

### Air/Water chillers for indoor installation Scroll compressors, plate heat exchangers and plug fan Cooling Capacity from 5,82 to 40,34 kW



- **STANDARD VERSION**
- **VERSION WITH HYDRONIC KIT**
- **FAN PLUG-FAN**

#### Characteristics

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) 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.

#### Versions available:

- CL\_°** Standard
- CL\_P** With pump
- CL\_A** With pump, and buffer tank

#### Operational limits

Work at full load up to 42°C external air temperature, (for more details please refer to the technical documentation)

- Compressors isolator and mains isolator standard on all models
- Horizontal or vertical air discharge site adjustable for all sizes
- Plastic directional air discharge hood for sizes 050 to 090
- Galvanised steel directional air discharge hood for the other sizes
- High Efficiency Scroll Compressor
- Water filter and flow switch standard on all versions

- Plug fans with EC Inverter motors  
Through continuous fan speed control permits operation in cooling mode with external temperatures down to -10°C and in heating mode with external temperatures up to 42°C
- Electronic controller with start timers and optimisation of defrost cycles
- High efficiency plate heat exchanger
- Anti-freeze electric heater standard for the buffer tank

#### Accessories

- **MODU-485BL:** RS-485 interface for supervision 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.
- **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.

**VMF-CRP to predict accessory for the management of the probes SPLW / SDHW if provided with the MULTICONTROL**

- **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 150 m with screened cable.
- **AERSET:** The AERSET accessory allows the automatic compensation of the operating setpoint of the unit to which it is connected,

based on a 0-10V MODBUSinput signal.  
**Mandatory accessory:** AER485 or MODU-485A

- **CLPA:** Galvanised steel plenum to be installed on the condenser coil. **Facilitates duct installations. Not available with accessoires GPCL for size from 025 to 090**
- **VT:** Anti-vibration mounts.

#### Accessories factory fitted only

- **GPCL:** Protective grille. Protects the external condenser coil from damage.
- **DRE:** Electronic soft starter device reducing starting current by about 30%. Only for unit 400V/3/50Hz
- **KR:** Anti-freeze electric heater for the plate heat exchanger.

#### COMPATIBILITÀ con il SISTEMA VMF

Per maggiori informazioni sul sistema fare riferimento alla documentazione dedicata.

## Accessory compatibility

CL	vers	25	30	40	50	70	80	90	100	150	200
MODU-485BL	All	.	.	.	.	.	.	.	.	.	.
AERWEB300	All	.	.	.	.	.	.	.	.	.	.
MULTICONTROL	All	.	.	.	.	.	.	.	.	.	.
SPLW	All	.	.	.	.	.	.	.	.	.	.
SDHW	All	.	.	.	.	.	.	.	.	.	.
PR3	All	.	.	.	.	.	.	.	.	.	.
AERSET	All	.	.	.	.	.	.	.	.	.	.
CLPA	(1) All	1	2	2	2	2	2	2	3	3	3
GPCL	All	1	2	2	2	2	2	2	3	3	3
BDX	P	5	5	5	5	5	5	5	-	-	-
	A	5	5	5	6	6	6	6	-	-	-
VT	° / P	9	9	9	9	9	9	9	15	15	15
	A	15A	15A	15A	15A	15A	15A	15A	15	15	15
<b>Accessories factory fitted only</b>											
DRE	(2)	5	5	5	5	5	5	5	5 (x2)	5 (x2)	5 (x2)
KR		2	2	2	2	2	2	2	2	2	2

(1) Not available with accessoires GPCL for size from 025 to 090

(2) Only for unit 400V/3/50Hz

## 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.

- Code**
- 1,2** CL
- 3,4,5** **Size**  
025-030-040-050-070-080-090-100-150-200
- 6** **Model**
  - ° Only cooling
- 7** **Execution**
  - ° Standard
  - L** Low noise
- 8** **Version**
  - ° Standard
  - P** With pump
  - A** Buffer tank
- 9** **Heat recovery**
  - ° Without recovery
  - D** With desuperheater
- 10** **Coil**
  - ° Aluminium
  - R** Copper
  - S** Tinned copper
  - V** Treated aluminium
- 11** **Field of use**
  - ° Standard (leaving water temperature down to 4°C)
  - Z** Low leaving liquid (from 4°C down to up to 0°C)
  - Y** Low leaving liquid (from 0°C down to -6°C) (6)
- 12** **Evaporator**
  - ° Standatd
  - C** Condensing unit
- 13** **Power supply**
  - M** 230V/1/50Hz (for size from 020 to 040)
  - ° 400V/3N/50Hz

## Technical Data

CL - °			025	030	040	050	070	080	090	100	150	200	
			V/ph/Hz	230V-400V	230V-400V	230V-400V	400V	400V	400V	400V	400V	400V	
12°C / 7°C	Cooling capacity	(1)	kW	5,82	7,11	8,80	12,65	16,28	18,3	20,14	26,16	32,86	40,34
	Total power input	(1)	kW	2,23	2,70	3,62	4,37	5,58	6,78	6,93	8,99	11,51	14,57
	EER*			2,61	2,63	2,43	2,89	2,92	2,70	2,91	2,91	2,85	2,77
	EER	(1)		2,79	2,79	2,54	3,13	3,11	2,84	3,08	3,09	3,05	2,92
	ESEER	(1)		2,87	2,90	2,67	3,18	3,21	2,97	3,20	4,21	4,13	4,01
	Cooling Energy Class Eurovent	(1)		B	B	C	A	A	A	A	A	A	A
	Water flow rate	(1)	l/h	1009	1234	1525	2191	2820	3170	3487	4538	5701	7009
	Pressure drop	(1)	kPa	19	26	25	27	29	30	29	45	53	72

CL - P/A				025	030	040	050	070	080	090	100	150	200
12°C / 7°C	Cooling capacity	(1)	kW	5,87	7,18	8,89	12,80	16,47	18,51	20,37	26,71	33,68	41,33
	Total power input	(1)	kW	2,27	2,72	3,61	4,35	5,52	6,71	6,84	9,03	11,69	14,67
	EER*	(1)		2,59	2,64	2,46	2,94	2,98	2,76	2,98	2,96	2,88	2,82
	EER			2,77	2,80	2,56	3,18	3,17	2,90	3,16	2,85	2,91	2,74
	ESEER	(1)		2,85	2,91	2,70	3,23	3,28	3,04	3,28	4,28	4,17	4,08
	Cooling Energy Class Eurovent	(1)		B	B	C	A	A	A	A	A	A	A
	Water flow rate	(1)	l/h	1009	1234	1525	2191	2820	3170	3487	4538	5701	7009
	Useful head	(1)	kPa	58	49	50	79	74	73	71	82	131	122

CL - °L				025	030	040	050	070	080	090	100	150	200
12°C / 7°C	Cooling capacity	(1)	kW	5,65	6,90	8,53	12,14	15,63	17,57	18,54	24,09	31,56	37,27
	Total power input	(1)	kW	2,24	2,71	3,62	4,42	5,62	6,83	7,52	9,77	11,60	14,63
	EER*			2,52	2,55	2,36	2,75	2,78	2,57	2,47	2,47	2,72	2,55
	EER	(1)		2,65	2,66	2,43	2,88	2,89	2,68	2,55	2,55	2,85	2,64
	ESEER	(1)		2,67	2,70	2,50	2,91	2,95	2,73	2,61	3,54	3,91	3,66
	Cooling Energy Class Eurovent	(1)		B	B	C	A	A	B	C	C	A	B
	Water flow rate	(1)	l/h	979	1197	1479	2104	2707	3043	3208	4175	5473	6472
	Pressure drop	(1)	kPa	18	25	24	25	27	28	25	38	49	66

CL - °LP/LA				025	030	040	050	070	080	090	100	150	200
12°C / 7°C	Cooling capacity	(1)	kW	5,70	6,97	8,62	12,29	15,82	17,78	18,75	24,60	32,35	38,20
	Total power input	(1)	kW	2,28	2,73	3,62	4,41	5,58	6,77	7,45	9,84	11,81	14,78
	EER*			2,50	2,55	2,38	2,79	2,84	2,63	2,52	2,50	2,74	2,58
	EER	(1)		2,63	2,66	2,46	2,92	2,94	2,74	2,61	2,58	2,87	2,68
	ESEER	(1)		2,65	2,71	2,52	2,95	3,01	2,79	2,67	3,59	3,94	3,71
	Cooling Energy Class Eurovent	(1)		B	B	C	A	A	B	C	C	A	B
	Water flow rate	(1)	l/h	979	1197	1479	2104	2707	3043	3208	4175	5473	6472
	Useful head	(1)	kPa	59	50	52	82	77	75	77	91	137	129

### Date (14511:2013)

(1) Water evaporator 12°C/7°C, External air 35°C

\* The legislation 14511: 2013 from the previous 14511: 2011 provides a different contribution of the fan

			025	030	040	050	070	080	090	100	150	200	
Electrical data													
230V	Total input currente (cooling)	(2)	A	10,1	12,9	16,9	/	/	/	/	/	/	
	Maximum current (FLA)	(2)	A	21,6	24,6	24,7	/	/	/	/	/	/	
	Starting current (LRA)	(2)	A	66,6	87,6	117,6	/	/	/	/	/	/	
400V	Total input currente (cooling)	(2)	A	4,8	5,1	7,5	8,5	10,2	12,0	12,8	16,7	19,7	25,3
	Maximum current (FLA)	(2)	A	11,1	11,6	12,6	13,7	15,4	17,0	20,4	27,4	30,8	40,8
	Starting current (LRA)	(2)	A	37,6	40,6	71,6	77,2	77,2	77,2	105,2	90,9	92,6	125,6
Scroll Compressor													
Compressors / circuit		n°/n°	1/1	1/1	1/1	1/1	1/1	1/1	1/1	2/1	2/1	2/1	
Refrigerant		Type	R410A										
Heat exchanger system side													
Exchanger		Type/n°	Plate/1										
hydraulic connections (In/Out)		Ø	1"1/4										
Fans Plug-fan													
Fan		Type/n°	inverter/1	inverter/1	inverter/1	inverter/1	inverter/1	inverter/1	inverter/1	inverter/2	inverter/2	inverter/2	
Air flow rate	°	m³/h	4000	4000	4000	6500	6500	6500	7500	10000	12000	12000	
	L	m³/h	3000	3000	3000	4000	4000	5000	5000	6000	8500	8500	
High static pressure		Pa	50	50	50	80	80	80	80	80	100	100	
Sound data - chiller (cooling)													
Sound power level		°	dB(A)	78	78	78	73	73	73	76	74	79	79
Sound pressure level		°	dB(A)	46	46	46	41	41	41	44	42	47	47
Sound power level		L	dB(A)	71	71	71	69	69	69	69	66	72	72
Sound pressure level		L	dB(A)	39	39	39	37	37	37	37	34	40	40
Sound data - delivery (cooling)													
Sound power level		°	dB(A)	78	78	78	78	78	78	81	78	83	83
Sound pressure level		°	dB(A)	46	46	46	46	46	46	49	47	52	52
Sound power level		L	dB(A)	71	71	71	68	68	68	68	63	73	73
Sound pressure level		L	dB(A)	39	39	39	36	36	36	36	32	41	41

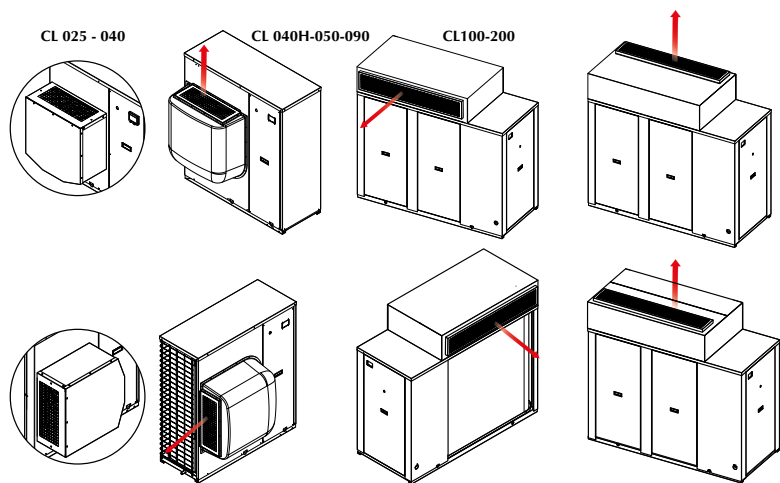
(2) Unit standar configuration without hydronic kit

**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.

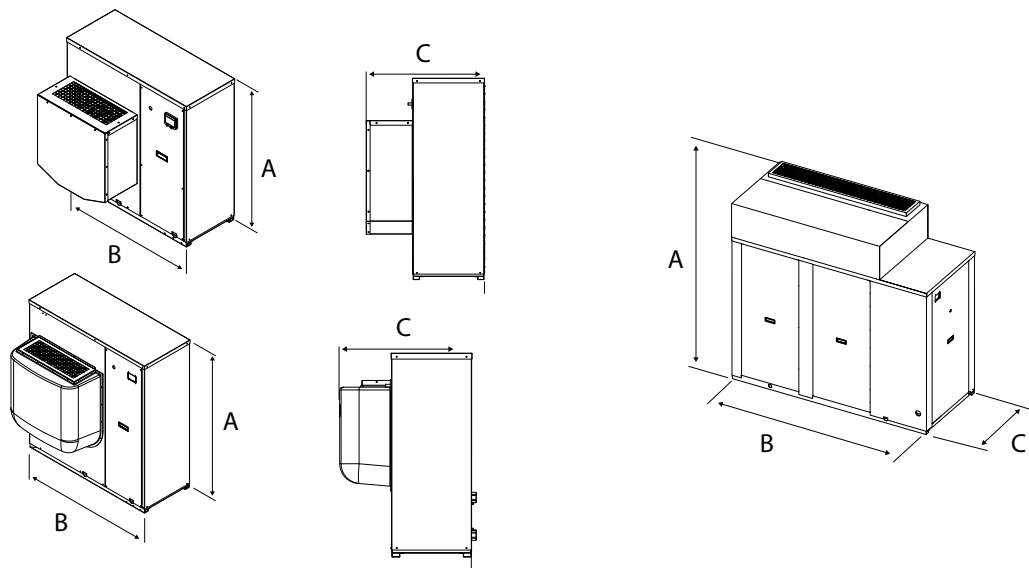
**Sound pressure** Sound pressure in free field, at 10 m distance from the external surface of the unit (in accordance with UNI EN ISO 3744).

**Note:** For more information, refer to the selection program or the technical documentation available on the website [www.aermec.com](http://www.aermec.com)

Discharge hood possible configurations (site modified)



Dimensions (mm)



CL standard and low noise			025	030	040	050	070	080	090	100	150	200
° (without hydronic kit)												
Height	A	mm	1028	1281	1281	1281	1281	1281	1281	1674	1674	1674
Width	B	mm	1005	1006	1006	1160	1160	1160	1160	1897	1897	1897
Length	C	mm	702	754	754	798	798	798	798	801	801	801
P (with pump)												
Height	A	mm	1028	1281	1281	1281	1281	1281	1281	1674	1674	1674
Width	B	mm	1005	1006	1006	1160	1160	1160	1160	1897	1897	1897
Length	C	mm	702	754	754	798	798	798	798	801	801	801
A (with buffer tank)												
Height	A	mm	1028	1281	1281	1281	1281	1281	1281	1674	1674	1674
Width	B	mm	1366	1458	1458	1610	1610	1610	1610	1897	1897	1897
Length	C	mm	702	754	754	798	798	798	798	801	801	801
Weight												
CL - °		kg	127	160	160	208	210	210	212	469	471	475
CL - P		kg	133	166	166	217	225	225	221	482	487	492
CL - A		kg	157	201	201	252	260	260	256	532	537	542

Aermec reserves the right to make all modification deemed necessary for improving the product at any time with any modification of technical data.

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