



→ Air-Cooled Liquid chillers & Reversible Air to Water Heat Pumps



Easy and fast installation
Hydronic module available
Compact, reliable and efficient



Nominal cooling capacity : 8-39 kW
Nominal heating capacity : 18-39 kW



Cooling or heating



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 parameter
- Circuit leakage, electrical compliance, water and refrigerant pressures.

RANGE

EREBA ACCESS's range is composed by 8 models in cooling only and 5 models reversible.

Operating range EREBA ACCESS :

- Cooling mode with an outdoor temperature from -10°C to 46°C (or 48°C for 17-40 models)
- Heating from -15°C to +40°C.

If the heat pump is the only source of heat:

Below this temperature, heating must be provided by a separate heating source or an additional electrical supply

If the heat pump is used for backup operation:

Operates down to the equilibrium point (temperature below which the heat pump can no longer keep up with heating needs). Below this point, the heat pump and boiler run alternately (heat pump OR boiler).

CONFORMITY

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/EU

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-adaptive 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 hydronic module

- Variable speed circulator or fix 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 3 bar (and 4 bar for 17-40)
- Thermal insulation and frost protection down to -10°C, using an electric resistance heater and pump cycling.

■ 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 color (RAL 7035) to facilitate the integration in residential area

■ Simplified electrical connections

- Various power cable outlet options (8-15)
- Single power supply point (17-40)
- Main disconnect switch with high trip capacity (17-40) only
- Transformer for safe 24 V control circuit supply included (17-40 only).



Economical operation

■ Increased seasonal efficiency

- In accordance with EN 14825:2013, 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 hydronic circuit.

■ Exceptional endurance tests

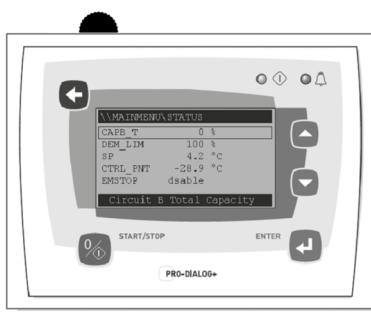
- Corrosion resistance tests in salt mist in the laboratory
- Accelerated ageing test on components that are submitted to continuous operation: compressor piping, fan supports
- Transport simulation test in the laboratory on a vibrating table.

Pro-Dialog+

■ Pro-Dialog+ control

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 user-friendly 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

■ Remote interface

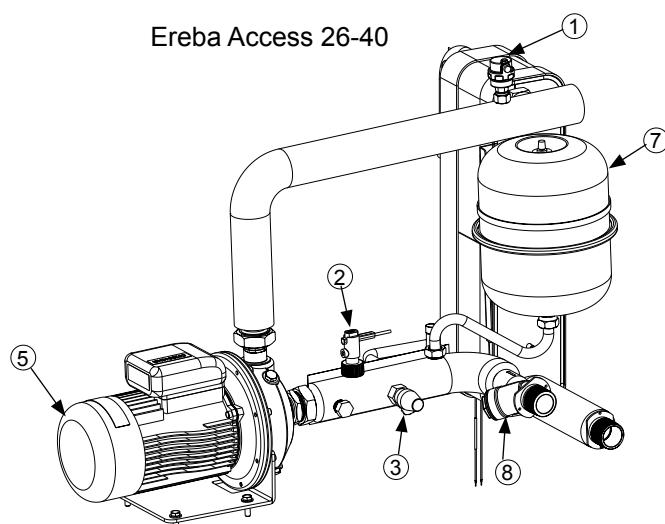
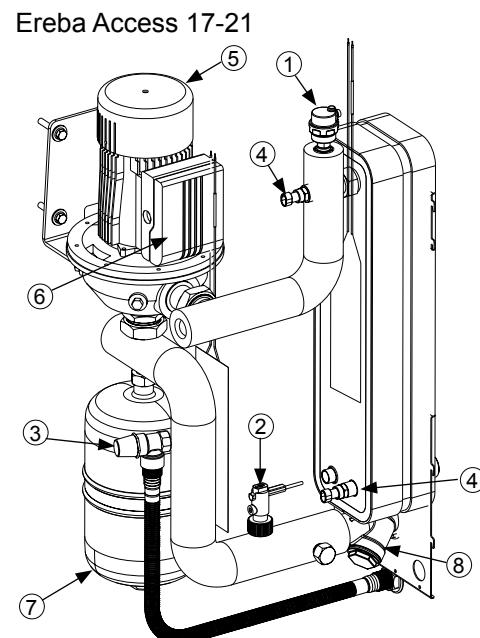
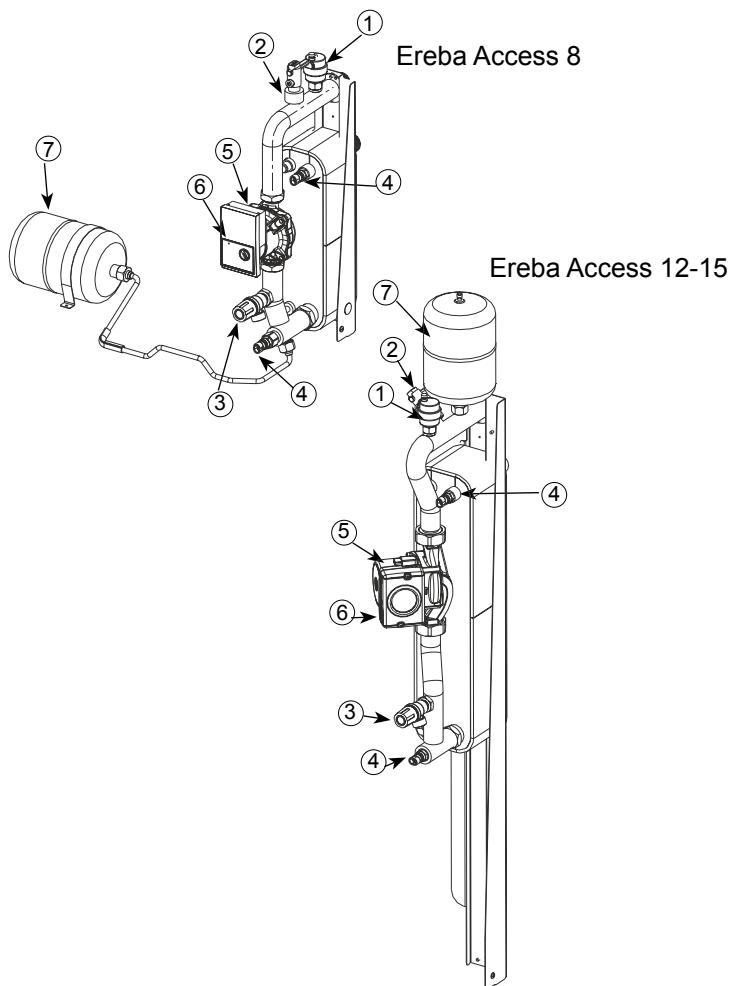
This interface allows access to the same menus as the unit interface and can be installed up to 300 m away. It includes a box that can be mounted inside the building. The power supply is provided via a 220 V/24V transformer supplied.

Ereba Access

HYDRONIC MODULE

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

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



Legend:

- 1 Automatic purge valve
- 2 Flow switch
- 3 Safety valve
- 4 Temperature sensor
- 5 Circulation pump
- 6 Plug to unblock seized pump
- 7 Expansion tank
- 8 Mesh filter



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PHYSICAL DATA

			cooling only								reversible				
EREBA ACCESS			8T	12T	15T	17T	21T	26T	33T	40T	17HT	21HT	26HT	33HT	40HT
Cooling*															
Nominal Capacity	C1	KW	8.0	10.8	14.0	16.5	21.4	27.4	33.3	41.5	15,70	19,90	26,20	32,20	39,10
EER	C1		3.10	2.93	2.91	3.03	3.13	3.05	3.26	2.93	3.06	3.04	2.89	3.11	2.81
Eurovent Class Cooling	C1		A	B	B	B	A	B	A	B	B	B	C	A	C
Nominal Capacity	C2	KW	10.1	15.0	17.7	22.7	29.5	38.4	45.5	57	21,90	27,00	33,90	42,80	54,00
EER	C2		3.70	3.65	3.43	3.83	3.88	3.94	4.03	3.47	3.96	3.72	3.52	3.83	3,37
ESEER			3.30	3.24	3.09	3.45	3.48	3.41	3.59	3.25	3.49	3.36	3.23	3.46	3,12
Heating*															
Nominal Capacity	H1	KW	-	-	-	-	-	-	-	-	17,6	22,0	30,9	34,4	38,8
COP	H1		-	-	-	-	-	-	-	-	4,02	3,99	3,94	3,95	3,48
SCOP	H1		-	-	-	-	-	-	-	-	3,20	3,20	3,20	3,20	3,20
η_s Heat	H1	%	-	-	-	-	-	-	-	-	125	125	125	125	125
Energy Class	H1		-	-	-	-	-	-	-	-	A+	A+	A+	A+	A+
Prated	H1	KW	-	-	-	-	-	-	-	-	10,0	13,0	21,0	23,0	29,0
Annual Energy Consumption	H1	KWH	-	-	-	-	-	-	-	-	6803	8331	13501	15098	19300
Nominal Capacity	H2	KW	-	-	-	-	-	-	-	-	17,0	21,4	29,7	33,1	40,9
COP	H2		-	-	-	-	-	-	-	-	3,20	3,28	3,18	3,17	3,13
Sound Power Level (1)	dB(A)	68	70	71	72	74	78	78	80	72	74	78	78	80	
Sound Pressure Level at 10m (2)	dB(A)	40	42	43	40	42	46	46	48	40	42	46	46	48	
Lenght	mm	908			1136			1002			1136			1002	
Width	mm	350			584			824			584			824	
Height	mm	821	1363			1580			1790			1580			1790
Operation Weight (3)	kg	76	114	116	189	208	255	280	291	206	223	280	295	305	
Compressors		Rotary	Scroll						Rotary	Scroll					
Refrigerant R410A charge (3)	kg	2.15	2.63	3.18	5.5	6.4	5.8	8.6	8.8	6.4	7.7	7.6	9.5	9.8	
	CO ₂ eq	4.5	5.5	6.6	11.5	13.4	12.1	18	18.4	13.4	16.1	15.9	19.9	20.5	
Air Heat Exchanger		Grooved copper tubes, aluminium fins													
Axial Fans		1 twin-speed	2 twin-speed		2 twin-speed		1 twin-speed			2 twin-speed		1 twin-speed			
Diameter	mm	495			495			710			495		710		
Air Flow	L/S	1060	2010		2212		3530			2217	1978	3530			
Water Heat Exchanger		Brazed plate													
Water volume	L	0.644	1.71	1.71	1.52	1.9	2.28	2.85	3.8	1.52	1.9	2.28	2.85	3.8	
Expansion tank volume	L	2			5			8			5		8		
Pump		Variable Speed				Single Speed									
Available static pressure	C1/ H1	kPa	52	74	60	152	126	174	160	188	148	130	188	176	187
Available static pressure	C2/ H2	kPa	37	54	33	110	71	78	56	106	152	134	197	186	193
Min. system water content	L	28	42	52	58	75	96	117	145	56	71	94	115	140	
Max. water-side operating pressure	kPa	300			400										
Outlet diameter		1" G male				1"1/4 G male									
Chassis paint colour		RAL 7035													

* In accordance with standard EN 14511-3:2013. Seasonal efficiency in accordance with standard EN 14825:2013, average climate

C1 Cooling mode conditions : evaporator water entering/leaving temperature 12°C/7°C, outside air temperature 35°C, evaporator cooling factor 0m² K/W

C2 Cooling mode conditions : evaporator water entering/leaving temperature 23°C/18°C, outside air temperature 35°C, evaporator cooling factor 0m² K/W

H1 Heating mode conditions : Water heat exchanger water entering/leaving temperature 30°C/35°C, cooling factor 0m² K/W. Outside air temperature 7°C db / 6°C wb

H2 Heating mode conditions : Water heat exchanger water entering/leaving temperature 40°C/45°C, cooling factor 0m² K/W. Outside air temperature 7°C db / 6°C wb

(1) In dB ref=10-12 W, (A) weighting. Declared dualnumber noise emission values in accordance with ISO 4871 (with an associated uncertainty of +/-3dB(A)).

Measured in accordance with ISO 9614-1 and certified by Eurovent.

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

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



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Ereba Access

ELECTRICAL DATA

EREBA ACCESS		8	12	15	17	21	26	33	40
Nominal power supply	V-ph-Hz			400-3+N-50					400-3-50
Voltage range	V		376-424			340-460			360-440
Control circuit supply				24V via internal transformer					
Maximum start-up current (Un) (1)	A	30	66	73	75	95	118	118	176
Unit power factor at nominal capacity (2)		0.88	0.84	0.85	0.84	0.79	0.77	0.81	0.9
Maximum operating power input (2)	kW	3.1	4.4	5.5	7.8	9.1	11	13.8	17.5
Nominal unit operating current drawn (3)	A	4.5	6.3	9.1	8	12	16	17	25
Maximum operating current draw (Un) (4)	A	5.1	7.6	9.3	13	16	20	24	30
Maximum operating current draw (Un-15%) (5)	A	5.4	8.0	9.9	15	18	23	27	36
Power fuse current (gL fuse)	A	10	16	20	25	32	40	50	63
Power supply cable section			H07RN-F - 5x2.5mm ²		H07RN-F - 5x6mm ²		H07RN-F - 5x16mm ²		H07RN-F - 4x16mm ²
Pump - power input (6)	kW	0.13	0.21	0.39	0.54	0.59	0.99	1.1	1.2
Pump - nominal operating current draw (6)	A	0.58	1	1.9	1.3	1.4	2.4	2.6	2.8
Pump - maximum current (external pump)	A	2			1.5		2.5		2.4
Number of fan motor capacitors (5 µF/450V)		1	2	2	2	2	0	0	0
Remote controller - Power supply cable section					H03VV-F - 7x0.5mm ²				

(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 400 V (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 340-460V for sizes 017 to 033 or 360-440V for size 040.

(6) Gross performances.



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Average climate

■ Low temp (30/35)

EREBA ACCESS	ηs (%)	SCOP	Pdesign (kW)	Annual power input with backup heater (kWh)	Sound power level dB(A)	Energy Class
17 HT	125	3,20	10	6803	72	A+
21 HT	125	3,20	13	8331	74	A+
26 HT	125	3,20	21	13501	78	A+
33 HT	125	3,20	23	15098	78	A+
40 HT	125	3,20	29	19300	80	A+

Colder climate

■ Low temp (30/35)

EREBA ACCESS	ηs (%)	SCOP	Pdesign (kW)	Annual power input with backup heater (kWh)	Sound power level dB(A)
17 HT	114	2,93	15	12009	-
21 HT	115	2,96	19	14896	-
26 HT	117	2,99	30	23476	-
33 HT	117	3,00	34	26242	-
40 HT	118	3,02	42	31642	-

Warmer climate

■ Low temp (30/35)

EREBA ACCESS	ηs (%)	SCOP	Pdesign (kW)	Annual power input with backup heater (kWh)	Sound power level dB(A)
17 HT	137	3,49	11	3876	-
21 HT	143	3,65	15	5143	-
26 HT	136	3,48	21	7637	-
33 HT	137	3,51	23	8492	-
40 HT	133	3,39	28	10623	-

SOUND SPECTRUM

■ Sound power level in dB(A)

EREBA ACCESS	Octave bands, Hz						Sound power level
	125	250	500	1000	2000	4000	
8	71	70	65	64	57	55	68
12	73	69	67	66	60	57	70
15	76	71	68	66	61	61	71
17	75	72	70	67	61	60	72
21	80	75	70	69	63	60	74
26	79	76	76	74	67	60	78
33	79	76	76	74	67	60	78
40	82	79	77	76	71	65	80

* SEER Conditions

OPERATING LIMITS

■ Operating range for EREBA ACCESS 8-15 (cooling only)

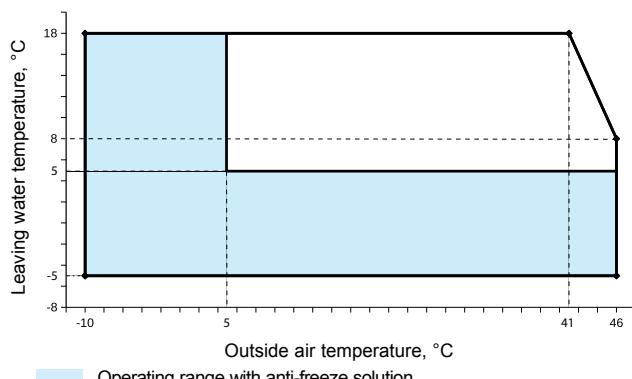
Water flow rate (in l/s)

EREBA Access	Minimum	Maximum @ 50kPa*		Maximum @ C1**
		Cooling mode	Heating mode	
8	0.12	0.24	-	0.38
12	0.12	0.52	-	0.52
15	0.12	0.88	-	0.62
17	0.45	1.39	1.39	0.79
21	0.57	1.52	1.52	1.03
26	0.67	1.96	2.18	1.32
33	0.87	2.18	2.29	1.60
40	1.05	2.6	2.6	1.99

* Maximum flow rate at an available pressure of 50 kPa (unit with hydronic module)

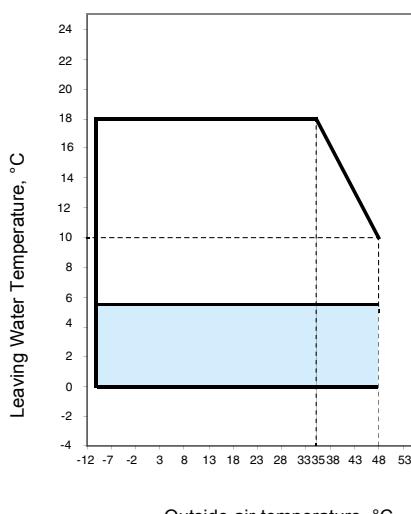
**Maximum flow rate at condition 1 - evaporator water entering/leaving temperature 12°C/7°C, outside air temperature 35°C.

Operating range EREBA ACCESS 8-15 cooling mode

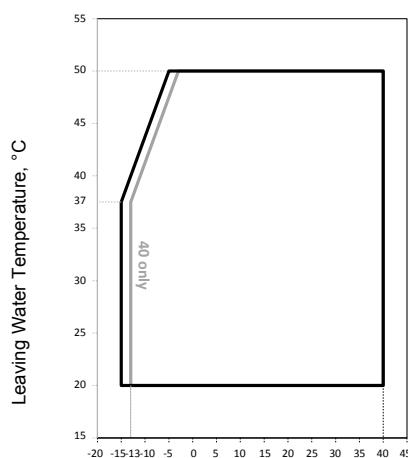


■ Operating range for EREBA ACCESS 17-40

Operating range EREBA ACCESS 17-40 cooling mode



Operating range EREBA ACCESS 17-40 heating mode

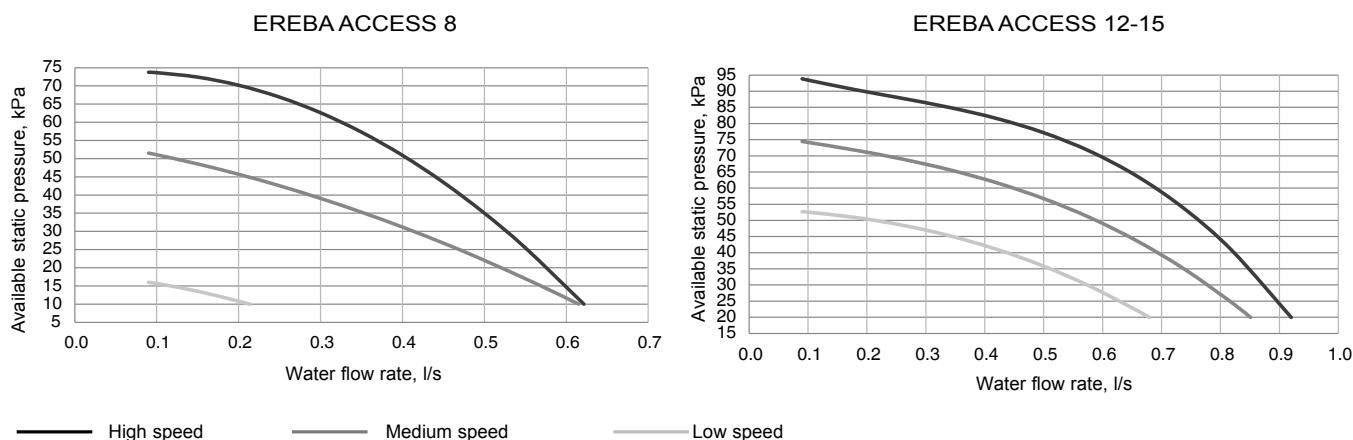


Operating range with anti-freeze solution

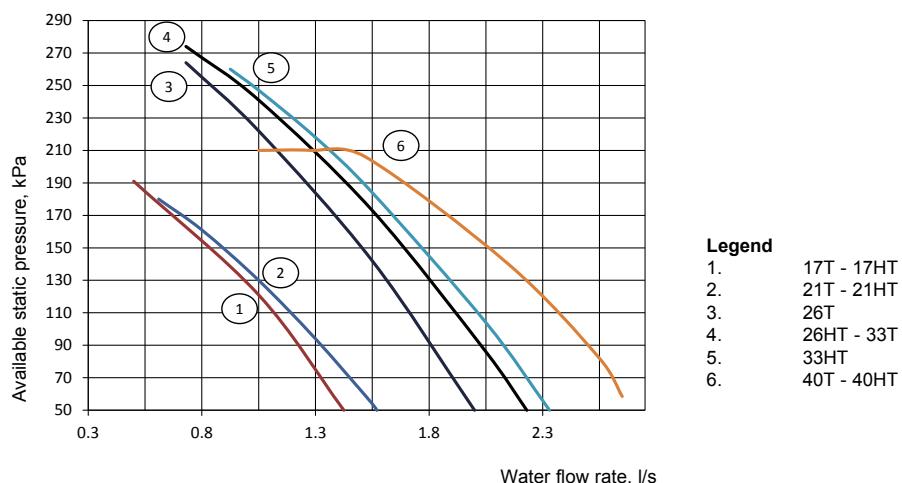
Operating range with anti-freeze solution

AVAILABLE STATIC SYSTEM PRESSURE

■ Available external static pressure for EREBA ACCESS



EReba Access 17-40





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Ereba Access

SYSTEM MINIMUM WATER VOLUME

The minimum water loop volume, in litres, is given by the following formula:

$$\text{Volume (l)} = \text{CAP (kW)} \times N$$

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

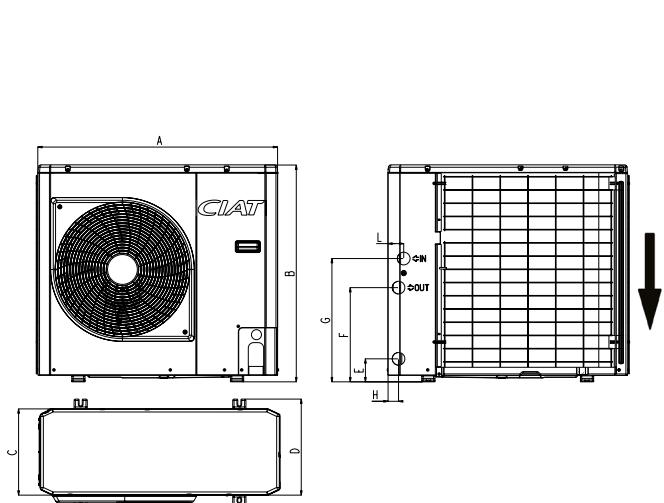
Water maximum volume (L)	1.5	3
Static pressure (bar)		
Fresh water	200	50
Ethylen glycol 10%	150	28
Ethylen glycol 20%	110	28
Ethylen glycol 30%	90	23
Ethylen glycol 40%	76	19



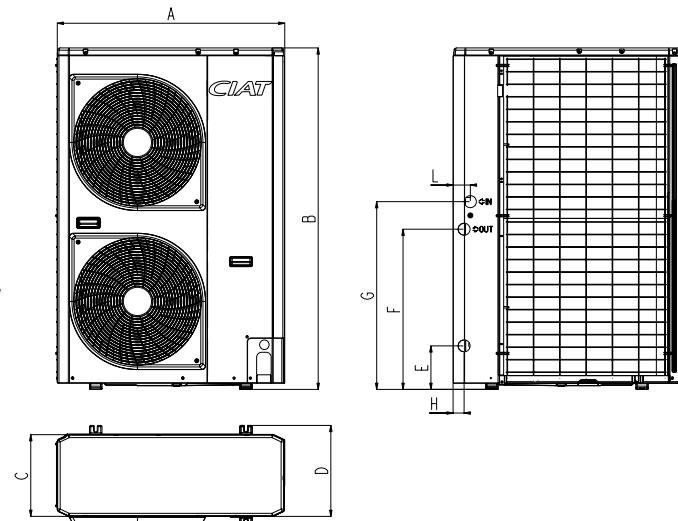
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DIMENSIONS (IN MM)

■ EREBA ACCESS 8

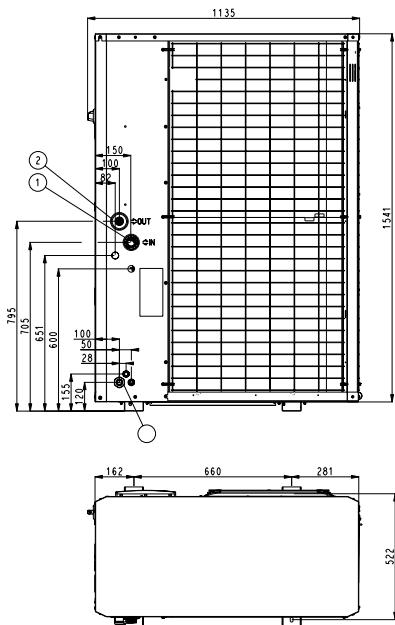


■ EREBA ACCESS 12-15

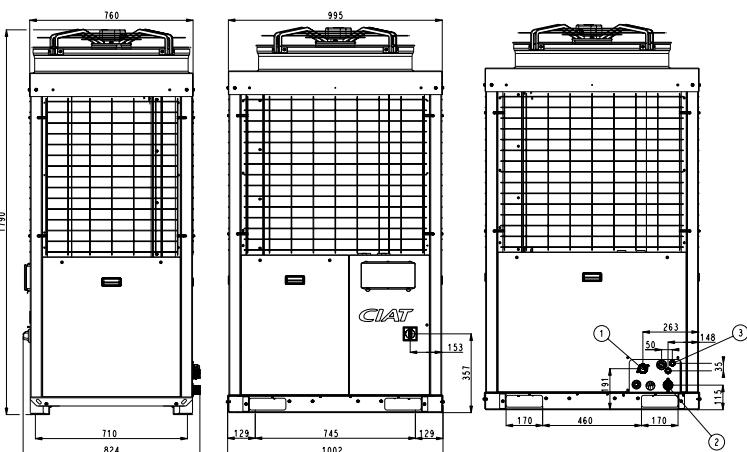


EREBA ACCESS	A	B	C	D	E	F	G	H	L
8	908	821	326	350	87	356	466	40	60
12	908	1363	326	350	529	995	1105	44	69
15	908	1363	326	350	529	995	1105	44	69

■ EREBA ACCESS 17-21



■ EREBA ACCESS 26-40



Legend
All dimensions are in mm
1. Water inlet
2. Water outlet
3. Power connections
Fixing holes ø10 mm

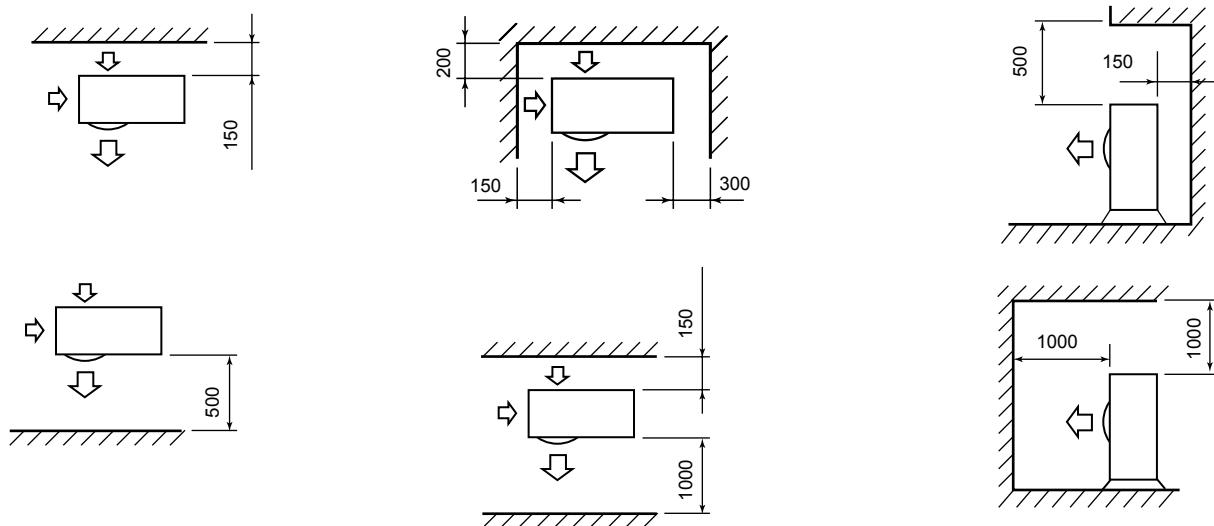
EREBA ACCESS	Weight (in kg)		
	Cooling only (T)	Operating weight*	Reversible (HT)
8	76	-	-
12	114	-	-
15	116	-	-
17	189	206	-
21	208	223	-
26	255	280	-
33	280	295	-
40	291	305	-

* Values are guidelines only. Refer to the unit nameplate

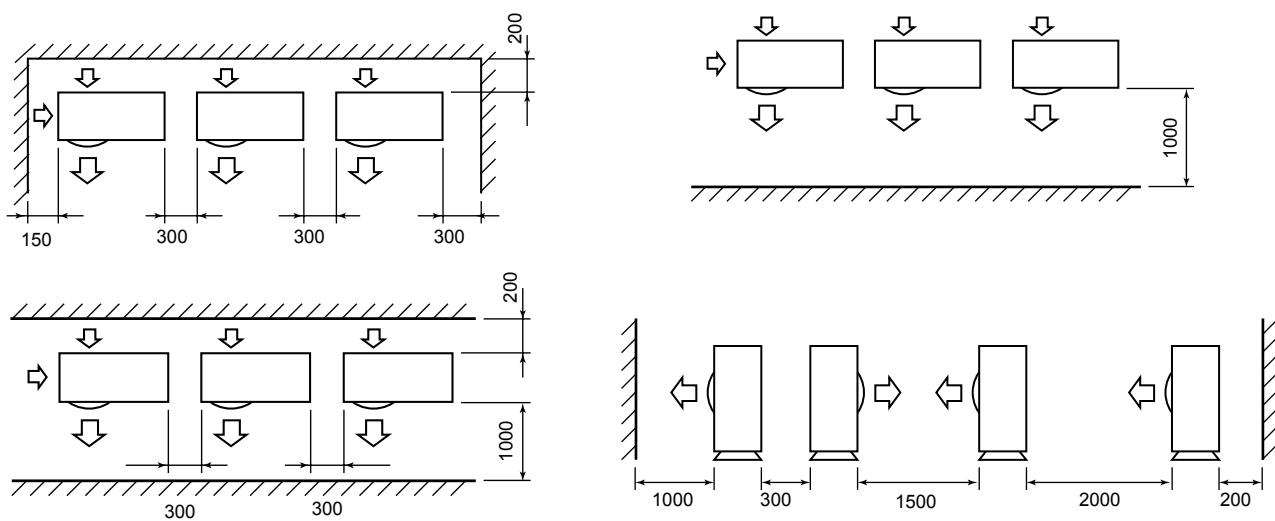
CLEARANCES (IN MM)

■ EREBA ACCESS 8-15

Single unit installation



Multiple unit installation

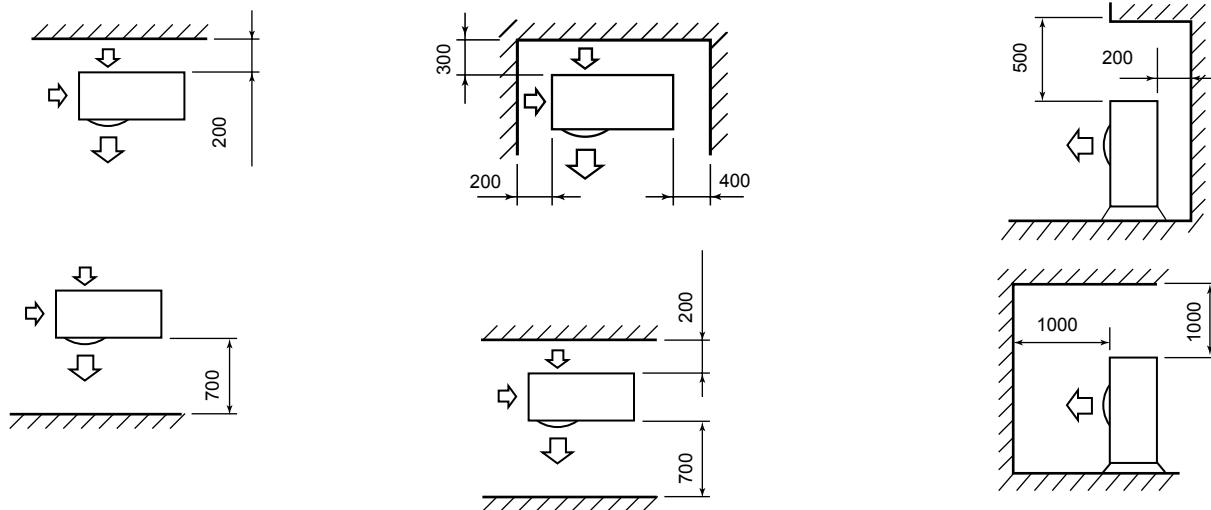


Note: The height of any obstacle at both the front and rear should be less than the outdoor unit height.

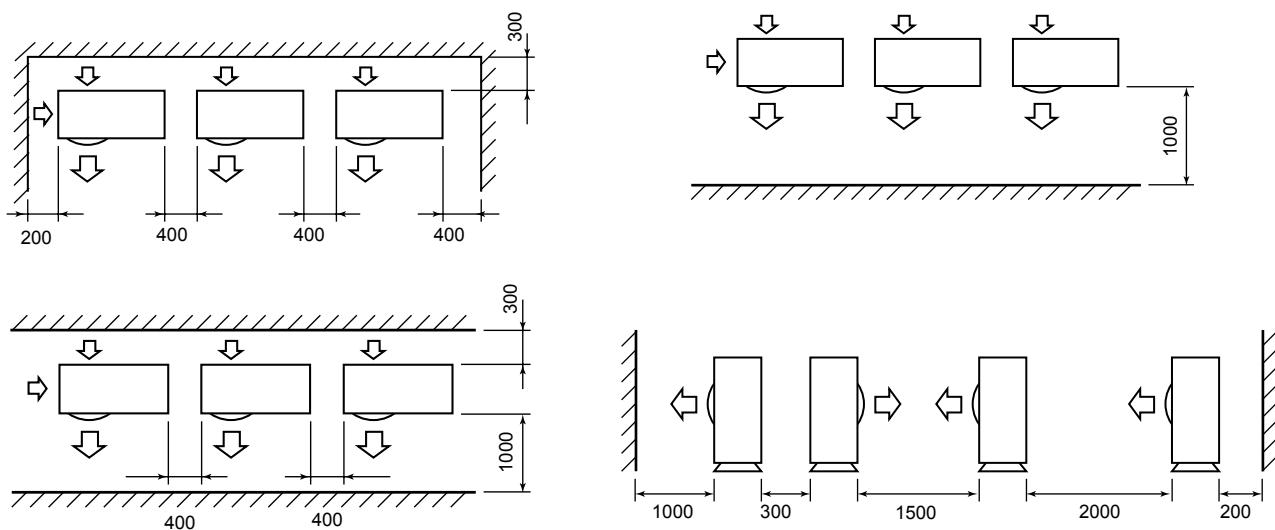
CLEARANCES (IN MM)

■ EREBA ACCESS 17-21

Single unit installation

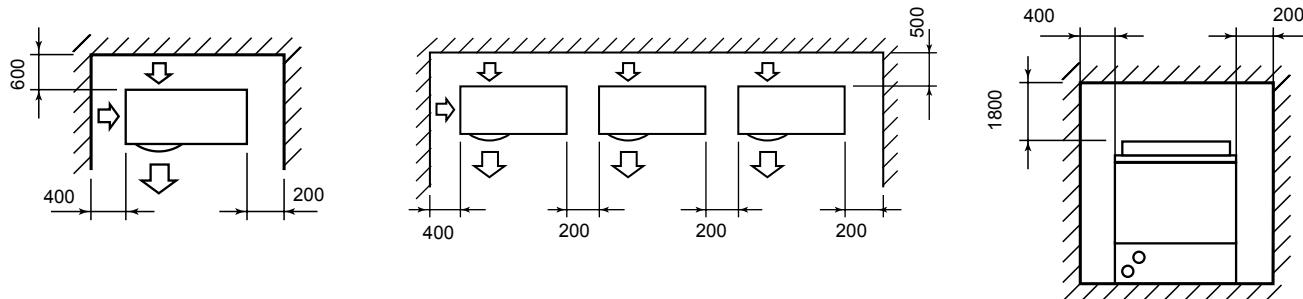


Multiple unit installation



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

■ EREBA ACCESS 26-40





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HEATING CAPACITIES IN ACCORDANCE WITH EN14511-3



		Outside air dry-bulb (wet-bulb) temperature, °C																									
		-15 (-16)				-10 (-11)				-7 (-8)				2 (1)				7 (6)				12 (11)					
LWT	Qh	COP	q	ESP	Qh	COP	q	ESP	Qh	COP	q	ESP	Qh	COP	q	ESP	Qh	COP	q	ESP	Qh	COP	q	ESP			
°C	kW	kW/ kW	l/s	kPa	kW	kW/ kW	l/s	kPa	kW	kW/ kW	l/s	kPa	kW	kW/ kW	l/s	kPa	kW	kW/ kW	l/s	kPa	kW	kW/ kW	l/s	kPa			
017	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			
	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			
	14,8	2,21	0,81	264	16,9	2,48	0,93	252	18,2	2,66	1,01	244	21,2	3,80	1,30	211	24,8	4,10	1,48	187	35,6	4,81	1,69	157			
	16,8	2,26	0,92	258	19,0	2,52	1,05	246	20,4	2,68	1,13	237	23,7	3,79	1,45	200	27,7	4,08	1,66	174	39,9	4,80	1,89	140			
	-	-	-	-	23,6	2,51	1,30	248	25,5	2,67	1,41	240	28,4	3,57	1,79	208	39,4	3,79	2,05	185	49,2	4,58	2,34	155			
017	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			
	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			
	14,9	2,02	0,80	264	16,9	2,27	0,92	253	18,2	2,44	1,00	246	20,9	3,45	1,28	214	30,9	3,94	1,47	190	35,2	4,38	1,67	161			
	16,8	2,08	0,91	259	19,1	2,33	1,05	246	20,6	2,48	1,13	238	23,4	3,46	1,44	203	34,4	3,95	1,64	178	39,3	4,38	1,87	145			
	-	-	-	-	23,8	2,33	1,29	248	25,7	2,49	1,40	240	28,0	3,28	1,77	210	38,8	3,48	2,02	188	48,4	4,20	2,30	159			
017	-	-	-	-	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			
	-	-	-	-	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			
	-	-	-	-	17,0	2,08	0,92	254	18,3	2,22	0,99	247	20,6	3,10	1,27	216	30,3	3,56	1,44	194	34,6	3,97	1,65	166			
	-	-	-	-	19,2	2,13	1,04	247	20,7	2,28	1,12	239	23,0	3,12	1,42	206	33,9	3,56	1,61	182	38,6	3,97	1,84	151			
	-	-	-	-	24,0	2,14	1,29	248	25,8	2,29	1,39	241	27,6	3,00	1,75	212	41,6	3,46	1,99	191	47,5	3,83	2,26	164			
017	-	-	-	-	-	-	-	-	-	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		
	-	-	-	-	-	-	-	-	-	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		
	-	-	-	-	-	-	-	-	-	18,5	2,04	0,98	248	20,2	2,78	1,24	219	29,7	3,18	1,42	199	33,9	3,56	1,61	172		
	-	-	-	-	-	-	-	-	-	20,7	2,08	1,10	241	22,6	2,79	1,39	210	33,1	3,17	1,58	187	37,7	3,55	1,80	158		
	-	-	-	-	-	-	-	-	-	26,3	2,12	1,39	241	27,4	2,73	1,74	214	40,9	3,13	1,95	195	46,5	3,46	2,22	169		
017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11,2	2,50	0,71	165	16,7	2,86	0,80	155	18,8	3,17	0,90	142
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13,3	2,30	0,90	149	21,1	2,92	1,01	137	23,8	3,26	1,14	122
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20,6	2,38	1,22	222	29,0	2,82	1,38	203	32,9	3,15	1,57	179
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23,0	2,40	1,36	214	32,1	2,80	1,53	194	36,3	3,12	1,73	168
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28,2	2,37	1,72	215	40,2	2,83	1,93	197	45,3	3,11	2,17	174

Legend

LWT Leaving water temperature, °C
Qh Heating capacity, kW
COP Coefficient of performance, kW/kW
q Condenser water flow rate, l/s
ESP External Static Pressure, kPa

Application data

Standard units, refrigerant: R-410A
Condenser entering/leaving water temperature difference: 5 K for LWT ≤ 50°C
Condenser fluid: water
Fouling factor: 0 (m² K)/W
Performances in accordance with EN14511-3:2013.



→ Air-Cooled Liquid chillers
& Reversible Air to Water Heat Pumps



COOLING CAPACITIES IN ACCORDANCE WITH EN14511-3

■ Ereba ACCESS Cooling only 8-15

		Condenser entering air temperature, °C																											
		-10				-5				0				5				10				15				20			
LWT	Qh	EER	q	ESP	Qh	EER	q	ESP	Qh	EER	q	ESP	Qh	EER	q	ESP	Qh	EER	q	ESP	Qh	EER	q	ESP	Qh	EER	q	ESP	
°C	kW	kW/ kW	l/s	kPa	kW	kW/ kW	l/s	kPa	kW	kW/ kW	l/s	kPa	kW	kW/ kW	l/s	kPa	kW	kW/ kW	l/s	kPa	kW	kW/ kW	l/s	kPa	kW	kW/ kW	l/s	kPa	
008		6.3	2.78	0.30	63	6.2	2.94	0.30	63	6.1	3.00	0.30	63	6.0	3.03	0.29	64	5.9	3.03	0.29	64	5.8	2.99	0.28	64	5.7	2.88	0.27	65
012	-5	9.0	2.89	0.44	81	9.0	2.86	0.43	81	8.8	2.80	0.43	81	8.7	2.72	0.42	82	8.5	2.63	0.41	82	8.3	2.51	0.40	83	8.1	2.38	0.39	83
015		10.9	2.40	0.53	75	10.9	2.51	0.53	75	10.9	2.57	0.53	75	10.7	2.59	0.52	76	10.5	2.57	0.51	77	10.3	2.50	0.50	77	9.9	2.40	0.48	78
008		7.7	2.76	0.37	55	7.7	3.47	0.37	55	7.7	3.67	0.37	55	7.7	3.72	0.37	55	7.5	3.57	0.36	56	7.4	3.45	0.36	56	7.1	3.24	0.34	58
012	0	10.6	3.19	0.51	77	10.7	3.22	0.52	76	10.6	3.22	0.51	77	10.5	3.19	0.51	77	10.3	3.12	0.50	77	10.1	3.01	0.49	78	9.8	2.88	0.47	79
015		13.5	2.95	0.65	65	13.5	3.06	0.65	65	13.4	3.13	0.64	66	13.3	3.15	0.64	66	13.0	3.11	0.63	67	12.7	3.03	0.61	69	12.3	2.90	0.59	70
008		9.8	2.82	0.47	40	9.9	4.31	0.47	40	9.8	4.61	0.47	40	9.7	4.60	0.46	42	9.4	4.21	0.45	43	9.1	3.97	0.44	45	8.6	3.64	0.41	49
012	5	12.4	3.53	0.60	70	12.4	3.64	0.60	70	12.4	3.70	0.60	70	12.3	3.71	0.59	70	12.1	3.66	0.59	70	11.9	3.57	0.57	72	11.5	3.42	0.56	73
015		16.3	3.56	0.78	47	16.3	3.70	0.78	47	16.2	3.77	0.78	47	16.1	3.80	0.77	49	15.8	3.75	0.76	50	15.4	3.65	0.74	53	15.0	3.50	0.72	56
008		9.7	2.70	0.46	42	9.9	4.26	0.48	38	10.0	4.65	0.48	38	10.0	4.71	0.48	38	9.8	4.37	0.47	40	9.5	4.13	0.46	42	9.1	3.78	0.44	45
012	7	12.9	3.61	0.62	68	13.1	3.76	0.63	67	13.1	3.84	0.63	67	13.0	3.86	0.63	67	12.9	3.83	0.62	68	12.6	3.74	0.61	69	12.3	3.59	0.59	70
015		17.1	3.76	0.82	41	17.1	3.89	0.82	41	17.0	3.95	0.81	42	16.8	3.96	0.80	44	16.5	3.91	0.79	46	16.1	3.81	0.77	49	15.7	3.64	0.75	52
008		9.4	2.53	0.45	43	10.1	4.18	0.48	38	10.3	4.73	0.49	37	10.4	4.89	0.50	35	10.3	4.61	0.50	35	10.1	4.36	0.49	37	9.7	4.00	0.47	40
012	10	13.8	3.75	0.66	64	14.0	3.93	0.67	62	14.1	4.05	0.68	61	14.1	4.10	0.68	61	14.0	4.08	0.67	62	13.7	4.01	0.66	64	13.4	3.86	0.64	66
015		18.3	4.05	0.87	31	18.3	4.17	0.87	31	18.2	4.22	0.86	33	17.9	4.21	0.85	35	17.7	4.16	0.84	37	17.2	4.03	0.82	41	16.7	3.85	0.80	44
008		9.0	2.24	0.43	47	10.3	4.05	0.49	37	10.8	4.87	0.52	31	11.1	5.18	0.53	29	11.3	5.05	0.54	27	11.2	4.78	0.54	27	10.8	4.37	0.52	31
012	15	15.2	3.98	0.73	55	15.5	4.24	0.75	52	15.7	4.42	0.76	50	15.8	4.52	0.76	50	15.8	4.54	0.76	50	15.6	4.46	0.75	52	15.3	4.31	0.73	55
015		20.2	4.60	0.96	10	20.1	4.70	0.96	10	20.0	4.73	0.95	13	19.7	4.69	0.94	15	19.4	4.59	0.92	20	19.0	4.43	0.90	25	18.5	4.23	0.88	29
008		8.8	2.06	0.42	48	10.4	3.98	0.50	35	11.1	4.95	0.53	29	11.6	5.36	0.55	25	11.9	5.32	0.57	21	11.8	5.05	0.57	21	11.5	4.61	0.55	25
012	18	16.1	4.12	0.77	49	16.5	4.44	0.79	46	16.7	4.66	0.80	44	16.9	4.79	0.81	42	16.9	4.82	0.81	42	16.7	4.76	0.80	44	16.4	4.61	0.79	46
015		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

		Condenser entering air temperature, °C																											
		25				30				35				40				45				46							
LWT	Qh	EER	q	ESP	Qh	EER	q	ESP	Qh	EER	q	ESP	Qh	EER	q	ESP	Qh	EER	q	ESP	Qh	EER	q	ESP	Qh	EER	q	ESP	
°C	kW	kW/ kW	l/s	kPa	kW	kW/ kW	l/s	kPa	kW	kW/ kW	l/s	kPa	kW	kW/ kW	l/s	kPa	kW	kW/ kW	l/s	kPa	kW	kW/ kW	l/s	kPa	kW	kW/ kW	l/s	kPa	
008		5.5	2.72	0.27	65	5.3	2.51	0.26	66	5.0	2.14	0.24	68	4.6	1.93	0.22	69	4.1	1.55	0.20	70	4.0	1.50	0.19	71				
012	-5	7.7	2.23	0.37	84	7.4	2.06	0.35	85	6.9	1.87	0.33	85	6.5	1.66	0.31	86	5.9	1.42	0.29	87	5.8	1.38	0.28	87				
015		9.4	2.25	0.46	80	8.9	2.07	0.43	81	8.3	1.83	0.40	83	7.7	1.56	0.37	84	6.9	1.25	0.33	85	6.7	1.19	0.33	85				
008		6.8	3.06	0.33	60	6.6	2.83	0.32	61	6.2	2.50	0.30	63	5.7	2.23	0.28	64	5.2	1.82	0.25	67	5.1	1.73	0.25	67				
012	0	9.4	2.71	0.46	80	8.9	2.50	0.43	81	8.4	2.26	0.41	82	8.0	2.00	0.38	83	7.3	1.68	0.35	85	7.2	1.61	0.35	85				
015		11.8	2.73	0.57	72	11.2	2.51	0.54	74	10.6	2.26	0.51	77	9.8	1.93	0.47	79	8.9	1.58	0.43	81	8.8	1.49	0.43	81				
008		8.3	3.40	0.40	51	7.9	3.18	0.38	54	7.6	2.89	0.36	56	6.9	2.58	0.33	60	6.4	2.13	0.31	62	6.3	1.99	0.30	63				
012	5	11.1	3.23	0.54	74	10.6	2.98	0.51	77	9.9	2.69	0.48	78	9.2	2.35	0.45	80	8.5	1.96	0.41	82	8.3	1.88	0.40	83				
015		14.4	3.29	0.69	60	13.7	3.04	0.66	64	13.2	2.76	0.64	66	12.1	2.35	0.59	70	11.2	1.93	0.54	74	11.0	1.85	0.53	75				
008		8.7	3.53	0.42	48	8.4	3.29	0.40	51	8.0	3.10	0.38	52	7.3	2.67	0.35	57	6.8	2.20	0.33	60	6.6	2.06	0.32	61				
012	7	11.8	3.39	0.57	72	11.3	3.13	0.55	74	10.8	2.93	0.52	74	9.9	2.46	0.48	78	9.1	2.05	0.44	81	9.0	1.96	0.44	81				
015		15.1	3.42	0.72	56	14.4	3.15	0.69	60	14.0	2.91	0.67	60	12.8	2.45	0.62													



→ Air-Cooled Liquid chillers
& Reversible Air to Water Heat Pumps

Ereba Access

COOLING CAPACITIES IN ACCORDANCE WITH EN14511-3



■ Ereba ACCESS Cooling only 17-40

LWT	°C	Condenser entering air temperature, °C																							
		20				25				30				35				40				46			
		Qh kW	EER kW/ kW	q l/s	ESP kPa	Qh kW	EER kW/ kW	q l/s	ESP kPa	Qh kW	EER kW/ kW	q l/s	ESP kPa	Qh kW	EER kW/ kW	q l/s	ESP kPa	Qh kW	EER kW/ kW	q l/s	ESP kPa	Qh kW	EER kW/ kW	q l/s	ESP kPa
017	5	17.9	4.56	0.85	143	17.2	4.03	0.82	148	16.4	3.50	0.78	153	15.6	3.01	0.74	158	14.8	2.58	0.70	163	13.6	2.12	0.65	170
021		23.1	4.54	1.10	115	22.3	4.06	1.06	120	21.5	3.59	1.02	126	20.4	3.12	0.97	133	19.1	2.65	0.91	140	17.3	2.11	0.83	151
026		28.9	4.49	1.38	163	28.0	3.97	1.33	170	26.9	3.49	1.28	179	25.6	3.03	1.22	189	24.0	2.58	1.14	201	21.8	2.07	1.04	216
033		35.0	4.73	1.67	149	34.2	4.21	1.63	155	33.0	3.76	1.57	164	31.6	3.28	1.51	174	29.7	2.80	1.41	188	26.9	2.27	1.28	207
040		45.5	4.26	2.17	169	43.6	3.78	2.07	179	41.4	3.33	1.97	189	39.1	2.91	1.86	200	36.5	2.50	1.74	211	33.2	2.05	1.58	225
017	7	18.9	4.77	0.90	137	18.2	4.21	0.87	142	17.4	3.66	0.83	147	16.6	3.15	0.79	152	15.6	2.70	0.75	158	14.4	2.22	0.69	165
021		24.6	4.74	1.17	106	23.7	4.23	1.13	112	22.8	3.74	1.08	118	21.6	3.25	1.03	126	20.3	2.76	0.97	134	18.4	2.21	0.88	145
026		31.1	4.77	1.48	146	30.2	4.23	1.44	154	29.0	3.73	1.38	163	27.7	3.24	1.32	174	25.9	2.76	1.23	187	23.5	2.23	1.12	205
033		37.4	4.99	1.78	130	36.4	4.43	1.74	138	35.1	3.95	1.67	149	33.6	3.45	1.60	160	31.6	2.96	1.51	175	28.7	2.40	1.37	195
040		48.4	4.43	2.31	155	46.4	3.94	2.21	165	44.1	3.47	2.10	176	41.6	3.03	1.99	188	38.9	2.62	1.86	201	35.4	2.15	1.69	216
017	10	20.6	5.07	0.98	125	19.9	4.50	0.95	131	19.0	3.91	0.91	137	18.1	3.37	0.86	143	17.1	2.90	0.81	150	15.7	2.38	0.75	158
021		26.8	5.04	1.28	92	25.9	4.51	1.24	98	24.9	3.99	1.19	105	23.6	3.48	1.13	114	22.1	2.96	1.06	123	20.1	2.37	0.96	136
026		34.4	5.19	1.64	119	33.4	4.60	1.59	128	32.1	4.07	1.53	139	30.6	3.55	1.46	151	28.7	3.04	1.37	167	26.1	2.45	1.25	187
033		40.9	5.33	1.95	103	39.8	4.76	1.90	112	38.5	4.24	1.84	123	36.9	3.73	1.76	136	34.8	3.20	1.66	153	31.6	2.60	1.51	176
040		53.0	4.68	2.53	130	50.7	4.16	2.42	143	48.3	3.67	2.31	156	45.6	3.21	2.18	169	42.8	2.79	2.04	183	38.9	2.30	1.86	201
017	15	24.0	5.64	1.15	101	23.1	5.02	1.11	108	22.1	4.37	1.06	116	21.0	3.78	1.01	124	19.9	3.25	0.95	132	18.3	2.69	0.88	142
021		31.1	5.56	1.49	61	30.0	4.98	1.44	69	28.9	4.43	1.38	78	27.5	3.89	1.31	89	25.8	3.33	1.23	101	23.4	2.69	1.12	116
026		40.3	5.86	1.93	66	39.2	5.23	1.88	76	37.8	4.65	1.81	90	36.1	4.08	1.73	106	34.0	3.52	1.63	125	31.0	2.87	1.48	150
033		47.4	5.93	2.27	46	46.1	5.32	2.21	58	44.5	4.74	2.13	73	42.7	4.19	2.04	89	40.5	3.62	1.94	109	37.0	2.96	1.77	138
040		-	-	-	-	58.6	4.51	2.80	99	55.8	3.98	2.67	115	52.8	3.49	2.52	133	49.5	3.04	2.37	150	45.1	2.53	2.16	172
017	18	26.2	5.99	1.26	84	25.3	5.33	1.21	92	24.1	4.66	1.16	101	22.9	4.03	1.10	110	21.7	3.47	1.04	120	20.0	2.87	0.96	132
021		33.9	5.86	1.62	40	32.7	5.25	1.57	50	31.4	4.69	1.51	60	29.9	4.12	1.43	71	28.1	3.54	1.35	85	25.6	2.88	1.23	103
026		-	-	-	-	-	-	-	41.0	4.95	1.97	61	39.2	4.37	1.88	78	37.0	3.79	1.77	99	33.9	3.10	1.62	128	
033		51.5	6.27	2.47	7	50.1	5.64	2.40	21	48.4	5.03	2.32	38	46.5	4.46	2.23	56	44.1	3.87	2.11	78	40.4	3.18	1.93	111
040		-	-	-	-	-	-	-	-	-	-	-	-	57.4	3.65	2.75	106	53.8	3.18	2.58	127	-	-	-	-

Legend

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

Application data

Standard units, refrigerant: R-410A
Evaporator entering/leaving water temperature difference: 5 K
Evaporator fluid: chilled water
Fouling factor: 0 (m² K)/W
Performances in accordance with EN14511-3:2013.



→ Air-Cooled Liquid chillers
& Reversible Air to Water Heat Pumps

COOLING CAPACITIES IN ACCORDANCE WITH EN14511-3



■ Ereba ACCESS Reversible 17-40

LWT	Qh	Condenser entering air temperature, °C																			
		20				25				30				35				40			
		kW	EER	q	ESP	kW	EER	q	ESP	kW	EER	q	ESP	kW	EER	q	ESP	kW	EER	q	ESP
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
		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
		27,6	3,98	1,34	194	26,8	3,54	1,29	200	25,8	3,14	1,24	207	24,6	2,75	1,19	215	23,1	2,36	1,12	224
		34,2	4,26	1,65	160	33,2	3,82	1,60	168	32,0	3,41	1,55	177	30,6	2,98	1,48	187	28,5	2,55	1,38	200
		42,4	3,87	2,04	182	40,7	3,46	1,96	190	38,9	3,07	1,87	199	36,8	2,69	1,77	208	34,6	2,32	1,66	217
017	7	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
		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
		29,4	4,16	1,42	183	28,5	3,71	1,38	189	27,4	3,30	1,33	196	26,2	2,89	1,26	205	24,6	2,49	1,19	215
		36,1	4,43	1,74	147	35,0	3,96	1,69	156	33,7	3,55	1,63	165	32,2	3,11	1,55	176	30,1	2,66	1,45	191
		44,9	4,03	2,16	170	43,1	3,61	2,08	179	41,2	3,20	1,98	188	39,1	2,81	1,88	198	36,7	2,43	1,77	208
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
		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
		32,0	4,41	1,55	164	31,1	3,95	1,51	171	29,9	3,52	1,45	179	28,6	3,10	1,38	189	26,9	2,69	1,30	201
		38,7	4,65	1,88	127	37,6	4,17	1,82	136	36,2	3,74	1,75	147	34,6	3,29	1,68	159	32,5	2,84	1,57	175
		49,0	4,25	2,37	148	47,0	3,81	2,27	159	44,9	3,39	2,16	170	42,6	2,98	2,05	182	40,1	2,60	1,93	193
017	15	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
		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
		36,0	4,75	1,75	133	34,9	4,27	1,70	142	33,6	3,82	1,63	153	32,0	3,38	1,56	165	30,3	2,95	1,47	178
		43,8	5,00	2,13	85	42,7	4,52	2,08	96	41,2	4,09	2,00	108	39,5	3,63	1,92	123	37,3	3,15	1,81	141
		56,9	4,56	2,76	104	54,6	4,10	2,65	117	52,2	3,65	2,52	132	49,4	3,23	2,39	147	46,4	2,84	2,25	163
017	18	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	20,7	3,42	1,00	124
		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	25,3	3,24	1,23	102
		38,1	4,90	1,86	116	36,9	4,42	1,80	127	35,5	3,96	1,73	139	33,9	3,52	1,65	152	32,1	3,08	1,56	166
		47,3	5,20	2,31	53	46,1	4,73	2,25	65	44,6	4,29	2,17	80	42,8	3,83	2,08	96	40,5	3,34	1,97	116
		61,6	4,72	2,99	74	59,4	4,25	2,89	88	56,9	3,79	2,76	104	54,0	3,37	2,62	122	50,8	2,96	2,46	140

Legend

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

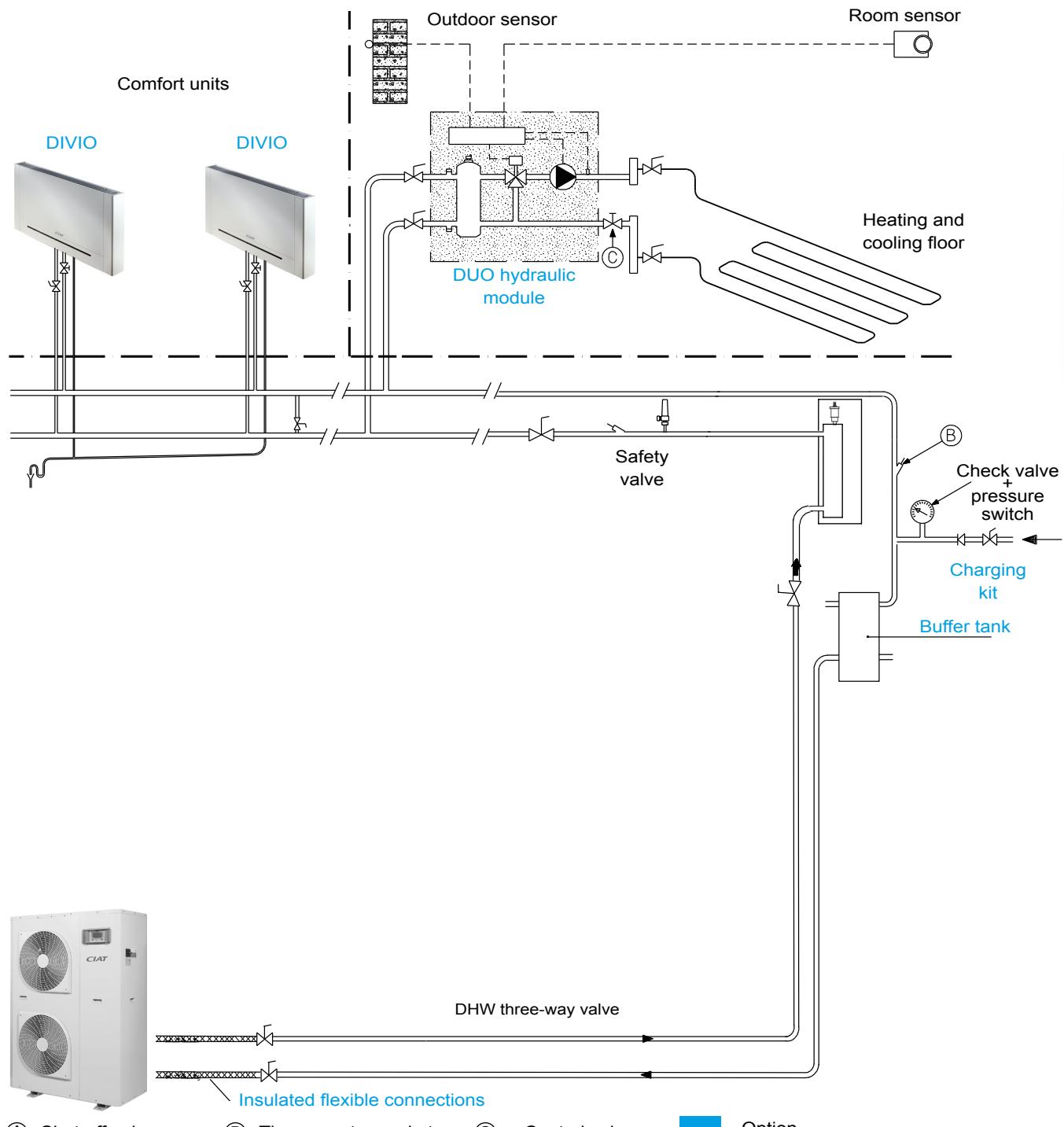
Application data

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 EN14511-3:2013.



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SCHEMATIC INSTALLATION DIAGRAM



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

This document is non-contractual. As part of its policy of continual product improvement, CIAT reserves the right to make any technical modification it feels appropriate without prior notification.

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