PROFROID

Low carbon heating production





High-temperature Commercial heat pump CO₂ natural refrigerant – Water source – CM range



Up to 90°C hot water production



2 levels of heat in one unit



Simultaneous heating and cooling



High efficiency



Ejector technology



Compact Footprint



Simple / intuitive touch screen / PLC controlled



Connect to BMS, smartphone, tablet, web server, and more



PFAS/TFA free refrigerant

Brochures available here:







HeatCO₂OL CM WW		CM 140WW	CM 170WW	CM 210WW	CM 240WW	CM 270WW	CM350WM
Nominal point: heating water in 30°C	, out 60°C. Cool	ing water in 1	2°C, out 7°C				
Heating capacity (water in / out: 30/6	0°C) kW	140	170	210	240	270	350
Cooling capacity (water in/out: 12/7°C	c) kW	110	140	170	195	220	290
COP		4,0	3,9	4,0	4,0	4,0	4.0
EER		3,2	3,3	3,3	3,3	3,3	3.3
Eq. SEER (1)		4,4	4,3	4,4	4,4	4,4	4.4
Total COP (Cooling and heating)		7,1	7,1	7,2	7,3	7,3	7.3
Input Power	kW	34	43	52	59	66	86
Flow rate heating 30/60°C	m³/h	4	5	6	7	8	11
Flow rate cooling 12/7°C	m³/h	19	24	29	34	38	50
Nominal point: heating water in 30°C	, out 70°C. Cool	ing water in 1	.2°C, out 7°C				
Heating capacity (water in / out: 30/7	0°C) kW	140	170	210	240	270	350
Cooling capacity (water in/out: 12/7°C	c) kW	105	140	170	195	220	290
COP		3,8	3,7	3,8	3,8	3,8	3.8
EER		3,1	3,2	3,2	3,2	3,2	3.2
Eq. SEER (1)		4,4	4,3	4,4	4,4	4,4	4.4
Total COP (Cooling and heating)		6,7	6,7	6,9	6,9	6,9	6.9
Input Power	kW	34	44	53	61	69	90
Flow rate heating 30/70°C	m³/h	3	4	5	5	6	8
Flow rate cooling 12/7°C	m³/h	18	24	29	34	38	50
Physical properties							
Number of compressors		2	3	3	3	3	4
CO ₂ charge (2)	kg	150	160	160	160	160	180
Connection water side hot	mm/DN	35	35	35	42	42	54
Connection water side cold	mm/DN	65	65	65	80	80	80
		Indoor	version*				
L		3220	3220	3220	3220	3220	3820
Dimensions W	mm	800	800	800	800	800	800
Н		1950	1950	1950	1950	1950	1950
Operationnal weight (CO ₂ + water included) (2)	kg	2700	2700	2700	2700	2700	3000
Sound pressure level @10 m (3)	dB(A)	49,5	50,4	51,3	51,3	51,8	53.4
Electrical data for 400/3/50 + N / EN	I / Short circuit	current 15k <i>A</i>	V.				
Maximum operating current	А	84	105	126	126	159	212
Nominal electric current	A	70	83	98	105	120	160

Heat COOL CM

Main options:

- Outdoor housing version with / without sound proofing
- Hydraulic pumps control
- Modbus, RS485/RTU, TCP communication
- Global electrical energy measurement
- Inverter drive on compressor N°2
- Smart control for several units in parallel
- 2 circuits with different temperature levels of hot water production to maximize performance
- Other options on request

US SEER, we use Directive 2009/15/EC of the European Parliament and of the Council with regard to Ecodesign requirements as areference.

(2) Estimated Value — to be charged and adjusted on site

(3) The sound presure levels are mentioned in free field. Running the equipment in other conditions may lead to different results. The results obtained on the installation site may differ from those in this leaflet, due to sound reflections from walls, etc. The reduction of sound level as a function of distance is theoretical and sound reflection and resonance may alter the results, either on total sound level or on certain frequencies.





Profroid reserves the right to change certain information and specifications contained in this document at any time and without prior notice. Since standards, specifications and designs are subject to occasional change, please ask for confirmation of the information given in this publication

