AERMEC

NEW

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.

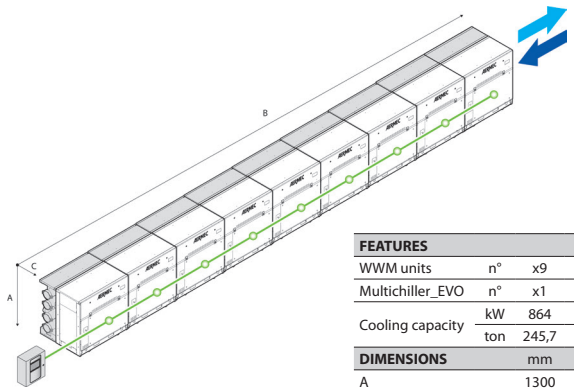
KREC_WWM
Cable entries box in order to facilitate the electrical installation.

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		•	•	•

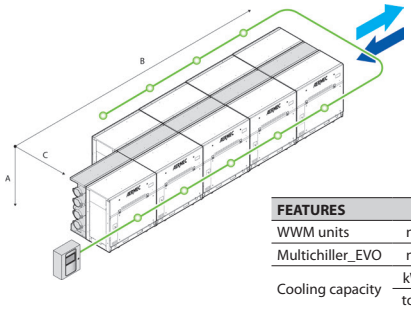
MODULARITY OPTIONS

CONFIGURATION 1: IN LINE



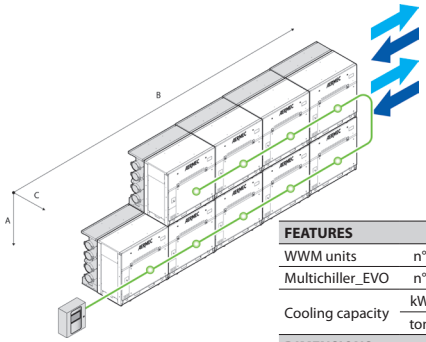
FEATURES			
WWM units	n°	x9	
Multichiller_EVO	n°	x1	
Cooling capacity	kW	864	
	ton	245,7	
DIMENSIONS		mm	in
A		1300	51.2
B		11970	471.6
C		1150	45.3

CONFIGURATION 2: BACK TO BACK



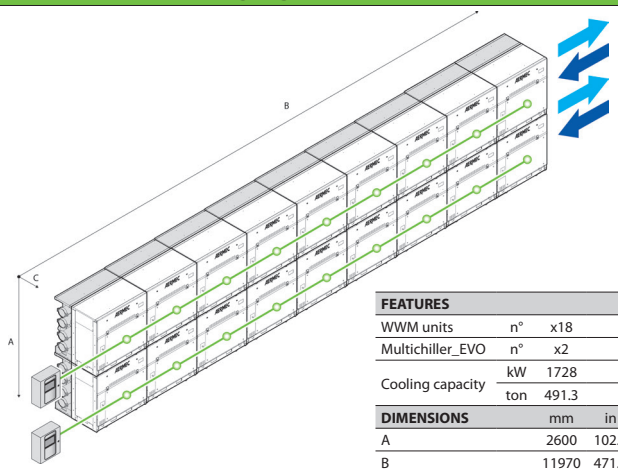
FEATURES			
WWM units	n°	x9	
Multichiller_EVO	n°	x1	
Cooling capacity	kW	864	
	ton	245,7	
DIMENSIONS		mm	in
A		1300	51.2
B		6650	262.0
C		1850	72.9

CONFIGURATION 3.1: STACK IN LINE



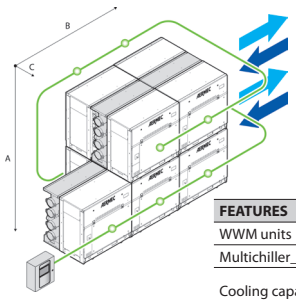
FEATURES			
WWM units	n°	x9	
Multichiller_EVO	n°	x1	
Cooling capacity	kW	864	
	ton	245.7	
DIMENSIONS		mm	in
A		2600	102.4
B		6650	262.0
C		1150	45.3

CONFIGURATION 3.2: STACK IN LINE



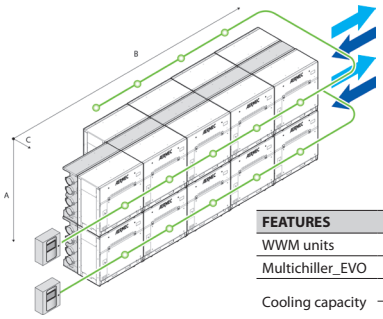
FEATURES			
WWM units	n°	x18	
Multichiller_EVO	n°	x2	
Cooling capacity	kW	1728	
	ton	491.3	
DIMENSIONS		mm	in
A		2600	102.4
B		11970	471.6
C		1150	45.3

CONFIGURATION 4.1: STACK IN LINE BACK TO BACK



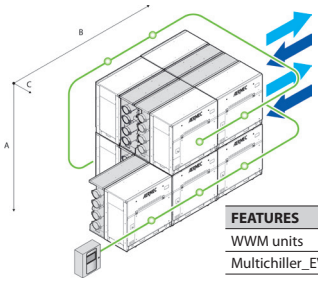
FEATURES			
WWM units	n°	x9	
Multichiller_EVO	n°	x1	
Cooling capacity	kW	864	
	ton	245.7	
DIMENSIONS		mm	in
A		2600	102.4
B		3990	157.2
C		1850	72.9

CONFIGURATION 4.2: STACK IN LINE BACK TO BACK



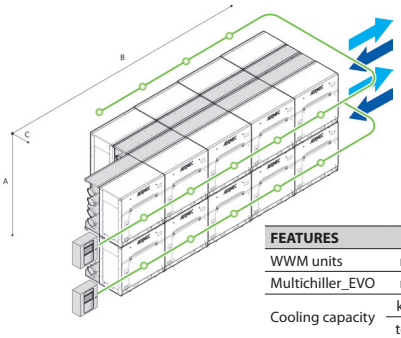
FEATURES			
WWM units	n°	x18	
Multichiller_EVO	n°	x2	
Cooling capacity	kW	1728	
	ton	491.3	
DIMENSIONS		mm	in
A		2600	102.4
B		6650	262.0
C		1850	72.9

CONFIGURATION 5.1:
STACK IN LINE BACK TO BACK DOUBLE



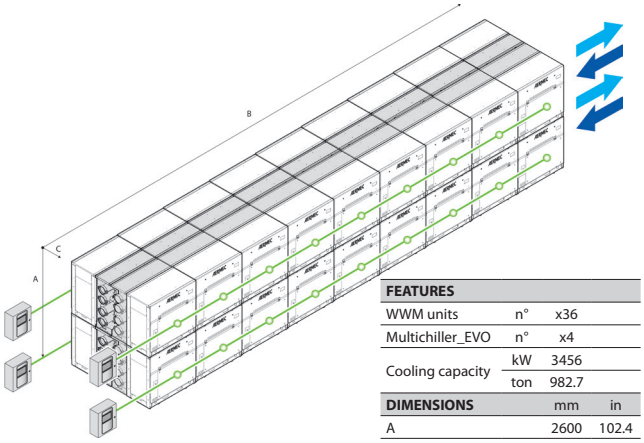
FEATURES			
WWM units	n°	x9	
Multichiller_EVO	n°	x1	
Cooling capacity	kW	864	
	ton	245.7	
DIMENSIONS		mm	in
A		2600	102.4
B		3990	157.2
C		2300	90.6

CONFIGURATION 5.2:
STACK IN LINE BACK TO BACK DOUBLE



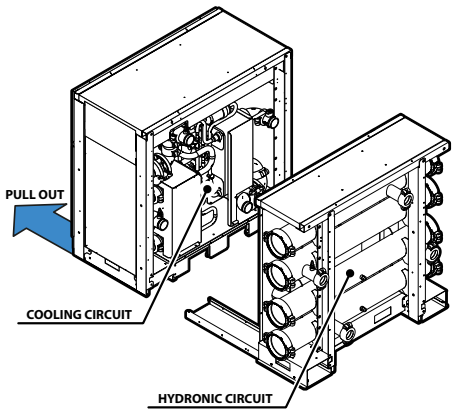
FEATURES			
WWM units	n°	x18	
Multichiller_EVO	n°	x2	
Cooling capacity	kW	1728	
	ton	491.3	
DIMENSIONS		mm	in
A		2600	102.4
B		6650	262.0
C		2300	90.6

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

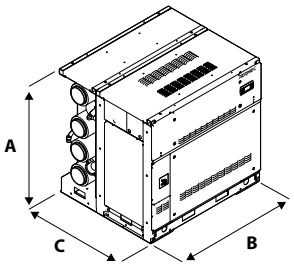
WWM		0500
Power supply "9"		208V-3-60Hz
Total input current in cooling mode	A	79
Total input current in heating mode	A	102
LRA	A	411
MCA	A	130
MOP	A	186
Recomm. Fuse	A	175
COMPRESSORS		
Compressors	type	Scroll
Nr.	nr.	2
Circuits	nr.	2
Capacity control	%	50-100
Refrigerant		R410A
EXCHANGER SYSTEM SIDE: 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

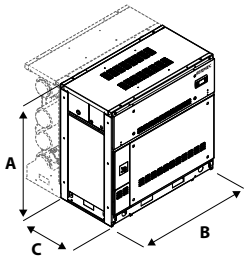
COOLING MODE: AHRI std 550/590 (I-P)
Evaporator outlet water temperature: 6.67°C, 44.01°F - Evaporator water flow: 155.0 l/(h kW), 2.40 gpm/tonR.
Condenser inlet water temperature: 29.44°C, 84.99°F - Condenser water flow: 193,75 l/(h kW), 3.00 gpm/tonR.

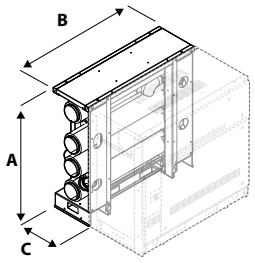
HEATING MODE: AHRI std 550/590 (I-P) med. conditions
Evaporator outlet water temperature: 6.67°C, 44.01°F - Evaporator water flow: 155.0 l/(h kW), 2.40 gpm/tonR.
Condenser water temperature (in/out): 40.56°C, 105.01°F / 48.89°C, 120.00°F.

(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

All specifications are subject to change without prior notice. Although every effort has been made to ensure accuracy, Aermec does not assume responsibility or liability for eventual errors or omissions.

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