NEW

WWM

Heat pump with reversible water side.
Water/Water for indoor installation.
Scroll compressors, Plate exchangers.
Cooling capacity 96kW.
Heating capacity 109kW.

HFC Refrigerant R410A

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

* See the modularity options.

FEATURES

Water-water chiller for indoor installation. Suitable for air-conditioning of medium and large services in residential and commercial buildings.

- WWM consists of independent 96kW modules that can be linked together to reach a capacity of 3456kW.
- 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 Bar, 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.

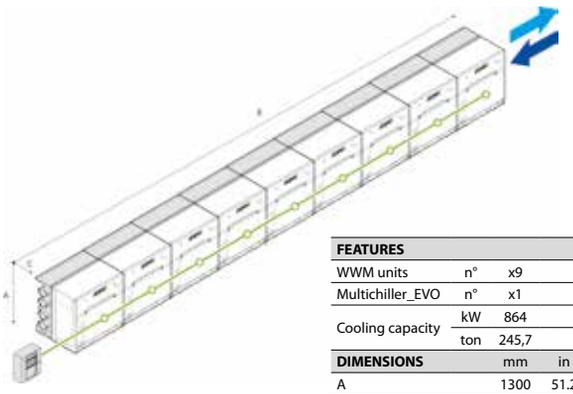
KREC_WWM
Cable entries box in order to facilitate the electrical installation.

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
ACCESSORIES			
AER485P1		•	•
AERBACP		•	•
AERNET		•	•
MULTICHILLER_EVO		•	•
KWWM		•	•
ACCESSORIES MOUNTED IN THE FACTORY			
CRATE_WWM°	100kg	•	
CRATE_WWMH-A	130kg		•
KREC_WWM		•	•
KITIDRO_WWM		•	•

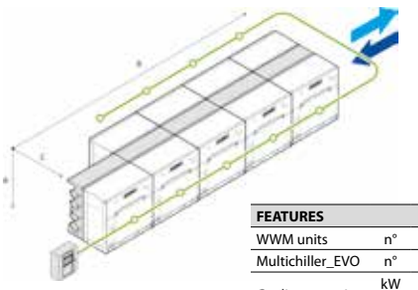
MODULARITY OPTIONS

CONFIGURATION 1: IN LINE



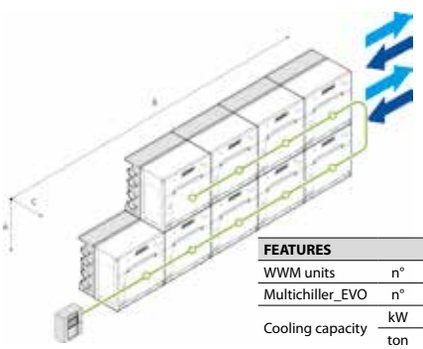
FEATURES			
WWM units	n°	x9	
Multichiller_EVO	n°	x1	
Cooling capacity	kW	864	
	ton	245,7	
DIMENSIONS		mm	in
A		1300	51.2
B		11970	471.6
C		1150	45.3

CONFIGURATION 2: BACK TO BACK



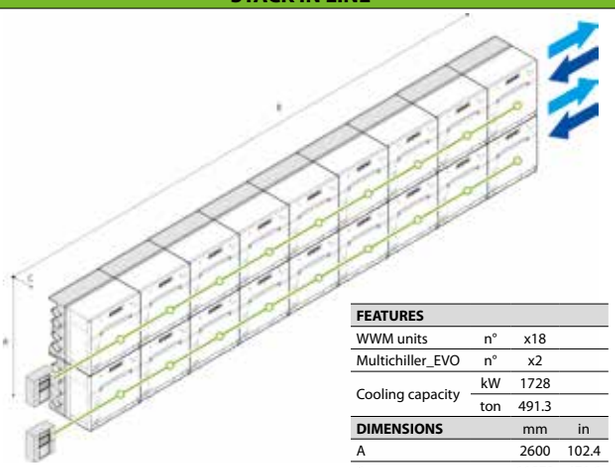
FEATURES			
WWM units	n°	x9	
Multichiller_EVO	n°	x1	
Cooling capacity	kW	864	
	ton	245,7	
DIMENSIONS		mm	in
A		1300	51.2
B		6650	262.0
C		1850	72.9

CONFIGURATION 3.1: STACK IN LINE



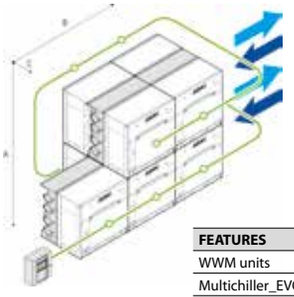
FEATURES			
WWM units	n°	x9	
Multichiller_EVO	n°	x1	
Cooling capacity	kW	864	
	ton	245.7	
DIMENSIONS		mm	in
A		2600	102.4
B		6650	262.0
C		1150	45.3

CONFIGURATION 3.2: STACK IN LINE



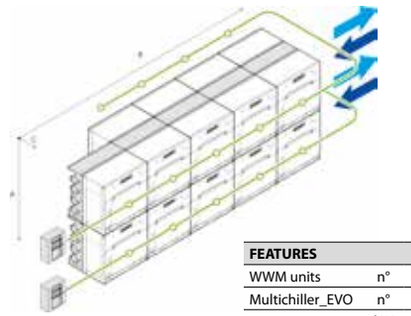
FEATURES			
WWM units	n°	x18	
Multichiller_EVO	n°	x2	
Cooling capacity	kW	1728	
	ton	491.3	
DIMENSIONS		mm	in
A		2600	102.4
B		11970	471.6
C		1150	45.3

CONFIGURATION 4.1: STACK IN LINE BACK TO BACK



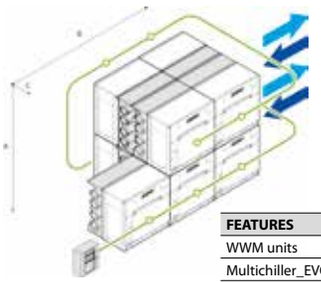
FEATURES			
WWM units	n°	x9	
Multichiller_EVO	n°	x1	
Cooling capacity	kW	864	
	ton	245.7	
DIMENSIONS		mm	in
A		2600	102.4
B		3990	157.2
C		1850	72.9

CONFIGURATION 4.2: STACK IN LINE BACK TO BACK



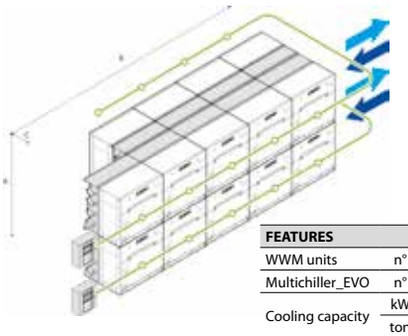
FEATURES			
WWM units	n°	x18	
Multichiller_EVO	n°	x2	
Cooling capacity	kW	1728	
	ton	491.3	
DIMENSIONS		mm	in
A		2600	102.4
B		6650	262.0
C		1850	72.9

CONFIGURATION 5.1: STACK IN LINE BACK TO BACK DOUBLE



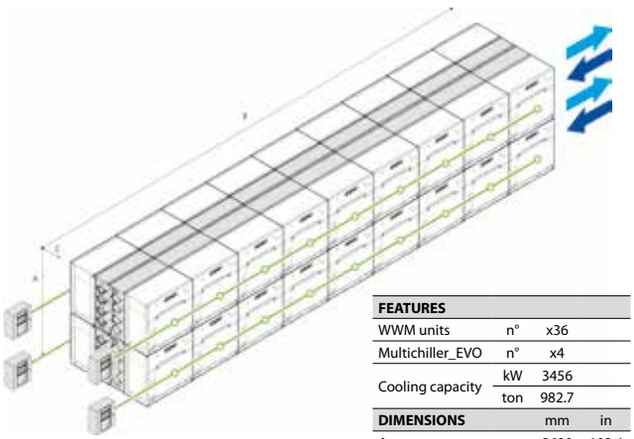
FEATURES			
WWM units	n°	x9	
Multichiller_EVO	n°	x1	
Cooling capacity	kW	864	
	ton	245.7	
DIMENSIONS		mm	in
A		2600	102.4
B		3990	157.2
C		2300	90.6

CONFIGURATION 5.2: STACK IN LINE BACK TO BACK DOUBLE



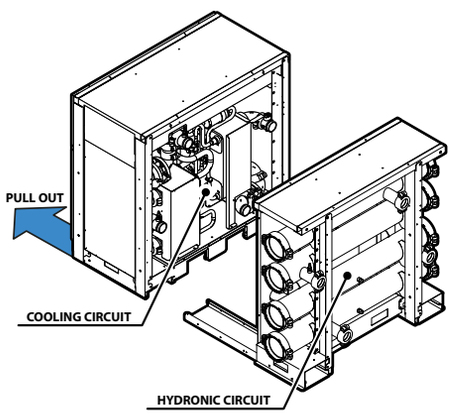
FEATURES			
WWM units	n°	x18	
Multichiller_EVO	n°	x2	
Cooling capacity	kW	1728	
	ton	491.3	
DIMENSIONS		mm	in
A		2600	102.4
B		6650	262.0
C		2300	90.6

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 +4°C)
MODELS	
1	Single refrigerant circuit
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 declared in accordance with EN 10255
POWER CONNECTION	
°	Without bus bars
B	Bus bars
POWER SUPPLY	
°	400/3/50Hz 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 - Single refrigerant circuit "1"				0500
			V/ph/Hz	400V-3-50Hz
12°C / 7°C	Cooling capacity	(1)	kW	96
	Total power input	(1)	kW	20,4
	EER	(1)	W/W	4,70
	ESEER	(1)	W/W	6,50
	Water flow rate system side	(1)	l/h	16528
	Pressure drop system side	(1)	kPa	24
	Water flow rate geothermal side	(1)	l/h	20046
	Pressure drop geothermal side	(1)	kPa	34
40°C/45°C	Heating capacity	(2)	kW	109
	Total input power	(2)	kW	25,0
	COP	(2)	W/W	4,35
	Water flow rate system side	(2)	l/h	18849
	Total pressure drop system side	(2)	kPa	29
	Water flow rate geothermal side	(2)	l/h	24210
	Total pressure geothermal side	(2)	kPa	50
	SEER		W/W	6,12
	ηsc		W/W	237%
	SCOP		W/W	4,83
	ηs		W/W	185%
	Pdesign		kW	103

WWM - Double refrigerant circuit "2"				0500
			V/ph/Hz	400V-3-50Hz
12°C / 7°C	Cooling capacity	(1)	kW	95
	Total power input	(1)	kW	20,2
	EER	(1)	W/W	4,72
	ESEER	(1)	W/W	5,47
	Water flow rate system side	(1)	l/h	16385
	Pressure drop system side	(1)	kPa	17
	Water flow rate geothermal side	(1)	l/h	19895
	Pressure drop geothermal side	(1)	kPa	23
40°C/45°C	Heating capacity	(2)	kW	107
	Total input power	(2)	kW	24,9
	COP	(2)	W/W	4,31
	Water flow rate system side	(2)	l/h	18609
	Total pressure drop system side	(2)	kPa	20
	Water flow rate geothermal side	(2)	l/h	23824
	Total pressure geothermal side	(2)	kPa	35
	SEER		W/W	5,37
	ηsc		W/W	207%
	SCOP		W/W	4,68
	ηs		W/W	179%
	Pdesign		kW	104

Data (14511:2013)

(1) Water system side (in/out) 12°C/7°C; Water geothermal (in/out) 30°C/35°C.

(2) Water system side (in/out) 40°C/45°C; Water geothermal (in/out) 10°C/5°C.

WWM - Single refrigerant circuit "1"			0500
	Electrical data		
400V	Total input current (cooling)	A	40
	Total input current (heating)	A	46
	Maximum current (FLA)	A	62
	Starting current (LRA)	A	149
	Scroll Compressor		
	Compressor	nr.	2
	Circuit	nr.	1
	Refrigerant gas	Type	R410A
	System side heat exchanger - Plate		
	Heat exchanger	nr.	1
	Water connection (in/out)	ø	Grooved 6"
	Geothermal side heat exchanger - Plate		
	Heat exchanger	nr.	1
	Water connection (in/out)	ø	Grooved 6"
	Sound data		
	Sound power	dB(A)	81,0
	Sound pressure	dB(A)	49,5

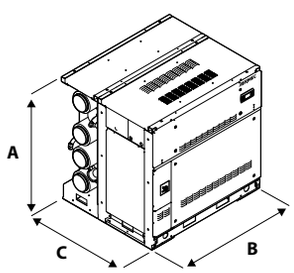
WWM - Double refrigerant circuit "2"			0500
	Electrical data		
400V	Total input current (cooling)	A	40
	Total input current (heating)	A	46
	Maximum current (FLA)	A	62
	Starting current (LRA)	A	149
	Scroll Compressor		
	Compressor	nr.	2
	Circuit	nr.	2
	Refrigerant gas	Type	R410A
	System side heat exchanger - Plate		
	Heat exchanger	nr.	1
	Water connection (in/out)	ø	Grooved 6"
	Geothermal side heat exchanger - Plate		
	Heat exchanger	nr.	1
	Water connection (in/out)	ø	Grooved 6"
	Sound data		
	Sound power	dB(A)	81,0
	Sound pressure	dB(A)	49,5

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.

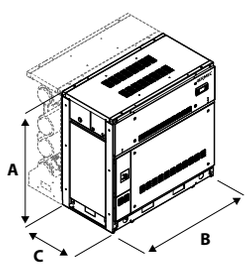
Sound pressure Sound pressure in free field, at 10m distance from the external surface of the unit (in accordance with UNI EN ISO 3744).

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

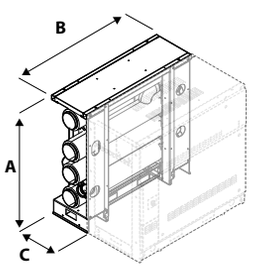
DIMENSIONS AND WEIGHT



DIMENSIONS			
WWM 0500		**Vers.**	**0500**
A	mm	H	1300
B	mm	H	1330
C	mm	H	1150
Empty weight with pallet	kg	B	966
Running weight	kg	B	1078
Empty weight with pallet	kg	H	930
Running weight	kg	H	1042



DIMENSIONS			
WWM 0500		**Vers.**	**0500**
A	mm	°	1300
B	mm	°	1330
C	mm	°	725
Empty weight with pallet	kg	B	736
Running weight	kg	B	747
Empty weight with pallet	kg	°	700
Running weight	kg	°	711



DIMENSIONS			
WWM 0500		**Vers.**	**0500**
A	mm	H	1300
B	mm	H	1330
C	mm	H	452
Empty weight with pallet	kg	H	230
Running weight	kg	H	330

Cod.: SWWMUY.02 / 1801

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