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Products Guide Pocket

North America
60Hz





AERMEC WORLD

Founded in 1961 in Bevilacqua (VR), its current headquarters and production site, Aermec has established itself worldwide over the years. Today it counts on the collaboration of about 900 employees, a capillary network of 54 sales agencies in Italy, more than 70 foreign distributors and 80 Technical Assistance Services and 8 branches in Europe and worldwide. From fan coils to high-power chillers, from air handling units to remote condensers and air conditioning units, Aermec - the company founded in 1961 by Giordano Riello that introduced the culture of air conditioning to our

country - offers ideal solutions for any type of system. There is no building or air conditioning problem that Aermec products cannot handle with optimal and technologically advanced solutions, in response to the increasingly sophisticated needs of architects, design studios and installers, both in Italy and abroad. Hotels, hospitals, theatres, museums, historical buildings, residential and commercial centres can enjoy ideal climate control thanks to Aermec technology and the experience and professionalism of its technicians.





Technology and reliability

Aermec's research centre currently houses the largest climatic test chamber in Europe for system equipment can test units rated as high as 2 MW. It is used to perform testing on chillers and heat pumps, chosen by Eurovent, up to 1500 kW.

Tests are carried out accurate to ± 0.2 °C, capable of simulating ambient temperature conditions from -20 to +55 °C. In addition, Aermec laboratories are set up to conduct noise and aerodynamic testing and measure changes in enthalpy.

Aermec quality is guaranteed by top certifications, such as Eurovent in Europe and AHRI in North America among others. Every year, a host of customers visit our company headquarters to attend customized tests in these purpose-built laboratories. Thorough procedures at the design stage, careful supplier selection, in-depth prototype testing, numerous checks in the field and vibrational analysis combine to ensure that all Aermec products are built to last and operate perfectly even under the most demanding service conditions.

MADISON HOUSE

Madison House is an apartments building designed by Handel Architects, located at 15 East 30th Street between Madison and Fifth Avenue, with 62 floors and 199 units.

Built in 2019, at 250 metres it is the tallest in the NoMad district. The striped façade features bands on light terracotta alternating with floor-to-ceiling windowed compartments.

Residents have access to amenities including a swimming pool, spa, gym, library, lounge and more.

The air conditioning systems consists of 24 NYB and 2 NLC.



NYB



NLC



VALDOSTA HIGH SCHOOL

Valdosta is the main city in the Valdosta metropolitan area, Georgia (USA) with a population of 139,588.

It is home to Valdosta State University, a regional institution of the University System of Georgia with over 10,900 students, as well as the prestigious Valdosta High School, the school with the most successful American football programme of any high school in the United States.

The City of Valdosta has invested significantly in energy savings in its school buildings: the millions of dollars saved will fund maintenance and renovation projects for the next 15 years.

For such an ambitious energy saving programme, high-efficiency WRL and NXW series water-to-water heat pumps were adopted. the design with an integrated hydronic unit also met the need for compactness dictated by the limited size of the plant rooms.



NXW



SAN FRANCISCO CONSERVATORY

It was built in 1917 and completely renovated in 2006. The project maintained the historic façade and the main architectural elements, but adapted the building to modern requirements, taking advantage of all the new possibilities offered by technology.

The new premises cover 260,000 sqft, housing classrooms, rehearsal rooms, offices and a large library that has been tripled in size from the previous one.

There are three concert halls, seating 450, 160 and 120 people respectively.



Two-thirds of the 179 installed fan coils are ducted while the rest are in a casing. They have all been fitted with electrical resistance or an additional water coil for heating.

FCZ-PO



FCZ-U



PEPSI COLA

PepsiCo, Inc. is an American multinational food, snack and beverage company based in Purchase, New York. In addition to the Pepsi-Cola brand, it owns the Gatorade, Frito-Lay, SoBe, Lay's, Naked, 7 Up and Tropicana brands, among others.

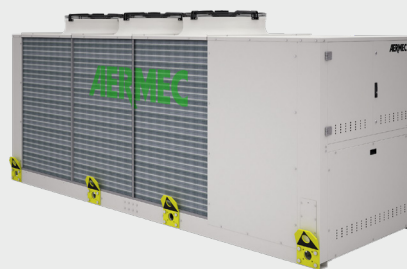
PepsiCo, with its more than 250,000 employees, sells in over 200 countries for a total annual turnover of more than 60 billion dollars. PepsiCo in Canada employs about 11,000 people in its six manufacturing plants and nine bottling plants.

These include Browning Harvey Ltd in St John's (Newfoundland), a 13,000 square metre plant with a history spanning more than 85 years.



NRL series multi-scroll heat pumps produce the cold necessary for the correct dissolution of the CO₂ in the drink, and the heat necessary to heat the fresh air in the plant and ensure the comfort of the workers.

NRL



LEGEND

Gas

Gas-R454B



Operational types:

Cooling and heating



Cooling only



DHW



Free-Cooling



Heating only



Multipurpose



For four pipes plants



For two pipes plants



Kind of compressors:

Centrifugal compressor



Inverter centrifugal compressor



Rotary compressor



Inverter rotary compressor



Scroll compressor



Inverter scroll compressor



Alternative compressor



Kind of fans:

Axial fan



Inverter axial fan



Centrifugal fan



Inverter centrifugal fan



EC fan



Inverter EC fan



Installation types:

Ceiling installation



Ducted installation



Floor installation



Wall installation



Air indoor unit



Air outdoor unit



Kind of exchangers:

Plate exchanger



Shell and tube heat exchanger



Pump kit



Water tank



Extra:

Inverter device



Compatible with ModBus protocol



Cold Plasma device



Touch control



Compatible with VMF system (Variable Multi Flow)



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01

FAN COILS

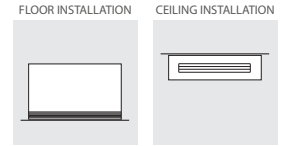
FCZ / FCZI / VED / VEDI / FCW



FCZ 120 US



- Very quiet
- Vertical and horizontal installation



SPECIFICATIONS:



FCZ	100	150	200	250	300	350	400	450	500	550	600	650
● Mbtu/h (1)	8.1	9.0	12.6	13.8	18.7	20.9	24.3	26.6	29.0	33.2	34.1	39.2
● Mbtu/h (2)	3.4	4.3	5.5	6.6	9.0	10.3	12.3	13.8	14.5	16.3	15.9	19.3

FCZ	700	750	800	850	900	950	1000
● Mbtu/h (1)	37.5	42.6	40.9	47.7	51.6	58.3	58.0
● Mbtu/h (2)	18.7	20.9	20.8	23.6	23.6	29.3	26.0

(1) Heating performance: Room air temperature 68 °F d.b.; Water (in/out) 158 °F/140 °F
 (2) Cooling performances: Room air temperature 80.6 °F d.b./66.2 °F w.b.; Water (in/out) 44.6 °F/53.6 °F
 The values shown in the table refer to the maximum speed available

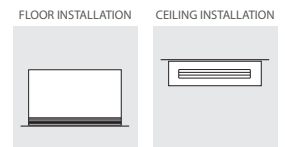
FCZ	101	201	301	401	501	601	701	801	901	1001
● Mbtu/h (1)	2.2	3.0	4.8	5.9	7.0	8.2	9.3	10.1	10.8	11.5
● Mbtu/h (2)	3.4	5.4	9.0	12.2	14.5	15.8	18.7	20.8	23.5	26.0

(1) Heating performance: Room air temperature 68 °F d.b.; Water (in/out) 149 °F/131 °F
 (2) Cooling performances: Room air temperature 80.6 °F d.b./66.2 °F w.b.; Water (in/out) 44.6 °F/53.6 °F
 The values shown in the table refer to the maximum speed available

FCZI EUF



- Electric saving equal to 50% with respect to a fan coil with 3-speed motor
- Total comfort: reduced variations in temperature and relative humidity
- Vertical and horizontal installation
- Very quiet



SPECIFICATIONS:



FCZI	200	250	300	350	400	450	500	550	700	750	900	950
● Mbtu/h (1)	12.6	13.8	18.8	21.0	24.4	26.7	29.0	33.3	37.5	42.7	51.7	58.3
● Mbtu/h (2)	5.5	6.6	9.0	10.3	12.3	13.8	14.5	16.3	18.8	21.0	23.6	29.3

(1) Heating performance: Room air temperature 68 °F d.b.; Water (in/out) 158 °F/140 °F
 (2) Cooling performances: Room air temperature 80.6 °F d.b./66.2 °F w.b.; Water (in/out) 44.6 °F/53.6 °F
 The values shown in the table refer to the maximum speed available

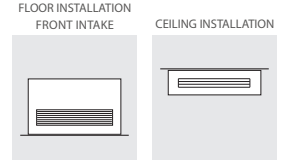
FCZI	201	301	401	501	701	901
● Mbtu/h (1)	5.5	8.7	10.6	12.7	16.9	19.5
● Mbtu/h (2)	5.5	9.0	12.3	14.5	18.8	23.6

(1) Heating performance: Room air temperature 68 °F d.b.; Water (in/out) 149 °F/131 °F
 (2) Cooling performances: Room air temperature 80.6 °F d.b./66.2 °F w.b.; Water (in/out) 44.6 °F/53.6 °F
 The values shown in the table refer to the maximum speed available

FCZI EUP/EUPAF



- Electric saving equal to 50% with respect to a fan coil with 3-speed motor
- Suitable for duct-type installations too
- Total comfort: reduced variations in temperature and relative humidity
- Vertical and horizontal installation
- Very quiet



SPECIFICATIONS:



FCZI	200	250	300	350	400	450	500	550	700	750	900	950
● Mbtu/h (1)	12.6	13.8	18.8	21.0	24.4	26.7	29.0	33.3	37.5	42.7	51.7	58.3
● Mbtu/h (2)	5.5	6.6	9.0	10.3	12.3	13.8	14.5	16.3	18.8	21.0	23.6	29.3

(1) Heating performance: Room air temperature 68 °F d.b.; Water (in/out) 158 °F/140 °F
 (2) Cooling performances: Room air temperature 80.6 °F d.b./66.2 °F w.b.; Water (in/out) 44.6 °F/53.6 °F
The values shown in the table refer to the maximum speed available

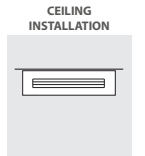
FCZI	201	301	401	501	701	901
● Mbtu/h (1)	5.5	8.7	10.6	12.7	16.9	19.5
● Mbtu/h (2)	5.5	9.0	12.3	14.5	18.8	23.6

(1) Heating performance: Room air temperature 68 °F d.b.; Water (in/out) 149 °F/131 °F
 (2) Cooling performances: Room air temperature 80.6 °F d.b./66.2 °F w.b.; Water (in/out) 44.6 °F/53.6 °F
The values shown in the table refer to the maximum speed available

VED US



- Horizontal installation
- Large range of available static pressure
- Inspectable ventilation group
- Electricity savings of 50% compared with a fan coil with multi-speed motor
- Total comfort: reduced variations in temperature and humidity



SPECIFICATIONS:



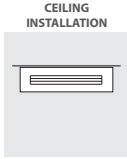
VED	030	040	130	140	230	240	330	340
● Mbtu/h (1)	12.5	13.3	21.4	22.4	24.4	26.9	35.8	37.3
● Mbtu/h (2)	5.5	6.4	10.2	11.2	11.6	13.7	17.0	18.2

(1) Heating performance: Room air temperature 68 °F d.b.; Water (in/out) 158 °F/140 °F
 (2) Cooling performances: Room air temperature 80.6 °F d.b./66.2 °F w.b.; Water (in/out) 44.6 °F/53.6 °F
The values shown in the table refer to the maximum speed available

VED US



- Horizontal installation
- Large range of available static pressure
- Inspectable ventilation group
- Electricity savings of 50% compared with a fan coil with multi-speed motor
- Total comfort: reduced variations in temperature and humidity



SPECIFICATIONS:



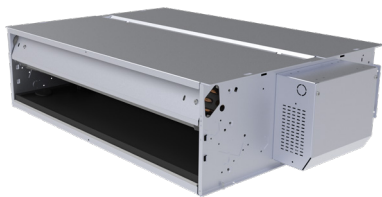
VED	430	440	530	540	630	640	730	740
● Mbtu/h (1)	54.4	61.7	59.9	67.9	92.1	111.5	98.2	108.1
● Mbtu/h (2)	23.7	27.3	26.4	30.6	42.7	51.4	47.2	54.8

(1) Heating performance: Room air temperature 68 °F d.b.; Water (in/out) 158 °F/140 °F
 (2) Cooling performances: Room air temperature 80.6 °F d.b./66.2 °F w.b.; Water (in/out) 44.6 °F/53.6 °F
The values shown in the table refer to the maximum speed available

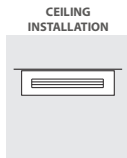
VED	441	541	641	741
● Mbtu/h (1)	24.8	26.9	41.9	44.2
● Mbtu/h (2)	27.3	30.6	51.4	54.8

(1) Heating performance: Room air temperature 68 °F d.b.; Water (in/out) 149 °F/131 °F
 (2) Cooling performances: Room air temperature 80.6 °F d.b./66.2 °F w.b.; Water (in/out) 44.6 °F/53.6 °F
The values shown in the table refer to the maximum speed available

VED IEU



- Horizontal installation
- Large range of available static pressure
- Inspectable ventilation group
- Electricity savings of 50% compared with a fan coil with multi-speed motor
- Total comfort: reduced variations in temperature and humidity



SPECIFICATIONS:



VEDI	030	040	130	140	230	240	330	340
● Mbtu/h (1)	12.6	13.4	21.5	22.5	24.4	27.0	35.9	37.4
● Mbtu/h (2)	5.4	6.3	10.1	11.1	11.5	13.5	16.8	18.0

(1) Heating performance: Room air temperature 68 °F d.b.; Water (in/out) 158 °F/140 °F
 (2) Cooling performances: Room air temperature 80.6 °F d.b./66.2 °F w.b.; Water (in/out) 44.6 °F/53.6 °F
The values shown in the table refer to the maximum speed available

VED IEU



- Horizontal installation
- Large range of available static pressure
- Inspectable ventilation group
- Electricity savings of 50% compared with a fan coil with multi-speed motor
- Total comfort: reduced variations in temperature and humidity



SPECIFICATIONS:



VEDI	530	540	730	740
● Mbtu/h (1)	59.9	67.9	98.9	128.6
● Mbtu/h (2)	25.2	29.6	45.9	53.6

(1) Heating performance: Room air temperature 68 °F d.b.; Water (in/out) 158 °F/140 °F
 (2) Cooling performances: Room air temperature 80.6 °F d.b./66.2 °F w.b.; Water (in/out) 44.6 °F/53.6 °F
 The values shown in the table refer to the maximum speed available

VEDI	541	741
● Mbtu/h (1)	26.9	44.22
● Mbtu/h (2)	30.6	57.3

(1) Heating performance: Room air temperature 68 °F d.b.; Water (in/out) 149 °F/131 °F
 (2) Cooling performances: Room air temperature 80.6 °F d.b./66.2 °F w.b.; Water (in/out) 44.6 °F/53.6 °F
 The values shown in the table refer to the maximum speed available

FCW

- Version with internal 3-way valve
- Compact dimensions



SPECIFICATIONS:



FCW (HZ1-HZC1)	2260	3260	4260	5260
● Mbtu/h (1)	6.9	8.8	32.7	20.5
● Mbtu/h (2)	7.0	8.8	16.3	20.6

(1) Heating performance: Room air temperature 68 °F d.b.; Water (in/out) 113 °F/104 °F
 (2) Cooling performances: Room air temperature 80.6 °F d.b./66.2 °F w.b.; Water (in/out) 44.6 °F/53.6 °F
 The values shown in the table refer to the maximum speed available

FCW (HZVLC1-HZ4PC1-HZVL1)	2260	3260	4260	5260
● Mbtu/h (1)	8.1	10.1	20.7	25.3
● Mbtu/h (2)	8.1	10.1	20.8	25.4

(1) Heating performance: Room air temperature 68 °F d.b.; Water (in/out) 113 °F/104 °F
 (2) Cooling performances: Room air temperature 80.6 °F d.b./66.2 °F w.b.; Water (in/out) 44.6 °F/53.6 °F
 The values shown in the table refer to the maximum speed available

02

AIR COOLED CHILLERS AND HEAT PUMPS

NYG / TBA



NYG 1000-1800

- High efficiency also at partial loads
- Low refrigerant charge
- Night mode



SPECIFICATIONS:



NYG	1000	1400	1800
• ton	88.46	116.7	144.9

Reference conditions: AHRI std 550/590 I-P; Service side water 54.01°F / 44.01°F; Outside air 95°F

NYG 0500

- Easy and quick to install compact
- Reliability and modularity



SPECIFICATIONS:



NYG	0500
• ton	27.82

Reference conditions: AHRI std 550/590 I-P; Service side water 54.01°F / 44.01°F; Outside air 95°F

NYG 1000-1800 H



- High efficiency also at partial loads
- Low refrigerant charge
- Night mode



SPECIFICATIONS:



NYG	1000	1400	1800
● ton (1)	83.38	110.0	136.6
● BTU/h (2)	952600	1256000	1560000

(1) Cooling performances:
Reference conditions AHRI std 550/590 I-P; Service side water 54.01°F / 44.01°F; Outside air 95°F

(2) Heating performances:
Reference conditions AHRI std 550/590 I-P; Service side water 104°F / 113°F; Outside air 44.6°F

NYG 0500 H



- Easy and quick to install compact
- Reliability and modularity
- Hot water up to 150°F (only for 0500 K)



SPECIFICATIONS:



NYG	0500 H	0500 G *	0500 K *
● ton (1)	26.68	29.9	29.9
● BTU/h (2)	329200	379273	379273

(1) Cooling performances:
Reference conditions AHRI std 550/590 I-P; Service side water 54.01°F / 44.01°F; Outside air 95°F

(2) Heating performances:
Reference conditions AHRI std 550/590 I-P; Service side water 104°F / 113°F; Outside air 44.6°F

* Work in progress certification

TBA



- High efficiency also at partial loads
- Microchannel coil
- Low compressor peak current (only 6 Amps!)
- Evaporator with low refrigerant charge
- Available also with R513A (XP10) refrigerant



SPECIFICATIONS:



TBA	1300	1350	2300	2325	2350	3300	3340	3350
● ton	95.33	123.01	178.36	206.04	233.71	267.54	313.67	355.18

System side water heat exchanger 54.0 °F / 44.1 °F; External air 95°F

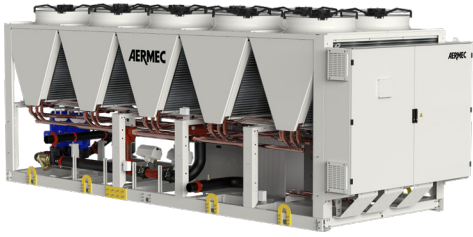
03

FREE-COOLING

NYG / TBA



NYG 1000-1800



- High efficiency also at partial loads
- Low refrigerant charge
- Night mode



SPECIFICATIONS:



NYG	1000	1400	1800
• ton (1)	86.69	114.3	142.0
• ton (2)	56.33	74.87	93.41

(1) Cooling performance chiller operation:
Reference conditions AHRI std 550/590 I-P; Service side water 54.01°F / 44.01°F; Outside air 95°F

(2) Cooling performances with free-cooling:
User side exchanger water 53.6 °F / * °F; Outside air 35.6 °F

NYG 0500



- Easy and quick to install compact
- Reliability and modularity



SPECIFICATIONS:



NYG	0500
• ton (1)	27.10
• ton (2)	18.48

(1) Cooling performance chiller operation:
Reference conditions AHRI std 550/590 I-P; Service side water 54.01°F / 44.01°F; Outside air 95°F

(2) Cooling performances with free-cooling:
User side exchanger water 53.6 °F / * °F; Outside air 35.6 °F

TBA



- High efficiency also at partial loads
- Microchannel coil
- Low compressor peak current (only 6 Amps!)
- Evaporator with low refrigerant charge
- Available also with R513A (XP10) refrigerant



SPECIFICATIONS:



TBA	1300	1350	2300	2325	2350	3300	3350
● ton (1)	90.72	119.93	173.85	202.96	233.71	267.54	345.96
● ton (2)	82.86	112.50	145.42	191.16	218.92	247.45	291.12

(1) Cooling performance chiller operation:
System side water heat exchanger 53.6 °F / 44.6 °F; External air 95°F

(2) Cooling performances with free-cooling:
User side exchanger water 53.6 °F / * °F; Outside air 35.6 °F

04

WATER COOLED CHILLERS AND HEAT PUMPS

WFGI



WFGI



- Production of hot water from condenser up to 158°F.
- Production of chilled water down to 17.6°F.



SPECIFICATIONS:



WFGI	1251	1601	2101	2502	3202	4202	4802	6402
● ton (1)	252,52	321,88	393,75	503,51	647,96	802,87	1068,59	1202,00
● BTU/h (2)	962480	1231868	1520334	1923400	2469933	3099940	4105744	4582100

(1) Cooling performances:
Water user side 54.0 °F / 44.0 °F; Water source side 85.0 °F / 94.3 °F

(2) Heating performances:
Water user side a 104.0 °F / 113.0 °F; Water source side 50.0 °F / 44.6 °F

05

MULTI-PURPOSE

NYP



NYP



- Units designed for 4-pipe systems
- High efficiency also at partial loads
- Simultaneous and independent production of hot and chilled water



SPECIFICATIONS:



NYG	1000	1400	1800
● ton (1)	82.20	108.5	134.7
● BTU/h (2)	943700	1244000	1545000

(1) Cooling performance:
Reference conditions AHRI std 550/590 I-P; Service side water 54.01°F / 44.01°F; Outside air 95°F

(2) Heating performance:
Reference conditions AHRI std 550/590 I-P; Service side water 104 °F / 113 °F; Outside air 44.6 °F

NOTES



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