.0
ELECTRICAL DATA															
Power supply 230V/3~/60Hz															
Input current	A	58	81	88	101	122	146	169	192	225	243	267	291	336	383
[LRA]	A	240	299	360	371	445	619	719	739	569	619	793	811	931	971
[MCA]	A	80	93	115	133	161	201	216	227	281	307	348	385	410	433
[MOP]	A	107	126	166	184	216	275	301	312	337	363	422	458	495	518
Recom fuse	A	100	125	150	175	200	250	300	300	300	350	400	450	450	500
Power supply 460V/3~/60Hz															
Input current	A	27	38	41	47	57	68	79	90	105	113	124	136	156	178
[LRA]	A	128	157	182	188	236	286	333	342	295	320	370	379	435	453
[MCA]	A	42	54	59	64	84	94	108	120	140	159	168	176	202	225
[MOP]	A	55	72	82	86	111	124	150	161	166	185	198	207	244	267
Recom fuse	A	50	70	80	80	110	110	150	150	150	175	175	200	225	250
Power supply 575V/3~/60Hz															
Input current	A	21	29	32	36	44	53	61	70	81	88	96	105	121	138
[LRA]	A	100	105	134	138	176	228	286	292	222	242	293	300	365	379
[MCA]	A	32	40	48	55	74	76	88	98	122	138	140	142	165	185
[MOP]	A	42	52	68	75	97	100	123	133	145	162	165	167	200	220
Recom fuse	A	40	50	60	75	90	100	110	125	125	150	150	150	200	200
Power supply 208V/3~/60Hz															
Input current	A	64	90	97	112	135	162	187	213	248	269	295	322	371	424
[LRA]	A	248	308	369	381	458	633	733	746	592	645	821	841	954	980
[MCA]	A	84	97	120	138	167	208	222	233	286	312	353	389	415	438
[MOP]	A	112	131	171	189	223	282	307	319	341	368	427	463	500	523
Recom fuse	A	110	125	150	175	200	250	300	300	300	350	400	450	500	500
GENERAL DATA															
COMPRESSOR															
Compressor	Type	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Compressor	n°	2	2	2	2	2	2	2	2	4	4	4	4	4	4
Circuit	n°	1	1	1	1	1	1	1	1	2	2	2	2	2	2
Refigerant gas	Type	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
EXCHANGER															
Exchanger	Type	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate
Quantity	n°	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Min. water flow	gpm	9.0	11.9	11.9	12.8	30.8	36.1	41.8	41.8	28.6	28.6	36.5	42.7	42.7	42.7
Max. water flow	gpm	74.0	74.0	74.0	74.0	211.3	211.3	211.3	211.3	263.3	263.3	263.3	263.3	263.3	263.3
Water content	gal	1.5	1.9	1.9	2.1	4.2	5.0	5.7	5.7	4.8	4.8	6.0	7.0	7.0	7.0
Water connection (in/out)	ø	2"	2"	2"	2"	2"½US	2"½US	2"½US	2"½US	2"½US	3"	3"	3"	3"	3"
Crankcase heater	n°/W	1/75	1/75	1/75	1/75	1/75	1/75	1/75	1/75	1/150	1/150	1/150	1/150	1/150	1/150
FANS															
Fans	Type	Plug fan	Plug fan	Plug fan	Plug fan	Plug fan	Plug fan	Plug fan	Plug fan	Plug fan	Plug fan	Plug fan	Plug fan	Plug fan	Plug fan
Numbers	n°	2	2	2	2	4	4	4	4	6	8	8	8	8	8
Air flow rate	cfm	7946	10418	9476	11124	18481	19835	21189	22307	30371	35844	36963	38611	40788	43496
SOUND DATA															
Sound power	dB(A)	76.2	80.7	80.3	81.8	81.5	87.0	88.4	89.4	84.8	84.2	87.9	89.9	91.3	92.3
Sound pressure 10m/33ft	dB(A)	44.5	48.9	48.5	50.1	49.6	55.2	56.6	57.6	52.9	52.1	55.8	57.9	59.2	60.3

COOLING MODE: AHRI CONDITION std 550/551
Evaporator water temperature (in/out): 12.26°C, 54.1°F / 6.67°C, 44.1°F - Dry bulb ambient air temperature: 35°C, 95°F

(The data indicated can be modified at any time by Aermec if deemed necessary).

DIMENSIONS AND WEIGHT



The designs are representative of some structural work, more information is available in the technical documentation

NLC	hydronic kit			0280	0300	0330	0350	0550	0600	0650	0675	0750	0800	0900	1000	1100	1250
Height	00	A	in	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7
Width	00	B	in	69.0	69.0	69.0	69.0	124.1	124.1	124.1	124.1	193.1	248.2	248.2	248.2	248.2	248.2
Depth	00	C	in	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3
Weight	00	-	lbs	please contact us													

NLC	hydronic kit			0280	0300	0330	0350	0550	0600	0650	0675	0750	0800	0900	1000	1100	1250
Height	P1-P2-P3-P4	A	in	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7
Width	P1-P2-P3-P4	B	in	98.5	98.5	98.5	98.5	124.1	124.1	124.1	124.1	193.1	248.2	248.2	248.2	248.2	248.2
Depth	P1-P2-P3-P4	C	in	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3
Weight	P1-P2-P3-P4	-	lbs	please contact us													

NLC	hydronic kit			0280	0300	0330	0350	0550	0600	0650	0675	0750	0800	0900	1000	1100	1250
Height	01-02-03-04	A	in	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7
Width	01-02-03-04	B	in	134.0	134.0	134.0	134.0	163.5	163.5	163.5	163.5	232.5	287.6	287.6	287.6	287.6	287.6
Depth	01-02-03-04	C	in	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3
Weight	01-02-03-04	-	lbs	please contact us													

NLC	heathing recovery			0280	0300	0330	0350	0550	0600	0650	0675	0750	0800	0900	1000	1100	1250
Height	T	A	in	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7
Width	T	B	in	69.0	69.0	69.0	69.0	124.1	124.1	124.1	124.1	193.1	248.2	248.2	248.2	248.2	248.2
Depth	T	C	in	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3
Weight	T	-	lbs	please contact us													

Aermec S.p.A.
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NLC H
0280/1250

Reversible heat pump
Air/Water for indoor installation
Scroll compressors, Plate exchangers, Plug fans
Cooling capacity from 14.1 to 84.5 ton
Heating capacity from 163.875 to 973.955 BTU/h

60Hz | HFC Refrigerant R410A | Intertek

NLC without hydronic kit configuration

NLC with hydronic kit configuration

- **AIR COOLED REVERSIBLE HEAT PUMP**
- **HIGH EFFICIENCY ALSO AT PARTIAL LOADS**
- **COOLING CIRCUIT WITH CASING**
- **COMPLETE AIR FLOW VERSATILITY**
- **HIGH EFFICIENCY PLUG-FANS**
- **INDOOR UNITS**
- **NIGHT MODE**

FEATURES

NLC_H is a single or dual refrigerant circuit heat pump charged with R410a gas. It has directly coupled plug fans with an EC inverter motor to ensure the quietest possible machine operation, scroll compressors with a high yield and low electricity absorption, a plate heat exchanger and a copper/aluminium coil. The machine cools/heats water to supply the distribution system that is usually connected to fan coil type terminals or to a low-temperature radiant system. In addition, NLC_H can also produce domestic hot water if it is fitted with a desuperheater or total recovery system, so it's ideal for residential and commercial contexts. It can be equipped with a hydronic kit (system side) including an expansion tank, safety valve (water side) and drain valve.

Models
- NLC H Reversible heat pump

Versions
- NLC HA High efficiency

- The range includes units with 2 compressors in single circuit and units with 4 compressors divided into two independent circuits.
- The possibility of using the electronic thermostatic valve brings significant benefits, especially when the heat pump is working at partial loads to the benefit of the unit's energy efficiency.
- Possibility of integrated hydronic kit that encloses the main hydraulic components; it is available in different configurations with one or two pumps, with different static pressures available, with or without storage tank.
- The units are equipped with plug-fans and inverter motors coupled directly with the fan, with the electronic condensation control as standard, which adjusts the air flow according to the actual system requirements, with benefits in terms of consumption and noise reduction. In addition, compared to conventional centrifugal fans, they do not feature belt and pulley transmission, resulting in easy flow adjustment, compactness, versatility, easy maintenance and no vibrations.
- Horizontal or vertical air flow.
- Microprocessor adjustment, with keyboard and LCD display, for easy consultation and intervention on the unit via a menu available in several languages.
- Adjustment includes complete management of the alarms and their log.
- The presence of a programmable timer allows setting time bands of operation and a possible second set-point.
- The temperature control takes place with the integral proportional logic, based on the water output temperature.
- Night Mode: it is possible to set a silenced operation profile.
- Perfect for night operation, since it guarantees greater acoustic comfort in the evenings, and a high efficiency in the time of greater load.

ACCESSORIES

ACCESSORIES:

AER 485P1
RS-485 interface for supervising systems with MODBUS protocol.

AERWEB300
AERWEB device allows the remote control of a chiller by means of a common PC through Ethernet connection, via a common browser; 4 models available:
AERWEB300-6: Web server for monitoring and controlling maximum 6 RS485 network devices;
AERWEB300-18: Web server for monitoring and controlling maximum 18 RS485 network devices;
AERWEB300-6G: Web server for monitoring and controlling maximum 6 RS485 network devices with integrated GPRS modem;
AERWEB300-18G: Web server for monitoring and controlling maximum 18 RS485 network devices with integrated GPRS modem;

PGD1
Allows you to control the chiller at a distance.

MULTICHILLER_UL
Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.

AVX
Spring anti-vibration mounts.

VT
Group of anti-vibration supports.

FLG
Flanges for ducts.

FL_UL
Flow switch.

FILTRO W
Water filter.
Attention, the flow switch and the water filter must be mounted; failure to do so will void the warranty.

ACCESSORIES MOUNTED IN THE FACTORY:

DRE
Plate peak current reduction electronic device.

RIFNLC
Current power factor correction. Connected in parallel to the motor, it allows a reduction of the input current (approx. 10%).

KRQ
Anti-condensate electric board resistance.

CRATE
Special wood cover for transport.

ACCESSORIES COMPATIBILITY

NLC		0280	0300	0330	0350	0550	0600	0650	0675	0750	0800	0900	1000	1100	1250
AER485P1		•	•	•	•	•	•	•	•	•	•	•	•	•	•
AERWEB300		•	•	•	•	•	•	•	•	•	•	•	•	•	•
PGD1		•	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER_UL		•	•	•	•	•	•	•	•	•	•	•	•	•	•
AVX	00	n.a.	n.a.	n.a.	n.a.	•	•	•	•	•	•	•	•	•	•
	P1-P4	n.a.	n.a.	n.a.	n.a.	•	•	•	•	•	•	•	•	•	•
	01-04	n.a.	n.a.	n.a.	n.a.	•	•	•	•	•	•	•	•	•	•
VT	00	•	•	•	•	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	P1-P4	•	•	•	•	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	01-04	•	•	•	•	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
FLG		1	1	1	1	2 (x2)	2 (x2)	2 (x2)	2 (x2)	2 (x4)	2 (x4)	2 (x4)	2 (x4)	2 (x4)	2 (x4)
FL_UL		•	•	•	•	•	•	•	•	•	•	•	•	•	•
FILTRO W		DN50	DN50	DN50	DN50	DN65	DN65	DN65	DN65	DN65	DN80	DN80	DN80	DN80	DN80
ACCESSORIES MOUNTED IN THE FACTORY															
DRE		•	•	•	•	•	•	•	•	•	•	•	•	•	•
RIFNLC	7	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	6/8/9	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
KRQ		•	•	•	•	•	•	•	•	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
CRATE	00	•	•	•	•	•	•	•	•	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	P1-P4	•	•	•	•	•	•	•	•	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	01-04	•	•	•	•	•	•	•	•	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

UNIT CONFIGURATOR

NAME	NLC
SIZE	0280 - 0300 - 0330 - 0350 - 0550 - 0600 - 0650 - 0675 - 0750 - 0800 - 0900 - 1000 - 1100 - 1250
THERMOSTATIC VALVE	
°	Mechanical, standard operations (produced water down to -10°C/14°F)
X	Electronic, standard operations (produced water down to -10°C/14°F)
MODELS	
H	Reversible heat pump
HEATHING RECOVERY	
°	Without recovery
D	With desuperheater
VERSION	
A	High efficiency
COILS	
°	Alluminium
R	Copper
S	Copper tin plated
V	Epoxy coated
FANS	
J	Inverter fan
POWER SUPPLY	
6	230/3/60Hz with magnetic circuit breakers
7	460/3/60Hz with magnetic circuit breakers
8	575/3/60Hz with magnetic circuit breakers
9	208/3/60Hz with magnetic circuit breakers
HYDRONIC KIT	
00	Without hydronic kit
01	With storage tank and single low head pump
02	With storage tank and twin low head pumps (duty + standby)
03	With storage tank and single high head pump
04	With storage tank and twin high head pumps (duty + standby)
P1	With single low head pump
P2	With twin low head pumps (duty + standby)
P3	With single high head pump
P4	With twin high head pumps (duty + standby)

TECHNICAL DATA

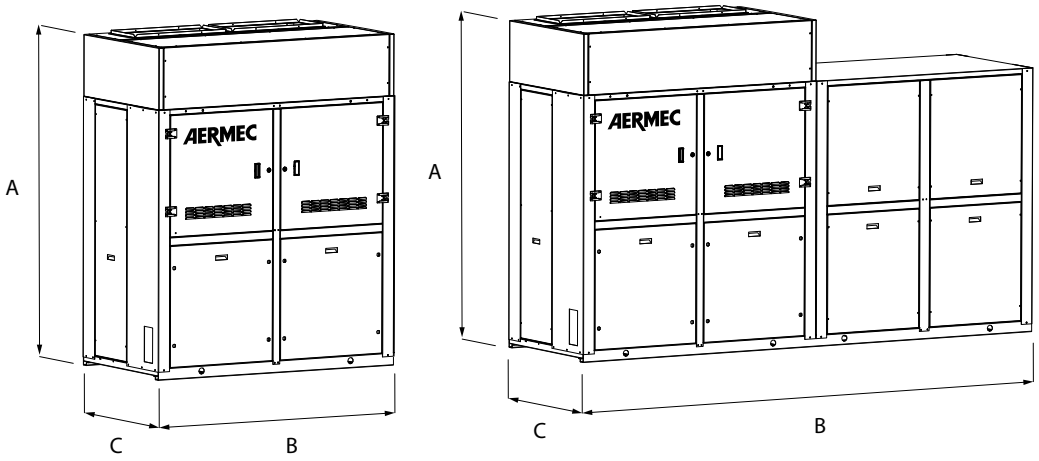
NLC H		0280	0300	0330	0350	0550	0600	0650	0675	0750	0800	0900	1000	1100	1250
Cooling capacity	ton	14.1	18.0	20.4	22.3	27.2	35.3	39.2	42.9	49.9	54.5	62.9	70.2	77.5	84.5
Total input power	kW	17.0	24.7	27.6	31.6	32.6	44.8	52.2	60.0	62.3	64.9	77.3	89.4	104.0	119.0
EER	BTU/W	9.96	8.76	8.87	8.49	10.01	9.47	9.03	8.59	9.62	10.09	9.78	9.44	8.96	8.53
IPLV	BTU/W	14.36	12.79	13.59	12.93	15.20	14.19	14.18	13.51	14.43	15.80	15.42	14.97	14.23	13.53
Water flow rate	gpm	34	43	49	54	65	85	94	103	120	131	151	169	186	203
Total pressure drop without pump	p.s.i.	2.5	3.0	3.9	4.2	2.6	3.2	3.3	3.9	3.9	4.1	3.9	4.1	5.0	5.9
Heating capacity	BTU/h	163.875	210.352	240.665	265.396	320.233	397.934	443.067	486.452	599.817	640.254	710.998	796.701	888.450	973.955
Total input power	kW	15.9	21.7	24.4	27.1	30.9	40.6	46.3	52.5	56.1	61.8	69.4	80.5	92.4	103.6
COP	BTU/W	10.30	9.68	9.87	9.80	10.39	9.81	9.58	9.28	10.70	10.36	10.25	9.91	9.63	9.41
Water flow rate	gpm	33	42	48	53	64	80	89	97	120	128	142	159	178	195
Total pressure drop without pump	p.s.i.	2.4	2.8	3.8	4.2	2.5	2.8	2.9	3.5	3.9	3.9	3.4	3.7	4.6	5.5
ELECTRICAL DATA															
Power supply 230V/3~/60Hz															
Input current cooling mode	A	58	81	90	102	117	144	167	191	213	233	261	288	332	377
Input current heating mode	A	55	73	81	90	112	133	151	170	197	225	240	265	301	337
[LRA]	A	240	299	360	371	445	619	719	739	587	619	793	811	931	971
[MCA]	A	80	93	115	133	161	201	216	227	298	307	348	385	410	433
[MOP]	A	107	126	166	184	216	275	301	312	354	363	422	458	495	518
Recom fuse	A	100	125	150	175	200	250	300	300	350	350	400	450	450	500
Power supply 460V/3~/60Hz															
Input current cooling mode	A	27	38	42	47	54	67	77	89	99	108	121	134	154	175
Input current heating mode	A	26	34	38	42	52	62	70	79	92	105	111	123	140	156
[LRA]	A	128	157	182	188	236	286	333	342	306	320	370	379	435	453
[MCA]	A	42	54	59	64	84	94	108	120	151	159	168	176	202	225
[MOP]	A	55	72	82	86	111	124	150	161	177	185	198	207	244	267
Recom fuse	A	50	70	80	80	110	110	150	150	175	175	175	200	225	250
Power supply 575V/3~/60Hz															
Input current cooling mode	A	21	29	32	37	42	52	60	69	77	84	94	103	119	136
Input current heating mode	A	20	26	29	32	40	48	54	61	71	81	86	95	108	121
[LRA]	A	100	105	134	138	176	228	286	292	231	242	293	300	365	379
[MCA]	A	32	40	48	55	74	76	88	98	131	138	140	142	165	185
[MOP]	A	42	52	68	75	97	100	123	133	154	162	165	167	200	220
Recom fuse	A	40	50	60	75	90	100	110	125	150	150	150	150	200	200
Power supply 208V/3~/60Hz															
Input current cooling mode	A	64	90	100	113	129	159	184	211	235	257	288	318	367	417
Input current heating mode	A	61	81	90	99	124	147	167	188	218	249	265	292	333	373
[LRA]	A	248	308	369	381	458	633	733	746	610	645	821	841	954	980
[MCA]	A	84	97	120	138	167	208	222	233	303	312	353	389	415	438
[MOP]	A	112	131	171	189	223	282	307	319	359	368	427	463	500	523
Recom fuse	A	110	125	150	175	200	250	300	300	350	350	400	450	500	500
GENERAL DATA															
COMPRESSOR															
Compressor	Type	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Compressor	n°	2	2	2	2	2	2	2	2	4	4	4	4	4	4
Circuit	n°	1	1	1	1	1	1	1	1	2	2	2	2	2	2
Refigerant gas	Type	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
EXCHANGER															
Exchanger	Type	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate
Quantity	n°	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Min. water flow	gpm	9.0	11.9	11.9	12.8	30.8	36.1	41.8	41.8	28.6	28.6	36.5	42.7	42.7	42.7
Max. water flow	gpm	74.0	74.0	74.0	74.0	211.3	211.3	211.3	211.3	263.3	263.3	263.3	263.3	263.3	263.3
Water content	gal	1.5	1.9	1.9	2.1	4.2	5.0	5.7	5.7	4.8	4.8	6.0	7.0	7.0	7.0
Water connection (in/out)	ø	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Crankcase heater	n°/W	1/75	1/75	1/75	1/75	1/75	1/75	1/75	1/75	1/150	1/150	1/150	1/150	1/150	1/150
FANS															
Fans	Type	Plug fan	Plug fan	Plug fan	Plug fan	Plug fan	Plug fan	Plug fan	Plug fan	Plug fan	Plug fan	Plug fan	Plug fan	Plug fan	Plug fan
Numbers	n°	2	2	2	2	4	4	4	4	8	8	8	8	8	8
Air flow rate in cooling mode	cfm	7887	10241	10241	10771	16245	18422	19776	22248	29370	32019	34667	36845	39611	42319
SOUND DATA															
Sound power	dB(A)	76.0	80.3	80.6	81.2	80.3	86.6	88.0	89.2	82.5	83.2	87.5	89.6	91.0	92.1
Sound pressure 10m/33ft	dB(A)	44.2	48.5	48.8	49.4	48.4	54.8	56.2	57.4	50.5	51.1	55.5	57.6	59.0	60.1

COOLING MODE: AHRI CONDITION std 550/551
Evaporator water temperature (in/out): 12.26°C, 54.1°F / 6.67°C, 44.1°F - Dry bulb ambient air temperature: 35°C, 95°F

HEATING MODE:
Evaporator water temperature (in/out): 40°C, 104°F / 45°C, 113°F - Dry bulb ambient air temperature: 7°C, 44.6°F

(The data indicated can be modified at any time by Aermec if deemed necessary).

DIMENSIONS AND WEIGHT



The designs are representative of some structural work, more information is available in the technical documentation

NLC H	hydronic kit			0280	0300	0330	0350	0550	0600	0650	0675	0750	0800	0900	1000	1100	1250
Height	00	A	in	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7
Width	00	B	in	69.0	69.0	69.0	69.0	124.1	124.1	124.1	124.1	248.2	248.2	248.2	248.2	248.2	248.2
Depth	00	C	in	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3
Weight	00	-	lbs	please contact us													

NLC	hydronic kit			0280	0300	0330	0350	0550	0600	0650	0675	0750	0800	0900	1000	1100	1250
Height	P1-P2-P3-P4	A	in	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7
Width	P1-P2-P3-P4	B	in	98.5	98.5	98.5	98.5	124.1	124.1	124.1	124.1	248.2	248.2	248.2	248.2	248.2	248.2
Depth	P1-P2-P3-P4	C	in	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3
Weight	P1-P2-P3-P4	-	lbs	please contact us													

NLC	hydronic kit			0280	0300	0330	0350	0550	0600	0650	0675	0750	0800	0900	1000	1100	1250
Height	01-02-03-04	A	in	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7	86.7
Width	01-02-03-04	B	in	134.0	134.0	134.0	134.0	163.5	163.5	163.5	163.5	287.6	287.6	287.6	287.6	287.6	287.6
Depth	01-02-03-04	C	in	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3
Weight	01-02-03-04	-	lbs	please contact us													

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AIR / WATER CHILLERS with FREE COOLING

When the cooling of the room is requested throughout the year, even during the winter season, such as in modern communication centers or in industrial applications, it is a waste to consume energy to produce cooling capacity.
To meet these needs, Aermec offers a range of chillers capable of exploiting, free of charge, the external cold air to cool the liquid with a considerable energy saving.

NRL
028/075

Chiller Free-cooling mode
Air/Water for outdoor installation
Scroll compressors, Plate exchangers, Axial fans
Cooling capacity chiller mode from 13.2/46.2 tons
Cooling capacity free-cooling mode from 10.2/32.7 tons

60Hz | HFC Refrigerant R410A | Intertek | AHRI

- **HIGH EFFICIENCIES ALSO AT PARTIAL LOADS**
- **EASY AND FAST INSTALLATION**
- **COMPACT VERSION**

VERSION AND FEATURES

MODELS
- **NRL_F** Free-cooling

VERSIONS
Without hydronic kit system side.
- **NRL_A** High efficincy chillers
- **NRL_E** High efficincy low noise chillers

RECOVERY
- **NRL"A-E"_°** without recovery units

OPERATING LIMIT
Cooling mode
Max. external air temperature 114,8°F
Min. temperature of water produced 21,2°F

FEATURES
- High-efficiency scroll compressor with crank case heater
- High efficiency heat exchangers with trace heating as standard
- Axial flow fans for quiet operation
- Microprocessor control system:
  - Control from the entering water temperature, with the possibility of selecting control of the leaving water temperature.
  - Condensing control in summer with a 0-10 V modulating signal based on pressure and compensated for external air temperature.
  - Automatic rotation of compressors and pumps based on operating hours
  - Load limiting safety control
  - Low and high pressure transducers (standard for all units)
  - Automatic reset of alarms before tripping
  - Display in 4 languages
  - Alarm history
- Metal enclosure with anti-corrosion polyester paint.

ACCESSORIES

MECHANICAL ACCESSORIES
- **VT:** Group of anti-vibration, to be installed under the base.
- **GP:** Protection grille, protects the external coil from accidental knocks.

ELECTRICAL ACCESORIES
- **AER485**: RS-485 interface for supervision systems with MODBUS protocol.
- **AERWEB300**
  Accessory AERWEB allows remote control of a chiller through a common PC and an ethernet connection over a common browser; 4 versions available:
  AERWEB300-6: Web server to monitor and remote control max. 6 units in RS485 network;
  AERWEB300-18: Web server to monitor and remote control max. 18 units in RS485 network;
  AERWEB300-6G: Web server to monitor and remote control max. 6 units in RS485 network with integrated GPRS modem;
  AERWEB300-18G: Web server to monitor and remote control max. 18 units in RS485 network with integrated GPRS modem;
- **DRE:** It allows the reduction of peak power necessary for the machine during start-up phase.
  Accessories can only be fitted in the factory.
- **DUALCHILLER:** Simplified control system to switch on and off, and command, two chillers (using Aermec GR3 command) in a single system, as if they were a single unit.
- **MULTICHILLER:**
  Control system to switch the individual chillers on and off, and command them, in a system in which several units are installed in parallel, always ensuring a constant delivery to the evaporators.
- **PGS:** Daily/Weekly Programmer.
  Allows you to programme two time bands per day (two switch on/off cycles) and to have differentiated programming for each day of the week.
- **PRM1-PRM2 FACTORY FITTED ACCESSORY.** It is a manual pressure switch electrically wired in series with the existing automatic high pressure switch on the compressor discharge pipe.

Compatibility with the VMF system.
For further system information please refer to the specific documentation.

For more information please contact us.

ACCESSORY COMPATIBILITY

Hydronic Kit	NRL 028	NRL 030	NRL 033	NRL 035	NRL 050	NRL 055	NRL 060	NRL 065	NRL 070	NRL 075
00 / P3 / P4	VT 17	VT 17	VT 17	VT 17	VT 13	VT 13	VT 22	VT 22	VT 22	VT 23
03 / 04	VT 13	VT 13	VT 13	VT 13	VT 10	VT 10	VT 22	VT 22	VT 22	VT 23

UNIT CONFIGURATOR

Field **DESCRIPTION**

1,2,3 **NRL**

4,5,6 **SIZE**

028 - 030 - 033 - 035 - 050 - 055 - 060 - 065 - 070 - 075

7 **COMPRESSOR**

0 R410A standard compressor

8 **THERMOSTATIC VALVE**

° Standard mechanical thermostatic valve with produced water up to 39,2°F / +4°C

Y Mechanical thermostatic valve with produced water from 39,2°F / +4°C to -42,8°F / -6°C

X Electronic thermostatic valve min. Water out temp 39,2°F / +4°C (contact the factory for lower temperature)

9 **MODELS**

F Free-cooling

10 **HEATHING RECOVERY**

° Without Recovery

11 **VERSION**

A High efficiency (not available for size 028 ÷ 035)

E High efficiency low noise (data on demand for size 050 ÷ 075)

12 **COILS**

° Alluminium

R Copper

S Copper tin plated

V Epoxy coated

13 **FANS**

I Fan speed modulating for condensation control

14 **SUPPLY**

6 230/3/60 With magnet circuit breakers

7 460/3/60 With magnet circuit breakers

8 575/3/60 With magnet circuit breakers

15,16 **HYDRONIC KIT**

00 Without hydronic kit

03 Water storage tank and high-head single pump

04 Water storage tank, with high-head pump and reserve pump

P3 Without water storage tank, with high-head pump

P4 Without water storage tank, with high-head pump and reserve pump

TECHNICAL DATA

Mod. NRL				028	030	033	035	050	055	060	065	070	075
CHILLER MODE													
Cooling capacity		FA	tons	-	-	-	-	23.84	27.23	34.06	37.91	41.17	46.24
		FE	tons	13.16	15.18	17.44	21.39	-	-	-	-	-	-
Total input power		FA	kW	-	-	-	-	33.30	40.02	48.02	56.23	64.65	65.05
		FE	kW	16.38	19.52	22.32	29.95	-	-	-	-	-	-
Water flow rate		FA	gpm	-	-	-	-	57	65	82	91	99	111
		FE	gpm	32	36	42	51	-	-	-	-	-	-
Pressure drops		FA	p.s.i.	-	-	-	-	7	9	10	10	12	12
		FE	p.s.i.	6	5	7	8	-	-	-	-	-	-
ENERGY INDICES													
EER		FA	BTU/h/W	-	-	-	-	8.60	8.17	8.52	8.10	7.65	8.54
		FE	BTU/h/W	9.65	9.34	9.39	8.58	-	-	-	-	-	-
IPLV		FA	BTU/h/W	-	-	-	-	12.02	11.92	12.56	12.19	11.87	11.51
		FE	BTU/h/W	11.85	11.82	11.89	11.48	-	-	-	-	-	-
FREE COOLING MODE													
Cooling capacity		FA	tons	-	-	-	-	18.48	19.39	25.19	29.82	30.68	32.71
		FE	tons	10.22	13.21	15.47	16.55	-	-	-	-	-	-
Total power input		FA	kW	-	-	-	-	4.67	4.67	6.59	6.66	6.66	6.66
		FE	kW	2.06	2.06	2.58	2.58	-	-	-	-	-	-
Water flow rate		FA	gpm	-	-	-	-	57	65	82	91	99	111
		FE	gpm	32	36	42	51	-	-	-	-	-	-
Pressure drops		FA	psi	-	-	-	-	9	12	14	15	17	19
		FE	psi	9	7	9	11	-	-	-	-	-	-
EER		FA	BTU/h/W	-	-	-	-	47.55	49.89	45.91	53.79	55.34	59.00
		FE	BTU/h/W	59.58	77.04	72.02	77.06	-	-	-	-	-	-

Cooling (AHRI STANDARD CONDITIONS): Outlet water temperature 6.7°C/44.6°F; Flow rate 0.043l/s per kW; External air temperature 35°C/95°F.

Freecooling (100%) (AHRI STANDARD CONDITIONS): Inlet water temperature 15°C/59°F; Outside air temperature 2°C/35.6°F; Compressors off.

AHRI conditions: leaving water 6.7°C / 44.6°F
flow rate 0.043 l/s per kW (full load)
Load 100% air 35°C / 95°F
Load 75% air 26.7°C / 80.06°F
Load 50% air 18.3°C / 64.94°F
Load 25% air 12.8°C / 55.04°F

Data refered to no pump version.

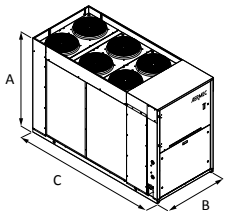
Mod. NRL				028	030	033	035	050	055	060	065	070	075
SCROLL COMPRESSORS													
Compressors		FA/FE	n°	2	2	2	2	3	3	4	4	4	4
Circuits		FA/FE	n°	2	2	2	2	2	2	2	2	2	2
Refrigerant		FA/FE	type	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Charges	C1	FA/FE	lb	21,83	21,83	21,83	21,83	27,56	26,46	29,76	29,76	30,86	49,16
	C2	FA/FE	lb	21,83	21,83	21,83	21,83	20,94	21,83	29,76	29,76	30,86	51,81
EXCHANGERS USER SIDE													
Water connections (in/out)		FA/FE	Ø	2"½	2"½	2"½	2"½	2"½	2"½	2"½	2"½	2"½	2"½
STANDARD FANS °													
Numbers		FA/FE	n°	6	6	8	8	2	2	3	3	3	3
Air flow rate		FA/FE	cfm	14750	14514	18172	18172	23836	23836	37170	36580	36580	36580
SOUND DATA													
Sound pressure		FA	dB(A)	-	-	-	-	50	50	51	52	55	55
		FE	dB(A)	42	42	43	44	44	44	44	45	50	50
Sound power		FA	dB(A)	-	-	-	-	82	82	83	84	85	87
		FE	dB(A)	74	74	75	76	76	76	76	77	77	82

Sound power: Aermec determines sound power values on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification.
Sound pressure: Sound pressure in free field, at 10 m distance from the external surface of the unit (in accordance with UNI EN ISO 3744).
Note: For more information, refer to the selection program Magellan or the technical documentation available on the website www.aermec.com

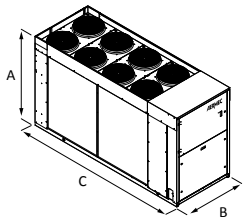
Dimensions

Mod. NRL				028	030	033	035	050	055	060	065	070	075
Height	A	FA-FE	in	63	63	63	63	74	74	74	74	74	78
Width	B	FA-FE	in	43	43	43	43	43	43	43	43	43	59
Depth	C	FA-FE	in	116	116	116	116	128	128	158	158	158	172
Empty weight	-	FA-FE	lbs	1847	2002	2037	2066	2449	2467	3020	3197	3241	3946

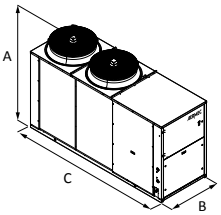
• NRL 028 FE
• NRL 030 FE



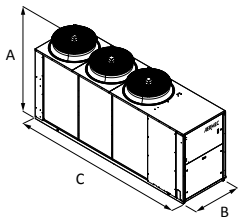
• NRL 033 FE
• NRL 035 FE



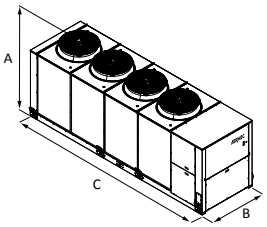
• NRL 050 FA
• NRL 055 FA



• NRL 060 FA
• NRL 065 FA
• NRL 070 FA



• NRL 075 FA



Aermec S.p.A.
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NRL
080/180

Chiller Free-cooling mode
Air/Water for outdoor installation
Scroll compressors, Plate exchangers, Axial fans
Cooling capacity chiller mode from 50.19/118.09 tons
Cooling capacity free-cooling mode from 33.71/ 84.11 tons

60Hz | HFC Refrigerant R410A | Intertek | AHRI

- HIGH EFFICIENCY VERSION
- LOW NOISE HIGH EFFICIENCY VERSION
- 2/4 REFRIGERANT CIRCUITS
- VERSION WITH BUILT-IN HYDRONIC KIT

VERSION AND FEATURES

MODELS
- **NRL_F** Free-cooling

VERSIONS
Without hydronic kit system side.
- **NRL_A** High efficincy
- **NRL_E** High efficincy Low noise

RECOVERY
- **NRL"A-E"_°** without recovery

OPERATING LIMIT
Cooling mode
Max. external air temperature 114,8°F
Min. temperature of water produced 21,2°F

FEATURES
- High-efficiency scroll compressor with crank case heater
- High efficiency heat exchangers with trace heating as standard
- Axial flow fans for quiet operation
- Microprocessor control system:
  - Control from the entering water temperature, with the possibility of selecting control of the leaving water temperature.
  - Condensing control in summer with a 0-10 V modulating signal based on pressure and compensated for external air temperature
  - Automatic rotation of compressors and pumps based on operating hours
  - Load limiting safety control
  - Low and high pressure transducers (standard for all units)
  - Automatic reset of alarms before tripping
  - Display in 4 languages
  - Alarm history
- Metal enclosure with anti-corrosion polyester paint.

ACCESSORIES

MECHANICAL ACCESSORIES
- **AVX:** Sprung anti-vibration supports. Select the AVX model from the compatibility table.
- **VT:** Group of anti-vibration, to be installed under the base.
- **GP:** Protection grille, protects the external coil from accidental knocks.

ELECTRICAL ACCESORIES
- **AER485**: RS-485 interface for supervision systems with MODBUS protocol.
- **AERWEB300**
  Accessory AERWEB allows remote control of a chiller through a common PC and an ethernet connection over a common browser; 4 versions available:
  AERWEB300-6: Web server to monitor and remote control max. 6 units in RS485 network;
  AERWEB300-18: Web server to monitor and remote control max. 18 units in RS485 network;
  AERWEB300-6G: Web server to monitor and remote control max. 6 units in RS485 network with integrated GPRS modem;
  AERWEB300-18G: Web server to monitor and remote control max. 18 units in RS485 network with integrated GPRS modem;
- **DRE:** It allows the reduction of peak power necessary for the machine during start-up phase.
  Accessories can only be fitted in the factory.
- **DUALCHILLER:** Simplified control system to switch on and off, and command, two chillers (using Aermec GR3 command) in a single system, as if they were a single unit.
- **MULTICHILLER:**
  Control system to switch the individual chillers on and off, and command them, in a system in which several units are installed in parallel, always ensuring a constant delivery to the evaporators.
- **PGS:** Daily/Weekly Programmer.
  Allows you to programme two time bands per day (two switch on/off cycles) and to have differentiated programming for each day of the week.
- **PRM1-PRM2 FACTORY FITTED ACCESSORY.** It is a manual pressure switch electrically wired in series with the existing automatic high pressure switch on the compressor discharge pipe.

Compatibility with the VMF system.
For further system information please refer to the specific documentation.

For more information please contact us.

ACCESSORY COMPATIBILITY

Hydronic Kit NRL	080	090	100	125	140	150	165	180
00	AVX 739	AVX 739	AVX 745	AVX 748	AVX 752	AVX 757	AVX 761	AVX 766
P3 / P4	AVX 741	AVX 744	AVX 747	AVX 750	AVX 754	AVX 758	AVX 763	AVX 763
03 / 04	AVX 740	AVX 743	AVX 746	AVX 749	AVX 753	AVX 753	AVX 762	AVX 762

UNIT CONFIGURATOR

Field **DESCRIPTION**

1,2,3 **NRL**

4, 5, 6 **SIZE**

080 - 090 - 100 - 125 - 140 - 150 - 165 - 180

7 **COMPRESSOR**

0 R410A standard compressor

8 **THERMOSTATIC VALVE**

° standard mechanical thermostatic valve (min. water out temp 39 °F)

Y mechanical thermostatic valve (water out temp range 21 ÷ 39 °F)

X electronic thermostatic valve (min. water out temp 39 °F, contact the factory for lower

9 **MODELS**

F Free-cooling

10 **Heat recovery**

° without recovery

11 **VERSION**

A High efficiency

E High efficiency low noise (data on demand)

12 **COILS**

° Alluminium

R Copper

S Copper tin plated

V Epoxy coated

13 **FANS**

I Fan speed modulating for condensation control

14 **SUPPLY**

6 230/3/60 with magnet circuit breakers (only for size 100 to 180)

7 460/3/60 with magnet circuit breakers

8 575/3/60 with magnet circuit breakers

15,16 **HYDRONIC KIT**

03 tank and single high head pump

04 tank and single high head pump and reserve pump

P3 single high head pump

P4 single high head pump and reserve pump

TECHNICAL DATA

Mod. NRL CHILLER MODE	Vers.		080	090	100	125	140	150	165	180
Cooling capacity	A	Tons	50.19	56.41	62.80	81.92	86.99	103.40	109.94	118.09
Total power input	A	(kW)	69.78	86.22	102.33	126.92	142.49	214.18	169.46	194.00
Water flow rate	A	gpm	120	135	151	196	208	248	264	283
Pressure drop	A	psi	10	11	12	13	13	14	14	16
ENERGY INDICES										
EER	BTU/Wat	Alls	8.64	7.86	7.37	7.75	7.33	5.80	7.79	7.31
IPLV	BTU/Wat	Alls	10.62	10.38	10.35	10.52	10.45	9.94	10.42	10.35
Mod. NRL FREE-COOLING MODE	**Vers.**		**080**	**090**	**100**	**125**	**140**	**150**	**165**	**180**
Cooling capacity	FA	Tons	33.71	38.19	43.39	49.28	55.87	65.17	74.08	84.11
Total power input	FA	(kW)	8.76	8.86	8.86	13.11	13.29	13.29	17.36	17.36
Water flow rate	FA	gpm	120	135	151	196	209	248	264	283
Pressure drop	FA	psi	13	16	16	17	18	20	20	21
ENERGY INDICES										
EER	All	Watt/Watt	46.23	51.75	58.80	45.15	50.50	58.90	51.27	58.21

Cooling (AHRI STANDARD CONDITIONS): Outlet water temperature 6.7°C/44.6°F; Flow rate 0.043l/s per kW; External air temperature 35°C/95°F.
Freecooling (100%) (AHRI STANDARD CONDITIONS): Inlet water temperature 15°C/59°F; Outside air temperature 2°C/35.6°F; Compressors off.

AHRI conditions: leaving water 6,7°C / 44.6°F
flow rate 0.043 l/s per kW (full load)
Load 100% air 35°C / 95°F
Load 75% air 26.7°C / 80.06°F
Load 50% air 18.3°C / 64.94°F
Load 25% air 12.8°C / 55.04°F

Data refered to no pump version.

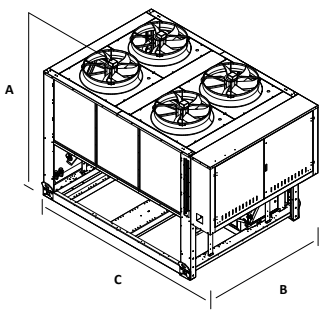
Mod. NRL	Vers.		080	090	100	125	140	150	165	180
SCROLL COMPRESSORS										
Quantity / circuits	All	n°/ n°	4/2	4/2	4/2	4/2	4/2	4/2	5/2	6/2
Refrigerant	type	All	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Charges	A	lbs C1	74.96	76.16	76.16	99.21	99.21	105.82	145.51	141.10
	A	lbs C2	74.96	79.37	76.16	103.62	103.62	105.82	154.32	141.10
EXCHANGERS USER SIDE										
Water connections (in/out)	All	Ø	3"	3"	3"	4"	4"	4"	4"	4"
STANDARD FANS °										
Numbers	A	n°	4	4	4	6	6	6	8	8
Air flow rate	A	cfm	48380	47436	47436	70564	68912	68912	93692	93692
SOUND DATA										
Sound pressure	A	dB(A)	57	57	58	61	62	62	63	63
Sound power	A	dB(A)	89	89	90	93	94	94	95	95

Sound power: Aermec determines sound power values on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification.
Sound pressure: Sound pressure in free field, at 10 m distance from the external surface of the unit (in accordance with UNI EN ISO 3744).
Note: For more information, refer to the selection program Magellan or the technical documentation available on the website www.aermec.com

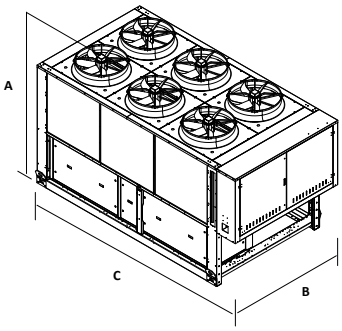
Dimensions

Mod. NRL				080	090	100	125	140	150	165	180
Height	A	All	in	96	96	96	96	96	96	96	96
Width	B	All	in	87	87	87	87	87	87	87	87
Depth	C	A	in	134	134	134	167	167	167	226	226
Weight		A	lbs	5225	5512	5820	7121	7430	7672	9348	9877

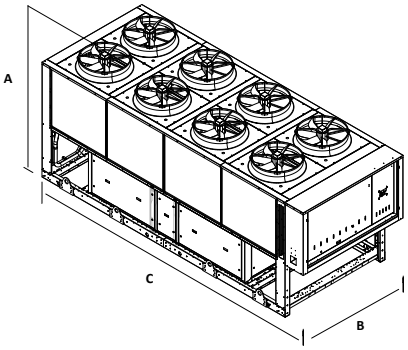
• **NRL 800 - 900 - 1000 F**



• **NRL 1250 - 1400 - 1500 F**



• **NRL 1650 - 1800 F**



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Tel. + 39 0442 633111 - Fax +39 0442 93577

NRL
200/360

Chiller Free-cooling mode
Air/Water for outdoor installation
Scroll compressors, Plate exchangers, Axial fans
Cooling capacity chiller mode from 125.59/ 236.17 tons
Cooling capacity free-cooling mode from 86.78/ 168.23 tons

60Hz | HFC Refrigerant R410A | Intertek | AHRI

- HIGH EFFICIENCY VERSION
- LOW NOISE HIGH EFFICIENCY VERSION
- 2/4 REFRIGERANT CIRCUITS
- VERSION WITH BUILT-IN HYDRONIC KIT

VERSION AND FEATURES

MODELS
- **NRL_F** Free-cooling

VERSIONS
Without hydronic kit system side.
- **NRL_A** High efficincy
- **NRL_E** High efficincy Low noise

RECOVERY
- **NRL"A-E"_°** Without recovery

OPERATING LIMIT
Chiller mode
Max. external air temperature 114,8°F
Min. temperature of water produced 21,2°F

FEATURES
- High-efficiency scroll compressor with crank case heater
- High efficiency heat exchangers with trace heating as standard
- Axial flow fans for quiet operation
- Microprocessor control system:
  - Control from the entering water temperature, with the possibility of selecting control of the leaving water temperature.
  - Condensing control in summer with a 0-10 V modulating signal based on pressure and compensated for external air temperature
  - Automatic rotation of compressors and pumps based on operating hours
  - Load limiting safety control
  - Low and high pressure transducers (standard for all units)
  - Automatic reset of alarms before tripping
  - Display in 4 languages
  - Alarm history
- Metal enclosure with anti-corrosion polyester paint.

ACCESSORIES

MECHANICAL ACCESSORIES
- **AVX**: Group of anti-vibration, to be installed under the base.
- **GP:** Protection grille, protects the external coil from accidental knocks.

ELECTRICAL ACCESORIES
- **AERWEB300:** Accessory AERWEB allows remote control of a chiller through a common PC and an ethernet connection over a common browser; 4 versions available:
  - AERWEB300-6: Web server to monitor and remote control max. 6 units in RS485 network;
  - AERWEB300-18: Web server to monitor and remote control max. 18 units in RS485 network;
  - AERWEB300-6G: Web server to monitor and remote control max. 6 units in RS485 network with integrated GPRS modem;
  - AERWEB300-18G: Web server to monitor and remote control max. 18 units in RS485 network with integrated GPRS modem;
- **DRE:** It allows the reduction of peak power necessary for the machine during start-up phase.

ACCESSORIES CAN ONLY BE FITTED IN THE FACTORY.
- **PGS:** Daily/Weekly Programmer.
  Allows you to programme two time bands per day (two switch on/off cycles) and to have differentiated programming for each day of the week.
- **PRM1-PRM2:** FACTORY FITTED ACCESSORY. It is a manual pressure switch electrically wired in series with the existing automatic high pressure switch on the compressor discharge pipe.
- **AER485:** RS-485 interface for supervision systems with MODBUS protocol.

Compatibility with the VMF system.
For further system information please refer to the specific documentation.

For more information please contact us.

ACCESSORY COMPATIBILITY

Hydronic Kit	200	225	250	280	300	330	360
00							
Model with Hydronic kit (00)	AVX 770	AVX 776	AVX 782	AVX 788	AVX 794	AVX 801	AVX 801
Model with Hydronic kit (P3/P4)	AVX 772	AVX 778	AVX 784	AVX 790	AVX 796	AVX 803	AVX 803
Model with Hydronic kit (03/04)	AVX 771	AVX 777	AVX 783	AVX 789	AVX 795	AVX 802	AVX 802

UNIT CONFIGURATOR

Field **DESCRIPTION**

1,2,3 **NRL**

4, 5, 6 **SIZE**

200 - 225 - 250 - 280 - 300 - 330 - 360

7 **COMPRESSOR**

0 R410A standard compressor

8 **THERMOSTATIC VALVE**

° standard mechanical thermostatic valve (min. water out temp 39 °F)

Y mechanical thermostatic valve (water out temp range 21 ÷ 39 °F)

X electronic thermostatic valve (min. water out temp 39 °F) contact the factory for lower temperature

9 **MODELS**

F Free-cooling

10 **Heat recovery**

° Without recovery

11 **VERSION**

A High efficiency

E High efficiency low noise (data on demand)

12 **COILS**

° Alluminium

R Copper

S Copper tin plated

V Epoxy coated

13 **FANS**

I Fan speed modulating for condensation control

14 **SUPPLY**

6 230/3/60 with magnet circuit breakers (data on demand for sizes 090 to)

7 460/3/60 with magnet circuit breakers

8 575/3/60 with magnet circuit breakers

15,16 **HYDRONIC KIT**

00 Without water storage

03 Water storage tank and high-head single pump

04 Water storage tank, with high-head pump and reserve pump

P3 Without water storage tank, with high-head pump

P4 Without water storage tank, with high-head pump and reserve pump

TECHNICAL DATA

Mod. NRL	Vers.		200	225	250	280	300	330	360
Cooling capacity	A	Tons	125.59	144.71	163.83	173.99	206.79	219.87	236.17
Total power input	A	(kW)	204.66	229.25	253.84	284.98	428.37	338.93	387.99
Water flow rate	A	gpm	301	347	392	417	495	527	566
Pressure drop	A	psi	12.39	12.69	12.69	13.10	14.00	14.04	15.66
ENERGY INDICES									
EER	BTU/Wat	Alls	7.37	7.58	7.75	7.33	5.80	7.79	7.31
IPLV	BTU/Wat	Alls	10.24	10.19	10.23	10.42	9.90	10.19	10.04

Mod. NRL	Vers.		200	225	250	280	300	330	360
Cooling capacity	FA	Tons	86.78	92.67	98.57	111.75	130.33	148.17	168.23
Total power input	FA	(kW)	17.73	21.97	26.22	26.58	26.58	34.71	34.71
Water flow rate	FA	(gpm)	301	347	393	417	496	527	566
Pressure drop	FA	psi	16	17	17	18	20	20	21
ENERGY INDICES									
EER	BTU/Wat	Alls	58.80	50.66	45.15	50.50	58.90	51.27	58.21

Mod. NRL	Vers.		200	225	250	280	300	330	360
SCROLL COMPRESSORS									
Quantity / circuits	All	n°/ n°	8/4	8/4	8/4	8/4	8/4	10/4	12/4
Refrigerant	type	All	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Charges	A	lbs C1	77.2	77.2	99.2	99.2	105.8	145.5	141.1
	A	lbs C2	77.2	77.2	47	103.6	105.8	154.3	141.1
	A	lbs C1	77.2	99.2	99.2	99.2	105.8	145.5	141.1
	A	lbs C2	77.2	103.6	103.6	103.6	105.8	154.3	141.1
EXCHANGERS USER SIDE									
Water connections (in/out)	All	Ø	3"	3"4"	4"	4"	4"	4"	4"
STANDARD FANS °									
Numbers	A	n°	8	10	12	12	12	16	16
Air flow rate	A	cfm	117716	140788	137492	137492	186932	186932	317600
SOUND DATA									
Sound pressure	A	dB(A)	61	63	64	65	65	66	66
Sound power	A	dB(A)	93	94	96	97	97	98	98

Cooling (AHRI STANDARD CONDITIONS): Outlet water temperature 6.7°C/44.6°F; Flow rate 0.043l/s per kW; External air temperature 35°C/95°F.

Freecooling (100%) (AHRI STANDARD CONDITIONS): Inlet water temperature 15°C/59°F; Outside air temperature 2°C/35.6°F; Compressors off.

AHRI conditions: leaving water 6.7°C / 44.6°F
flow rate 0,043 l/s per kW (full load)
Load 100% air 35°C / 95°F
Load 75% air 26.7°C / 80.06°F
Load 50% air 18.3°C / 64.94°F
Load 25% air 12.8°C / 55.04°F

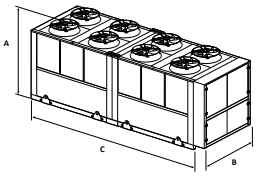
Data refered to no pump version.

Sound power: Aermec determines sound power values on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification.
Sound pressure: Sound pressure in free field, at 10 m distance from the external surface of the unit (in accordance with UNI EN ISO 3744).
Note: For more information, refer to the selection program Magellan or the technical documentation available on the website www.aermec.com

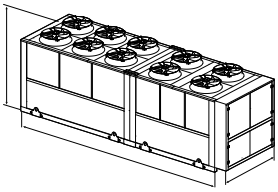
Dimensions

Mod. NRL				200	225	250	280	300	330	360
Height	A	All	in	96.46	96.46	96.46	96.46	96.46	96.46	96.46
Width	B	All	in	86.61	86.61	86.61	86.61	86.61	86.61	86.61
Depth	C	A	in	251.97	285.43	318.90	318.90	318.90	437.01	437.01
Weight (kg)		A	lbs	11.709	13.142	14.553	14.972	15.479	18.853	19.889

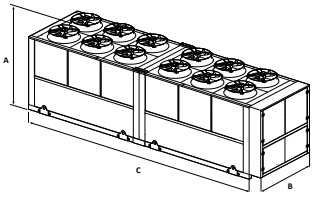
NRL 2000



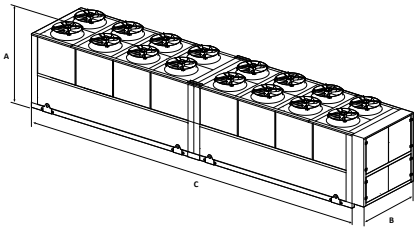
NRL 2250



NRL 2500
NRL 2800
NRL 3000



NRL 3300
NRL 3600



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NYB

Chiller with Free Cooling
Air/Water for outdoor installation
Scroll compressors, Plate exchangers, Axial fans
Cooling capacity from 28.5 ton

60Hz | HFC Refrigerant R410A | Intertek | AHRI

- **MICROCHANNEL COILS**
- **FREE COOLING MODEL**
- **COMPACT MODULE, EASY AND QUICK TO INSTALL**
- **RELIABLE AND MODULAR**

FEATURES

NYB is made of independent 28 ton, modules which can be connected together up to 255 ton cooling capacity. Every single module is an external chiller producing chilled water with high efficiency scroll compressors, axial fans, microchannel coils, system side plate heat exchanger. Units with the desuperheater option can also produce hot water for free. The base, the structure and the panels are made of treated galvanised steel with rustproof polyester paint.
With NYB it is possible to couple up to 9 chillers designed to reduce overall unit dimensions to a minimum. This modularity adapts the installation to actual system development requirements. This way, the cooling capacity can be increased over time in a simple and economic manner.

Model
NYB_F Free-cooling

Operating range: Operation at up to 115 °F outdoor air temperature at full load.

- NYB is made of 2 chiller circuits to ensure continuity even if one of the two is stopped. The careful choice of components, the particular configuration and the option of connecting multiple independent modules and managing them as if they were a single unit, allows maximum yield at full load, but also with partial loads thanks to the partialisation steps that increase as the connected modules increases, ensuring continual adaptation to actual system requests.
- The electrical control panel, present in every unit, together with the control logic implemented, allows each module to operate in synergy with the others, whilst ensuring continued operation if one or more modules fail. Modularity is essential for component redundancy, as it allows a safer system design and increased reliability.
- The modules are easy to install and can be connected together, both from the hydraulic and the electrical point of view, making it possible to fine tune the system. Hydraulic connections are facilitated by quick connect couplings, while electrical connections are simplified by the presence of a hinged electrical control panel on each unit.
- The chiller module uses aluminium microchannel coils, ensuring very high levels of efficiency. These coils use less refrigerant compared to traditional copper/aluminium coils.
- To respond to multiple system requirements, a Freecooling version is also available, particularly indicated if the requirement for chilled water is significant even during the winter period. In fact, the greater the difference between the outside air and requested water temperature, the greater the economical advantage of using freecooling.
- The NYB module is already supplied with a water filter and interception valves to facilitate cleaning and maintenance. As an accessory, an air filter protecting the coil facilitates cleaning and guarantees la good heat exchange.
- The microprocessor, with keyboard and LCD display, allows easy consultation and intervention on the unit via a menu, available in several languages. Adjustment includes complete management of the alarms and their log.
- The presence of a programmable timer allows operation time bands setting and programming of a possible second set-point.
- The temperature control takes place with the
- integral proportional logic, based on the water
- outlet temperature.
- With night Mode it is possible to set a silent mode profile.

  Perfect for night operation, it guarantees greater acoustic comfort, nonetheless offering, a high efficiency in the time of greater load.
  NB: The "J" inverter fan is compulsory for the Night Mode

- **FB1 (As Standard), air filter protecting micro channel coils. composed of a frame and a composite structure of micro-expanded aluminium mesh, with very low pressure drops.**

ACCESSORIES

ACCESSORIES:

AER485P1
RS-485 interface for supervising systems with MODBUS protocol.

PGD1
Remote chiller controlling.

MULTICHILLER_UL
Control system for control, switch-on and switch-off of single chillers in a plant where multiple units are installed in parallel,always ensuring constant flow to the evaporators.

ACCESSORIES MOUNTED IN THE FACTORY:

DRE
Plate peak current reduction electronic device.

RIF
Current power factor correction. Connected in parallel to the motor, it allows a reduction of the input current (approx. 10%).

KREC-7-8 / KREC-6-9

KNYB
Pair of caps with grooved joints assembled on the unit manifold.

GPNYB_BACK / GPNYB_SIDE
Anti-intrusion grid.

ACCESSORIES COMPATIBILITY

NYB	0500
AER485P1	•
PGD1	•
MULTICHILLER_UL	•

NYB		0500
Accessories mounted in the factory		
DRE	*(*)*	•
RIF	*(*)*	•
KREC-7-8		•
KREC-6-9		•
KNYB	*(*)*	•
GPNYB_BACK	*(*)*	•
GPNYB_SIDE	*(*)*	•

(*) Contact supplier

UNIT CONFIGURATOR

Field		Description
1,2,3		NYB
4,5,6,7		**Size**
		0500
8		**Scope of application**
	°	Standard (produced water down to +39.2 °F)
9		**Model**
	F	Free-cooling
10		**Heat recovery**
	°	Without heat recovery
	D	With desuperheater
11		**Version**
	A	High efficiency
12		**Coils**
	°	Aluminium microchannel
	O	Painted aluminium microchannel
	R	Copper - Copper
	S	Copper - Tinned
13		**Fans**
	J	Inverter
14		**Power supply**
	6	230/3/60Hz with magnetic circuit breakers
	7	460/3/60Hz with magnetic circuit breakers
	8	575/3/60Hz with magnetic circuit breakers
	9	208/3/60Hz with magnetic circuit breakers
15-16		**Integrated hydronic kit**
	00	Without hydronic kit

NYB		0500
FREE COOLING IN COOLING MODE		
Cooling capacity	ton	28.5
Total input power	kW	33.8
EER	BTU/W	10.10
IPLV (standard fan)	BTU/W	13.72
Water flow rate	gpm	68
Total pressure drop without pump	p.s.i.	3.1
FREE COOLING MODE 100%		
Cooling capacity	ton	24.0
Total input power	kW	4.5
EER	BTU/W	63.31
Water flow rate	gpm	68
Total pressure drop without pump	p.s.i.	6.9
Power supply 460V-3-60Hz with standard fan		
Imput current (cooling mode)	A	60
Imput current (free cooling mode)	A	8
[LRA]	A	218
[MCA]	A	69
[MOP]	A	95

GENERAL DATA		
Compressors	Type	Scroll
N. compressors	N.	2
N. circuit	N.	2
Unit Part Load	%	50%
Gas type	Type	R410A
Refrigerant charge	lbs	31
Exchangers user side	Type	Plate
Quantity	N.	1
Water connection (in/out)	ø	6"
Water content (Cooling only)	gal	20
Water content (Free Cooling)	gal	40

Fans (Inverter) Free Cooling		
Fans type	Type	Axial
Quantity	N.	2
Air fl ow (unitary)	cfm	20012
Static pressure	Pa	0

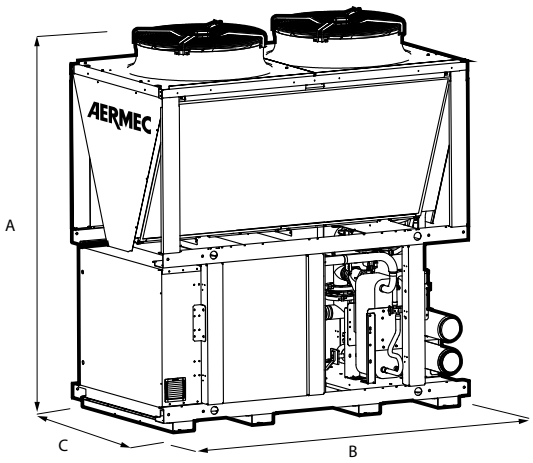
Sound data Free Cooling mode		
Sound power	dB(A)	88.4
Sound pressure (10m/33ft)	dB(A)	56.5

COOLING MODE: AHRI CONDITION std 550/551
Evaporator water temperature (in/out): 12.26°C, 54.1°F / 6.67°C, 44.1°F - Dry bulb ambient air temperature: 35°C, 95°F - Free-cooling 0%.

COOLING MODE - FREE COOLING 100%:
Evaporator water temperature (in/out): 15°C, 59°F / 10°C, 50°F - Dry bulb outdoor air inlet temperature: 2°C, 35.6°F

(The data indicated can be modified at any time by Aermec if deemed necessary).

DIMENSIONS AND WEIGHT



NYB			0500
Height	A	in	96.5
Widht	B	in	86.7
Depth	C	in	46.9
Weights (empty)		lbs	2672
Weights (running mode)		lbs	3007

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WATER / WATER CHILLERS AND HEAT PUMPS

Aermec plant engineering really comes into its own in the field of machines and technology for centralised systems. Aermec offer a full range of chillers and heat pumps from the small domestic system up to that of the large size for the service industry.
The cooling capacity range is extremely wide, and the fittings solutions are equally diverse, for scroll, screw or centrifugal compressor applications.
The careful selection of materials and the close attention paid to every detail of assembly coupled with the huge selection of accessories complete the industry-leading products designed for use in this sector, making Aermec units a real "must" in the world of Italian and European climate control.

WRL

Reversible chillers water side
Water/Water for indoor installation
Scroll compressors, Plate exchangers
Cooling capacity from 15.3 to 26.9 ton
Heating capacity from 198.652 to 344.456 BTU/h

60Hz | HFC Refrigerant R410A | C NRTL US

- **HIGH EFFICIENCIES**
- **PRODUCTION OF HOT WATER UP TO 131°F**
- **SUITABLE FOR GEOTHERMAL APPLICATIONS**

FEATURES

WRL is a water-condensed chiller that works with R410a refrigerant. It's an indoor, single-circuit unit that's ideal for geothermal applications. Fitted with hermetic scroll compressors, heat exchangers (system side) and a plate source, it fully meets the needs of the residential market: reduced size, easy installation, low noise levels. Free hot water can also be produced in units with a desuperheater. An integrated hydronic kit can be fitted (both system side and source side), containing the main hydraulic components. Available in various configurations with low or high head pumps, inverter pumps, and a modulating valve to reduce consumption. These units are reversible on the water side, so they can work in heat pump mode (keeping the same heat exchangers as evaporator and condenser).

MODELS
- WRL_° heat pump water side inversion.
- WRL_E condenserless, ONLY for water side inversion (DATA ON DEMAND).

RECOVERY
- WRL_° without heat recovery.
- WRL_D with desuperheater.

ACCESSORIES

MECHANICAL ACCESSORIES:
VT
Group of anti-vibration supports.
Select the VT model from the compatibility table.

ELECTRICAL ACCESORIES:
AER485P1
RS-485 interface for supervising systems with MODBUS protocol.

PGD1
Simplified remote panel. Allows control of basic unit functions and alarm notification. Remote mounted up to 500 m away with TWISTED PAIR SCREENED cable and TCONN6J000.

ACCESSORIES COMPATIBILITY

WRL	200	400	500
MECHANICAL ACCESSORIES:			
VT	9	9	15
ELECTRICAL ACCESORIES:			
AER485P1	•	•	•
PGD1	•	•	•

UNIT CONFIGURATOR

NAME	WRL
SIZE	200 - 400 - 500
WORKING FIELDS	
°	Standard mechanical thermostatic valve (min. water out temp +4°C)
Y	Mechanical thermostatic valve (water outlet temp range -8 ÷ 4°C)
X	Electronic thermostatic valve (min. water out temp +4°C, contact the factory for lower temperatures)
MODEL	
°	Water-condensed chiller
E	Condenserless, (data on demand)
VERSION	
°	Standard
HEAT RECOVERY	
°	Without heat recovery
D	With desuperheater
EXTERNAL SIDE PUMP	
°	Without hydronic kit
U	High head pump
V	Modulating 2 way valve
SYSTEM SIDE PUMPS	
°	without hydronic kit
N	high head pump
RESERVED BLANK	
°	
SOFT START	
°	without soft start
S	soft start
POWER SUPPLY	
6	230V 3 60Hz with magnetic circuit breaker
7	460V 3 60Hz with magnetic circuit breaker
8	575V 3 60Hz with magnetic circuit breaker

TECHNICAL DATA

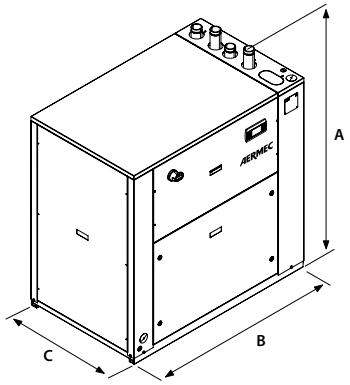
WRL°		200	400	500
Cooling				
Cooling capacity	ton	15.3	20.6	26.9
Total input power	kW	11.4	15.1	19.0
EER	BTU/Wat	16.12	16.44	16.96
IPLV	BTU/Wat	21.06	21.47	22.16
Water flow rate system side	gpm	36.6	49.4	64.3
System side pressure drop	p.s.i.	3.1	5.5	3.0
Water flow rate geothermal side	gpm	46.0	62.0	80.3
Geothermal side pressure drop	p.s.i.	4.2	8.2	3.9
Heating capacity	BTU/h	198.652	267.625	344.456
Total input power	kW	14.1	19.1	23.4
COP	BTU/Wat	4.13	4.11	4.31
Water flow rate system side	gpm	44.1	59.4	76.5
System side pressure drop	p.s.i.	3.9	7.5	3.6
Water flow rate geothermal side	gpm	33.9	45.7	59.6
Geothermal side pressure drop	p.s.i.	2.7	4.7	2.6
Power supply			460V-3-60Hz	
Input current cooling mode	A	21	26	32
Input current heating mode	A	25	31	39
Compressor				
Scroll compressor	n.	2	2	2
Circuit	n.	1	1	1
Refrigerant	Type	R410A	R410A	R410A
Exchanger				
Plate exchanger	n.	2	2	2
Inlet/outlet	Ø	2"	2"	2"½
Sound data				
Sound pressure	dB(A)	46	50	51
Sound power	dB(A)	78	82	83

COOLING MODE: AHRI CONDITION std 550/551
Evaporator water temperature (in/out): 12.26°C, 54.07°F / 6.67°C, 44.01°F - Evaporator water flow: 155.0 l/(h kW)
Condenser water temperature (in/out): 29.40°C, 84.92°F / 34.61°C, 94.30°F - Condenser water flow: 193.75 l/(h kW)

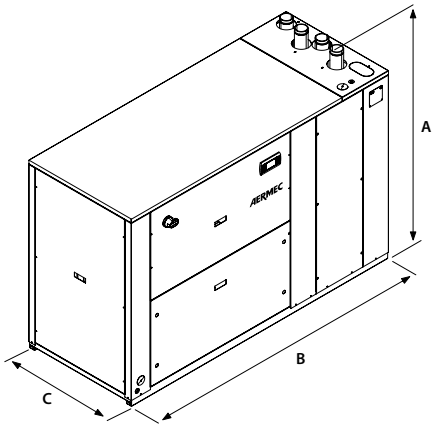
HEATING MODE
Evaporator water temperature (in/out): 10.0°C, 50.0°F / 5.0°C, 41.0°F
Condenser water temperature (in/out): 40.0°C, 104.0°F / 45.0°C, 113.0°Fv

(The data indicated can be modified at any time by Aermec if deemed necessary).

DIMENSIONS AND WEIGHT



WRL 200/400



WRL 500

DIMENSIONS AND WEIGHT			200	400
Height	A	in	54.3	54.3
Long	B	in	33.3	33.3
Deep	C	in	52.0	52.0
Empty weight	-	lbs	716	853

DIMENSIONS AND WEIGHT			500
Height	A	in	54.3
Long	B	in	33.3
Deep	C	in	81.1
Empty weight	-	lbs	1164

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WRL H

Water cooled reversible heat pump
Water/Water for indoor installation
Scroll compressor, Plate exchanger
Cooling capacity 15.00/26.8 tons
Heating capacity 185.807/319.540 BTU/h

60Hz | HFC Refrigerant R410A | TÜV NRTL C US

PGD1
Simplified remote panel.
ACCESSORY

- **HIGH EFFICIENCIES**
- **POSSIBILITY OF HAVING:**
  PARTIAL HEAT RECOVERY
  PRODUCTION OF HOT WATER UP TO 131°F
- **SUITABLE FOR GEOTHERMAL APPLICATIONS**

VERSION AND FEATURES

MODELS
- **WRL_H** heat pump refrigerant side cycle inversion.

RECOVERY
- **WRL_°** without heat recovery.
- **WRL_D** with desuperheater.

OPERATING LIMIT
Standard version
Max. evaporator water outlet temperature 64,4°F
Min. evaporator water outlet temperature 17,6°F
Max. condenser water outlet temperature 131°F
Min. condenser water outlet temperature 77°F

FEATURES
WRL is the range of water cooled chillers operating with refrigerant R410A. They are internal units with hermetic scroll compressors that respond perfectly to the market requirements: small dimensions, ease of installation, low noise.

High efficiency
Aermec has designed these units to optimise heat pump operation, providing high performances and low energy consumption.

Connections
The electric and hydraulic connections are all located on the upper part of the unit facilitating installation and maintenance. This allows reduced plant room space and installation in the smallest space possible.

Silent
The WRL units are distinguished for their silence in operation. Careful soundproofing of the unit with suitable sound-absorbent material results in low sound levels for all units.

Dynamic set point
Using the latest generation of electronic controller and with an external air temperature sensor (accessory), the heat pump unit can vary the leaving water temperature based on climatic conditions, thus increasing the energy efficiency of the system.

Advantages
Using the latest innovative technology and focus on maximum quality gives the WRL series the maximum energy efficiency, ease of installation, and most versatile application using renewable energy sources.

Technical features
- Structure and base in hot dip galvanised sheet steel with epoxy paint finish (RAL 9002).
- Generously sized plate heat exchangers.
- Compressors with high performance and low electrical input.
- Flow switch as standard.
- Conforms with Safety Directives (CE) and the standards regarding electromagnetic compatibility.
  The safety of the unit is provided by the door interlocked isolator and active protection of the main components.
- Externally mounted user interface with display of all operating parameters in 4 languages.
- Latest generation of electronic controller.
- User-friendly remote mounted control panel with alarm notification.

ACCESSORIES

- **AER485P1:** RS-485 interface for supervising systems with MODBUS protocol.
- **VT:** Anti-vibration mounts to be assembled under the unit's sheet steel base.
- **PGD1:** Simplified remote panel. Allows to perform the basic controls of the unit with alarm signals. Can be controlled from a max of 500 m with 2 PAIRS of TWISTED cable + SHIELD with shielded pairs and TCONN6J000.

ACCESSORY COMPATIBILITY

WRL-H	200	400	500
AER485P1	●	●	●
VT	9	9	15
PGD1	●	●	●

UNIT CONFIGURATOR

Field:

1 2 3	**Code**	WRL
4 5 6	**Size**	200, 400, 500
7	**Field of use**	
	°	standard mechanical thermostatic valve (min. water out temp +39,2°F)
	Y	mechanical thermostatic valve (water outlet temp range 17,6 ÷ 39,2°F)
	X	electronic thermostatic valve (min. water out temp +39,2°F, contact the factory for lower temperatures)
8	**Model:**	
	H	heat pump refrigerant side cycle inversion
9	**Version:**	
	°	standard
10	**Heat recovery**	
	°	without heat recovery
	D	with desuperheater
11	**External side pump**	
	°	without hydronic kit
	U	high head pump
	V	modulating 2 way valve
12	**System side pumps**	
	°	without hydronic kit
	N	high head pump
13	**Reserved blank**	
	°	
14	**Soft start**	
	°	without soft start
	S	soft start
15	**Power supply**	
	6	230V 3 60Hz with magnetic circuit breaker
	7	460V 3 60Hz with magnetic circuit breaker
	8	575V 3 60Hz with magnetic circuit breaker

TECHNICAL DATA

Model WRL-H		200	400	500
Cooling capacity	tons	15.00	20.36	26.81
Total input power	kW	11.54	15.18	19.14
Evaporator water flow rate	gpm	35.96	48.81	64.25
Pressure drops	p.s.i.	3.0	5.4	2.7
Condenser water flow	gpm	45.16	61.30	80.69
Condenser pressure drop	p.s.i.	4.4	8.0	3.9
Heating capacity	BTU/h	185.807	252.840	319.540
Total input power	kW	15.00	20.4	24
Condenser water flow	gpm	41.24	56.12	70.92
Condenser pressure drop	p.s.i.	4.0	7.1	3.2
Evaporator water flow	gpm	30.45	41.44	53.65
Evaporator pressure drop	p.s.i.	2.0	3.6	1.7
ENERGY INDICES				
EER	BTU/W	15.61	16.11	16.82
COP	W/W	3.63	3.63	3.90
IPLV	BTU/W	20.39	21.05	21.98
SCROLL COMPRESSORS				
Compressors	n°	2	2	2
Circuits	n°	1	1	1
Refrigerant	type	R410A	R410A	R410A
Charges	lb	n.d.	n.d.	n.d.
HYDRAULIC CONNECTIONS				
Evaporator connection	Ø	2"	2"	2"½
Condenser connection	Ø	2"	2"	2"½
SOUND DATA				
Sound pressure	dB(A)	46	50	51
Sound power	dB(A)	78	82	83

Reference data (AHRI standard):

COOLING

Evaporator

Water outlet temperature	6.7°C / 44°F
Water flow	0.043l/s per kW - 2.4gpm/ton
Δt	5.56K

Condenser

Water inlet temperature	29.4°C / 85°F
Water flow	0.054l/s per kW - 3gmp/ton
Δt	5.31K

HEATING

Evaporator:

Water inlet temperature	**10°C - 50°F**
Water outlet temperature	**5°C - 41°F**
Δt	**5K**

Condenser:

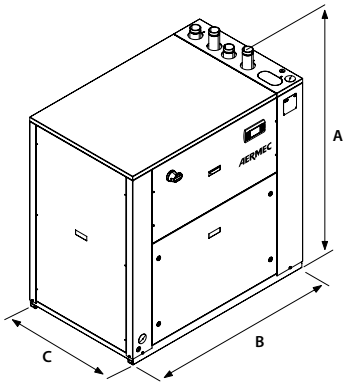
Water inlet temperature	**40°C - 104°F**
Water outlet temperature	**45°C - 113°F**
Δt	**5K**

SOUND PRESSURE

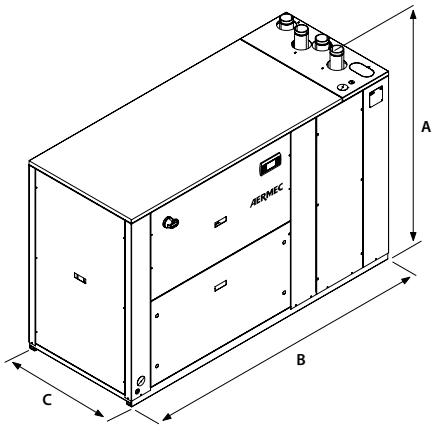
Sound pressure in free field, at 33ft distance from the external surface of the unit.

DIMENSIONS

Dimensions			200	400	500
Height	A	in	54.3	54.3	54.3
Width	B	in	33.3	33.3	33.3
Depth	C	in	52.0	52.0	81.1
Empty weight	-	lb	715	852	1192



WRL-H 200/400



WRL-H 500

Aermec S.p.A.
Via Roma, 996 - 37040 Bevilacqua (VR) - Italy
Tel 0442633111 - Fax 044293730
www.aermec.com

WWM

Reversible chillers water side.
Water/Water for indoor installation.
Scroll compressors, Plate exchangers.
Cooling capacity 31.2 ton.
Heating capacity 426.449 BTU/h.

60Hz | HFC Refrigerant R410A | Intertek | PLUG & PLAY

- **Compact module**
- **Reliable and modular**
- **Easy and quick to install**
- **Up to 36 connectable units***
- **Max 2 levels of stackable units**

* See the modularity options.

FEATURES

- WWM consists of independent 31.2 ton modules that can be linked together to reach a capacity of 1123.2 ton.
- Each individual module is an independent indoor chiller for producing cooled water with high-efficiency scroll compressors and plate type heat exchangers.
- The base, structure and panelling are load-bearing elements made of galvanised steel treated with polyester anti-corrosion paints.
- With WWM, you can combine up to 36 units designed to minimise the overall dimensions.
- Thanks to its modular construction, the installation can be adapted to suit specific system development needs whilst guaranteeing improved safety and reliability. As a result, the cooling capacity can be easily increased over time, at a limited cost.
- The modules are easy to install and link together from the hydronic point of view, thanks to the connections with grooved joints.
- **Bus bars, to facilitate the electrical connections.**
- **The WWM refrigerant circuit can easily be disconnected from the unit, maintaining all the functions of the hydronic circuit** to ensure correct system operation.
- The precise choice of components, the special configuration, and the possibility to connect several independent modules and manage them as if they were a single unit are all aspects that guarantee maximum output at full load, whilst ensuring continuous adaptation to the real service needs.
- The WWM units stand out for their quiet operation. Accurate unit sound-proofing, using good-quality sound absorbent material, means all the units work at low noise levels.
- Each unit has its own electrical panel, guaranteeing continuity even if one module malfunctions or goes into lockout.
- WWM version PN10 has the switch; WWM version PN21 mounts the transmitter.
- Fitted as standard, with butterfly shut-off valves on both hydronic lines for disconnecting the circuit when maintenance needs to be carried out.
- In the event of a variable flow rate, the motorised hydronic valves can intercept one module or more in order to reduce the flow rate when there is a low thermal load level.
- The MULTICHILLER_EVO (accessory) allows up to 9 units to be managed in parallel mode. This accessory allow to maximise the total efficency to the system under to work load, external air temperature conditions and water produced. The user panel is a 7" touch screen with ethernet inlet connections for a remote use.
- Microprocessor adjustment, complete with a keyboard and LCD screen for easily consulting the system and intervening on the unit via a multi-language menu.
- The adjustment system includes the complete management of alarms and the alarm log.
- The programming clock can be used to set operating time bands and a second set-point if required.

ACCESSORIES

ACCESSORIES:

AER485P1
RS-485 interface for supervising systems with MODBUS protocol.

AERBACP
Field bus for bacnet protocol.

AERNET
The device allows the control, the management and the remote monitoring of a Chiller with a PC, smartphone or tablet using Cloud connection. AERNET works as Master while every unit connected is configured as Slave (max. 6 unit); also, with a simple click is possible to save a log file with all the connected unit datas in the personal terminal for post analysis.

MULTICHILLER_EVO
Control, switch-on and switch-off system of the single chillers where multiple units are installed in parallel, always ensuring constant flow rate to the evaporators.
* For the control with Multichiller Evo, nr.1 accessory AER485P1 is mandatory for every WWM of the system.

KWWM
The kit contains 4 caps with a diameter of 6" for the water manifolds.

ACCESSORIES MOUNTED IN THE FACTORY:

CRATE_WWM° / CRATE_WWMH-A
Special wood cover for transport.

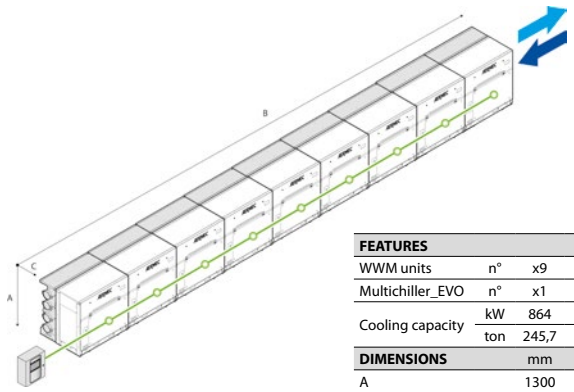
KREC_WWM
Cable entries box in order to facilitate the electrical installation.

KITIDRO_WWM
Water filter with connection pipe (diameter 6") with drain tap and additional bulb well (diameter ½") available to the installer.

WWM		0500		
Hydraulic headers kit	**Weight**	**°**	**H**	**A**
ACCESSORIES				
AER485P1		•	•	•
AERBACP		•	•	•
AERNET		•	•	•
MULTICHILLER_EVO		•	•	•
KWWM		•	•	•
ACCESSORIES MOUNTED IN THE FACTORY				
CRATE_WWM°	220,5 lbs	•		
CRATE_WWMH-A	286,6 lbs		•	•
KREC_WWM		•	•	•
KITIDRO_WWM		•	•	•

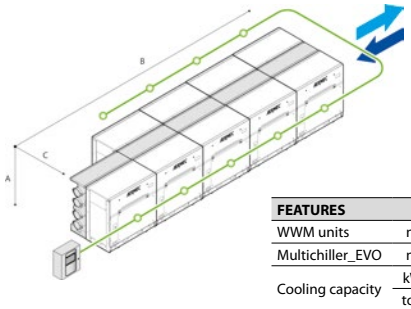
MODULARITY OPTIONS

CONFIGURATION 1: IN LINE



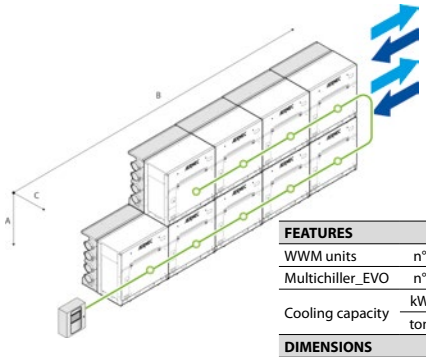
FEATURES			
WWM units	n°	x9	
Multichiller_EVO	n°	x1	
Cooling capacity	kW	864	
	ton	245,7	
DIMENSIONS		mm	in
A		1300	51.2
B		11970	471.6
C		1150	45.3

CONFIGURATION 2: BACK TO BACK



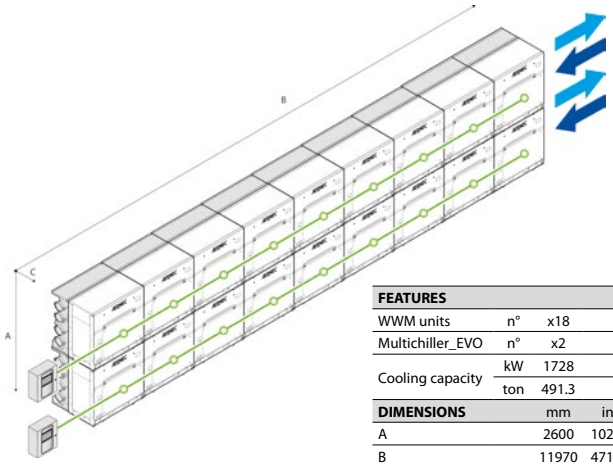
FEATURES			
WWM units	n°	x9	
Multichiller_EVO	n°	x1	
Cooling capacity	kW	864	
	ton	245,7	
DIMENSIONS		mm	in
A		1300	51.2
B		6650	262.0
C		1850	72.9

CONFIGURATION 3.1: STACK IN LINE



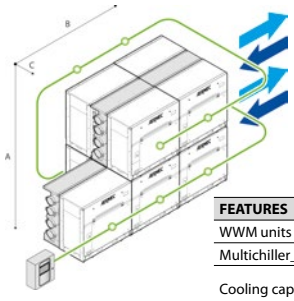
FEATURES			
WWM units	n°	x9	
Multichiller_EVO	n°	x1	
Cooling capacity	kW	864	
	ton	245.7	
DIMENSIONS		mm	in
A		2600	102.4
B		6650	262.0
C		1150	45.3

CONFIGURATION 3.2: STACK IN LINE



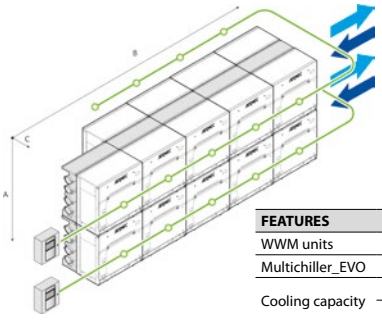
FEATURES			
WWM units	n°	x18	
Multichiller_EVO	n°	x2	
Cooling capacity	kW	1728	
	ton	491.3	
DIMENSIONS		mm	in
A		2600	102.4
B		11970	471.6
C		1150	45.3

CONFIGURATION 4.1: STACK IN LINE BACK TO BACK



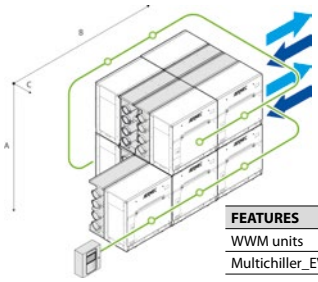
FEATURES			
WWM units	n°	x9	
Multichiller_EVO	n°	x1	
Cooling capacity	kW	864	
	ton	245.7	
DIMENSIONS		mm	in
A		2600	102.4
B		3990	157.2
C		1850	72.9

CONFIGURATION 4.2: STACK IN LINE BACK TO BACK



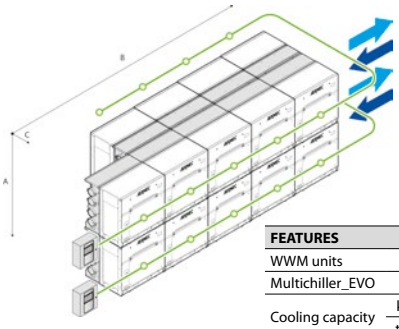
FEATURES			
WWM units	n°	x18	
Multichiller_EVO	n°	x2	
Cooling capacity	kW	1728	
	ton	491.3	
DIMENSIONS		mm	in
A		2600	102.4
B		6650	262.0
C		1850	72.9

CONFIGURATION 5.1:
STACK IN LINE BACK TO BACK DOUBLE



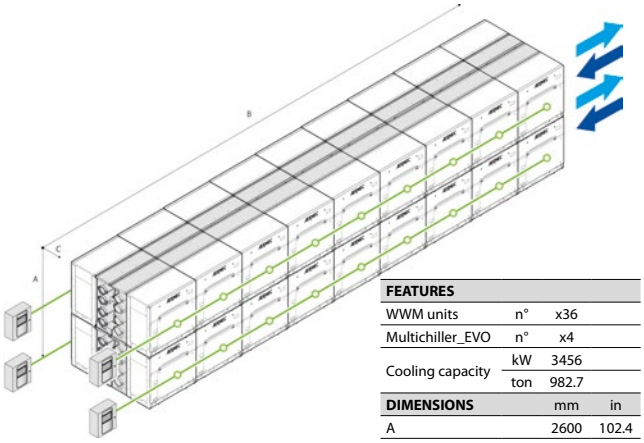
FEATURES			
WWM units	n°	x9	
Multichiller_EVO	n°	x1	
Cooling capacity	kW	864	
	ton	245.7	
DIMENSIONS		mm	in
A		2600	102.4
B		3990	157.2
C		2300	90.6

CONFIGURATION 5.2:
STACK IN LINE BACK TO BACK DOUBLE



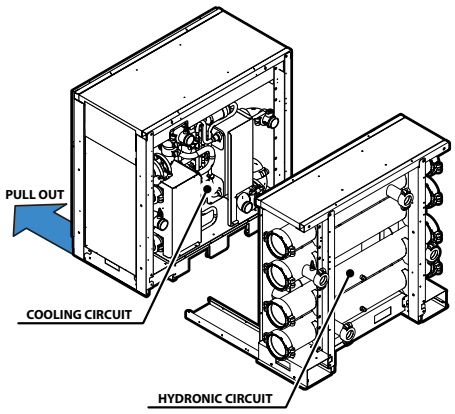
FEATURES			
WWM units	n°	x18	
Multichiller_EVO	n°	x2	
Cooling capacity	kW	1728	
	ton	491.3	
DIMENSIONS		mm	in
A		2600	102.4
B		6650	262.0
C		2300	90.6

CONFIGURATION 5.3:
STACK IN LINE BACK TO BACK DOUBLE



FEATURES			
WWM units	n°	x36	
Multichiller_EVO	n°	x4	
Cooling capacity	kW	3456	
	ton	982.7	
DIMENSIONS		mm	in
A		2600	102.4
B		11970	471.6
C		2300	90.6

EASY MAINTENANCE



UNIT CONFIGURATOR

NAME	**WWM**
SIZE	0500
THERMOSTATIC VALVE	
°	Standard operations (produced water down to +39.2°F)
MODELS	
2	Double refrigerant circuit
HYDRAULIC PRESSURE RATING	
1	145 psi (PN10)
3	300 psi (PN21)
HYDRAULIC HEADERS KIT	
°	No headers provided
H	6" headers kit - PN21 standard carbon steel pipes
A	6" headers kit - PN21 schedule 40 carbon steel pipes
POWER CONNECTION	
°	Without bus bars
B	Bus bars
POWER SUPPLY	
6	230/3/60Hz with magnetic circuit breakers
7	460/3/60Hz with magnetic circuit breakers
8	575/3/60Hz with magnetic circuit breakers
9	208/3/60Hz with magnetic circuit breakers
ELECTRICAL PANEL SCCR	
°	10 kA control panel
RIF	
°	Without power factor device
R	Factory installed power factor device
BLANK NOT USED	
°	-

TECHNICAL DATA

WWM		0500
Cooling capacity	ton	31.2
Input power	kW	23.2
EER	BTU/W	16.19
IPLV	BTU/W	20.83
Water flow rate system side	gpm	75
Total pressure drop without pump	psi	2.8
Water flow rate geothermal side	gpm	98
Total pressure drop without pump	psi	4.4
Heating capacity	BTU/h	426.449
Total input power	kW	30.1
COP	BTU/W	14.17
Water flow rate system side	gpm	57
Total pressure drop without pump	psi	1.5
Water flow rate geothermal side	gpm	65
Total pressure drop without pump	psi	2.1

GENERAL DATA		
Power supply "6"		230V-3-60Hz
Total input current in cooling mode	A	85
Total input current in heating mode	A	110
LRA	A	411
MCA	A	125
MOP	A	181
Recomm. Fuse	A	175
Power supply "7"		460V-3-60Hz
Total input current in cooling mode	A	34
Total input current in heating mode	A	45
LRA	A	213
MCA	A	61
MOP	A	88
Recomm. Fuse	A	80
Power supply "8"		575V-3-60Hz
Total input current in cooling mode	A	27
Total input current in heating mode	A	36
LRA	A	157
MCA	A	55
MOP	A	79
Recomm. Fuse	A	75

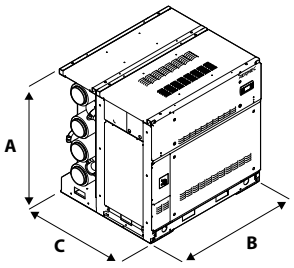
WWM		0500
Power supply "9"		208V-3-60Hz
Total input current in cooling mode	A	79
Total input current in heating mode	A	102
LRA	A	411
MCA	A	130
MOP	A	186
Recomm. Fuse	A	175
COMPRESSORS		
Compressors	type	Scroll
Nr.	nr.	2
Circuits	nr.	2
Capacity control	%	50-100
Refrigerant		R410A
EXCHANGER SYSTEM SIDE: EVAPORATOR		
Exchanger system side	type	Plate
Quantity	n°	1
Min. water flow	gpm	22.2
Max. water flow	gpm	263.3
Water content	gal	3.9
Electrical resistance	nr./W	1/150
EXCHANGER GEOTHERMAL SIDE: CONDENSER		
Exchanger geothermal side	type	Plate
Quantity	n°	1
Min. water flow	gpm	22.2
Max. water flow	gpm	263.3
Water content	gal	3.9
Electrical resistance	nr./W	1/150
HYDRAULIC CONNECTIONS		
Water connection (in/out)	type	Grooved joints
	ø	6"
SOUND DATA		
Sound power	dB(A)	84.0
Sound pressure	dB(A)	52.6

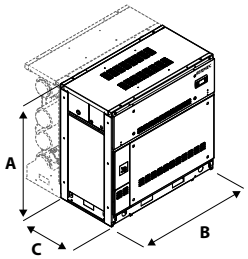
COOLING MODE: AHRI std 550/590 (I-P)
Evaporator outlet water temperature: 6.67°C, 44.01°F - Evaporator water flow: 155.0 l/(h kW), 2.40 gpm/tonR.
Condenser inlet water temperature: 29.44°C, 84.99°F - Condenser water flow: 193,75 l/(h kW), 3.00 gpm/tonR.

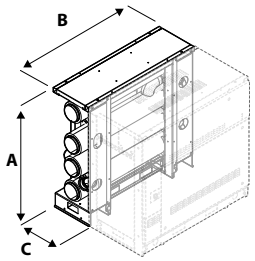
HEATING MODE: AHRI std 550/590 (I-P) med. conditions
Evaporator outlet water temperature: 6.67°C, 44.01°F - Evaporator water flow: 155.0 l/(h kW), 2.40 gpm/tonR.
Condenser water temperature (in/out): 40.56°C, 105.01°F / 48.89°C, 120.00°F.

(The data indicated can be modified at any time by Aermec if deemed necessary).

DIMENSIONS AND WEIGHT







DIMENSIONS			
WWM 0500		Vers.	0500
A	in	H / A	51.2
B	in	H / A	52.4
C	in	H / A	45.3
Empty weight with pallet	lbs	B	2130
Running weight	lbs	B	2376
Empty weight with pallet	lbs	°	2050
Running weight	lbs	°	2296

DIMENSIONS			
WWM 0500		Vers.	0500
A	in	°	51.2
B	in	°	52.4
C	in	°	28.6
Empty weight with pallet	lbs	B	1623
Running weight	lbs	B	1647
Empty weight with pallet	lbs	°	1543
Running weight	lbs	°	1568

DIMENSIONS			
WWM 0500		Vers.	0500
A	in	H / A	51.2
B	in	H / A	52.4
C	in	H / A	17.8
Empty weight with pallet	lbs	-	507
Running weight	lbs	-	728

Aermec S.p.A.
Via Roma, 996
37040 Bevilacqua (VR) - Italy
Tel. + 39 0442 633111 - Fax +39 0442 93577

NXW

Chiller
Water/Water for indoor installation
Scroll compressors, Plate exchangers
Cooling capacity from 31.5 ton to 139.2 ton

60Hz | HFC Refrigerant R410A | Intertek

- **HIGH EFFICIENCY**
- **OPTION OF 1 OR 2 PUMPS ON BOTH EVAPORATOR AND CONDENSER SIDE**
- **PRODUCTION OF HOT WATER UP 64.4°F**

FEATURES

NXW is the range of water cooled chiller that operate with refrigerant R410A. They are internal units with hermetic scroll compressors that respond perfectly to the market requirements: small dimensions, ease of installation, low noise.
Models available:
- NXW°: water side reversible chiller

All models are available in low noise version

Evaporator and/or condenser side pump unit
The unit can be supplied with a hydronic module for both the evaporator and the condenser side; each module includes a water filter fitted, low or high head pump, flow switch, thereby optimising space, time and installation costs.
It is possible to request a standby low or high head pump.
Advanced controls

The NXW controller provides several functions:
- Two chiller units in parallel (run/standby).
- Programmed pump rotation.
- Inverter condenser pump control to manage the condensing pressure.
- Programmable time-clock.
- Automatic water set point compensation.
- Data logging.

Construction details:
- Structure and base in hot dip galvanised sheet steel with epoxy pain finish (RAL 9002).
- High efficiency plate heat exchangers.
- Compressors with high performance and low electrical input.
- High and low pressure transducers as standard
- Conforms with Safety Directives (CE) and the standards regarding electromagnetic compatibility.
- The safety of the unit is provided by the door interlocked isolator and active protection of the main components.
- Externally mounted user interface with display of all operating parameters in 4 languages.
- User-friendly remote mounted control panel with alarm notification.

ACCESSORIES

AER485P1
Through this accessory, it is possible to connect the unit with BMS supervision systems with electrical standard RS 485 and MODBUS type protocol. NOTE: disclosure must be provided for compressor No. 1.

AERWEB300
Accessory AERWEB allows remote control of a chiller through a common PC and an ethernet connection over a common browser; 4 versions available:
AERWEB300-6: Web server to monitor and remote control max. 6 units in RS485 network;
AERWEB300-18: Web server to monitor and remote control max. 18 units in RS485 network;
AERWEB300-6G: Web server to monitor and remote control max. 6 units in RS485 network with integrated GPRS modem;
AERWEB300-18G: Web server to monitor and remote control max. 18 units in RS485 network with integrated GPRS modem.

MULTICHILLER_NXW
Control system to switch the individual chillers on and off, and command them, in a system in which several units are installed in parallel, always ensuring a constant delivery to the exchanger.

PGD1
In addition to the unit mounted controller on the NXW unit a remote mounted PGD1 panel can be supplied providing the same functions (keyboard controls and display).

AVX
Spring anti-vibration mounts.

RIF
Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current. Factory fitted only.

DRE
Soft starter (current reduction of about 30% for single circuit units, 26% for two circuit units, 22% for three circuit units). Only for 400V/3/50Hz. Factory fitted only.

CRATE
Special wood cover for transport.

ACCESSORY COMPATIBILITY

NXW	Model	0500	0550	0600	0650	0700	0750	0800	0900	1000	1250	1400	1500	1650
AER485P1	°	•	•	•	•	•	•	•	•	•	•	•	•	•
AERWEB300	°	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER_NXW	°	•	•	•	•	•	•	•	•	•	•	•	•	•
PGD1	°	•	•	•	•	•	•	•	•	•	•	•	•	•
AVX														
WITHOUT PUMP	°	309	309	310	303	303	310	314	314	315	315	317	317	317
WITH 1 PUMP	°	321	321	311	311	651	651	652	653	654	659	659	659	659
WITH 2 PUMP	°	311	311	311	311	651	651	652	653	654	659	659	659	659
WITH 3 PUMP	°	311	311	312	312	651	651	652	653	654	659	659	659	659
WITH 4 PUMP	°	312	312	312	312	651	651	652	653	654	659	659	659	659
RIF	°	•	•	•	•	•	•	•	•	•	•	•	•	•
DRE	°	•	•	•	•	•	•	•	•	•	•	•	•	•
CRATE														
(for E/D/without pumps configurations)	°	CRATE06	CRATE06	CRATE06	CRATE06	CRATE06	CRATE06	CRATE08	CRATE08	CRATE08	CRATE08	CRATE08	CRATE08	CRATE08
(for T/with pumps configurations)	°	CRATE07	CRATE07	CRATE07	CRATE07	CRATE07	CRATE07	CRATE09	CRATE09	CRATE09	CRATE09	CRATE09	CRATE09	CRATE09

UNIT CONFIGURATOR

By suitably combining the numerous options available it is possible to configure each model in such a way as to meet even the most demanding of system requirements.

Name	NXW
Size	0500, 0550, 0600, 0650, 0700, 0750, 0800, 0900, 1000, 1250, 1400, 1500, 1650
Thermostatic valve	
°	Mechanical, standard operations (produced water down to 39.2°F)
Y	Mechanical, low temperature operations (produced water down to 14°F) only for NXW° Mechanical, low temperature operations (produced water down to 17.6°F) only for NXWH
X	Electronic, standard operations (produced water down to 39.2°F)
Model	
°	Chiller water side cycle inversion
Version	
L	Low noise
Evaporator	
°	Standard BPHE exchanger
E	Condenserless (DATA ON DEMAND)
Heat recovery	
°	Without heat recovery
D	With desuperheater
T	With total recovery
Power supply	
6	230/3/60Hz with magnetic circuit breakers
7	460/3/60Hz with magnetic circuit breakers (as standard)
8	575/3/60Hz with magnetic circuit breakers
9	208/3/60Hz with magnetic circuit breakers
System side pumps	
°	No pumps provided
M	Low head single pump
N	Low head duty + backup pump
O	High head single pump
P	High head duty + backup pump
External side pumps	
°	No pumps provided
U	Low head single pump
V	Low head duty + backup pump
W	High head single pump
Z	High head duty + backup pump
	These combinations are not possible: YH, YD, YT, HE, HT, ET, T with pumps

NXW	PUMPS MODEL							
	M	N	O	P	U	V	W	Z
0500	•	•	•	•	•	•	•	•
0550	•	•	•	•	•	•	•	•
0600	•	•	•	•	•	•	•	•
0650	•	•	•	•	•	•	•	•
0700	•	•	•	•	•	•	•	•
0750	•	•	•	•	•	•	•	•
0800	•	•	•	•	•	•	•	•
0900	•	•	•	•	•	•	•	n.a.
1000	•	•	•	n.a.	•	•	•	n.a.
1250	•	•	•	n.a.	•	n.a.	•	n.a.
1400	•	•	•	n.a.	•	n.a.	•	n.a.
1500	•	•	•	n.a.	•	n.a.	•	n.a.
1650	•	•	•	n.a.	•	n.a.	•	n.a.

• Available

n.a. Not available

TECHNICAL DATA

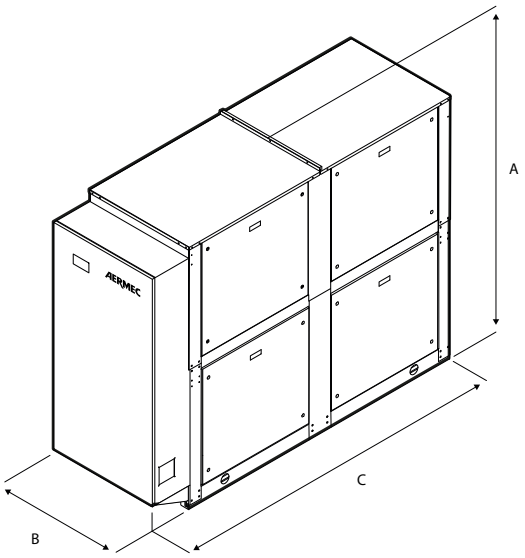
NXW°		0500	0550	0600	0650	0700	0750	0800	0900	1000	1250	1400	1500	1650
Cooling capacity	ton	31.5	34.3	36.5	42.0	46.8	53.6	62.4	71.3	83.8	95.1	105.9	122.6	139.2
Total input power	kW	23.04	24.80	26.64	29.94	34.83	38.86	46.28	53.53	60.41	68.59	76.32	88.37	100.32
EER	BTU/ Wat	16.42	16.61	16.43	16.83	16.12	16.56	16.17	15.98	16.65	16.64	16.65	16.64	16.65
IPLV	BTU/ Wat	22.08	23.56	23.35	23.56	22.83	23.18	22.63	21.53	23.30	23.57	23.30	22.42	23.30
Water flow rate system side	gpm	76	82	88	101	112	129	150	171	201	228	254	294	334
Total pressure drop without pump	p.s.i.	2.4	2.9	3.3	3.8	4.8	3.7	4.3	5.6	3.0	3.1	3.0	3.6	4.5
Water flow rate geothermal side	gpm	95	103	109	126	140	161	187	214	251	285	318	368	418
Total pressure drop without pump	p.s.i.	2.4	2.8	3.2	3.2	4.1	2.1	2.9	2.8	2.5	3.2	3.6	4.8	6.0
Heating capacity	BTU/h	412.088	448.949	476.344	544.939	609.153	694.787	817.611	923.766	1.047.009	1.183.597	1.325.440	1.517.261	1.707.945
Total input power	kW	28.50	31.08	33.67	38.36	43.82	47.40	57.40	66.30	73.60	83.40	92.80	106.62	121.05
COP	BTU/ Wat	14.47	14.46	14.16	14.22	13.91	14.67	14.26	13.95	14.24	14.20	14.30	14.24	14.12
Water flow rate system side	gpm	92	101	107	122	137	156	183	207	235	265	297	340	383
Total pressure drop without pump	p.s.i.	2.2	2.7	3.0	3.0	3.9	2.0	2.8	2.6	2.2	2.7	3.2	4.1	5.1
Water flow rate geothermal side	gpm	71	77	81	93	103	120	140	157	179	202	227	259	291
Total pressure drop without pump	p.s.i.	14.7	17.5	19.4	22.5	27.7	22.0	25.6	32.2	16.2	16.7	16.5	19.0	23.3
EXCHANGER SYSTEM SIDE: EVAPORATOR														
Exchanger system side	Type	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate
Quantity	n°	1	1	1	1	1	1	1	1	1	1	1	1	1
Min. water flow	gpm	34	34	34	37	37	52	59	59	81	92	111	122	122
Max. water flow	gpm	189	189	189	189	189	189	189	189	462	462	462	462	462
Water connection (in/out) - Victaulic	ø	2"½ US	2"½ US	2"½ US	2"½ US	2"½ US	2"½ US	2"½ US	2"½ US	3"	3"	3"	4"	4"
Water content	gal	3.4	3.4	3.4	3.7	3.7	5.3	5.9	5.9	8.7	9.9	12.0	13.2	13.2
EXCHANGER GEOTHERMAL SIDE: CONDENSER														
Exchanger geothermal side	Type	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate
Quantity	n°	1	1	1	1	1	1	1	1	1	1	1	1	1
Min. water flow	gpm	43	43	43	52	52	74	74	92	122	122	148	148	148
Max. water flow	gpm	189	189	189	189	189	462	462	462	462	462	462	462	462
Water connection (in/out) - Victaulic	ø	2"½ US	2"½ US	2"½ US	2"½ US	2"½ US	3"	3"	3"	3"	3"	4"	4"	4"
Water content	gal	4.4	4.4	4.4	5.3	5.3	8.0	8.0	9.9	13.2	13.2	16.0	16.0	16.0
SOUND DATA														
Sound power	dB(A)	78.9	78.0	78.9	78.9	79.6	79.9	82.0	85.2	87.0	88.8	90.0	89.5	89.0
Sound pressure (33ft)	dB(A)	47.2	46.3	47.2	47.2	47.8	48.2	50.2	53.4	55.1	56.9	58.1	57.6	57.1

COOLING MODE: AHRI CONDITION std 550/551
Evaporator water temperature (in/out): 12.26°C. 54.07°F / 6.67°C. 44.01°F - Evaporator water flow: 155.0 l/(h kW)
Condenser water temperature (in/out): 29.40°C. 84.92°F / 34.61°C. 94.30°F - Condenser water flow: 193.75 l/(h kW)

HEATING MODE
Evaporator water temperature (in/out): 10.0°C. 50.0°F / 5.0°C. 41.0°F
Condenser water temperature (in/out): 40.0°C. 104.0°F / 45.0°C. 113.0°Fv

(The data indicated can be modified at any time by Aermec if deemed necessary).

DIMENSIONS AND WEIGHT



NXW°			0500	0550	0600	0650	0700	0750	0800	0900	1000	1250	1400	1500	1650
Height (power supply 6/9)	A	in	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	77.6	77.6	77.6	77.6
Height (power supply 7/8)	A	in	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
Width (power supply 6/9)	B	in	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	47.3	47.3	47.3	47.3
Width (power supply 7/8)	B	in	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5
Depth (power supply 6/9)	C	in	82.7	82.7	82.7	82.7	82.7	82.7	82.7	95.3	95.3	99.3	99.3	99.3	99.3
Depth (power supply 7/8)	C	in	82.7	82.7	82.7	82.7	82.7	82.7	82.7	95.3	95.3	95.3	95.3	95.3	95.3

NXW°		0500	0550	0600	0650	0700	0750	0800	0900	1000	1250	1400	1500	1650
Weights (empty)	lbs	1610	1744	1746	1935	1955	2270	2365	2789	3458	3696	4026	4165	4252
Weights (running mode)	lbs	1675	1809	1811	2010	2030	2380	2481	2921	3641	3888	4260	4409	4496

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NXW

Heat pump
Water/Water for indoor installation
Scroll compressors, Plate exchangers
Cooling capacity from 30.8 ton to 128.7 ton
Heating capacity from 388.172BTU/h to 1.683.627 BTU/h

60Hz | HFC Refrigerant R410A | Intertek

- **HIGH EFFICIENCY**
- **HEAT PUMP WITH REFRIGERANT SIDE REVERSING FOR GEOTHERMAL APPLICATIONS**
- **OPTION OF 1 OR 2 PUMPS ON BOTH EVAPORATOR AND CONDENSER SIDE**
- **PRODUCTION OF HOT WATER UP 64.4°F**

FEATURES

NXW is the range of water cooled chiller and heat pumps that operate with refrigerant R410A. They are internal units with hermetic scroll compressors that respond perfectly to the market requirements: small dimensions, ease of installation, low noise.
Models available:
- NXWH: refrigerant side reversible heat pump

All models are available in low noise version

Evaporator and/or condenser side pump unit
The unit can be supplied with a hydronic module for both the evaporator and the condenser side; each module includes a water filter fitted, low or high head pump, flow switch, thereby optimising space, time and installation costs.
It is possible to request a standby low or high head pump.

Advanced controls
The NXW controller provides several functions:
- Two chiller units in parallel (run/standby).
- Programmed pump rotation.
- Inverter condenser pump control to manage the condensing pressure.
- Programmable time-clock.
- Automatic water set point compensation.
- Data logging.

Construction details:
- Structure and base in hot dip galvanised sheet steel with epoxy pain finish (RAL 9002).
- High efficiency plate heat exchangers.
- Compressors with high performance and low electrical input.
- High and low pressure transducers as standard
- Conforms with Safety Directives (CE) and the standards regarding electromagnetic compatibility.
- The safety of the unit is provided by the door interlocked isolator and active protection of the main components.
- Externally mounted user interface with display of all operating parameters in 4 languages.
- User-friendly remote mounted control panel with alarm notification.

ACCESSORIES

AER485P1
Through this accessory, it is possible to connect the unit with BMS supervision systems with electrical standard RS 485 and MODBUS type protocol. NOTE: disclosure must be provided for compressor No. 1.

AERWEB300
Accessory AERWEB allows remote control of a chiller through a common PC and an ethernet connection over a common browser; 4 versions available:
AERWEB300-6: Web server to monitor and remote control max. 6 units in RS485 network;
AERWEB300-18: Web server to monitor and remote control max. 18 units in RS485 network;
AERWEB300-6G: Web server to monitor and remote control max. 6 units in RS485 network with integrated GPRS modem;
AERWEB300-18G: Web server to monitor and remote control max. 18 units in RS485 network with integrated GPRS modem.

MULTICHILLER_NXW
Control system to switch the individual chillers on and off, and command them, in a system in which several units are installed in parallel, always ensuring a constant delivery to the exchanger.

PGD1
In addition to the unit mounted controller on the NXW unit a remote mounted PGD1 panel can be supplied providing the same functions (keyboard controls and display).

AVX
Spring anti-vibration mounts.

RIF
Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current. Factory fitted only.

DRE
Soft starter (current reduction of about 30% for single circuit units, 26% for two circuit units, 22% for three circuit units). Only for 400V/3/50Hz. Factory fitted only.

CRATE
Special wood cover for transport.

ACCESSORY COMPATIBILITY

NXW	Model	0500	0550	0600	0650	0700	0750	0800	0900	1000	1250	1400	1500	1650
AER485P1	H	•	•	•	•	•	•	•	•	•	•	•	•	•
AERWEB300	H	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER_NXW	H	•	•	•	•	•	•	•	•	•	•	•	•	•
PGD1	H	•	•	•	•	•	•	•	•	•	•	•	•	•
AVX														
WHITHOUT PUMP	H	309	309	310	303	303	310	314	314	315	315	317	317	317
WHITH 1 PUMP	H	321	321	311	311	651	651	652	653	654	659	659	659	659
WHITH 2 PUMP	H	311	311	311	311	651	651	652	653	654	659	659	659	659
WHITH 3 PUMP	H	311	311	312	312	651	651	652	653	654	659	659	659	659
WHITH 4 PUMP	H	312	312	312	312	651	651	652	653	654	659	659	659	659
RIF	H	•	•	•	•	•	•	•	•	•	•	•	•	•
DRE	H	•	•	•	•	•	•	•	•	•	•	•	•	•
CRATE														
(for E/D/without pumps configurations)	H	CRATE06	CRATE06	CRATE06	CRATE06	CRATE06	CRATE06	CRATE08	CRATE08	CRATE08	CRATE08	CRATE08	CRATE08	CRATE08
(for T/with pumps configurations)	H	CRATE07	CRATE07	CRATE07	CRATE07	CRATE07	CRATE07	CRATE09	CRATE09	CRATE09	CRATE09	CRATE09	CRATE09	CRATE09

UNIT CONFIGURATOR

By suitably combining the numerous options available it is possible to configure each model in such a way as to meet even the most demanding of system requirements.

Name	NXW
Size	0500, 0550, 0600, 0650, 0700, 0750, 0800, 0900, 1000, 1250, 1400, 1500, 1650
Thermostatic valve	
°	Mechanical, standard operations (produced water down to 39.2°F)
Y	Mechanical, low temperature operations (produced water down to 14°F) only for NXW° Mechanical, low temperature operations (produced water down to 17.6°F) only for NXWH
X	Electronic, standard operations (produced water down to 39.2°F)
Model	
H	Chiller / heat pump refrigerant side cycle inversion
Version	
L	Low noise
Evaporator	
°	Standard BPHE exchanger
E	Condenserless (DATA ON DEMAND)
Heat recovery	
°	Without heat recovery
D	With desuperheater
T	With total recovery
Power supply	
6	230/3/60Hz with magnetic circuit breakers
7	460/3/60Hz with magnetic circuit breakers (as standard)
8	575/3/60Hz with magnetic circuit breakers
9	208/3/60Hz with magnetic circuit breakers
System side pumps	
°	No pumps provided
M	Low head single pump
N	Low head duty + backup pump
O	High head single pump
P	High head duty + backup pump
External side pumps	
°	No pumps provided
U	Low head single pump
V	Low head duty + backup pump
W	High head single pump
Z	High head duty + backup pump
	These combinations are not possible: YH, YD, YT, HE, HT, ET, T with pumps

NXW	PUMPS MODEL							
	M	N	O	P	U	V	W	Z
0500	•	•	•	•	•	•	•	•
0550	•	•	•	•	•	•	•	•
0600	•	•	•	•	•	•	•	•
0650	•	•	•	•	•	•	•	•
0700	•	•	•	•	•	•	•	•
0750	•	•	•	•	•	•	•	•
0800	•	•	•	•	•	•	•	•
0900	•	•	•	•	•	•	•	n.a.
1000	•	•	•	n.a.	•	•	•	n.a.
1250	•	•	•	n.a.	•	n.a.	•	n.a.
1400	•	•	•	n.a.	•	n.a.	•	n.a.
1500	•	•	•	n.a.	•	n.a.	•	n.a.
1650	•	•	•	n.a.	•	n.a.	•	n.a.

• Available

n.a. Not available

TECHNICAL DATA

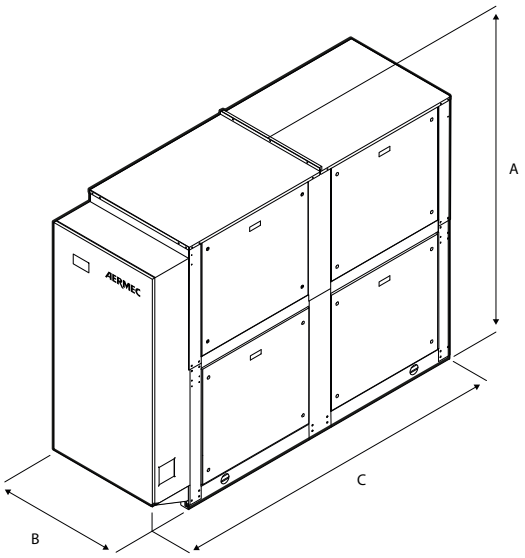
NXWH		0500	0550	0600	0650	0700	0750	0800	0900	1000	1250	1400	1500	1650
Cooling capacity	ton	30.8	33.5	36.1	41.1	46.4	51.9	61.8	71.7	84.3	89.3	106.6	115.1	128.7
Total input power	kW	23.11	24.91	26.54	30.10	34.83	38.91	46.32	53.75	60.67	68.83	76.70	88.62	100.54
EER	BTU/Wat	16.01	16.12	16.30	16.39	16.00	16.00	16.01	16.02	16.68	15.57	16.67	15.58	15.36
IPLV	BTU/Wat	21.56	22.88	23.19	22.96	22.68	22.41	22.43	21.59	23.36	22.07	23.36	21.01	21.50
Water flow rate system side	gpm	74	80	87	99	111	125	148	172	202	214	256	276	309
Total pressure drop without pump	p.s.i.	1.6	1.9	1.7	2.2	2.4	1.4	1.9	1.4	1.7	2.1	1.9	2.5	3.1
Water flow rate geothermal side	gpm	93	100	108	123	139	156	185	215	253	268	320	345	386
Total pressure drop without pump	p.s.i.	2.3	2.7	2.4	3.1	3.4	2.0	2.7	2.7	2.5	3.1	3.6	4.6	5.8
Heating capacity	BTU/h	388.172	422.406	453.323	517.410	583.732	655.466	773.062	887.126	994.612	1.120.042	1.253.362	1.497.768	1.683.627
Total input power	kW	28.60	31.38	33.44	38.76	43.86	47.80	57.40	64.90	73.20	83.60	93.20	107.10	121.56
COP	BTU/Wat	13.59	13.47	13.57	13.36	13.32	13.73	13.48	13.68	13.60	13.41	13.46	14.00	13.86
Water flow rate system side	gpm	87	95	102	116	131	147	173	199	223	251	281	336	378
Total pressure drop without pump	p.s.i.	2.2	2.6	2.3	3.0	3.2	1.9	2.5	1.9	2.0	2.8	2.3	3.7	4.6
Water flow rate geothermal side	gpm	65	71	76	87	98	111	130	150	168	188	210	255	285
Total pressure drop without pump	p.s.i.	7.7	9.2	8.3	10.6	11.5	6.9	9.1	9.0	7.5	10.4	10.7	17.4	21.9
EXCHANGER SYSTEM SIDE: EVAPORATOR														
Exchanger system side	Type	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate
Quantity	n°	1	1	1	1	1	1	1	1	1	1	1	1	1
Min. water flow	gpm	43	43	52	52	59	74	74	111	122	122	148	148	148
Max. water flow	gpm	189	189	189	189	189	462	462	462	462	462	462	462	462
Water connection (in/out) - Victaulic	ø	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Water content	gal	4.4	4.4	5.3	5.3	5.9	8	8	12	13.2	13.2	16	16	16
EXCHANGER GEOTHERMAL SIDE: CONDENSER														
Exchanger geothermal side	Type	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate
Quantity	n°	1	1	1	1	1	1	1	1	1	1	1	1	1
Min. water flow	gpm	43	43	52	52	59	74	74	111	122	122	148	148	148
Max. water flow	gpm	189	189	189	189	189	462	462	462	462	462	462	462	462
Water connection (in/out) - Victaulic	ø	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Water content	gal	4.4	4.4	5.3	5.3	5.9	8	8	12	13.2	13.2	16	16	16
SOUND DATA														
Sound power	dB(A)	78.9	78	78.9	78.9	79.6	79.9	82	85.2	87	88.8	90	89.5	89
Sound pressure (33ft)	dB(A)	47.2	46.3	47.2	47.2	47.8	48.2	50.3	53.4	55.2	56.9	58.1	57.6	57.1

COOLING MODE: AHRI CONDITION std 550/551
Evaporator water temperature (in/out): 12,26°C, 54,07°F / 6,67°C, 44,01°F - Evaporator water flow: 155,0 l/(h kW)
Condenser water temperature (in/out): 29,40°C, 84,92°F / 34,61°C, 94,30°F - Condenser water flow: 193,75 l/(h kW)

HEATING MODE
Evaporator water temperature (in/out): 10,0°C, 50,0°F / 5,0°C, 41,0°F
Condenser water temperature (in/out): 40,0°C, 104,0°F / 45,0°C, 113,0°Fv

(The data indicated can be modified at any time by Aermec if deemed necessary).

DIMENSIONS AND WEIGHT



NXWH			0500	0550	0600	0650	0700	0750	0800	0900	1000	1250	1400	1500	1650
Height (power supply 6/9)	A	in	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	77.6	77.6	77.6	77.6
Height (power supply 7/8)	A	in	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2	74.2
Width (power supply 6/9)	B	in	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	47.3	47.3	47.3	47.3
Width (power supply 7/8)	B	in	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5	31.5
Depth (power supply 6/9)	C	in	82.7	82.7	82.7	82.7	82.7	82.7	82.7	95.3	95.3	99.3	99.3	99.3	99.3
Depth (power supply 7/8)	C	in	82.7	82.7	82.7	82.7	82.7	82.7	82.7	95.3	95.3	95.3	95.3	95.3	95.3

NXWH		0500	0550	0600	0650	0700	0750	0800	0900	1000	1250	1400	1500	1650
Weights (empty)	lbs	1610	1744	1746	1935	1955	2270	2365	2789	3458	3696	4026	4165	4252
Weights (running mode)	lbs	1683	1817	1834	2023	2054	2403	2497	2989	3678	3916	4294	4433	4520

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MULTI-PURPOSE

Thanks to the special architecture of the refrigerant circuit and advanced control logic, the multi-purpose heat pump is able to simultaneously satisfy different installation requirements and to independently modulate the power delivered on each of them.
The ability to simultaneously meet the demand of the hot and cold circuit, whatever the proportion of the load on the two circuits may be, derives from the capacity of its control to switch the operation between the various possible modes.

MULTI-PURPOSE			Air flow rate cfm	Cool Cap. ton	Heat Cap. BTU/h	Page
	Units with scroll compressors					
	NRP 0280-0750	Multipurpose	-	12.3-44.9	184.010-660.103	152
	NRP 0800-1800	Multipurpose	-	51.7-120.4	738.278-1.689.276	156
new	NXP	Multipurpose	-	30.9-129.3	398026 -1684093	160

NRP

Multipurpose
Air/Water for outdoor installation
Axial fans, scroll compressor
Cooling capacity 12.3/44.9 tons
Heating capacity 184.010/660.103 BTU/h

60Hz | HFC Refrigerant R410A | Intertek

- **DESIGNED FOR 2 AND 4-PIPE SYSTEMS**
- **HIGH EFFICIENCY VERSION**
- **HIGH EFFICIENCY EVEN AT PART LOAD**
- **OPTION VERSION WITH BUILT-IN HYDRONIC KIT**

CHARACTERISTICS

NRP is the range of multipurpose external units operating on refrigerant R410A, designed for **2 or 4-pipe systems.** With just one unit simultaneous and independent requests for hot and chilled water can be accommodated all year round.

Version

NRP_A Multipurpose high efficiency version
NRP_E Multipurpose high efficiency low noise version

- **Operational limits (1)**
- max. external air temperature 114.8°F Cooling mode
- Maximum leaving water temperature 130°F Heating mode
- 2refrigerant circuits
- High efficiency scroll compressors with low power input
- Heat exchangers optimised to benefit from the excellent heat transfer characteristics of R410A.
- flow switch as standard supply
- Water filter
- Options for integrated hydronic modules with pumps, buffer tank:
- Buffer tank and pumps or only pumps
- expansion tank
- Safety valve
- Pressure gauge
- Axial fans for extremely quiet operation
- Microprocessor controls.
  - Control from the entering water temperature, with the possibility of selecting control of the leaving water temperature.
  - Condensing control in summer with a 0-10 V modulating signal based on pressure and compensated for external air temperature
  - Evaporating control in summer for heat pump operation
  - Intelligent defrost control on drop of pressure
  - Automatic rotation of compressors and pumps based on operating hours
  - Load limiting safety control
- Metallic protective cabinet with anti-corrosion polyester paint

(1) For more details on operating limits, refer to the technical documentation available on the website www.aermec.com

ACCESSORIES

- **AER485P1:** RS-485 interface for supervising systems with MODBUS protocol.
- **AERWEB300:** The AERWEB option allows remote control of a chiller through a standard PC and an ethernet connection with a standard browser; 4 versions available:
  AERWEB300-6: Web server to monitor and remote control maximum 6 units on RS485 network;
  AERWEB300-18: Web server to monitor and remote control maximum 18 units on RS485 network;
  AERWEB300-6G: Web server to monitor and remote control maximum 6 units on RS485 network with integrated GPRS modem;
  AERWEB300-18G: Web server to monitor and remote control maximum 18 units on RS485 network with integrated GPRS modem.
- **PGD1:** Simplified remote panel. Allows control of basic unit functions and alarm notification. Remote mounted up to 500 m away with TWISTED PAIR SCREENED cable and TCONN6J000.
- **GP:** Protection grille protects the external coil from accidental damage.
- **VT** Anti-vibration mounts to be installed under the base of the unit.

Accessories factory fitted only

- **TRX1**:The storage tanks with holes and integrative resistances are delivered from the factory with plastic protective caps. Before the system is loaded, the plastic caps must be replaced with the specific TRX1 if installation of one or all the resistances is not foreseen.
- **RIF**: Power factor correction. Connected in parallel to the motor allowing about 10% reduction of input current.

COMPATIBILITY OF ACCESSORIES

NRP	VERSION	0280	0300	0330	0350	0500	0550	0600	0650	0700	0750
VT	00 P1-P2-P3-P4 R1-R2-R3-R4	17	17	17	17	13	13	13	13	22	23
	01-02-03-04	13	13	13	13	10	10	10	10	22	23
GP	A	-	-	-	-	GP2x2	GP2x2	GP2x2	GP2x2	GP2x3	GP10x3
	E	GP3	GP4	GP4	GP4	GP2x2	GP2x2	GP2x2	GP2x2	GP2x3	GP10x3
TRX1	ALL	•	•	•	•	•	•	•	•	•	•
DRE	ALL	281	301	331	351	501	551	601	651	701	751
RIF *	ALL	•	•	•	•	•	•	•	•	•	•
AER485P1	ALL	•	•	•	•	•	•	•	•	•	•
PGD1	ALL	•	•	•	•	•	•	•	•	•	•
AERWEB300-6	ALL	•	•	•	•	•	•	•	•	•	•
AERWEB300-18	ALL	•	•	•	•	•	•	•	•	•	•
AERWEB300-6G	ALL	•	•	•	•	•	•	•	•	•	•
AERWEB300-18G	ALL	•	•	•	•	•	•	•	•	•	•

*** Please contact us.**

UNIT CONFIGURATOR

By suitably combining the numerous options available it is possible to configure each model in such a way as to meet the most demanding of system requirements.

Field:

1 2 3 Code NRP

4 5 6 7 Size 0280, 0300, 0330, 0350, 0500, 0550, 0600, 0650, 0700, 0750

8 Version

- **A** High efficiency (not available for sizes 0280÷0350)
- **E** Silenced high efficiency (data on demand for sizes 0500÷0750)

9 Type of system:

- **2** 2 pipe system (cooling + DHW heating)
- **4** 4 pipe system (cooling + heating)

10 Coil

- **°** Aluminium
- **R** Copper
- **S** Tinned copper
- **V** Coated aluminium (epoxy paint)

11 Fan

- **I** Inverter

12 Power supply

- **6** 230/3/60 with magnet circuit breakers
- **7** 460/3/60 with magnet circuit breakers
- **8** 575/3/60 with magnet circuit breakers

13 14 System side hydronc kit

- **00** Without hydronic kit
- **01** Tank and single low head pump (not available for sizes 0800÷1800)
- **02** Tank and single low head pump and reserve pump (not available for sizes 0800÷1800)
- **03** Tank and single high head pump (not available for sizes 0800÷1800)
- **04** Tank and single high head pump and reserve pump (not available for sizes 0800÷1800)
- **P1** Single low head pump
- **P2** Single low head pump and reserve pump
- **P3** Single high head pump
- **P4** Single high head pump and reserve pump

15 16 DHW side idronic kit ①

- **00** Without hydronic kit
- **R1** Single low head pump
- **R2** Single low head pump and reserve pump
- **R3** Single high head pump
- **R4** Single high head pump and reserve pump

① **DHW SIDE/SYSTEM SIDE**
DHW side, production of domestic hot water, in 2-pipe systems.
System side, production of hot water, in 4-pipe systems.

POSSIBLE CONFIGURATIONS BETWEEN HYDRONIC KITS

System hydronic unit \ Recovery hydronic unit	°	R1	R2	R3	R4
°	•	•	•	•	•
01	•	n.a.	n.a.	n.a.	n.a.
02	•	n.a.	n.a.	n.a.	n.a.
03	•	n.a.	n.a.	n.a.	n.a.
04	•	n.a.	n.a.	n.a.	n.a.
05	•	n.a.	n.a.	n.a.	n.a.
06	•	n.a.	n.a.	n.a.	n.a.
07	•	n.a.	n.a.	n.a.	n.a.
08	•	n.a.	n.a.	n.a.	n.a.
P1	•	•	•	•	•
P2	•	•	•	•	•
P3	•	•	•	•	•
P4	•	•	•	•	•

KEY:
- • Avaiable
- **n.a.** Not avaiable

TECHNICAL DATA

Mod. NRP Multipurpose for 2-pipe system			0280	0300	0330	0350	0500	0550	0600	0650	0700	0750
Cooling system side												
Cooling capacity	A	ton	-	-	-	-	22.73	26.83	32.65	37.03	41.16	44.93
	E	ton	12.32	14.13	16.21	20.29			data on demand			
Total input power	A	kW	-	-	-	-	28.40	33.67	40.62	46.30	51.78	56.01
	E	kW	15.25	17.65	20.05	25.42			data on demand			
Water flow rate	A	gpm	-	-	-	-	54.43	64.26	78.19	88.69	98.58	107.61
	E	gpm	29.51	33.85	33.83	48.60			data on demand			
Total pressure drop	A	PSI	-	-	-	-	2.03	2.47	4.64	9.60	6.36	4.79
	E	PSI	1.74	2.18	2.18	2.47			data on demand			
ENERGY INDICES												
EER	A	BTU/W	-	-	-	-	9.61	9.57	9.65	9.61	9.55	9.64
	E	BTU/W	9.71	9.62	9.71	9.59			data on demand			

			0280	0300	0330	0350	0500	0550	0600	0650	0700	0750
Heating capacity	A	BTU/h	-	-	-	-	328.258	381.646	479.474	536.314	590.505	660.103
	E	BTU/h	184.010	213.353	242.695	304.776			data on demand			
Total input power	A	kW	-	-	-	-	31.01	36.53	46.58	51.18	56.58	63.51
	E	kW	17.24	19.94	22.65	27.32			data on demand			
Water flow rate	A	gpm	-	-	-	-	73	85	106	119	131	147
	E	gpm	41	47	54	68			data on demand			
Total pressure drop	A	PSI	-	-	-	-	**3.3**	**4.0**	**6.9**	**7.9**	**9.7**	**7.2**
	E	PSI	2.8	3.4	3.4	3.9			data on demand			
ENERGY INDICES												
COP	A	W/W	-	-	-	-	3.10	3.06	3.02	3.07	3.06	3.05
	E	W/W	3.13	3.14	3.14	3.27			data on demand			

			0280	0300	0330	0350	0500	0550	0600	0650	0700	0750
Cooling wit heat recovery	A	ton	-	-	-	-	**27.38**	**33.41**	**40.94**	**46.36**	**51.66**	**56.76**
	E	ton	**15.14**	**17.89**	**20.55**	**26.05**			**data on demand**			
Cooling capacity	A	ton	-	-	-	-	20.64	24.57	29.92	34.01	37.89	41.60
	E	ton	11.17	13.19	15.12	19.38			data on demand			
Total input power	A	kW	-	-	-	-	24.94	32.75	40.80	45.70	51.00	56.10
	E	kW	14.69	17.39	20.10	24.70			data on demand			
Water flow rate Evaporator	A	gpm	-	-	-	-	49.48	58.89	71.71	81.53	90.82	99.72
	E	gpm	26.77	31.62	36.25	46.46			data on demand			
Evaporator pressure drops SYSTEM SIDE	A	PSI	-	-	-	-	1.92	2.46	3.90	4.62	5.73	4.14
ENERGY INDICES												
TER - Total Efficiency Ratio	-	W/W	6.30	6.28	6.24	6.47	6.77	6.23	6.11	6.18	6.18	6.17

COOLING CONDITIONS: AHRI STANDARD

System water outlet	6.7°C - 44.06°F
System water flow	0.043 l/s per kW
External air temperature	35°C - 95°F

TOTAL RECOVERY CONDITIONS:

System heat exchanger

Water outlet	6.7°C / 44.06°F
Water flow	0.043 l/s per kW

DHW / System heat exchanger

Water inlet	40°C / 104°F
Water outlet	45°C / 113°F

HEATING CONDITIONS:

DHW / System water inlet	40°C - 104°F
DHW / System water outlet	45°C - 113°F
External air temperature d.b./w.b.	7/6°C - 44.6°F/42.8

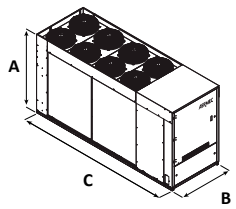
TECHNICAL DATA

GENERAL DATA				0280	0300	0330	0350	0500	0550	0600	0650	0700	0750
SCROLL COMPRESSORS													
Quantity / circuits		All	n°/ n°	2 / 2	2 / 2	2 / 2	2 / 2	3 / 2	3 / 2	4 / 2	4 / 2	4 / 2	4 / 2
Refrigerant type All		type	All	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
Charges		circuit C1	lbs C1	21.4	26.5	26.5	30.9	30.0	30.9	57.3	57.3	57.3	97.0
		circuit C2	lbs C1	21.4	26.5	26.5	30.9	27.3	27.3	57.3	57.3	57.3	97.0
EXCHANGERS USER SIDE													
Water connections (in/out)		-	inch	2"½	2"½	2"½	2"½	2"½	2"½	2"½	2"½	2"½	3"
EC INVERTER FANS													
Numbers		-	n°	8	8	8	8	2	2	3	3	3	4
Air flow rate		-	cfm	44000	44000	44000	41000	45000	45000	68000	68000	68000	92000
SOUD DATA													
Sound pressure	(2)	A	dB(A)	42	43	45	46	43	44	45	46	46	47
	(2)	E	dB(A)	-	-	-	-	51	52	53	54	54	54
Sound power	(2)	A	dB(A)	74	75	77	78	75	76	77	78	78	79
	(2)	E	dB(A)	-	-	-	-	83	84	85	86	86	86

Sound power
Aermec determines sound power values on the basis of measurements made in accordance with UNI EN ISO 9614-2, as required for Eurovent certification.
Sound pressure
Sound pressure in free field, at 10 m distance from the external surface of the unit (in accordance with UNI EN ISO 3744).
(1) The electrical data of the versions without hydronic module integrated
(2) Calculated in cooling mode
Note: For more information, refer to the selection program Magellan or the technical documentation available on the website www.aermec.com

DIMENSIONS (in)

NRP 0280-0300-0330-0350



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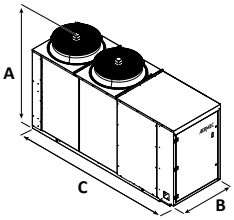

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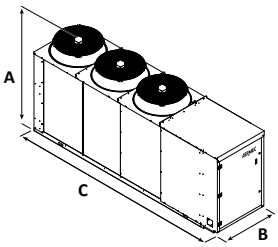

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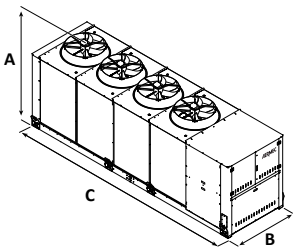

Mod. NRP			Vers	0280	0300	0330	0350	0500	0550	0600	0650	0700	0750
Height	(inch)	A	Alls	63.2	63.2	63.2	63.2	73.8	73.8	73.8	73.8	73.8	77.8
Width	(inch)	B	Alls	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	43.3	59.1
Depth	(inch)	C	Alls	126.0	126.0	126.0	126.0	131.6	131.6	170.9	170.9	170.9	210.8
Weight when empty	(lb)			1948.9	2004.0	2061.3	2244.3	2464.8	2570.6	3209.9	3262.8	3406.1	4931.7

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NRP

Multipurpose
Air/Water for outdoor installation
Axial fans, scroll compressor
Cooling capacity 51,71/120,35 tons
Heating capacity 738.278/1.689.276 BTU/h

60Hz | HFC Refrigerant R410A | Intertek

- **DESIGNED FOR 2 AND 4-PIPE SYSTEMS**
- **HIGH EFFICIENCY VERSION**
- **HIGH EFFICIENCY EVEN AT PART LOAD**
- **OPTION VERSION WITH BUILT-IN HYDRONIC KIT**

FEATURES

NRP is the range of multipurpose external units operating on refrigerant R410A, designed for **2 or 4-pipe systems.** With just one unit simultaneous and independent requests for hot and chilled water can be accommodated all year round.

Version
NRP_A Multipurpose high efficiency version
NRP_E Multipurpose high efficiency low noise version

- **Operational limits (1)**
- max. external air temperature 46°C Cooling mode
- Maximum leaving water temperature 55°C Heating mode
- 2 refrigerant circuits
- Heat exchangers optimised to benefit from the excellent heat transfer characteristics of R410A.
- flow switch as standard supply
- Water filter
- Options for integrated hydronic modules with pumps:
- Pumps or only pumps
- expansion tank
- Safety valve
- Pressure gauge
- Axial fans for extremely quiet operation
- Microprocessor controls.
  - Control from the entering water temperature, with the possibility of selecting control of the leaving water temperature.
  - Condensing control in summer with a 0-10 V modulating signal based on pressure and compensated for external air temperature
  - Evaporating control in summer for heat pump operation
  - Intelligent defrost control on drop of pressure
  - Automatic rotation of compressors and pumps based on operating hours
  - Load limiting safety control
- Metallic protective cabinet with anti-corrosion polyester paint

ACCESSORIES

AVX ANTI-VIBRATION MOUNTS
Group of anti-vibration mounts.

GP PROTECTION GRIDS
Protect the external coil from blows and prevent access to the underlying area where the compressors and the chiller circuit are housed. Every kit includes two grids.

TRX1
The storage tanks with holes and integrative resistances are delivered from the factory with plastic protective caps. Before the system is loaded, the plastic caps must be replaced with the specific TRX1 if installation of one or all the resistances is not foreseen.

AER485P1
RS-485 interface for supervising systems with MODBUS protocol.

AERWEB300
Accessory AERWEB allows remote control of a chiller through a common PC and an ethernet connection over a common browser; 4 versions available:

AERWEB300-6: Web server to monitor and remote control max. 6 units in RS485 network;

AERWEB300-18: Web server to monitor and remote control max. 18 units in RS485 network;

AERWEB300-6G: Web server to monitor and remote control max. 6 units in RS485 network with integrated GPRS modem;

AERWEB300-18G: Web server to monitor and remote control max. 18 units in RS485 network with integrated GPRS modem;

PGD1
Graphical display, which allows complete management of the unit like the one on board the machine. Can be controlled up to 50 m away with a telephone cable, 200 m with a shielded AWG 24 cable.

RIF
Current rephaser. Connected in parallel to the motor, it allows a reduction of the input current (approx. 10%). It can only be installed in the factory and so must be requested on ordering.

ACCESSORIES COMPATIBILITY

NRP	VERSION	0800	0900	1000	1250	1400	1500	1650	1800
AVX	00	AVX7030	AVX7030	AVX7030	AVX7031	AVX7031	AVX7031	AVX7032	AVX7032
	P1-P2-P3-P4 R1-R2-R3-R4	AVX7030	AVX7030	AVX7030	AVX7031	AVX7031	AVX7031	AVX7031	AVX7031
GP	A	GP260	GP260	GP260	GP350	GP350	GP350	GP500	GP500
DRE	ALL	801	901	1001	1251	1401	1501	1651	1801
RIF *	ALL	•	•	•	•	•	•	•	•
AER485P1	ALL	•	•	•	•	•	•	•	•
PGD1	ALL	•	•	•	•	•	•	•	•
AERWEB300-6	ALL	•	•	•	•	•	•	•	•
AERWEB300-18	ALL	•	•	•	•	•	•	•	•
AERWEB300-6G	ALL	•	•	•	•	•	•	•	•
AERWEB300-18G	ALL	•	•	•	•	•	•	•	•

*** Please contact us.**

UNIT CONFIGURATOR

By suitably combining the numerous options available it is possible to configure each model in such a way as to meet the most demanding of system requirements.

NAME **NRP**

SIZE 0800-0900-1000-1250-1400-1500-1650-1800

VERSION

A High efficiency

E Silenced high efficiency (data on demand for sizes 0800÷1800)

TYPE OF SYSTEM:

2 2 pipe system (cooling + DHW heating)

4 4 pipe system (cooling + heating)

COIL

° Aluminium

R Copper

S Tinned copper

V Coated aluminium (epoxy paint)

FAN

I Inverter

POWER SUPPLY

6 230/3/60 with magnet circuit breakers

7 460/3/60 with magnet circuit breakers

8 575/3/60 with magnet circuit breakers

9 208/3/60 with magnet circuit breakers

SYSTEM SIDE HYDRONC KIT

00 Without hydronic kit

P1 Single low head pump

P2 Single low head pump and reserve pump

P3 Single high head pump

P4 Single high head pump and reserve pump

DHW SIDE IDRONIC KIT (1)

00 Without hydronic kit

R1 Single low head pump

R2 Single low head pump and reserve pump

R3 Single high head pump

R4 Single high head pump and reserve pump

(1) DHW SIDE/SYSTEM SIDE
DHW side, production of domestic hot water, in 2-pipe systems.
System side, production of hot water, in 4-pipe systems.

POSSIBLE CONFIGURATIONS BETWEEN HYDRONIC KITS

		Recovery hydronic unit				
		SDgr	R1	R2	R3	R4
system hydronic unit	SDgr	•	•	•	•	•
	P1	•	•	•	•	•
	P2	•	•	•	•	•
	P3	•	•	•	•	•
	P4	•	•	•	•	•

Key:
• Avaiable

TECHNICAL DATA

NRB	ver.		800	900	1000	1250	1404	1504	1655	1800
Cooling capacity	A	ton	51.71	58.45	65.31	82.72	94.63	106.64	113.01	120.35
Total input power	A	kW	64.11	73.01	81.91	102.49	117.53	132.42	141.29	151.41
EER	A	BTU/Wat	9.7	9.63	9.56	9.7	9.67	9.67	9.6	9.56
IPLV	A	BTU/Wat								
Water flow rate	A	gpm	123.84	139.98	156.42	198.11	226.65	255.4	270.65	288.24
Total pressure drop without pump	A	p.s.i.	3.92	4.35	3.19	3.48	3.63	4.06	4.06	4.21
Heating capacity	A	BTU/h	738.278	830.351	928.369	1.178.567	1.338.583	1.498.599	1.594.589	1.689.276
Total input power	A	kW	70.91	79.71	87.11	111.92	126.32	140.72	149.92	158.92
COP	A	BTU/Wat	10.42	10.42	10.66	10.55	10.62	10.66	10.66	10.66
IPLV	A	BTU/Wat								
Water flow rate	A	gpm	163.85	184.29	206.04	261.57	297.09	332.6	353.9	374.92
Total pressure drop without pump	A	p.s.i.	16.37	13.89	13.69	10.67	12.95	7.43	13.42	11.61
Cooling with heat recovery	A	ton	62.34	70.97	80.2	100.51	116.02	131.32	141.12	150.76
Cooling capacity	A	ton	46.3	52.52	59.73	74.36	85.93	97.29	104.49	111.54
Total input power	A	kW	59.4	68.3	75.8	96.8	111.4	126	135.6	145.2
TER	A	BTU/Wat	21.96	21.72	22.17	21.69	21.79	21.79	21.76	21.69
IPLV	A	BTU/Wat								
Water flow rate	A	gpm	110.97	125.89	143.16	178.23	205.97	233.19	250.47	267.35
Evaporator pressure drops SYSTEM SIDE	A	p.s.i.	3.43	3.89	3.03	3.16	3.55	4.06	4.19	4.36
GENERAL DATA										
COMPRESSOR										
Compressor		Type	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
Compressor		n°	4	4	4	4	4	4	5	6
Circuit		n°	2	2	2	2	2	2	2	2
Refigerant gas		Type	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
EXCHANGER										
Exchanger		Type	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate
Quantity		n°	1	1	1	1	1	1	1	1
Water content		gal	5.28	5.94	7.98	8.69	9.88	10.83	12.02	13.21
Water connection (in/out)		ø	3"	3"	3"	4"	4"	4"	4"	4"
FANS										
Fans		Type	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter	Inverter
Numbers		n°	6	6	6	8	8	8	8	8
Air flow rate		cfm	78869	78869	78869	105944	105944	105944	105944	105944
SOUND DATA										
Sound power		dB(A)	89	92	93	94	95	96	96	96
Sound pressure 10m/33ft		dB(A)	57	60	61	62	63	64	64	64

COOLING MODE: AHRI CONDITION std 550/551
Evaporator water temperature (in/out): 12.26°C. 54.07°F / 6.67°C. 44.01°F - Evaporator water flow: 155.0 l/(h kW)
Condenser water temperature (in/out): 29.40°C. 84.92°F / 34.61°C. 94.30°F - Condenser water flow: 193.75 l/(h kW)

HEATING MODE
Evaporator water temperature (in/out): 10.0°C. 50.0°F / 5.0°C. 41.0°F
Condenser water temperature (in/out): 40.0°C. 104.0°F / 45.0°C. 113.0°Fv

HEATING DHW SIDE
Evaporator water temperature (in/out): 10.0°C. 50.0°F / 5.0°C. 41.0°F
Recovery water temperature (in/out): 40.0°C. 104.0°F / 45.0°C. 113.0°F

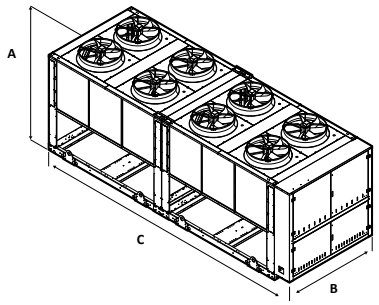
COOLING MODE WITH RECOVERY
Evaporator water temperature (in/out): 12.26°C. 54.07°F / 6.70°C. 44.06°F - Evaporator water flow: 155.0 l/(h kW)
Recovery water temperature (in/out): 40.0°C. 104.0°F / 45.0°C. 113.0°F

(The data indicated can be modified at any time by Aermec if deemed necessary).

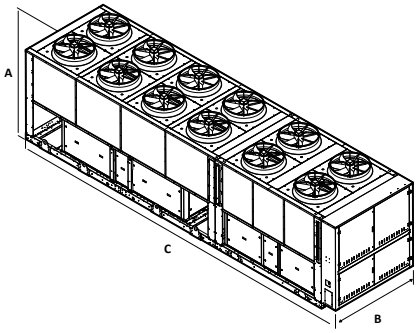
DIMENSIONS AND WEIGHT

NRP			0800	0900	1000	1250	1404	1504	1655	1800
Height	A	in	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5
Width	B	in	86.6	86.6	86.6	86.6	86.6	86.6	86.6	86.6
Depth	C	in	167.3	167.3	167.3	226.4	226.4	226.4	226.4	226.4
Weight when empty		lbs	5357.2	5754.1	6327.3	7782.3	8024.8	8201.2	8598.0	8994.9

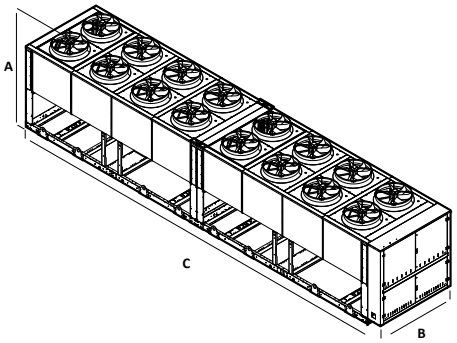
NRL 200



NRL 225



NRL 250 -280 - 300 - 330 - 360



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NXP

Multipurpose
Water/Water for indoor installation
Scroll compressors, Plate exchangers
Cooling capacity from 30.9 to 129.3 ton
Heating capacity from 398026 to 1684093 BTU/h

60Hz | HFC Refrigerant R410A | Intertek

- **MULTIPURPOSE UNITS**
- **HIGH EFFICIENCY EVEN AT PART LOAD**
- **DESIGNED FOR 2 AND 4-PIPE SYSTEMS**
- **OPTION VERSION WITH BUILT-IN HYDRONIC KIT**

FEATURES

NXP is the range of Multipurpose external units operating on refrigerant R410A, designed for 2 or 4-pipe systems. With just one unit simultaneous and independent requests for hot and chilled water can be accommodated all year round.

System type:
- 2-pipe system (cooling + DHW heating)
- 4-pipe system (cooling + heating)

All models are available in low noise version.

- Maximum leaving water temperature 131°F in heating mode.
- 2refrigerant circuits.
- High efficiency scroll compressors with low power input.
- Heat exchangers optimised to benefit from the excellent heat transfer characteristics of R410A.
- High and low pressure transducers as standard
- The built-in hydronic module includes the main water circuit components; it is available in varius configurations with one or two pumps with high or low head both on the system side and recovery side.

Advanced controls
- Microprocessor controls
- Control from the leaving water temperature
- Automatic rotation of compressors and pumps based on operating hours
- Programmable time-clock
- Load limiting safety control
- Electrical panel with wires numbered all the main components of security and control
- Externally mounted user interface with display of all operating parameters in 4 languages

Construction details:
Structure and base in hot dip galvanised sheet steel with epoxy pain finish (RAL 9002).
- High efficiency plate heat exchangers.
- Compressors with high performance and low electrical input.

ACCESSORIES

- **AER485P1**
  RS-485 interface for supervising systems with MODBUS protocol.

- **AERWEB300**
  The AERWEB option allows remote control of a chiller through a standard PC and an ethernet connection with a standard browser; 4 versions available:
  AERWEB300-6: Web server to monitor and remote control maximum 6 units on RS485 network;
  AERWEB300-18: Web server to monitor and remote control maximum 18 units on RS485 network;
  AERWEB300-6G: Web server to monitor and remote control maximum 6 units on RS485 network with integrated GPRS modem;
  AERWEB300-18G: Web server to monitor and remote control maximum 18 units on RS485 network with integrated GPRS modem.

- **MULTICHILLER_NXP**
  Control system to switch the individual chillers on and off, and command them, in a system in which several units are installed in parallel, always ensuring a constant delivery to the exchanger.

- **PGD1**
  Simplified remote panel. Allows control of basic unit functions and alarm notification. Remote mounted up to 500 m away with TWISTED PAIR SCREENED cable and TCONN6J000.

- **AVX**
  Anti-vibration mounts to be installed under the base of the unit.

- **CRATE**
  Special wood cover for transport.

NXP	Vers.	0500	0550	0600	0650	0700	0750	0800	0900	1000	1250	1400	1500	1650
AER485P1	All	•	•	•	•	•	•	•	•	•	•	•	•	•
AERWEB300	All	•	•	•	•	•	•	•	•	•	•	•	•	•
MULTICHILLER_NXP	All	•	•	•	•	•	•	•	•	•	•	•	•	•
PGD1	All	•	•	•	•	•	•	•	•	•	•	•	•	•
AVX														
NXP without pump	-	351	351	356	356	356	365	365	366	367	367	367	367	367
NXP with max 2 pump	-	368	368	368	369	369	363	363	370	371	371	372	372	372
NXP with max 4 pump	-	368	368	368	369	363	373	373	370	371	374	374	374	372
CRATE	All	•	•	•	•	•	•	•	•	•	•	•	•	•

UNIT CONFIGURATOR

By suitably combining the numerous options available it is possible to configure each model in such a way as to meet even the most demanding of system requirements.

Name	NXP
Size	0500, 0550, 0600, 0650, 0700, 0750, 0800, 0900, 1000, 1250, 1400, 1500, 1650
Thermostatic valve	
°	Mechanical, standard operations on system and geothermal side (produced water down to 39,2°F)
Y	Mechanical, low temperature operations on geothermal side (produced water range from 39,2 to 17,6°F)
System type	
2	2-pipe system (cooling + DHW heating)
4	4-pipe system (cooling + heating)
Version	
L	Low noise
Power supply	
6	230V/3/60Hz with circuit breackers
7	460V/3/60Hz with circuit breackers
8	575V/3/60Hz with circuit breackers
9	208V/3/60Hz with circuit breackers
System integrated hydronic module	
°	without pumps or buffer tank
M	n°1 low head pump
N	n°2 low head pumps
O	n°1 high head pump
P	n°2 high head pumps
Heat recovery integrated hydronic module	
°	without pumps or buffer tank
U	n°1 low head pump
V	n°2 low head pumps
W	n°1 high head pump
Z	n°2 high head pumps

NXP	PUMPS MODEL							
	M	N	O	P	U	V	W	Z
0500	•	•	•	•	•	•	•	•
0550	•	•	•	•	•	•	•	•
0600	•	•	•	•	•	•	•	•
0650	•	•	•	•	•	•	•	•
0700	•	•	•	•	•	•	•	•
0750	•	•	•	•	•	•	•	•
0800	•	•	•	•	•	•	•	•
0900	•	•	•	•	•	•	•	•
1000	•	•	•	•	•	•	•	•
1250	•	•	•	•	•	•	•	n.a.
1400	•	•	•	•	•	•	•	n.a.
1500	•	•	•	•	•	•	•	n.a.
1650	•	•	•	•	•	•	•	n.a.

• Available

n.a. Not available

TECHNICAL DATA

NXP MULTIPURPOSE FOR 2-PIPE SYSTEM		0500	0550	0600	0650	0700	0750	0800	0900	1000	1250	1400	1500	1650
Cooling system side														
Cooling capacity	ton	30.9	33.8	36.5	41.5	46.7	52.0	60.0	71.2	80.8	89.9	101.5	115.5	129.3
Total input power	kW	23.70	25.56	27.17	30.98	35.73	39.88	47.58	54.42	62.12	70.53	78.33	90.79	103.33
EER	BTU/Wat	15.68	15.89	16.14	16.09	15.72	15.65	15.13	15.71	15.63	15.31	15.56	15.29	15.03
IPLV	BTU/Wat	21.08	22.53	22.93	22.51	22.25	21.90	21.17	21.16	21.87	21.68	21.77	20.59	21.03
Water flow rate system side	gpm	74	81	88	100	112	125	144	171	194	216	244	277	310
Total pressure drop without pump	p.s.i.	1.6	1.9	1.7	2.2	2.4	1.6	2.1	1.6	1.9	2.3	2.3	3.0	3.7
Water flow rate geothermal side	gpm	93	101	109	124	140	156	180	214	242	270	304	347	388
Total pressure drop without pump	p.s.i.	2.4	2.8	2.5	3.2	3.5	2.3	3.0	2.4	2.8	3.5	3.6	4.7	5.8
Heating system side														
Heating capacity	BTU/h	398026	433564	465965	529312	599892	671509	782537	909032	1024966	1149656	1291810	1474540	1654817
Total input power	kW	28.37	31.43	33.31	38.66	43.97	48.87	57.75	65.36	74.11	84.64	94.36	109.31	124.58
COP	BTU/Wat	14.05	13.81	14.00	13.70	13.66	13.75	13.56	13.92	13.84	13.60	13.70	13.50	13.30
Water flow rate system side	gpm	89.3	97.2	104.5	118.7	134.5	150.6	175.5	203.8	229.8	257.8	289.7	330.7	371.1
Total pressure drop without pump	p.s.i.	2.4	2.8	2.5	3.1	3.4	2.3	3.1	2.3	2.6	3.2	3.3	4.3	5.3
Water flow rate geothermal side	gpm	67.7	73.4	79.2	89.4	101.2	113.5	131.7	154.2	173.6	193.7	218.1	247.8	276.8
Total pressure drop without pump	p.s.i.	1.3	1.5	1.3	1.7	1.8	1.2	1.6	1.3	1.4	1.8	1.9	2.4	3.0
Heating DHW side														
Heating capacity	BTU/h	402916	439296	471821	536245	607382	682514	795544	924001	1041007	1169409	1313146	1498899	1684093
Total input power	kW	28.48	31.46	33.39	38.68	44.08	48.44	57.15	64.89	73.56	83.88	93.42	108.01	122.85
COP	BTU/Wat	14.16	13.97	14.14	13.88	13.79	14.10	13.93	14.25	14.16	13.96	14.07	13.89	13.72
Water flow rate DHW side	gpm	90.4	98.5	105.8	120.2	136.2	153.0	178.4	207.2	233.4	262.2	294.5	336.1	377.6
Total pressure drop without pump	p.s.i.	2.1	2.5	2.3	2.9	3.2	2.1	2.8	2.2	2.5	3.1	3.2	4.1	5.2
Water flow rate geothermal side	gpm	68.7	74.6	80.4	90.9	102.8	116.3	135.0	157.9	177.6	198.6	223.5	254.2	284.5
Total pressure drop without pump	p.s.i.	1.3	1.5	1.4	1.7	1.9	1.3	1.7	1.3	1.5	1.9	1.9	2.5	3.1
Cooling mode with recovery														
Cooling capacity	ton	27.6	29.9	32.3	36.5	41.2	46.2	53.5	63.2	71.6	79.8	90.0	102.6	114.8
Recovered power	BTU/h	423406	461595	496282	563781	637859	712759	828130	970655	1099481	1231923	1385207	1584012	1778436
Total input power	kW	28.63	31.61	33.50	38.79	44.26	48.68	57.47	65.41	74.21	84.46	94.02	108.85	123.84
Water flow rate system side	gpm	66.1	71.8	77.5	87.6	98.9	111.0	128.4	151.7	171.8	191.6	216.1	246.2	275.4
Total pressure drop without pump	p.s.i.	1.3	1.5	1.4	1.7	1.8	1.2	1.6	1.3	1.5	1.8	1.8	2.4	2.9
Water flow rate DHW side	gpm	94.9	103.5	111.3	126.4	143.0	159.8	185.7	217.7	246.5	276.2	310.6	355.2	398.8
Total pressure drop without pump	p.s.i.	2.4	2.8	2.5	3.2	3.5	2.3	3.0	2.4	2.8	3.4	3.6	4.6	5.8

COOLING MODE: AHRI CONDITION std 550/551
Evaporator water temperature (in/out): 12.26°C. 54.07°F / 6.67°C. 44.01°F - Evaporator water flow: 155.0 l/(h kW)
Condenser water temperature (in/out): 29.40°C. 84.92°F / 34.61°C. 94.30°F - Condenser water flow: 193.75 l/(h kW)

HEATING MODE
Evaporator water temperature (in/out): 10.0°C. 50.0°F / 5.0°C. 41.0°F
Condenser water temperature (in/out): 40.0°C. 104.0°F / 45.0°C. 113.0°Fv

HEATING DHW SIDE
Evaporator water temperature (in/out): 10.0°C. 50.0°F / 5.0°C. 41.0°F
Recovery water temperature (in/out): 40.0°C. 104.0°F / 45.0°C. 113.0°F

COOLING MODE WITH RECOVERY
Evaporator water temperature (in/out): 12.26°C. 54.07°F / 6.70°C. 44.06°F - Evaporator water flow: 155.0 l/(h kW)
Recovery water temperature (in/out): 40.0°C. 104.0°F / 45.0°C. 113.0°F

(The data indicated can be modified at any time by Aermec if deemed necessary).

TECHNICAL DATA

NXP MULTIPURPOSE FOR 4-PIPE SYSTEM		0500	0550	0600	0650	0700	0750	0800	0900	1000	1250	1400	1500	1650
Cooling system side														
Cooling capacity	ton	30.9	33.8	36.5	41.5	46.7	52.0	60.0	71.2	80.8	89.9	101.5	115.5	129.3
Total input power	kW	23.70	25.56	27.17	30.98	35.73	39.88	47.58	54.42	62.12	70.53	78.33	90.79	103.33
EER	BTU/Wat	15.68	15.89	16.14	16.09	15.72	15.65	15.13	15.71	15.63	15.31	15.56	15.29	15.03
IPLV	BTU/Wat	21.08	22.53	22.93	22.51	22.25	21.90	21.17	21.16	21.87	21.68	21.77	20.59	21.03
Water flow rate system side	gpm	74	81	88	100	112	125	144	171	194	216	244	277	310
Total pressure drop without pump	p.s.i.	1.6	1.9	1.7	2.2	2.4	1.6	2.1	1.6	1.9	2.3	2.3	3.0	3.7
Water flow rate geothermal side	gpm	93	101	109	124	140	156	180	214	242	270	304	347	388
Total pressure drop without pump	p.s.i.	2.4	2.8	2.5	3.2	3.5	2.3	3.0	2.4	2.8	3.5	3.6	4.7	5.8
Heating system side														
Heating capacity	BTU/h	402916	439296	471821	536245	607382	682514	795544	924001	1041007	1169409	1313146	1498899	1684093
Total input power	kW	28.48	31.46	33.39	38.68	44.08	48.44	57.15	64.89	73.56	83.88	93.42	108.01	122.85
COP	BTU/Wat	14.16	13.97	14.14	13.88	13.79	14.10	13.93	14.25	14.16	13.96	14.07	13.89	13.72
Water flow rate system side	gpm	90.4	98.5	105.8	120.2	136.2	153.0	178.4	207.2	233.4	262.2	294.5	336.1	377.6
Total pressure drop without pump	p.s.i.	2.1	2.5	2.3	2.9	3.2	2.1	2.8	2.2	2.5	3.1	3.2	4.1	5.2
Water flow rate geothermal side	gpm	68.7	74.6	80.4	90.9	102.8	116.3	135.0	157.9	177.6	198.6	223.5	254.2	284.5
Total pressure drop without pump	p.s.i.	1.3	1.5	1.4	1.7	1.9	1.3	1.7	1.3	1.5	1.9	1.9	2.5	3.1
Cooling mode with recovery														
Cooling capacity	ton	27.6	29.9	32.3	36.5	41.2	46.2	53.5	63.2	71.6	79.8	90.0	102.6	114.8
Recovered power	BTU/h	423406	461595	496282	563781	637859	712759	828130	970655	1099481	1231923	1385207	1584012	1778436
Total input power	kW	28.63	31.61	33.50	38.79	44.26	48.68	57.47	65.41	74.21	84.46	94.02	108.85	123.84
Water flow rate system side	gpm	66.1	71.8	77.5	87.6	98.9	111.0	128.4	151.7	171.8	191.6	216.1	246.2	275.4
Total pressure drop without pump	p.s.i.	1.3	1.5	1.4	1.7	1.8	1.2	1.6	1.3	1.5	1.8	1.8	2.4	2.9
Water flow rate DHW side	gpm	94.9	103.5	111.3	126.4	143.0	159.8	185.7	217.7	246.5	276.2	310.6	355.2	398.8
Total pressure drop without pump	p.s.i.	2.4	2.8	2.5	3.2	3.5	2.3	3.0	2.4	2.8	3.4	3.6	4.6	5.8

COOLING MODE: AHRI CONDITION std 550/551
Evaporator water temperature (in/out): 12.26°C. 54.07°F / 6.67°C. 44.01°F - Evaporator water flow: 155.0 l/(h kW)
Condenser water temperature (in/out): 29.40°C. 84.92°F / 34.61°C. 94.30°F - Condenser water flow: 193.75 l/(h kW)

HEATING MODE
Evaporator water temperature (in/out): 10.0°C. 50.0°F / 5.0°C. 41.0°F
Condenser water temperature (in/out): 40.0°C. 104.0°F / 45.0°C. 113.0°Fv

COOLING MODE WITH RECOVERY
Evaporator water temperature (in/out): 12.26°C. 54.07°F / 6.70°C. 44.06°F - Evaporator water flow: 155.0 l/(h kW)
Recovery water temperature (in/out): 40.0°C. 104.0°F / 45.0°C. 113.0°F

(The data indicated can be modified at any time by Aermec if deemed necessary).

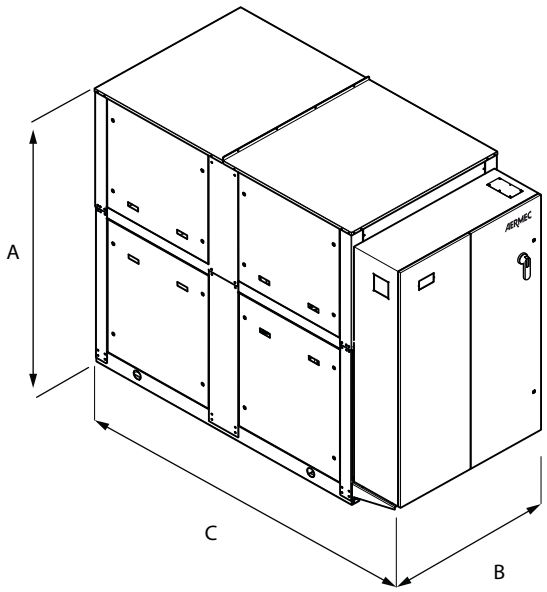
ELECTRICAL DATA

ELECTRICAL DATA NXP		0500	0550	0600	0650	0700	0750	0800	0900	1000	1250	1400	1500	1650
Power supply 230V/3~/60Hz														
Total input current in cooling mode	A	93	91	102	112	127	140	186	196	209	238	264	303	341
Total input current in heating mode	A	104	106	117	131	148	163	211	226	243	276	307	353	400
Total input current in recovery mode	A	105	106	118	132	148	162	210	224	242	274	304	349	395
Total input current cooling + recovery mode	A	105	107	118	132	149	162	211	225	243	275	306	352	398
LRA	A	404	381	421	361	433	456	532	709	734	853	892	917	979
MCA	A	125	131	136	142	182	218	237	278	314	340	362	417	466
MOP	A	181	182	192	175	233	269	293	352	388	425	448	527	575
Recommended fuse	A	175	175	175	175	225	250	250	350	350	400	400	500	500
Power supply 460V/3~/60Hz														
Total input current in cooling mode	A	42	41	46	51	57	63	84	89	95	108	120	137	154
Total input current in heating mode	A	47	48	53	59	67	74	96	102	110	125	139	160	181
Total input current in recovery mode	A	47	48	53	60	67	73	95	102	109	124	138	158	179
Total input current cooling + recovery mode	A	48	48	53	60	67	74	95	102	110	124	138	159	180
LRA	A	208	187	216	180	210	220	266	318	328	384	402	454	482
MCA	A	62	67	72	79	89	98	115	124	132	158	181	209	234
MOP	A	88	89	98	97	112	121	141	154	163	200	223	264	289
Recommended fuse	A	80	80	90	90	110	110	125	150	150	200	200	250	250
Power supply 575V/3~/60Hz														
Total input current in cooling mode	A	32	32	36	39	44	49	65	68	73	83	92	105	119
Total input current in heating mode	A	36	37	41	46	51	57	74	79	85	96	107	123	139
Total input current in recovery mode	A	36	37	41	46	52	56	73	78	84	95	106	122	138
Total input current cooling + recovery mode	A	37	37	41	46	52	57	73	79	85	96	107	123	139
LRA	A	154	137	160	122	155	163	199	251	260	324	338	350	371
MCA	A	56	53	58	57	73	87	103	105	107	130	150	183	212
MOP	A	79	73	81	70	92	107	127	130	131	164	185	232	261
Recommended fuse	A	75	70	80	70	90	100	125	125	125	150	175	225	250
Power supply 208V/3~/60Hz														
Total input current in cooling mode	A	102	101	113	124	140	155	205	217	232	263	292	335	378
Total input current in heating mode	A	115	117	130	145	163	180	234	250	269	305	339	390	442
Total input current in recovery mode	A	116	117	130	145	164	179	232	248	267	303	336	386	437
Total input current cooling + recovery mode	A	116	118	130	146	164	180	233	249	268	304	338	389	440
LRA	A	411	390	430	374	447	472	553	731	758	879	922	950	1019
MCA	A	132	137	143	148	188	224	243	284	320	346	369	423	472
MOP	A	188	188	198	181	240	275	299	358	394	431	454	533	582
Recommended fuse	A	175	175	175	175	225	250	250	350	350	400	450	500	500

GENERAL DATA

GENERAL DATA NXP		0500	0550	0600	0650	0700	0750	0800	0900	1000	1250	1400	1500	1650
COMPRESSOR														
Compressor	Type	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
N° compressor / circuit	n°	2 / 2	3 / 2	3 / 2	4 / 2	4 / 2	4 / 2	4 / 2	4 / 2	4 / 2	4 / 2	4 / 2	4 / 2	4 / 2
Refigerant gas	Type	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
EXCHANGER														
Plate exchanger	Type	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate
Quantity	n°	1	1	1	1	1	1	1	1	1	1	1	1	1
Min. water flow	gpm	43.1	43.1	52.0	52.0	58.6	74.0	74.0	111.4	122.4	122.4	148.4	148.4	148.4
Max. water flow	gpm	189.3	189.3	189.3	189.3	189.3	462.3	462.3	462.3	462.3	462.3	462.3	462.3	462.3
Water content	gal	4.4	4.4	5.3	5.3	5.9	8.0	8.0	12.0	13.2	13.2	16.0	16.0	16.0
Plate exchanger (system side. recovery side. geo side)	Type	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate
Tot. exchanger quantity	n°	3	3	3	3	3	3	3	3	3	3	3	3	3
Hydronic connection type	Type	Grooved joints	Grooved joints	Grooved joints	Grooved joints	Grooved joints	Grooved joints	Grooved joints	Grooved joints	Grooved joints	Grooved joints	Grooved joints	Grooved joints	Grooved joints
Water connection (in/out) System side	ø	2" ½	2" ½	2" ½	2" ½	2" ½	3"	3"	3"	3"	3"	3"	4"	4"
Water connection (in/out) Recovery side	ø	2" ½	2" ½	2" ½	2" ½	2" ½	3"	3"	3"	3"	3"	4"	4"	4"
Water connection (in/out) Geothermal side	ø	2" ½	2" ½	2" ½	2" ½	2" ½	3"	3"	3"	3"	3"	4"	4"	4"
SOUND DATA														
Sound power	dB(A)	79.0	78.1	79.0	79.0	79.5	80.0	82.0	85.2	87.0	88.8	90.0	91.8	93.6
Sound pressure (10m)	dB(A)	47.1	46.3	47.1	47.1	47.7	48.1	50.1	53.3	55.1	56.8	58.1	59.9	61.7

DIMENSIONS AND WEIGHT



NXP DIMENSIONS AND WEIGHT WITHOUT PUMP			0500	0550	0600	0650	0700	0750	0800	0900	1000	1250	1400	1500	1650
Height	A	in	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5
Width	B	in	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3
Depth	C	in	102.4	102.4	102.4	102.4	102.4	102.4	102.4	102.4	102.4	102.4	102.4	102.4	102.4
Empty weight		lbs	2645.5	2821.9	2932.1	3064.4	3174.7	3306.9	3505.3	4232.9	4717.9	4828.1	5202.9	5225.0	5401.3
Running mode weight		lbs	2755.3	2931.6	3064.1	3196.4	3323.3	3506.3	3704.8	4533.5	5048.3	5158.5	5604.7	5626.7	5803.1

NXP DIMENSIONS AND WEIGHT WITH PUMP			0500	0550	0600	0650	0700	0750	0800	0900	1000	1250	1400	1500	1650
Height	A	in	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5	83.5
Width	B	in	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3	49.3
Depth	C	in	135.9	135.9	135.9	135.9	135.9	135.9	135.9	135.9	147.8	147.8	147.8	147.8	147.8
Empty weight		lbs	3064.4	3196.7	3218.7	3430.4	3540.6	3805.2	3829.7	4556.4	5164.4	5270.1	5643.1	5741.2	5840.5
Running mode weight		lbs	3174.1	3306.4	3350.7	3562.3	3689.2	4004.6	4029.1	4857.0	5494.8	5600.5	6044.9	6143.0	6242.3

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CERTIFICATIONS

SAFETY CERTIFICATIONS

ETL Certifications

TUV Certifications

PERFORMANCE CERTIFICATIONS

AHRI Certifications

ICONS

60Hz Frequency

ETL Certification

TÜV Certification

AHRI Certification

Inverter Tecnology

VMF Compatibility

PLUG & PLAY Installation

FREE COOLING Mode

R401A Refrigerant gas

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