

**Condenserless unit
79,2-410 kW****Version**

B Basic

Features**COMPACTNESS**

Compactness in terms of overall size and weight, helping installation and working on site

ADAPTABILITY

Adaptability at the building's cooling request thanks to the continuous capacity regulation, assured by sophisticated control's logic.

WIDE OPERATING RANGE

Extensive range of operation with remote condenser operating up to 46°C air temperature

SILENT OPERATION

Extremely silent operation thanks to the accurate unit's design. Optional integral acoustic enclosure, reduces more the sound level beyond the best on market

Accessory

- Soft start
- Set-up for remote connectivity with ModBus, Echelon, Bacnet, Bacnet over-IP.
- Remote control keyboard (distance to 200m and to 500m)
- Electronic expansion valve
- Integral acoustical enclosure (type base or plus)

Indoor unit for the production of chilled water combined with a remote condenser, with semi-hermetic screw compressors optimized for R134a, shell and tube evaporator designed by Climaveneta and thermostatic expansion valve.

Base and supporting structure and panels are of galvanized epoxy powder coated steel with increased thickness.

Flexible and reliable unit; it easily adapts itself to different thermal load conditions thanks to the precise thermoregulation. The high performance's level is achieved thanks to the accurate sizing of all internal components.

Controls**W3000SE Large**

The W3000 SE Large controller offers advanced functions and algorithms.

The keypad is generously sized with full operating status display. The commands and detailed LCD display make access to the unit's settings easy and safe. These resources allow to consult and intervene on the unit by means of a multi-level menu, with selectable language setting.

The diagnostics includes a complete alarm management, with the "black-box" and alarm logging functions for enhanced analysis of the unit operation.

For multiple units' systems, the regulation of the resources, via optional proprietary devices, can be implemented. Energy metering, for both consumption and capacity, can also be developed. Supervision can be easily developed via proprietary devices or the integration in third party systems by means of the most common protocols as ModBus, Bacnet, Bacnet-over-IP, Echelon LonWorks. Compatibility with the remote keyboard managing up to 10 units.

Availability of an internal real time clock for operation scheduling (4-day profiles with 10 hour belts).

The regulation features the continuous modulation of capacity, based on a dynamic dead band and referring to the leaving water temperature. As alternative, step-wise regulation is also available, referred to the return water temperature with selectable proportional- or proportional-integral logic.



FOCS-ME / B		0401	0501	0551	0651	0751	0802	0851
Power supply	V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
PERFORMANCE								
COOLING								
Cooling capacity	(1) kW	79,2	98,2	119	135	151	162	181
Total power input	(1) kW	22,7	27,9	32,5	37,6	42,3	45,6	48,9
EER	(1) kW/kW	3,49	3,52	3,67	3,59	3,57	3,55	3,71
EXCHANGERS								
HEAT EXCHANGER USER SIDE IN REFRIGERATION								
Water flow	(1) l/s	3,79	4,70	5,71	6,46	7,23	7,73	8,67
Pressure drop	(1) kPa	14,7	14,9	11,9	15,2	19,0	14,6	18,3
REFRIGERANT CIRCUIT								
Compressors nr.	N°	1	1	1	1	1	2	1
No. Circuits	N°	1	1	1	1	1	2	1
Refrigerant charge	kg							
NOISE LEVEL								
Sound Pressure	(2) dB(A)	59	60	62	62	62	62	62
Sound power level in cooling	(3)(4) dB(A)	91	92	94	94	94	94	94
SIZE AND WEIGHT								
A	(5) mm	2024	2330	2400	2400	2400	2890	2947
B	(5) mm	880	880	880	880	880	1081	880
H	(5) mm	1300	1300	1490	1490	1490	1430	1490
Operating weight	(5) kg	720	750	1040	1060	1060	1280	1130

FOCS-ME / B		0951	1002	1102	1302	1502	1702	1902
Power supply	V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
PERFORMANCE								
COOLING								
Cooling capacity	(1) kW	203	200	230	273	312	360	410
Total power input	(1) kW	56,5	56,0	64,6	75,3	85,0	97,7	113
EER	(1) kW/kW	3,59	3,57	3,56	3,63	3,67	3,69	3,63
EXCHANGERS								
HEAT EXCHANGER USER SIDE IN REFRIGERATION								
Water flow	(1) l/s	9,71	9,55	10,99	13,06	14,93	17,23	19,63
Pressure drop	(1) kPa	34,8	33,7	44,6	38,7	35,0	46,5	25,0
REFRIGERANT CIRCUIT								
Compressors nr.	N°	1	2	2	2	2	2	2
No. Circuits	N°	1	2	2	2	2	2	2
Refrigerant charge	kg							
NOISE LEVEL								
Sound Pressure	(2) dB(A)	62	63	65	65	65	65	65
Sound power level in cooling	(3)(4) dB(A)	94	95	97	97	97	97	97
SIZE AND WEIGHT								
A	(5) mm	2947	2890	3016	3277	3277	3292	3362
B	(5) mm	880	1081	1081	1081	1081	1081	1081
H	(5) mm	1500	1430	1480	1580	1580	1590	1700
Operating weight	(5) kg	1150	1290	1680	1970	1990	2010	2300

Notes:

- 1 Plant (side) cooling exchanger water (in/out) 12°C/7°C; Condensation temperature 47°C.
 - 2 Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.
 - 3 Sound power on the basis of measurements made in compliance with ISO 9614.
 - 4 Sound power level in cooling, indoors.
 - 5 Unit in standard configuration/execution, without optional accessories.
- The units highlighted in this publication contain HFC R134a [GWP₁₀₀ 1430] fluorinated greenhouse gases.

