



## Panasonic condensing units with natural refrigerant - Healthcare business

Panasonic's CR Series of CO<sub>2</sub> condensing units provide the ideal solution for healthcare applications. As a non-flammable and non-toxic refrigerant, CO<sub>2</sub> is the ideal choice when taking a risk management approach, as in healthcare settings.



heating & cooling solutions



# The benefits of CO<sub>2</sub>

CO<sub>2</sub> refrigerants = Natural = Sustainable solution.

CO<sub>2</sub> is a future-proven solution in refrigeration, because it is not impacted by any current legal restriction, nor quota, taxes, price increasing or shortage.

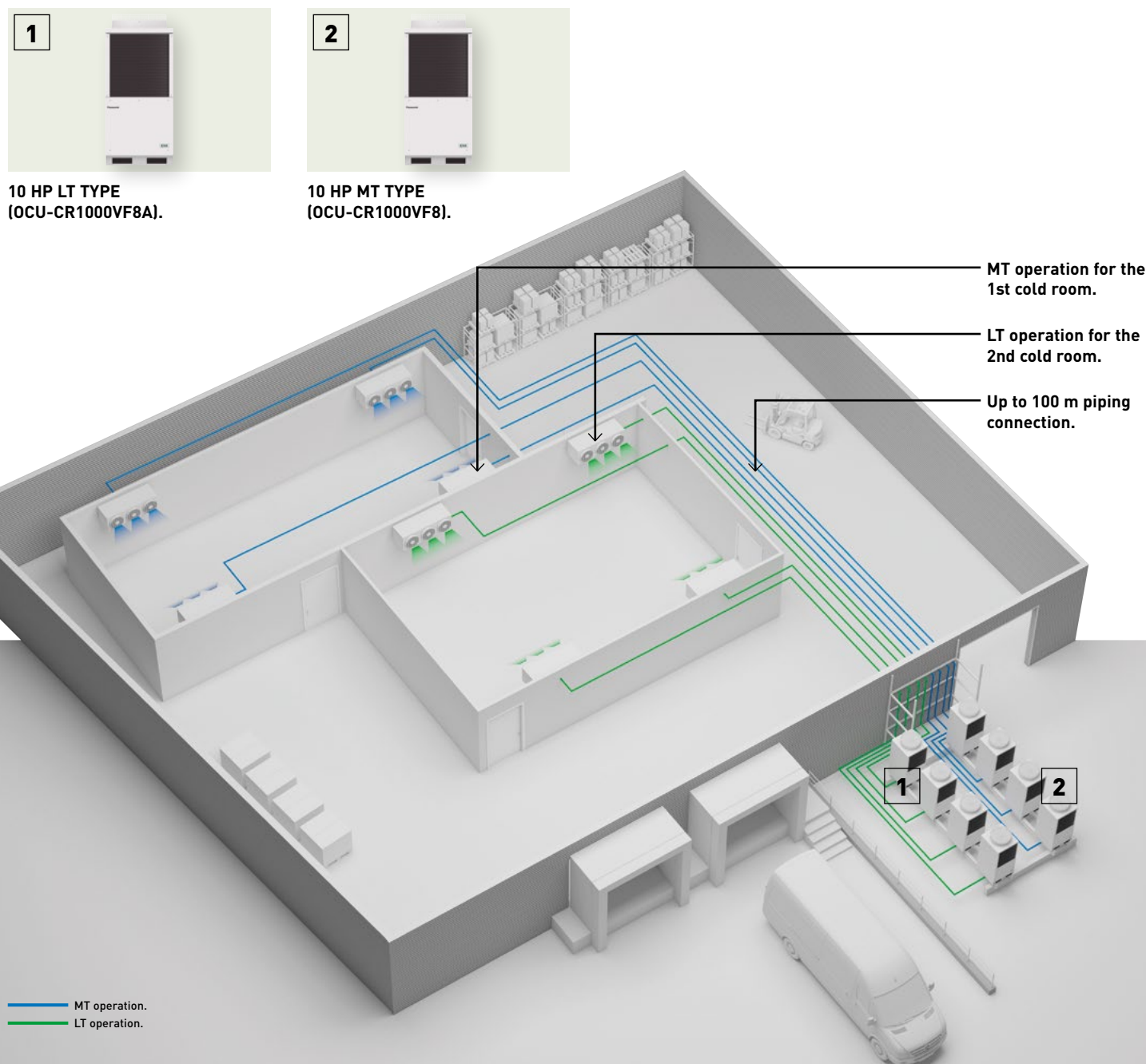
Panasonic is ready to provide a solution in Europe with CO<sub>2</sub> refrigeration systems to help prevent global warming and support environmentally-friendly and cost saving operations.

- CO<sub>2</sub> is an environmentally-friendly solution, with zero ODP and GWP (Global Warming Potential)=1
- No Quota, no shortage, no obsolescence
- CO<sub>2</sub> also fits well to future legal evolution and bans
- European subsidies can be applied for better ROI
- Meets the latest F-gas regulation and Eco-design efficiency requirements

## The safe refrigeration systems for your healthcare business

The below project example shows a warehouse in the healthcare laboratory, which requires several cold rooms to safely store bio-products.

Panasonic professionals strongly support your projects to meet customer's requests!



The safe refrigeration systems for your healthcare business.  
CO<sub>2</sub> is the right refrigerant to curb the carbon footprint of any business organization, bringing key advantages to the healthcare sector.



## 1 Risk management is a TOP priority for a healthcare business

CO<sub>2</sub> is non-flammable and non-toxic refrigerant, therefore it is the ideal refrigerant in a risk-management approach to healthcare applications; one of the most challenging business conditions.

## 2 Pharmaceutical products without any contamination risk

Pharmaceutical products must be handled and stored with the highest level of safety possible. CO<sub>2</sub> is the refrigerant of choice to avoid any contamination in case of leakage, being both non-toxic and non-flammable.

## 3 Highly flexible and durable CO<sub>2</sub> condensing units

A compact unit profile and maximum 100 m piping length bring the right flexibility large size installations, such as hospitals and medical laboratories. Each unit has passed strict quality control from Panasonic, to comply with demanding working conditions specific to the healthcare industry.

## 4 Safety first

As a non-toxic and non-flammable refrigerant, CO<sub>2</sub> ensures high level of safety from commissioning to maintenance, without any heavy administrative workload.

### Case studies



#### STEMCELL Technologies.

STEMCELL Technologies is a global biotechnology company that develops, manufactures and sells products and provides services that support academic and industrial scientists. Panasonic CO<sub>2</sub> condensing units have been chosen to fulfill the expectation of environmental-friendly and safety requirements. The products with reliable quality and high performance was also an essential point.

Country: France.

Project size: 4 x 1000VF8 and 4 x 1000VF8A.

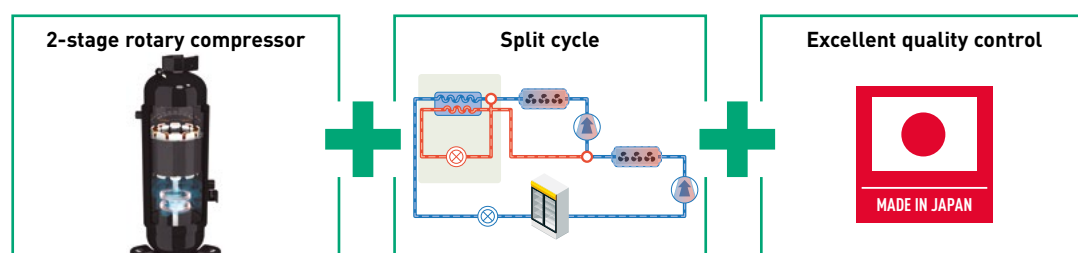
#### Factors of success:

- 1 | Mandatory reliability from environmental-friendly solution, without any flammability, nor toxicity risk
- 2 | Plug-and-play, with sound monitoring capabilities
- 3 | Extended piping length, without drop in performance



### High performance and reliable quality by Panasonic

All units have been through strict quality control to meet high-quality expectations. The excellent performance of the CR Series condensing units is the result of Panasonic technology, and over 20 years of experience in CO<sub>2</sub>!



- Unique Panasonic 2-stage rotary compressor with more than 20 years experience
- 5 year compressor warranty

- Split cycle\* enhancing cooling effect
- Strict quality control by skilled team
- Local support by skilled and trained experts

\* Available for 200VF5, 400VF8A and 1000VF8A models.






Find out more!

[https://youtu.be/MyRkqbdnN\\_0](https://youtu.be/MyRkqbdnN_0)





CO<sub>2</sub> Condensing units - CR Series

						
Standard outdoor unit		OCU-CR200VF5A	OCU-CR400VF8	OCU-CR400VF8A	OCU-CR1000VF8	OCU-CR1000VF8A
Anti corrosion coating outdoor unit		OCU-CR200VF5ASL	OCU-CR400VF8SL	OCU-CR400VF8ASL	OCU-CR1000VF8SL	OCU-CR1000VF8ASL
Type (MT: medium temp. LT: low temp.)		MT (4 kW) / LT (2 kW)	MT (7,5 kW)	MT (8 kW) / LT (4 kW)	MT (15 kW)	MT (16 kW) / LT (8 kW)
Power supply	Voltage	V	220 / 230 / 240	380 / 400 / 415	380 / 400 / 415	380 / 400 / 415
	Phase		Single phase	Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50	50
Cooling capacity at ET -10 °C AT 32 °C		kW	3,70	7,10	14,00	15,10
Cooling capacity at ET -35 °C AT 32 °C		kW	1,80	—	3,8	8,00
Evaporator connection			Multiple	Multiple	Multiple	Multiple
Evaporation temperature		Min ~ Max °C	-45 ~ -5	-20 ~ -5	-45 ~ -5	-20 ~ -5
Ambient temperature		Min ~ Max °C	-20 ~ +43	-20 ~ +43	-20 ~ +45	-15 ~ +43
Refrigerant			R744	R744	R744	R744
Design pressure liquid line		Mpa	12	8	8	8
Design pressure suction line		Mpa	8	8	8	8
User system external alarm. Digital input. Non-voltage contact			Yes	Yes	Yes	Yes
Liquid tube electromagnetic valve		Vac	220 / 230 / 240	220 / 230 / 240	220 / 230 / 240	220 / 230 / 240
Showcase operation ON / OFF signal. Digital input. Non-voltage contact			Yes	Yes	Yes	Yes
Modbus communication line (RS485)		Ports	2	2	2	2
Compressor type			2- stage rotary	2- stage rotary	2- stage rotary	2- stage rotary
Dimension		H x W x D mm	930 x 900 x 437	948 x 1 143 x 609	948 x 1 143 x 609	1 941 x 890 x 890
Net weight		Kg	70	136	149	293
Piping diameter	Suction pipe	Inch (mm)	3/8 (9,52)	1/2 (12,70)	1/2 (12,70)	3/4 (19,05)
	Liquid pipe	Inch (mm)	1/4 (6,35)	3/8 (9,52)	3/8 (9,52)	5/8 (15,88)
Length of connection piping		m	25	50	50	100 <sup>1)</sup>
PED		CAT	I	II	II	II
Air flow		m³/min	54	59	59	220
External static pressure		Pa	17	50	50	58
Heat recovery port			—	—	Yes	—


Standard performance						
Ambient temperature		°C	32	32	32	32
Evaporating temperature		°C	-10	-35	-10	-35
Cooling capacity		kW	3,70	1,80	7,10	14,00
Power consumption		kW	1,79	1,65	4,00	8,20
Nominal load ampere		A	7,94	7,26	6,14	12,60
Sound pressure		dB(A)	35,5 <sup>2)</sup>	35,5 <sup>2)</sup>	33 <sup>3)</sup>	36,1 <sup>3)</sup>
Necessary accessories						
Drier filter liquid line, diameter 6,35 mm		D-152T / DCY-P12	Yes (included: delivered with the unit)	Yes (included: delivered with the unit)	Yes (included: delivered with the unit)	—
Drier filter liquid line, diameter 15,88 mm		D-155T / DCY-P8	—	—	—	Yes (included: delivered with the unit)
Suction filter, diameter 19,05 mm (outer diameter welding)		S-008T / S-008T1	—	Yes (included: delivered with the unit)	Yes (included: delivered with the unit)	Yes (included: delivered with the unit)


1) PZ-68S (refrigeration oil) must be added if >50 m. 2) ET-10 °C, 65 S-1, 10 m from product. 3) ET-10 °C, 80 S-1, 10 m from product. 4) ET -10 °C, 60 S-1, 10 m from product.


Accessories	
PAW-C02-PANEL	Panel with MPXPRO control, stator, probes, etc + Electronic Expansion Valve 12-12 ODF high pressure, size E2V09CSFC1
KIT-C02-PANEL-C-03	Panel-C with MPXPRO control, stator, probes, etc + Electronic Expansion Valve 3/8" ODF high pressure, size E2V03CWAC0
KIT-C02-PANEL-C-05	Panel-C with MPXPRO control, stator, probes, etc + Electronic Expansion Valve 3/8" ODF high pressure, size E2V05CWAC0
KIT-C02-PANEL-C-09	Panel-C with MPXPRO control, stator, probes, etc + Electronic Expansion Valve 3/8" ODF high pressure, size E2V09CWAC0
KIT-C02-PANEL-C-11	Panel-C with MPXPRO control, stator, probes, etc + Electronic Expansion Valve 3/8" ODF high pressure, size E2V11CWAC0
KIT-C02-PANEL-C-14	Panel-C with MPXPRO control, stator, probes, etc + Electronic Expansion Valve 3/8" ODF high pressure, size E2V14CWAC0
KIT-C02-PANEL-C-18	Panel-C with MPXPRO control, stator, probes, etc + Electronic Expansion Valve 3/8" ODF high pressure, size E2V18CWAC0
KIT-C02-PANEL-C-24	Panel-C with MPXPRO control, stator, probes, etc + Electronic Expansion Valve 3/8" ODF high pressure, size E2V24CWAC0
SPK-TU125	Service adaptor for vacuum and service (HP port and LP port) , valid for 2HP, 4HP and 10HP models.
PAW-C02-CHECKER	Service Checker for commissioning, maintenance and service, valid for 2HP, 4HP and 10HP models.
CZ-C02LBROL500	Lubrication Oil PZ-68S (0.5L)*, valid for 2HP, 4HP and 10HP models.


\* You can find the PZ-68S oil "Safety Sheet" in the SAFETY section of our pipe selection software, available on our PRO Club platform.


Stock availability: PAW-C02-PANEL until end of stock.


























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Panasonic Marketing Europe GmbH  
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Hagenauer Strasse 43, 65203 Wiesbaden, Germany

heating & cooling solutions

Spare parts for service and maintenance	
80203514138000 <sup>1)</sup>	S-008T Suction filter, ø 19,05 mm (outer ø welding), valid for 4HP and 10HP models.
80203514139000 <sup>2)</sup>	S-008T1 Suction filter, ø 19,05 mm (outer ø welding), valid for 4HP and 10HP models.
80203513179000 <sup>3)</sup>	D-155T Filter dryer, ø 15,88mm - 5/8" (in ø welding) (type CO-085-S), valid for 10HP model.
80203513187000 <sup>4)</sup>	DCY-P8 165 S Filter dryer , ø 16,1mm - 5/8" (in ø welding), valid for 10HP model.
80203513180000 <sup>5)</sup>	D-152T Filter dryer, ø 6,35mm - 1/4" (in ø welding) (type CO-082-S), valid for 2HP and 4HP models.
80203513186000 <sup>4)</sup>	DCY-P12 092 S Filter dryer, ø 6,4mm - 1/4" (in ø welding), valid for 2HP and 4HP models.

Compatibility relationship: 1) and 2) are compatible; 3) and 4) are compatible; 5) and 6) are compatible.  
Stock availability: 1), 3) and 5) until end of stock.