

# Cascade CO<sub>2</sub> remote condensing unit CDU-M



#### SOLUTIONS FOR COMMERCIAL REFRIGERATION ENVIRONMENTAL CDU-M - Product réf. R04A1B

Evaporating temperature	°(C)	-35	-30		-10	-5	
Cooling capacity	(kW)	2.0	2.16	5	4.33	4.87	
Electric power input	(kW) 2.11		2.13		2.62	2.76	
Operation temperature	Evaporating (Min/Max)		°(C)		-35 ~ +5		
	Ambient (Min/Max)		°(C)		-25 ~ +43		
Dimensions	Height x Width x Depth		(mm)	1.300 X 1.100 X 281*			
Weight			(kg)	107			
Noise pressure level (1)	1 meter away		(dB(A))	49			
Compressor	Туре			Inverter Hermetic Scroll			
	Speed range		(Hz)	35 ~ 80			
Heat Exchanger	Туре			Aluminium microchannel			
Refrigerant	Type / GWP			R744 (CO <sub>2</sub> ) / 1			
Power Supply	Phases /Voltage/ Fre- quency		(-/V/Hz)	1 phase / 230/ 50 or 60			
Communication	Standard			Modbus			
PED	Category				1		
Maximum working pressure (MWP)	High pressure side		MPa		14		
MWP	Low pressure side		MPa		9		



+5 5.6 2.78

(1) Conditions : T° Ambient + 32°C, Compressor Speed 80hz

\*without pipe cover

### MAIN BENEFITS

- First 100% CO<sub>2</sub> refrigerant solution for convenient stores and small cooling capacities
- Extremely compact
- Very silent operation

#### • Very low refrigerant charge, absolutely neutral impact on the environment

Modular, flexible and easy installation









### Natural refrigerant

#### Non-flammable, non-toxic

 $\rm CO_2$  is one of the safest refrigerants. In case of accidental leak, there is no risk for the end-users or for the technician.

# Reduced global warming potential

#### (GWP = 1)

Contrary to F-gases that are commonly used in the field of commercial refrigeration,  $CO_2$ refrigerant has a minimal environmental impact (less green housing effect). Its global warming potential of 1 is at least 1,430 times smaller than HFCs. For instance, 1 kg of R410a = 2,100 tons of  $CO_2$ !



CO<sub>2</sub> refrigerant: At least to 1,430 times less greenhousing than commonly-used refrigerants!

## SANDEN-made components

# SANDEN designs and manufactures $CO_2$ compressors & exchangers used in its products.

Efficient systems require efficient components. We design and manufacture the  $CO_2$  compressors, gas coolers and evaporators that are assembled in all SANDEN product ranges. That is how we ensure the best quality standards.



### Design and manufacturing

### For optimized performance in real-life conditions

With 54 locations in 23 countries, SANDEN is committed to providing the most optimized solutions to local markets. The launch of commercial refrigeration products range results from an intense collaboration between Japanese and European engineers.

# Expertise in CO<sub>2</sub> technology

#### Strong experience in multiple applications

The SANDEN group has developed unique knowledge in  $CO_2$  technology encompassing a large panel of applications. SANDEN manufactures  $CO_2$  heat pump water heaters, vending machines and retail refrigeration systems worldwide.



SandenVendo G-Drink vending machine based on SANDEN CO, technology



