



Panasonic condensing units with natural refrigerant – Quick Service Restaurants

Panasonic's CR Series of CO₂ condensing units provide the sustainable solution for Quick Service Restaurants (QSR). In addition to the benefit of no food contamination risk, CO₂ condensing units perfectly meet the needs for QSR that has space limitation and high level of service requirements.

heating & cooling solutions



The benefits of CO₂

CO₂ refrigerant = Natural refrigerant = Sustainable solution.

CO₂ is a future-proof solution in refrigeration, because it is not impacted by any current legal restriction, nor quota, taxes, strong price increases or shortage.

With its CO₂ refrigeration systems, Panasonic provides a solution in Europe which helps prevent global warming and supports environmentally-friendly and cost saving retail operations.

- CO₂ is an environmentally-friendly solution, with a zero ODP (Ozone Depletion Potential) and a GWP (Global Warming Potential) = 1
- No Quota, no shortage, no obsolescence
- CO₂ will not be affected by future legal evolutions and bans
- European subsidies can be applied for better ROI
- CO₂ meets the latest F-gas regulation and Eco-design efficiency requirements

A sustainable refrigeration system in your restaurant

Panasonic professionals strongly support your projects to meet customers' requests!



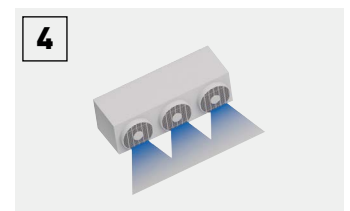
1
2 HP MT/LT condensing unit (OCU-CR200VF5A).



2
10 HP MT condensing unit (OCU-CR1000VF8).

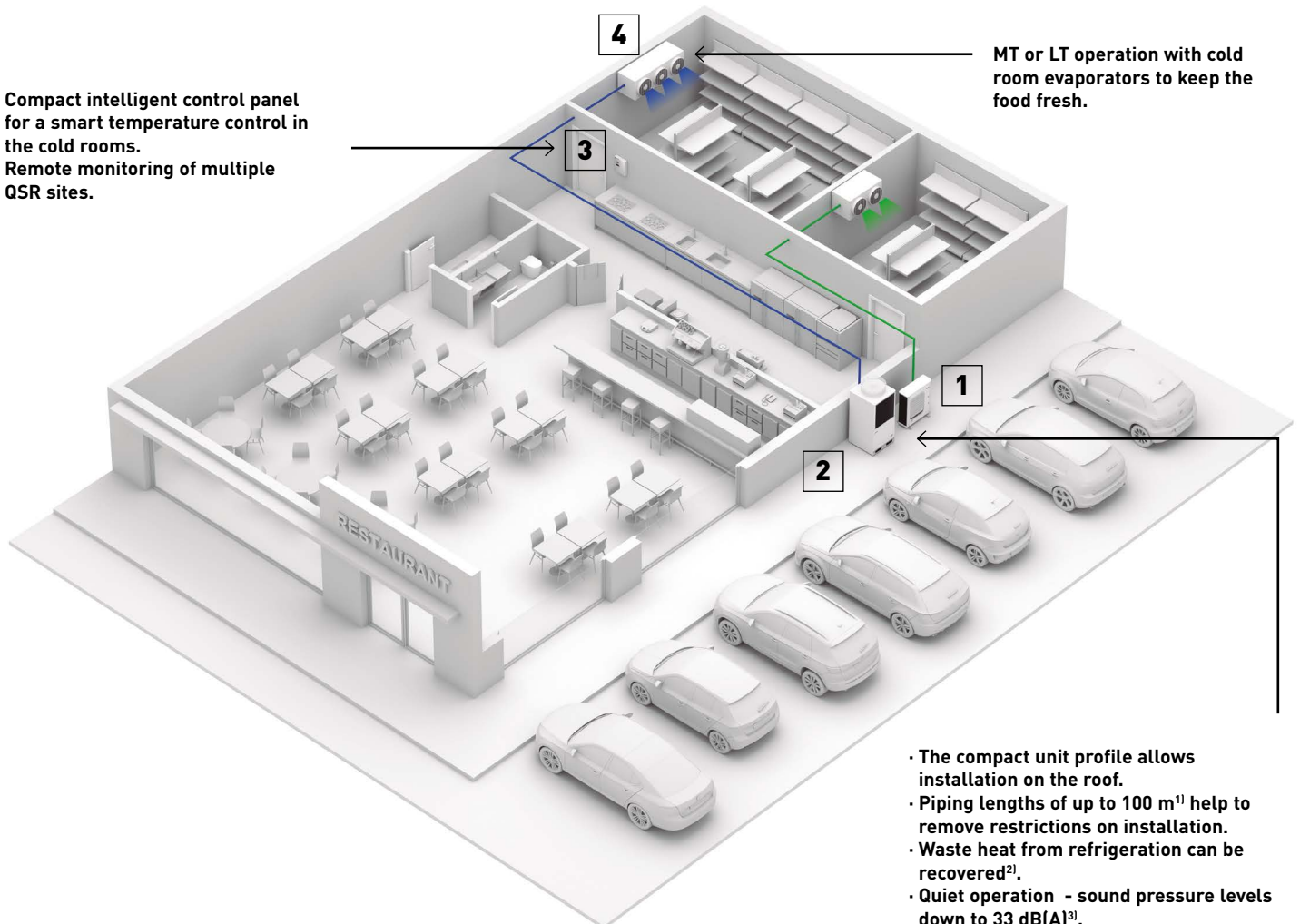


3
Intelligent controller Panel-C.



4
Evaporator for cold room (field supplied).

- Compact intelligent control panel for a smart temperature control in the cold rooms.
- Remote monitoring of multiple QSR sites.



- The compact unit profile allows installation on the roof.
- Piping lengths of up to 100 m¹⁾ help to remove restrictions on installation.
- Waste heat from refrigeration can be recovered²⁾.
- Quiet operation - sound pressure levels down to 33 dB(A)³⁾.

1) 10 HP model, 2) Available in limited models, 3) @ 10 m with 4 HP model.

— MT operation.
— LT operation.

CO₂ (R744) is the choice of the refrigerant to curb the carbon footprint of any business organisation, especially owners of restaurants to whom it brings key advantages.



1 Highly flexible & durable CO₂ condensing units
Compact unit profile and up to 100 m piping length deliver unparalleled flexibility to small restaurants with limited space for installation. A heat recovery function gives possibilities to cut running costs for the owners.

2 Fresh food without any contamination risk
CO₂ is a non-toxic refrigerant. There is no risk of food contamination in the case of a leakage inside cold rooms and/or showcases.

3 Safety first
Being a non-toxic and non-flammable refrigerant, CO₂ ensures high levels of safety from commissioning to maintenance.

4 Remote monitoring to secure your business
Panasonic is compatible with major monitoring systems, such as Carel, Danfoss, Dixell, Eliwell and RDM.



Case studies

Beyond the environmentally friendly aspects of the natural refrigerant CO₂, Panasonic's CR series was also selected for its high seasonal efficiency, product quality and reliability. The series offers unique advantages by allowing easy switching between medium temperature and low temperature operation.

McDonald's.

Country: France.
Units: 1 x CR200VF5.

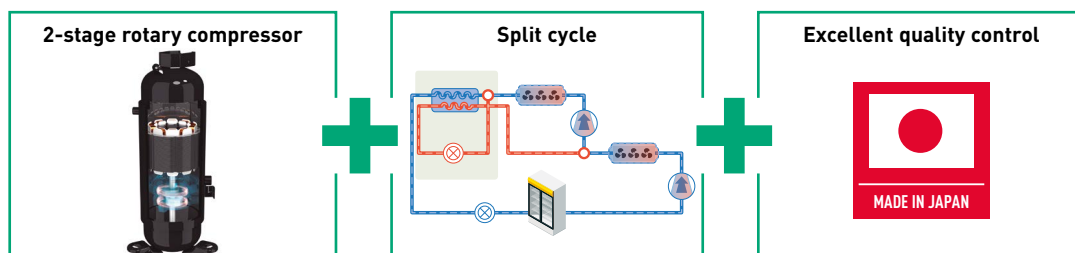
Factors of success:

- 1| Natural CO₂ (R744) refrigerant was a choice to be relaced from HFC (R404) system.
- 2| Low energy consumption thanks to Panasonic unique technology with a twin 2-stage rotary compressor and split cycle.
- 3| Wide operation range at high ambient temperature up to 43°C.
- 4| The professional training dedicated for the installer.
- 5| Strong technical support by Panasonic team during the installation & commissioning.



High performance and reliable quality by Panasonic

All condensing units have been subjected to strict quality controls to meet high-quality expectations. The excellent performance of the CR series condensing units is the result of the combination of superior Panasonic technology and over 20 years of experience with CO₂ refrigerant!



Find out more!



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

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

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

CO₂ Condensing units - CR Series



Standard outdoor unit			OCU-CR200VF5A	OCU-CR400VF8	OCU-CR400VF8A	OCU-CR1000VF8	OCU-CR1000VF8A			
Type (MT: medium temperature, LT: low temperature)			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	380/400/415			
	Phase		Single phase	Three phase	Three phase	Three phase	Three phase			
	Frequency	Hz	50	50	50	50	50			
Cooling capacity at ET -10 °C AT 32 °C		kW	3,70	7,10	7,7	14,00	15,10			
Cooling capacity at ET -35 °C AT 32 °C		kW	1,80	—	3,8	—	8,00			
SEPR cooling at ET -10 °C AT 32 °C			3,83	2,68	2,45	2,62	2,82			
SEPR freezing at ET -35 °C AT 32 °C			1,92	—	1,56	—	1,66			
Annual electricity consumption at ET -10 °C AT 32 °C		kWh/a	6797	16337	19302	32815	32409			
Annual electricity consumption at ET -35 °C AT 32 °C		kWh/a	8021	—	30424	—	39985			
Evaporator connection			Multiple	Multiple	Multiple	Multiple	Multiple			
Evaporation temperature	Min ~ Max	°C	-45 ~ -5	-20 ~ -5	-45 ~ -5	-20 ~ -5	-45 ~ -5			
Ambient temperature	Min ~ Max	°C	-20 ~ +43	-20 ~ +43	-20 ~ +45	-15 ~ +43	-15 ~ +43			
Refrigerant			R744	R744	R744	R744	R744			
Design pressure, liquid line		MPa	12	8	8	8	8			
Design pressure, suction line		MPa	8	8	8	8	8			
User system external alarm. Digital input. Non-voltage contact			Yes	Yes	Yes	Yes	Yes			
Liquid tube electromagnetic valve		V AC	220/230/240	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	Yes			
Modbus communication ports (RS485)			Yes	Yes	Yes	Yes	Yes			
Compressor type			2- stage rotary	2- stage rotary	2- stage rotary	2- stage rotary	2- stage rotary			
Dimensions	H x W x D	mm	930 x 900 x 437	948 x 1143 x 609	948 x 1143 x 609	1941 x 890 x 890	1941 x 890 x 890			
Net weight		kg	70	136	149	293	320			
Piping diameter ¹⁾	Suction pipe	Inch (mm)	3/8(9,52)	1/2(12,70)	1/2(12,70)	3/4(19,05)	3/4(19,05)			
	Liquid pipe	Inch (mm)	1/4(6,35)	3/8(9,52)	3/8(9,52)	5/8(15,88)	5/8(15,88)			
Max. length of connection piping		m	25	50 ²⁾	50 ²⁾	100 ³⁾	100 ³⁾			
PED category			I	II	II	II	II			
Air flow		m ³ /min	54	59	59	220	220			
External static pressure		Pa	17	50	50	58	58			
Heat recovery port			—	—	Yes	—	Yes			
Standard performance	Ambient temperature	°C	32	32	32	32	32			
	Evaporating temperature	°C	-10	-35	-10	-10	-35			
	Cooling capacity	kW	3,70	1,80	7,10	7,7	3,8	14,00	15,10	8,00
	Power consumption	kW	1,79	1,65	4,00	4,5	3,8	8,20	8,20	7,57
	Nominal current	A	7,94	7,26	6,14	7,2	6,2	12,60	12,60	11,60
	Sound pressure	dB(A)	35,5 ⁴⁾	35,5 ⁴⁾	33 ⁵⁾	36,1 ⁵⁾	36,1 ⁵⁾	36,0 ⁶⁾	36,0 ⁶⁾	36,0 ⁶⁾

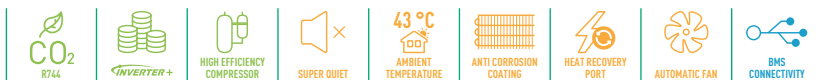
Necessary accessories						
Filter dryer, liquid line, Ø6,35 mm	D-152T/DCY-P12	Yes (included)	Yes (included)	Yes (included)	—	—
Filter dryer, liquid line, Ø15,88 mm	D-155T/DCY-P8	—	—	—	Yes (included)	Yes (included)
Suction filter, Ø19,05 mm (outer Ø welding)	S-008T/S-008T1	—	Yes (included)	Yes (included)	Yes (included)	Yes (included)

1) These diameters refer to the unit connection ports. The required piping diameters must be calculated with Refrigeration designer available on PRO Club. 2) PZ-68S (refrigeration oil) must be added according to Refrigeration designer available on PRO Club. 3) PZ-68S (refrigeration oil) must be added if >50 m. 4) ET-10 °C, 65 S-1, 10 m from product. 5) ET-10 °C, 80 S-1, 10 m from product. 6) ET -10 °C, 60 S-1, 10 m from product.

Accessories

KIT-C02-PANEL-C-03	Panel-C + MPXPRO control, stator, probes, etc + EEV 3/8" ODF high pressure, size E2V03CWACO
KIT-C02-PANEL-C-05	Panel-C + MPXPRO control, stator, probes, etc + EEV 3/8" ODF high pressure, size E2V05CWACO
KIT-C02-PANEL-C-09	Panel-C + MPXPRO control, stator, probes, etc + EEV 3/8" ODF high pressure, size E2V09CWACO
KIT-C02-PANEL-C-11	Panel-C + MPXPRO control, stator, probes, etc + EEV 3/8" ODF high pressure, size E2V11CWACO
KIT-C02-PANEL-C-14	Panel-C + MPXPRO control, stator, probes, etc + EEV 3/8" ODF high pressure, size E2V14CWACO
KIT-C02-PANEL-C-18	Panel-C + MPXPRO control, stator, probes, etc + EEV 3/8" ODF high pressure, size E2V18CWACO
KIT-C02-PANEL-C-24	Panel-C + MPXPRO control, stator, probes, etc + EEV 3/8" ODF high pressure, size E2V24CWACO
SPK-TU125	Service adaptor for vacuum and service (HP and LP port), for 2 HP, 4 HP and 10 HP
PAW-C02-CHECKER	Service Checker for commissioning, maintenance and service, for 2 HP, 4 HP and 10 HP
CZ-C02LBROL500	Lubrication Oil PZ-68S (0,5L)*, for 2 HP, 4 HP and 10 HP

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



Spare parts for service and maintenance

80203514138000 ¹⁾	S-008T Suction filter, Ø19,05 (outer Ø welding) for 4 HP and 10 HP
80203514139000 ²⁾	S-008T1 Suction filter, Ø19,05 (outer Ø welding) for 4 HP and 10 HP
80203513180000 ³⁾	D-155T Filter dryer, Ø5/8 (15,88) (in Ø welding) (type CO-085-S) for 10 HP
80203513187000 ⁴⁾	DCY-P8 165 S Filter dryer, Ø 5/8 (16,10) (in Ø welding) for 10 HP
80203513179000 ⁵⁾	D-152T Filter dryer, Ø1/4 (6,35) (in Ø welding) (type CO-082-S) for 2 HP and 4 HP
80203513186000 ⁶⁾	DCY-P12 092 S Filter dryer, Ø1/4 (6,40) (in Ø welding) for 2 HP and 4 HP

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.

Panasonic®

To find out how Panasonic cares for you, log on to:
www.aircon.panasonic.eu/GN_En

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heating & cooling solutions