

# PROFROID

## Low carbon heating production

# Heat COOL IS



High-temperature  
Industrial heat pump  
CO<sub>2</sub> natural refrigerant –  
Water source – IS range



Up to 90°C hot water production



High efficiency



Simple / intuitive touch screen / PLC controlled



3 levels of heat in one unit



Ejector technology



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



Simultaneous heating and cooling



Compact Foot print



PFAS/TFA free refrigerant

Brochures available here:



300–750 kW AC cooling capacity



400–900 kW heating capacity

## Main options:

- Outdoor housing version with / without sound proofing
- Hydraulic pumps control
- Modbus, RS485/RTU, TCP communication
- Electrical energy measurement for compressor
- Electrical energy measurement for pumps
- 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

HeatCO <sub>2</sub> OL IS WW		IS 460WW	IS 580WW	IS 650WW	IS 790WW	IS 910WW	
Nominal point: heating water in 30°C, out 60°C. Cooling water in 12°C, out 7°C							
Heating capacity (water in / out: 30/60°C)	kW	460	580	650	790	910	
Cooling capacity (water in/out: 12/7°C)	kW	370	470	530	640	740	
COP		3,6	3,7	3,6	3,7	3,6	
EER		3,0	3,0	3,0	3,0	3,0	
Eq. SEER (1)		4,5	4,5	4,3	4,5	4,5	
Total COP (Cooling and heating)		6,5	6,7	6,5	6,7	6,5	
Input Power	kW	121	154	176	213	249	
Flow rate heating 30/60°C	m <sup>3</sup> /h	13	17	19	23	26	
Flow rate cooling 12/7°C	m <sup>3</sup> /h	64	81	91	110	128	
Nominal point: heating water in 30°C, out 70°C. Cooling water in 12°C, out 7°C							
Heating capacity (water in / out: 30/70°C)	kW	460	580	650	790	915	
Cooling capacity (water in/out: 12/7°C)	kW	370	470	530	640	740	
COP		3,5	3,6	3,5	3,6	3,5	
EER		3,0	3,0	3,0	3,0	3,0	
Eq. SEER (1)		4,5	4,5	4,3	4,5	4,5	
Total COP (Cooling and heating)		6,3	6,5	6,4	6,5	6,3	
Input Power	kW	121	154	176	213	249	
Flow rate heating 30/70°C	m <sup>3</sup> /h	10	13	14	17	20	
Flow rate cooling 12/7°C	m <sup>3</sup> /h	64	81	91	110	128	
Physical properties							
Number of compressors		4	5	5	5	5	
CO <sub>2</sub> charge (2)	kg	510	510	520	550	550	
Connection water side hot	DN	50	65	65	65	65	
Connection water side cold	DN	100	125	125	150	150	
Indoor version*							
Dimensions	L	mm	5200	6145	6145	6145	6145
	W	mm	1000	1000	1000	1000	1000
	h	mm	2200	2200	2200	2200	2200
Operational weight (CO <sub>2</sub> + water included) (2)	kg	6400	6400	6700	7300	7500	
Sound pressure level @10m (3)	dB(A)	58,4	59,4	59,2	61,6	62,7	
Electrical data for 400/3/50 + N / EN / Short circuit current 15kA							
Maximum operating current	A	282	353	468	437	437	
Nominal electric current	A	218	267	341	363	413	

\* outdoor version available

(1) SEER, we use Directive 2009/15/EC of the European Parliament and of the Council with regard to Ecodesign requirements as reference.

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

(3) The sound pressure 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.



- **Water source / Air source**
- **Packaged evaporator / split versions for commercial AW ranges**
- **Reversible: Heat in winter / AC and domestic hot water in summer**



More than  
**23 000<sub>2</sub>**  
units produced

