

Air-Cooled Liquid Chillers and Reversible Air-to-Water Heat Pumps



Easy and fast installation

Hydraulic module available

Compact, reliable and efficient







Cooling or heating Nominal cooling capacity : 16-21~kWNominal heating capacity: 18-22~kW



USE

The EREBA™ ACCESS air-to-water heat pump / chiller is designed for heating and cooling applications in individual homes and small commercial applications.

When installed alone, **EREBA™ ACCESS** is compatible with low to medium temperature emitters (underfloor heating, fan coil units, water cassettes, radiators, mixed installations, etc.). **EREBA™ ACCESS** is also compatible with medium to high temperature emitters for boiler backup operation.

The EREBA™ ACCESS unit is installed outside in an open area, ideally as close as possible to the machine room.

Each unit is tested in the factory and delivered ready for operation.

- End-of-line test of all unit operating parameters.
- Circuit leakage, electrical compliance, water and refrigerant pressures.

RANGE

EREBA™ ACCESS's range is composed by 2 models in cooling only and 2 models reversible.

Operating range **EREBA™ ACCESS**:

- Cooling mode with an outdoor temperature from -10°C to 48°C
- Heating from -15°C to +40°C.

In heating mode, if the heat pump is not powerful enough, a backup type boiler or electrical heater is necessary. It must be managed by an external device.

COMPLIANCE

Low Voltage Directive 2014/35/EU

EMC : Electromagnetic Compatibility 2014/30/EU PED : Pressure Equipment Directive 2014/6/EU

WEEE: Waste Electrical & Electronic Equipment 2012/19/EU RoHS: Restriction of Hazardous Substances Directive 2011/65/

ΕU



Air-Cooled Liquid Chillers and Reversible Air-to-Water Heat Pumps

The EREBA™ ACCESS liquid chiller/heat pump range was designed for commercial applications such as the air conditioning of offices, hotels and residential houses.

The units integrate the latest technological innovations: Non-ozone depleting refrigerant R410A, scroll or rotary compressors, low-noise fans and auto-adaptative microprocessor control.

For added flexibility the **EREBA™ ACCESS** units are available with hydraulic module integrated into the unit chassis, limiting the installation to straightforward operations like connection of the power supply and the water supply and return piping.

Features

The EREBA™ ACCESS chiller/heat pump systems can be used with a wide choice of CIAT terminal fan coil units, and ductable products.

Ecodesign is the European Directive that sets mandatory requirements for Energy related Products (ErP) to improve their energy efficiency.

Quiet operation

Compressors

 Low-noise rotary/scroll compressor with low vibration levels and maintenance free.

Air heat exchanger section

- Vertical air heat exchanger coils
- The latest-generation low-noise fans are now even quieter and do not generate intrusive low-frequency noise
- Rigid fan installation for reduced start-up noise.

Easy and fast installation

Integrated hydraulic module

- Fixed-speed pump.
- Water filter protecting the water pump against circulating debris
- High-capacity membrane expansion tank ensures pressurisation of the water circuit
- Overpressure valve, set to 4 bar
- Thermal insulation and frost protection down to -10°C using pump cycling for all sizes and electric resistance heater.

Physical features

- Advanced circuit design and component selection has resulted in a compact unit with an exceptionally small footprint that is easy to transport even through narrow doors. Reduced operating weight and a handle on the unit panels to facilitate transport.
- The unit is enclosed by easily removable panels, covering all components (except air heat exchanger and fans).
- A neutral colour (RAL 7035) to facilitate the integration in residential area

Simplified electrical connections

- Single power supply point.
- Main disconnect switch with high trip capacity .
- Transformer for safe 24 V control circuit supply included.



Economical operation

Increased seasonal efficiency

- In accordance with EN 14825:2022, Average Climate, energy label reach A and B (see physical data).
- Specific Free Defrost algorithm is present to optimise performance and comfort even during defrost period.

Reduced maintenance costs

- Maintenance-free scroll or rotary compressors
- Fast diagnosis of possible incidents and their history via the Pro-Dialog+ control.
- R410A refrigerant is easier to use than other refrigerant blends

Environmental care

Ozone-friendly R410A refrigerant

- Chlorine-free refrigerant of the HFC group with zero ozone depletion potential
- Very efficient gives an increased energy efficiency ratio (EER)

Leak-tight refrigerant circuit

- Brazed refrigerant connections for increased leak-tightness.
- Verification of pressure transducers and temperature sensors without transferring refrigerant charge

Superior reliability

Auto-adaptive control

 Control algorithm prevents excessive compressor cycling and permits reduction of the water quantity in the hydraulic circuit.

Exceptional endurance tests

- Corrosion resistance tests in salt mist in the laboratory
- Accelerated ageing test on components that are submitted to continuous operation: Compressor piping, fan supports
- Transport simulation test in the laboratory on a vibrating table.



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Pro-Dialog+

Pro-Dialog+ control for models 17-21

Pro-Dialog+ combines intelligence with operating simplicity. The control constantly monitors all machine parameters and precisely manages the operation of compressors, expansion devices, fans and of the water heat exchanger water pump for optimum energy efficiency.

Pro-Dialog+ interface



Energy management

- Seven-day internal time schedule clock: Permits unit on/ off control and operation at a second set point
- Set point reset based on the outside air temperature or the return water temperature or on the water heat exchanger delta T
- Master/slave control of two units operating in parallel with operating time equalisation and automatic change-over in case of a unit fault.
- · Change-over based on the outside air temperature
- Integrated features
 - Night mode: Capacity and fan speed limitation for reduced noise level
- Ease-of-use
 - The new backlit LCD interface includes a manual control potentiometer to ensure legibility under any lighting conditions
 - The information is displayed clearly in English, French, German, Italian and Spanish (for other languages please consult CIAT)
 - The Pro-Dialog+ navigation uses intuitive tree-structure menus, similar to the Internet navigators. They are userfriendly and permit quick access to the principal operating parameters: Number of compressors operating, suction/ discharge pressure, compressor operating hours, set point, air temperature, entering/leaving water temperature.

Remote operating mode with volt-free contacts

A simple two-wire communication bus between the RS485 port of the unit offers multiple remote control, monitoring and diagnostic possibilities.

- Start/stop: Opening of this contact will shut down the unit
- Dual set point: Closing of this contact activates a second set point (example: Unoccupied mode)
- Alert indication: This volt-free contact indicates the presence of a minor fault
- Alarm indication: This volt-free contact indicates the presence of a major fault that has led to the shut-down of the unit
- User safety: This contact can be used for any customer safety loop, closing of the contact generates a specific alarm
- Out of service: This signal indicates that the unit is completely out of service
- Unit capacity: This analogue output (0-10 V) gives an immediate indication of the unit capacity
- Compressor operation: This contact signals that the compressor is in operation



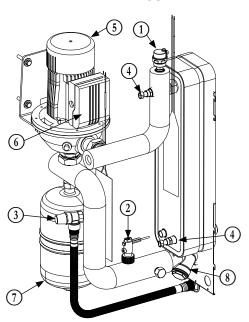
Air-Cooled Liquid Chillers and Reversible Air-to-Water Heat Pumps

HYDRAULIC MODULE

The hydraulic module reduces the installation time. The unit is factory-equipped with the main hydraulic components required for the installation.

The water heat exchanger and the hydraulic module are protected against frost down to -10°C, using an electric resistance heater and pump cycling. However, the use of EG (Ethylen Glycol) can effectively protect the installation even in case of power failure

EREBA™ ACCESS 17-21



- 1 Automatic purge valve
 2 Flow switch
 3 Relief valve

- Temperature sensor
- Circulation pump
- Plug to unblock seized pump
- Expansion tank
- Mesh filter



Air-Cooled Liquid Chillers and Reversible Air-to-Water Heat Pumps

PHYSICAL DATA

EREBA™ ACCESS Cooling of	only	17HT	21HT		
Cooling					
Standard unit	CA1	Nominal capacity	kW	16,2	21,3
Full load performances*	CAI	EER	kW/kW	2,95	3,07
	CA2	Nominal capacity	kW	22,6	29,5
	CAZ	EER	kW/kW	3,76	3,84
Standard unit		SEPR _{-2/-8°C} Process medium temp.	kWh/kWh	2,99	3,03
Seasonal energy efficiency**		SEPR _{12/7°C} Process high temp.	kWh/kWh	5,20	5,27
		SEER _{12/7°C} Comfort low temp.	kWh/kWh	3,25	3,38
		SEER _{23/18°C} Comfort medium temp.	kWh/kWh	4,05	4,00

In accordance with standard EN 14511-3:2022.

In accordance with standard EN 14825:2022, average climate

CA1 Cooling mode conditions: Temperature of the supply/return water to/from the evaporator 12 °C/7 °C, outdoor air temperature 35 °C.

Evaporator fouling factor 0 m² k/W

CA₂ Cooling mode conditions: Temperature of the supply/return water to/from the evaporator 23 °C/18 °C, outdoor air temperature 35 °C.

Evaporator fouling factor 0 m² k/W.

SEPR _{-2/-8°C} Values in bold comply with Ecodesign Regulation (EU) No. 2015/1095 for Process application

SEER 12/7 °C & SEPR 12/7 °C Values calculated in accordance with EN 14825:2022 SEER _{23/18 °C} Values calculated in accordance with EN 14825:2022



Eurovent certified values

EREBA™ ACCESS Reversib	17HT	21HT			
Heating					
Standard unit	HA1	Nominal capacity	kW	17,7	22
Full load performances*	пАт	COP	kW/kW	3,98	3,96
	HA2	Nominal capacity	kW	17,2	21,6
	ПАZ	COP	kW/kW	3,18	3,27
Standard unit		SCOP 30/35°C	kWh/kWh	3,19	3,19
Seasonal energy efficiency**	HA1	ηs heat _{30/35°C}	%	125	125
	пАт	P _{rated}	kW	13	13
		Energy labelling		A+	A+
Cooling					
Standard unit	C A 1	Nominal capacity	kW	15,6	19,7
Full load performances*	CA1	EER	kW/kW	2,99	2,98
	CA2	Nominal capacity	kW	21,8	26,9
CAZ		EER	kW/kW	3,88	3,66
Standard unit		SEPR _{12/7°C} Process high temp.	kWh/kWh	5,15	5,07
Seasonal energy efficiency**		SEER _{12/7°C} Comfort low temp.	kWh/kWh	3,11	3,14
		SEER _{23/18°C} Comfort medium temp.	kWh/kWh	3,94	3,73

In accordance with standard EN 14511-3:2022.

In accordance with standard EN 14825:2022, average climate

Heating mode conditions: Water heat exchanger water entering/leaving temperature 30 °C/35 °C, outside air temperature tdb/twb HA1

= 7 °C db/6 °C wb, evaporator fooling factor 0 m² k/W

Heating mode conditions: Water heat exchanger water entering/leaving temperature 40 °C/45 °C, outside air temperature tdb/twb = 7 °C db/6 °C wb, evaporator fooling factor 0 m² k/W CA1

Cooling mode conditions: Temperature of the supply/return water to/from the evaporator 12 °C/7 °C, outdoor air temperature 35 °C. Evaporator fouling factor 0 m² k/W

CA2 Cooling mode conditions: Temperature of the supply/return water to/from the evaporator 23 °C/18 °C, outdoor air temperature 35 °C.

Evaporator fouling factor 0 m² k/W.

ηs heat 30/35 °C & SCOP 30/35 °C Values in bold comply with Ecodesign Regulation (EU) No. 813/2013 for heating application

SEER 12/7 °C & SEPR 12/7 °C Values calculated in accordance with EN 14825:2022 SEER _{23/18 °C} Values calculated in accordance with EN 14825:2022



HA2

Eurovent certified values



Air-Cooled Liquid Chillers and Reversible Air-to-Water Heat Pumps

PHYSICAL DATA

EREBA™ ACCESS			Coolin	ig only	Reversible	
		17T	21T	17HT	21HT	
Sound power level ⁽¹⁾		dB(A)	72	74	72	74
Sound pressure level at 10 m ⁽²⁾ dB(A)			40	42	40	42
Length		mm	11	36	11	36
Width		mm	58	34	58	34
Height		mm	15	80	15	80
Operating weight ⁽³⁾		kg	189	208	206	223
Compressors				Sc	roll	
Refrigerant R410A charge ⁽³⁾		kg	5,5	6,4	6,4	7,7
		CO ₂ eq	11,5	13,4	13,4	16,1
Air heat exchanger			Grooved copper tubes, aluminium fins			
Axial Fans			2 twin-	-speed	2 twin-speed	
Diameter		mm	49	95	495	
Air flow		l/s	22	12	2217	1978
Water Heat Exchanger				Braze	ed plate	
Water volume		L	1,52	1,9	1,52	1,9
Expansion tank volume		L	į	5	5	
Pump				Fixed	speed	
Available static pressure	C1/H1	kPa	152	126	148	130
Available static pressure	C2/H2	kPa	110	71	152	134
Minimum system water content I		58	75	56	71	
Max. water-side operating pres	ssure	kPa	400			
Outlet diameter			1"1/4 G male			
Chassis paint colour				RAL	7035	

⁽¹⁾ In dB ref=10⁻¹² W, (A) weighting. Declared dual-number noise emission values in accordance with ISO 4871 (with an associated uncertainty of +/-3 dB(A)). Measured in accordance with ISO 9614-1 and certified by Eurovent.

⁽²⁾ In dB ref 20 µPa, (A) weighting. Declared dual-number noise emission values in accordance with ISO 4871 (with an associated uncertainty of +/-3 dB(A)). For information, calculated from the sound power level Lw(A).

⁽³⁾ Values are guidelines only. Refer to the unit nameplate.



Air-Cooled Liquid Chillers and Reversible Air-to-Water Heat Pumps

ELECTRICAL DATA

EREBA™ ACCESS		17	21	
Nominal power supply	V-ph-Hz	400-3	+N-50	
Voltage range	V		-460	
Control circuit supply		24 V via interr	nal transformer	
Maximum start-up current (Un)(1)	Α	75	95	
Unit power factor at nominal capacity ⁽²⁾		0,84	0,79	
Maximum operating power input ⁽²⁾	kW	7,8	9,1	
Nominal unit operating current drawn ⁽³⁾	А	8	12	
Maximum operating current draw (Un) ⁽⁴⁾	А	13	16	
Maximum operating current draw (Un-15%) ⁽⁵⁾	А	15	18	
Power fuse current (gL fuse)	Α	25	32	
Power supply cable section		H07RN-F - 5x6mm²		
Pump - power input ⁽⁶⁾	kW	0,54	0,59	
Pump - nominal operating current draw ⁽⁶⁾	А	1,3	1,4	
Pump - maximum current (external pump)	А	1,5		
Number of fan motor capacitors (5 µF/450 V)		2	2	
Remote controller - Power supply cable section		H03VV-F -	7x0,5mm²	

⁽¹⁾ Maximum instantaneous start-up current (locked rotor current of the compressor).

⁽²⁾ Power input, compressors and fans, at the unit operating limits (saturated suction temperature 10°C, saturated condensing temperature 65°C) and nominal voltage of 400V (data given on the unit nameplate)

⁽³⁾ Standardised Eurovent conditions: Water heat exchanger entering/leaving water temperature 12 °C/7 °C, outside air temperature 35 °C.

(4) Maximum unit operating current at maximum unit power input and 400 V (data given on the unit nameplate).

(5) Maximum unit operating current at maximum unit power input and 340-460 V for sizes 017 to 021.

⁽⁶⁾ Gross performances.



Air-Cooled Liquid Chillers and Reversible Air-to-Water Heat Pumps

PART-LOAD PERFORMANCES

SEER for comfort chillers (in accordance with EU ECODESIGN)

The SEER (Seasonal Energy Efficiency Ratio) measures the seasonal energy efficiency of comfort **chillers** by calculating the ratio between annual cooling demand of the building and annual energy demand of the chiller. It takes into account the energy efficiency achieved for each outdoor temperature weighted by the number of hours observed for each of these temperatures, using actual climate data.

SEER is a new way of measuring the true energy efficiency of chillers for **comfort cooling** over an entire year. This new indicator gives a more realistic indication of the real energy efficiency and environmental impact of a cooling system. (Ecodesign Regulation 2016/2281).

SEPR for process chillers (in accordance with EU ECODESIGN)

The SEPR (Seasonal Energy Performance Ratio) measures the seasonal energy efficiency of process chillers by calculating the ratio between annual cooling demand of the process and annual energy demand of the chiller. It takes into account the energy efficiency achieved at each outdoor temperature of an average climate weighted by the number of hours observed for each of these temperatures.

SEPR is a new way of measuring the true energy efficiency of chillers for **process cooling** over an entire year. This new indicator gives a more realistic indication of the real energy efficiency and environmental impact of the cooling system (Ecodesign Regulation 2015/1095).

Average climate

Low temp (30/35)

EREBA™ ACCESS	ŋs (%)	SCOP	Pdesign (kW)	Annual power input with backup heater (kWh)	Sound power level dB(A)	Energy Class
17 HT	125	3,20	13	8476	72	A+
21 HT	126	3,23	13	8331	74	A+

Colder climate

Low temp (30/35)

EREBA™ ACCESS	ŋs (%)	SCOP	Pdesign (kW)	Annual power input with backup heater (kWh)	Sound power level dB(A)
17 HT	120	3,08	15	10829	-
21 HT	121	3,11	19	13415	-

Warmer climate

Low temp (30/35)

EREBA™ ACCESS	ŋs (%)	SCOP	Pdesign (kW)	Annual power input with backup heater (kWh)	Sound power level dB(A)
17 HT	138	3,53	11	3876	-
21 HT	144	3,68	15	5143	-



Air-Cooled Liquid Chillers and Reversible Air-to-Water Heat Pumps

SOUND SPECTRUM

Sound power level (dB(A)

EREBA™ ACCESS	Octave bands, Hz					Sound power level	
Load ⁽¹⁾	125	250	500	1000	2000	4000	Souria power level
17	75	72	70	67	61	60	72
21	80	75	70	69	63	60	74

⁽¹⁾ SEER Conditions

OPERATING LIMITS

Water flow rate (in I/s)

Data applicable for pure water.

EREBA™ ACCESS	Minimum	Maximum	Maximum @ C1 ⁽²⁾	
LREBA ACCESS	Willimani	Cooling mode	Heating mode	Cooling mode 12°C/7°C, 35°C
17	0,45	1,39	1,39	0,79
21	0,57	1,52	1,52	1,03

⁽¹⁾ Maximum flow rate at an available pressure of 50 kPa (unit with hydraulic module)

⁽²⁾ Maximum flow rate at condition 1 - evaporator water entering/leaving temperature 12°C/7°C, outside air temperature 35°C.

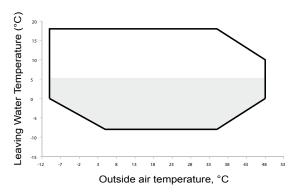


Air-Cooled Liquid Chillers and Reversible Air-to-Water Heat Pumps

OPERATING LIMITS

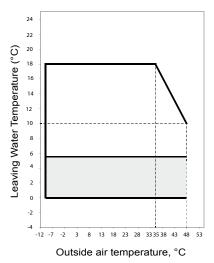
■ Operating range for EREBA™ ACCESS 17-21

Operating range EREBA™ ACCESS 17-21T cooling mode



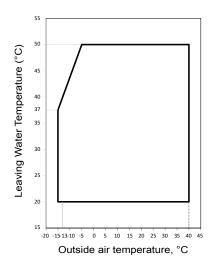
Operating range with anti-freeze solution

Operating range EREBA™ ACCESS 17-21 HT cooling mode



Operating range with anti-freeze solution

Operating range EREBA™ ACCESS 17-21 HT heating mode



Operating range with anti-freeze solution



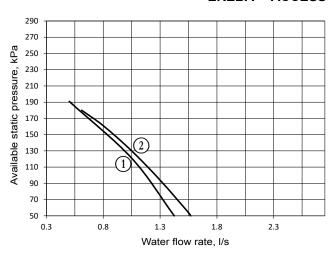
Air-Cooled Liquid Chillers and Reversible Air-to-Water Heat Pumps

AVAILABLE STATIC SYSTEM PRESSURE

■ Available external static pressure for EREBA[™] ACCESS

Data applicable for pure water.

EREBA™ ACCESS 17-21



Key1 17T - 17H1
2 21T - 21H1

SYSTEM MINIMUM WATER VOLUME

The minimum water loop volume, in litres, is given by the following formula: Volume (I) = CAP (kW) x N

Where CAP is the nominal cooling capacity at nominal operating conditions.

Application	N
Air conditioning	3,5
Heating or domestic hot water application	6
Industrial process cooling	See note

Note: For industrial process cooling applications, where high stability of water temperature levels must be achieved, the values above must be increased. We recommend consulting the factory for these particular applications.

SYSTEM MAXIMUM WATER VOLUME

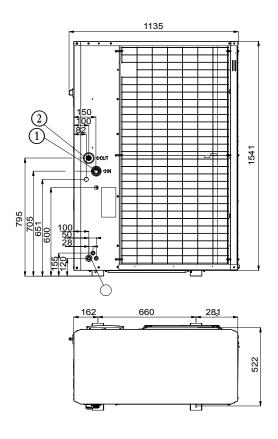
Water maximum volume (L)				
Static pressure (bar)	1,5	3		
Fresh water	200	50		
Ethylen glycol 10%	150	28		
Ethylen glycol 20%	110	28		
Ethylen glycol 30%	90	23		



Air-Cooled Liquid Chillers and Reversible Air-to-Water Heat Pumps

DIMENSIONS (IN MM)

■ EREBA™ ACCESS 17-21



All dimensions are given in mm

(1) Water inlet

- Water outletPower connections

Mounting holes (ø10 mm)

Weight (in kg)					
EREBA™ ACCESS	Operating weight ⁽¹⁾				
	Cooling only (T)	Reversible (HT)			
17	189	206			
21	208	223			

⁽¹⁾ Values are guidelines only. Refer to the unit nameplate

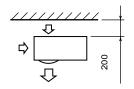


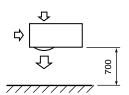
Air-Cooled Liquid Chillers and Reversible Air-to-Water Heat Pumps

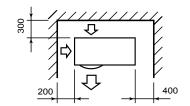
CLEARANCES (IN MM)

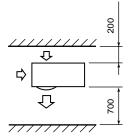
■ EREBA™ ACCESS 17-21

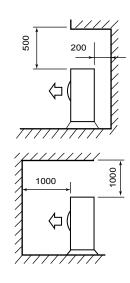
Single unit installation



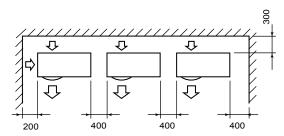


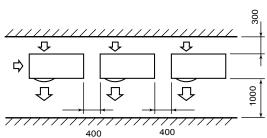


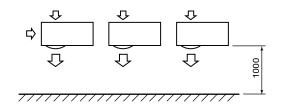


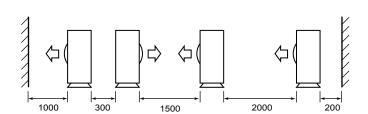


Multiple unit installation









Note: The height of any obstacle at both the front and rear should be less than the outdoor unit height.



Air-Cooled Liquid Chillers and Reversible Air-to-Water Heat Pumps

HEATING CAPACITIES IN ACCORDANCE WITH EN14511-3

		Outside air dry-bulb (wet-bulb)													et-bulb) temperature, °C										
			-15 (-16)				-10 (-11)				-7 (-8)				2 (1)				7 (6)				12 (11)		
	LWT	Qh	COP	q	ESP	Qh	СОР	q	ESP	Qh	COP	q	ESP	Qh	COP	q	ESP	Qh	COP	q	ESP	Qh	COP	q	ESP
	°C	kW	kW/ kW	I/s	kPa	kW	kW/ kW	I/s	kPa	kW	kW/ kW	I/s	kPa	kW	kW/ kW	I/s	kPa	kW	kW/ kW	I/s	kPa	kW	kW/ kW	I/s	kPa
017	30	7,6	2,02	0,47	189	8,6	2,26	0,54	182	9,2	2,41	0,58	178	10,9	3,93	0,74	160	17,9	4,46	0,85	146	20,4	4,97	0,97	129
021	30	9,6	1,98	0,60	178	10,7	2,20	0,68	171	11,5	2,35	0,73	165	14,8	4,04	0,93	144	17,8	4,24	1,06	128	25,4	4,86	1,21	109
017	35	7,7	1,86	0,47	189	8,7	2,08	0,54	182	9,3	2,21	0,58	178	10,7	3,53	0,74	161	17,6	4,02	0,84	149	20,1	4,49	0,96	133
021	35	9,7	1,85	0,60	178	10,8	2,06	0,68	171	11,6	2,20	0,73	166	14,7	3,71	0,92	145	22,0	3,99	1,05	131	25,1	4,42	1,20	112
017	40	-	-	-	-	8,8	1,90	0,54	183	9,4	2,03	0,58	178	10,6	3,17	0,73	163	17,3	3,59	0,83	151	19,7	4,01	0,94	136
021	40	-	-	-	-	11,0	1,90	0,68	171	11,8	2,03	0,73	166	14,6	3,38	0,92	147	21,7	3,64	1,04	133	24,7	4,04	1,18	115
017	45	-	-	-	-	-	-	-	-	9,6	1,88	0,58	179	10,5	2,85	0,72	164	17,0	3,20	0,81	153	19,3	3,57	0,92	139
021	45	-	-	-	-	-	-	-	-	12,0	1,88	0,73	167	14,5	3,05	0,91	148	21,4	3,28	1,03	135	24,3	3,65	1,16	118
017		-	-	-	-	-	-	-	-	-	-	-	-	11,2	2,50	0,71	165	16,7	2,86	0,80	155	18,8	3,17	0,90	142
021	50	-	-	-	-	-	-	-	-	-	-	-	-	13,3	2,30	0,90	149	21,1	2,92	1,01	137	23,8	3,26	1,14	122

Key LWT

Leaving water temperature,°C

Qh Heating capacity, kW

COP Coefficient of performance, kW/kW

Condenser water flow rate, I/s q ESP

External Static Pressure, kPa



Eurovent certified values

Application data

Standard units, refrigerant: R-410A

Condenser entering/leaving water temperature difference: 5 K for LWT \leq 50°C

Condenser fluid: Water Fouling factor: 0 m² k/W

Performances in accordance with EN14511-3:2022.



Air-Cooled Liquid Chillers and Reversible Air-to-Water Heat Pumps

COOLING CAPACITIES IN ACCORDANCE WITH EN14511-3

■ EREBA™ ACCESS Cooling only 17-21

		Condenser entering air temperature, °C																							
			2	0		25				30				35				40				46			
	LWT	Qc	EER	q	ESP	Qc	EER	q	ESP	Qc	EER	q	ESP	Qh	EER	q	ESP	Qc	EER	q	ESP	Qc	EER	q	ESP
	°C	kW	kW/ kW	l/s	kPa	kW	kW/ kW	l/s	kPa	kW	kW/ kW	I/s	kPa	kW	kW/ kW	l/s	kPa	kW	kW/ kW	l/s	kPa	kW	kW/ kW	l/s	kPa
017	5	17,7	4,31	0,85	143	17,0	3,82	0,82	148	16,3	3,33	0,78	153	15,5	2,88	0,74	158	14,6	2,48	0,70	163	13,4	2,03	0,65	170
021	э	22,9	4,30	1,10	115	22,1	3,86	1,06	120	21,2	3,43	1,02	126	20,2	3,00	0,97	133	18,9	2,55	0,91	140	17,1	2,04	0,83	151
017	7	18,7	4,49	0,90	137	18,0	3,99	0,87	142	17,2	3,48	0,83	147	16,4	3,01	0,79	152	15,5	2,59	0,75	158	14,2	2,13	0,69	165
021	1 '	24,3	4,47	1,17	106	23,5	4,02	1,13	112	22,5	3,57	1,08	118	21,4	3,12	1,03	126	20,1	2,67	0,97	134	18,2	2,14	0,88	145
017	10	20,4	4,77	0,98	125	19,7	4,25	0,95	131	18,8	3,72	0,91	137	17,9	3,22	0,86	143	16,9	2,78	0,81	150	15,6	2,29	0,75	158
021	10	26,5	4,73	1,28	92	25,6	4,26	1,24	98	24,6	3,80	1,19	105	23,4	3,33	1,13	114	21,9	2,85	1,06	123	19,9	2,29	0,96	136
017	15	23,7	5,26	1,15	101	22,9	4,72	1,11	108	21,9	4,14	1,06	116	20,8	3,60	1,01	124	19,7	3,12	0,95	132	-	-	-	-
021	15	30,7	5,14	1,49	61	29,7	4,65	1,44	69	28,5	4,18	1,38	78	27,2	3,69	1,31	89	25,5	3,18	1,23	101	-	-	-	-
017	40	25,9	5,54	1,26	84	25,0	4,98	1,21	92	23,9	4,39	1,16	101	22,7	3,83	1,10	110	-	-	-	-	-	-	-	-
021	18	33,4	5,34	1,62	40	32,3	4,85	1,57	50	31,1	4,38	1,51	60	29,6	3,89	1,43	71	-	-	-	-	-	-	-	-

Key
LWT Leaving water temperature, °C
Qc Cooling capacity, kW
EER Energy efficiency ratio, kW/kW
q Evaporator water flow rate, l/s
ESP External Static Pressure, kPa

CERTIFIED PERFORMANCE

Eurovent certified values

Application data

Standard units, refrigerant: R-410A Evaporator entering/leaving water temperature difference: 5K Evaporator fluid: Chilled water Fouling factor: 0 m² k/W Performances in accordance with EN14511-3:2022.



Air-Cooled Liquid Chillers and Reversible Air-to-Water Heat Pumps

COOLING CAPACITIES IN ACCORDANCE WITH EN14511-3

■ EREBA™ ACCESS Reversible 17-21

		Condenser entering air temperature, °C																							
			2	0		25				30				35					4	0		46			
	LWT	Qc	EER	q	ESP	Qc	EER	q	ESP	Qc	EER	q	ESP	Qh	EER	q	ESP	Qc	EER	q	ESP	Qc	EER	q	ESP
	°C	kW	kW/ kW	l/s	kPa	kW	kW/ kW	I/s	kPa	kW	kW/ kW	l/s	kPa												
017	5	17,0	4,37	0,82	147	16,4	3,89	0,79	151	15,6	3,38	0,75	156	14,8	2,92	0,71	161	14,0	2,50	0,67	166	12,8	2,05	0,62	172
021	5	21,2	4,17	1,02	125	20,5	3,72	0,99	130	19,7	3,32	0,95	135	18,8	2,91	0,90	141	17,6	2,49	0,85	148	15,9	2,00	0,77	157
017		18,1	4,57	0,87	140	17,4	4,06	0,84	145	16,6	3,55	0,80	150	15,7	3,06	0,76	155	14,8	2,63	0,71	161	13,6	2,16	0,66	168
021	,	22,5	4,34	1,08	118	21,7	3,87	1,05	123	20,8	3,46	1,00	128	19,9	3,04	0,96	134	18,6	2,61	0,90	142	16,9	2,10	0,81	152
017	10	19,7	4,86	0,95	129	18,9	4,33	0,91	135	18,1	3,80	0,87	141	17,2	3,29	0,83	147	16,2	2,83	0,78	153	14,9	2,33	0,72	161
021	10	24,4	4,58	1,18	105	23,6	4,09	1,14	111	22,7	3,67	1,09	117	21,7	3,23	1,04	124	20,3	2,79	0,98	132	18,5	2,26	0,89	144
017	45	22,9	5,40	1,11	106	22,1	4,81	1,07	113	21,1	4,26	1,02	120	20,1	3,71	0,97	128	18,9	3,20	0,91	136	-	-	-	-
021	15	28,2	4,95	1,37	79	27,3	4,45	1,32	87	26,1	4,00	1,26	95	24,9	3,55	1,20	104	23,4	3,08	1,13	114	-	-	-	-
017	40	25,0	5,70	1,21	89	24,1	5,09	1,17	97	23,1	4,54	1,12	106	21,9	3,96	1,06	115	-	-	-	-	-	-	-	-
021	18	30,6	5,13	1,48	62	29,5	4,62	1,43	71	28,3	4,17	1,37	80	27,0	3,72	1,31	90	-	-	-	-	-	-	-	-

Key
LWT Leaving water temperature, °C
Qc Cooling capacity, kW
EER Energy efficiency ratio, kW/kW
q Evaporator water flow rate, l/s
ESP External Static Pressure, kPa



Eurovent certified values

Application data

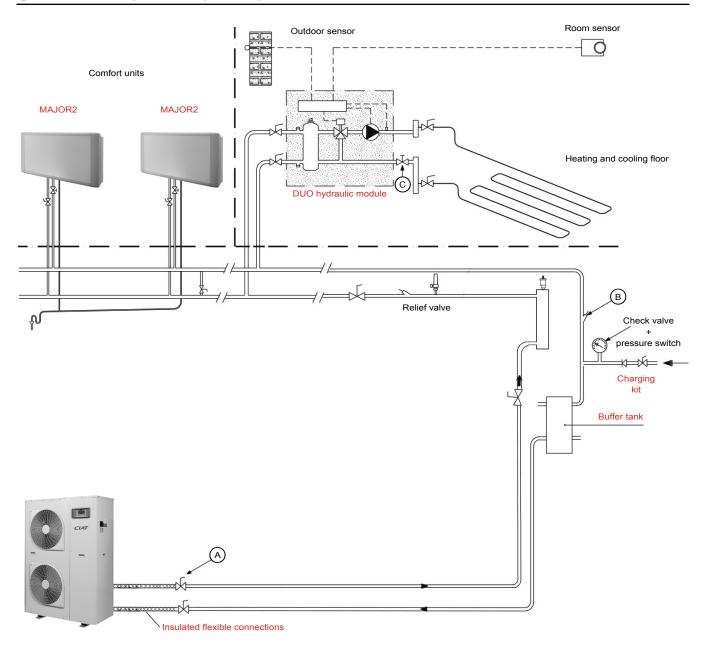
Standard units, refrigerant: R-410A Evaporator entering/leaving water temperature difference: 5K Evaporator fluid: Chilled water Fouling factor: 0 m² k/W

Performances in accordance with EN14511-3:2022.



Air-Cooled Liquid Chillers and Reversible Air-to-Water Heat Pumps

SCHEMATIC INSTALLATION DIAGRAM



A Shut-off valves

B Thermometer pockets

C Control valves

Option

Note: The schematic diagrams herein are provided for information only. Under no circumstances do they constitute actual installation diagrams

The quality management system of this product's assembly site has been certified in accordance with the requirements of the ISO 9001 standard (latest current version) after an assessment conducted by an authorized independent third party.

The environmental management system of this product's assembly site has been certified in accordance with the requirements of the ISO 14001 standard (latest

current version) after an assessment conducted by an authorized independent third party.

The occupational health and safety management system of this product's assembly site has been certified in accordance with the requirements of the ISO 45001 standard (latest current version) after an assessment conducted by an authorized independent third party.

Please contact your sales representative for more information

Order No.: NA23755A, 04.2023. Supersedes order No.: NA19755A, 03.2019. Manufacturer reserves the right to change any product specifications without notice. Carrier S.C.S, Montluel, France.

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