Panasonic

FRIGRO
HOT IN COOLING

REFRIGERATION RANGE
2025 / 2026

heating & cooling solutions

Moving to more sustainable refrigeration solutions – iCORE and iCOOL ranges

Panasonic's iCORE and iCOOL condensing units offer a complete line of cooling solutions using CO_2, HFO, and HFC refrigerants – ideal for retail stores, supermarkets, HoReCa, gas stations, food processing, and cold storage. As the industry transitions toward greener technologies, Panasonic provides systems that address both immediate needs and long-term goals in energy efficiency and enhanced environmental responsibility.

iCO2RE / iCOOL

Refrigeration engineered for excellence

Step toward more sustainable cooling solutions.

Panasonic introduces its most extensive and versatile commercial refrigeration range to date.
This milestone reflects a significant strategic evolution.

The world keeps moving. So must cooling. Meet our refrigeration portfolio.

Complete line of cooling solutions using CO_2, HFO and HFC refrigerants.

R744
CO_2

R448A | R449A | R134a | R513A | R454C | R455A

Panasonic unveils iCORE and iCOOL refrigeration ranges.

The portfolio introduces two distinct product ranges, designed to provide commercial refrigeration to a wide range of applications including retail stores, supermarkets, HoReCa sector, gas stations and cold storage applications:

iCO2RE

iCOOL

iCORE

Move to natural refrigerants.
Panasonic's flagship range of CO_2 condensing units, representing the core of future-proof, natural refrigerant technology.
The iCORE range offers a broad selection of cooling capacities, with up to 29 kW for medium temperature applications, and up to 15 kW for low temperature requirements.

iCOOL

Reduce your energy bills with advanced Inverter technology.
A comprehensive range of Inverter HFC and A2L-ready solutions, designed to meet today's market needs while supporting the transition to lower-GWP refrigerants. The iCOOL range covers a wide spectrum of cooling capacities – up to 42 kW for medium temperature applications, and up to 14 kW for low temperature needs.

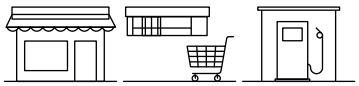
These brands reflect Panasonic's dual commitment: first, to lead the transition to more sustainable refrigerants; and second, to deliver long-term energy savings and lower electricity bills through advanced Inverter technology, benefiting both today's systems and those ready for the future.

Solution with high energy saving

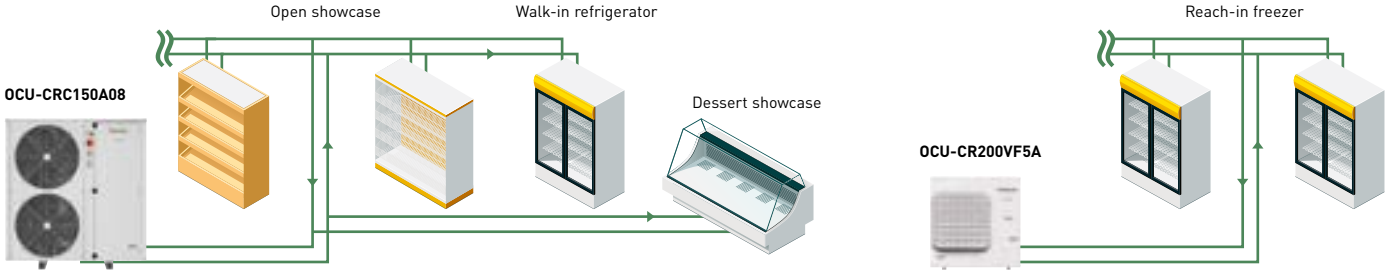
Panasonic's iCORE and iCOOL ranges of condensing units offer a reliable solution for a wide range of applications, including convenience stores, supermarket, gas stations and cold rooms.

Showcases.

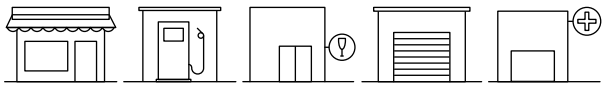
Convenience stores, supermarkets, gas stations.



R744

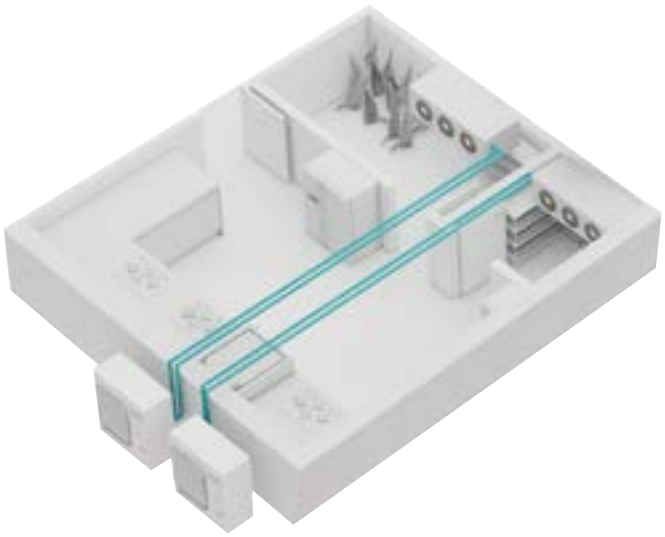


Cold room application to keep food fresh



R744

Multiple installation capabilities. Unparalleled flexibility:
- Food retail applications (convenience store, supermarkets, gas stations)
- Food service applications (restaurants, canteens, schools)
- Non-food applications (warehousing, industrial storage, healthcare)



iCORE and iCOOL cold room application integrated with Panasonic PACi NX Series high temperature

Panasonic offers various solutions for cold rooms by combining a wide range of products.
Integrated with PACi NX Series, it allows for flexible design and installation.

Condensing units – iCORE and iCOOL ranges for refrigerated room.

PACi NX Series for cooling rooms between 8 °C WB and 24 °C WB.

PACi NX: 8 °C WB and 24 °C WB

iCORE range – Naturally efficient cooling

iCO2RE

Panasonic's iCORE range is a new generation of CO_2 condensing units, built on more sustainability, energy efficiency, and flexibility. Using CO_2 – a natural refrigerant – iCORE supports today's environmental goals while delivering reliable, high-performance cooling.

iCORE range – CO_2 condensing units									
OCU-CR CO_2 Series						OCU-CRC Custom-fit CO_2 Series			SCU-CRC Custom-fit CO_2 Series
MT/LT type	MT type	MT/LT type	MT type	MT/LT type	MT/LT type	MT/LT type	MT/LT type	MT type	MT/LT type
									
OCU-CR200VF5A	OCU-CR400VF8	OCU-CR400VF8A	OCU-CR1000VF8	OCU-CR1000VF8A	OCU-CR2000VF8A	OCU-CRC060A08	OCU-CRC150A08	OCU-CRC210M08	SCU-CRC150A08
Capacity range (kW)									
4 (MT)/2 (LT)	7	8 (MT)/4 (LT)	14	15 (MT)/8 (LT)	29 (MT)/15 (LT)	6 (MT)/3 (LT)	15 (MT)/7 (LT)	21	15 (MT)/7 (LT)
Medium temperature									
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Low temperature									
Yes	No	Yes	No	Yes	Yes	Yes	Yes	No	Yes
ET (evaporation temperature) set points range (°C)									
-45 ~ -5 °C	-20 ~ -5 °C	-45 ~ -5 °C	-20 ~ -5 °C	-45 ~ -5 °C	-45 ~ -5 °C	-35 ~ -5 °C	-35 ~ 0 °C	-20 ~ -5 °C	-35 ~ 0 °C
Room size example (m³)*									
40 (MT)/10 (LT)	80	80 (MT)/20 (LT)	200	200 (MT)/50 (LT)	300 (MT)/75 (LT)	60 (MT)/15 (LT)	200 (MT)/45 (LT)	250	200 (MT)/45 (LT)

* Room size is reference. Please contact to authorized Panasonic dealer for calculation.

The range includes the OCU-CR CO_2 Series – value-packed units designed for the evolving, eco-conscious market – and the OCU/SCU-CRC Custom Fit CO_2 Series, offering factory-integrated, and fully tested options for faster installation and reduced on-site labour. iCORE is the core of an efficient, future-ready refrigeration system – combining ecological responsibility with practical performance to meet a wide range of market needs.

iCORE OCU-CR CO_2 Series · R744.

R744

From 4 to 29 kW MT and from 2 to 15 kW LT.

MADE IN JAPAN

iCORE OCU/SCU-CRC Custom-fit CO_2 Series · R744.

R744

From 6 to 21 kW MT and from 3 to 7 kW LT.

MADE IN EUROPE

Choose a greener solution by Panasonic.
iCORE range – CO_2 condensing units for medium and low temperature refrigeration applications, tailored for demanding needs.

System reliability and precise temperature control are critical to maintaining product quality and ensuring food safety for end customers. Panasonic's solutions are also designed for high energy efficiency, helping businesses reduce operational costs while supporting their environmental responsibilities.

Why CO_2?: Natural refrigerant

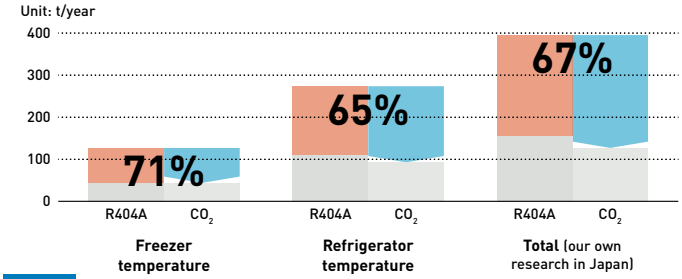
EU F-Gas regulation is a key priority for European countries. It ensures compliance with the Kigali Amendment supporting international climate commitments on greenhouse gases and leading the global transition to climate-friendly HFC-free technologies.
Carbon dioxide (R744) is regaining its place in the refrigeration world. Driven by environmental concerns, legislation now requires increased adoption of 'alternative' refrigerants, such as CO_2.
CO_2 is an environmentally-friendly solution, with zero ODP and "GWP" (Global Warming Potential)=1 means natural substance in the atmosphere.

In Europe a step-by-step HFC reduction has been in place since the F-Gas regulation was introduced in 2015.
Countries all over the world have actively been preparing to enact the necessary domestic legislation to implement the agreement to reduce the use of HFCs.
Panasonic is now able to provide a solution in Europe with CO_2 refrigeration systems to prevent global warming and to support environment-friendly retail operations.
The following table shows how well R744 (CO_2) performs regarding environmental impact and safety.

ODP (Ozone Depletion Potential)=0 - GWP (Global Warming Potential)=1

	Next generation refrigerant			Current refrigerant	
	CO_2	Ammonia	Isobutane	R410A	R404A
ODP	**0**	0	0	0	0
GWP	**1**	0	4	2090	3920
Flammability	**Non flammable**	Light flammable	Flammable	Non flammable	Non flammable
Toxicity	**No**	Yes	No	No	No

Comparison of CO_2 emissions



Energy saving
25,4% freezer
16,2% refrigeration

CO_2 emission
67% reduction

Direct influence [1] Indirect influence [2]

1) Direct influence presents the effect of refrigerant leakage comparing R744 (CO_2) with R404A.
2) Indirect influence presents CO_2 emissions linked to power consumption of CO_2 unit and conventional units.
By Panasonic research in Japan. Comparing 6 shops average for R404A Inverter multi condensing unit.

A more sustainable refrigeration systems in your food retail

CO_2 refrigerant is the choice to curb carbon footprint of any business organization, especially to food retailers, to whom it brings key advantages.
Panasonic professional strongly supports your projects to meet customer's request!

* Case study based on iCORE OCU-CR CO_2 Series CO_2 units.

1

10 HP MT TYPE (OCU-CR1000VF8).

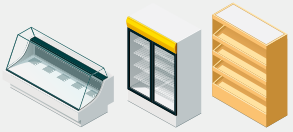
2

2 HP MT/LT TYPE (OCU-CR200VF5A).

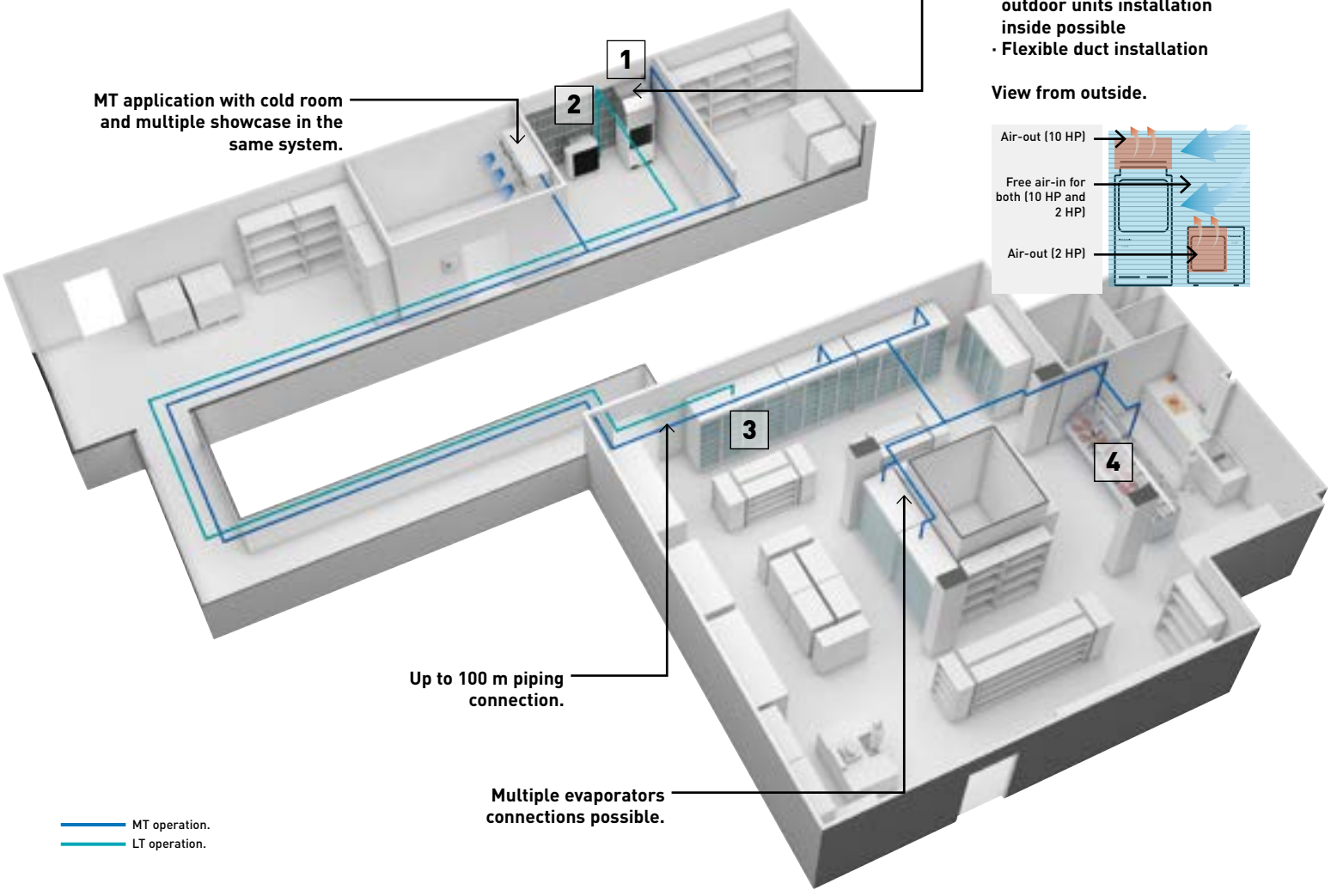
3

Reach-in freezer (field supplied).

4



Serve-over counters, showcase and walk-in refrigerator (field supplied).



Nolan's Supermarket.
Nolan's Supermarket celebrated its 60th year in business with an extension and full refurbishment which completely overhauled the existing store.
A particular focus of the project was to create a state-of-the-art refrigeration system operating on the 'Zero Ozone Depletion' plus ultralow GWP of 1 natural refrigerant CO_2 and as part of the scheme. Panasonic CO_2 condensing units - iCORE OCU-CR CO_2 Series have been chosen because of the high performance and reliable quality.

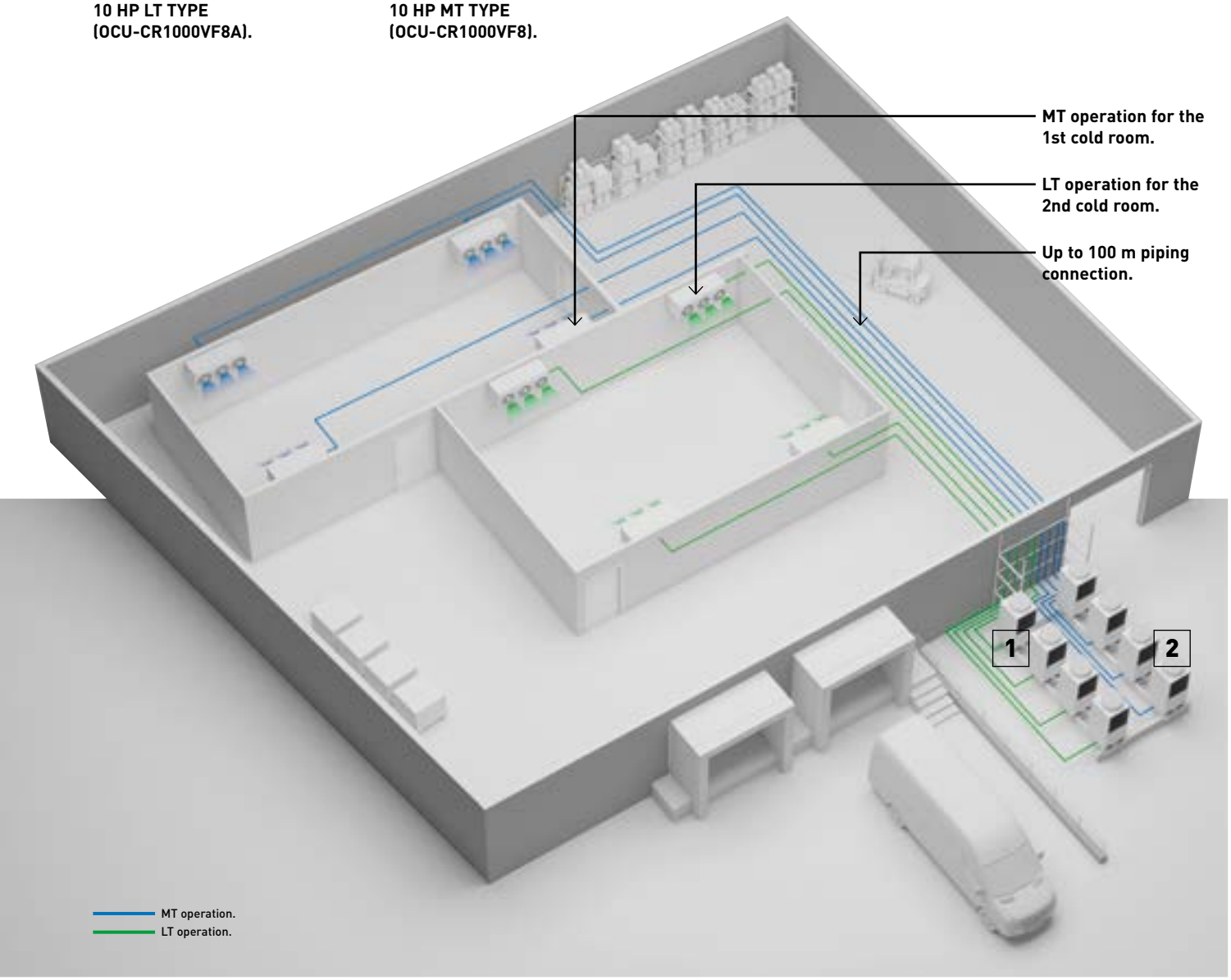
The safe refrigeration systems for your healthcare business

CO_2 is the right refrigerant to curb carbon footprint of any business organization. In addition, there are advantages specially for healthcare business. The project example shows one of the warehouse in the healthcare laboratory which requires several cold rooms there to keep bio-products safely.

* Case study based on iCORE OCU-CR CO_2 Series CO_2 units.

10 HP LT TYPE (OCU-CR1000VF8A).

10 HP MT TYPE (OCU-CR1000VF8).



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_2 condensing units - iCORE OCU-CR CO_2 Series 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.

iCORE OCU-CR CO_2 Series

CO_2 transcritical condensing units. iCORE OCU-CR CO_2 Series offer a wide range of refrigeration systems, meeting the specific needs of various commercial applications.

MADE IN JAPAN

Superior cooling capacity at each evaporating temperature.

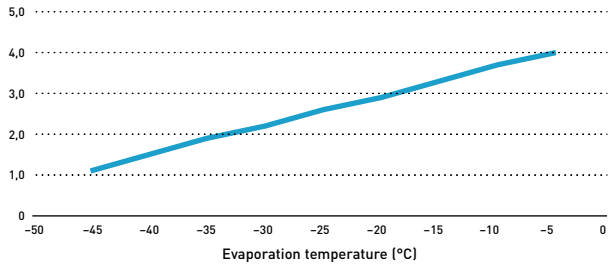
CO_2 transcritical condensing units - iCORE OCU-CR CO_2 Series have a high cooling capacity at each set point. The CO_2 2-stage compressor developed by Panasonic is designed to compress CO_2 refrigerant twice; it reduces the load in operation by half (compared to 1-stage refrigerant compression) and delivers increased durability and reliability.
Units can be programmed to run at low and medium temperatures at initial set-up. These settings can then be modified by turning a simple and user friendly rotary switch to further enhance energy savings.

MT/LT type: 200VF5A - 4 / 2 kW.

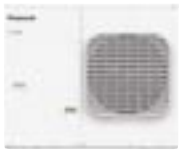
3,83 SEPR cooling.
1,92 SEPR freezing.

* SEPR values has been tested at 3-part laboratory.

OCU-CR200VF5A(SL) [1].
Cooling capacity (kW)



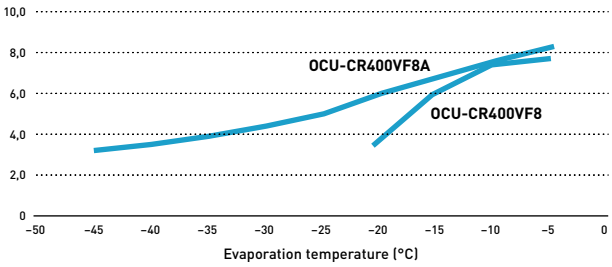
MT type: 400VF8 - 7 kW. MT/LT type: 400VF8A - 8 / 4 kW.



2,45 SEPR cooling.
1,56 SEPR freezing.

* Model 400VF8A.

OCU-CR400VF8(SL) / OCU-CR400VF8A(SL) [2].
Cooling capacity (kW)

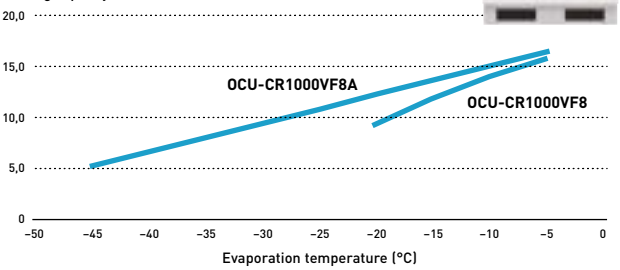


MT type: 1000VF8 - 14 kW. MT/LT type: 1000VF8A - 15 / 8 kW.

2,86 SEPR cooling.
1,49 SEPR freezing.

* Model 1000VF8A.

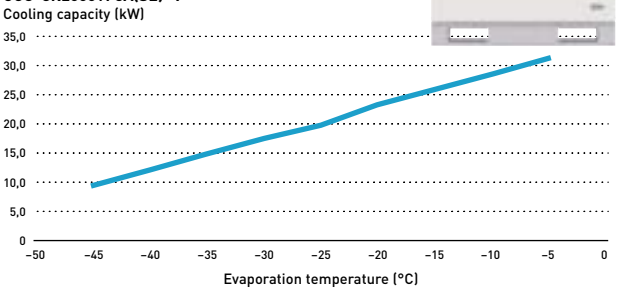
OCU-CR1000VF8(SL) / OCU-CR1000VF8A(SL) [2].
Cooling capacity (kW)



MT/LT type: 2000VF8A - 29 / 15 kW.

3,10 SEPR cooling.
1,64 SEPR freezing.

OCU-CR2000VF8A(SL) [1].
Cooling capacity (kW)



1) Ambient temperature: 32 °C, 230 V, refrigerant: R744, suction gas temperature: 18 °C. 2) Ambient temperature: 32 °C, 400 V, refrigerant: R744, suction gas temperature:18 °C.

1 Superior efficiency with reliable quality

- Panasonic has combined the 2-stage compressor with the split cycle for increased efficiency
- High seasonal performance. SEPR: maximum 3,83 in cooling, 1,92 in freezing*
- High COP at high ambient temperature

* 200VF5A.

2 Heat recovery port [1] as renewable energy

- Maximum 16,7 kW [2] of heating for free
- Optional possibility to get subsidy (depending on location)
- Easy connection process

1) For models 1000VF8A and 2000VF8A. 2) For model 1000VF8A.

3 Flexible installation

- Set-points at medium or low temperature available depending on applications
- Compact unit
- Silent operation
- Long piping length: maximum 100 m*
- High external static pressure
- Transfer pressure control for stable electric expansion valve control in showcases*

* For models 1000VF8A and 2000VF8A.

Technology by Panasonic

Reliability is our main target. We ensure excellent quality control established by skilled factory team.

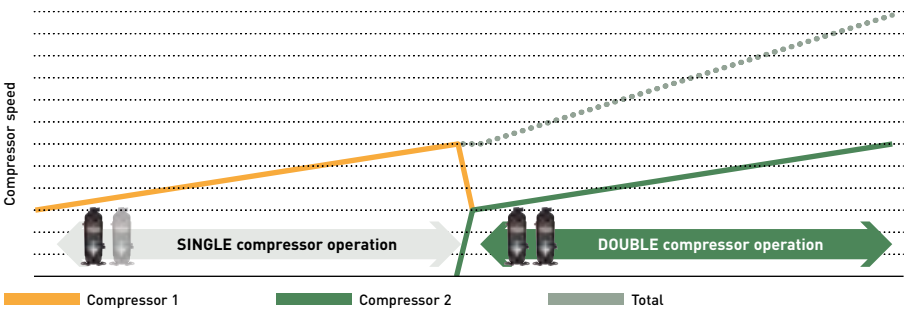
iCORE OCU-CR CO_2 Series 20 HP MT/LT model.

The iCORE OCU-CR CO_2 Series now includes 20 HP MT/LT model, a highly efficient multi compressor solution.

· Multi-compressor systems
· Smaller footprint
· Maximum piping length of 100 m
· Cooling capacity can be controlled from 25 to 100% under partial load
· Flexible and precise control capabilities with digital input/output

Energy efficient multi compressors operation.
By distributing the workload between two compressors, the system operate efficiently, adjusting capacity to match the varying cooling demands. Compressors 1 and 2 alternate every 10 days to ensure even load distribution.

Example of compressor operation.



OCU-CR2000VF8A/SL

Reliable CO_2 technology by Panasonic

· Reliable quality: Made in Japan
· 19500 units sold and installed in more than 5200 retail operations such as convenience stores and supermarkets in Japan*
· Excellent quality control established by skilled factory team
· Panasonic offers 5 year warranties on compressors and 2 years on components
· The 5 year compressor warranty matches the products long lifespan

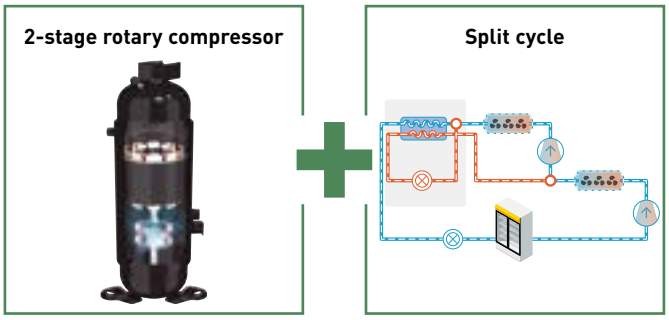
* As of the end of December '23.

Panasonic's combined technology of the 2-stage compressor with the split cycle.

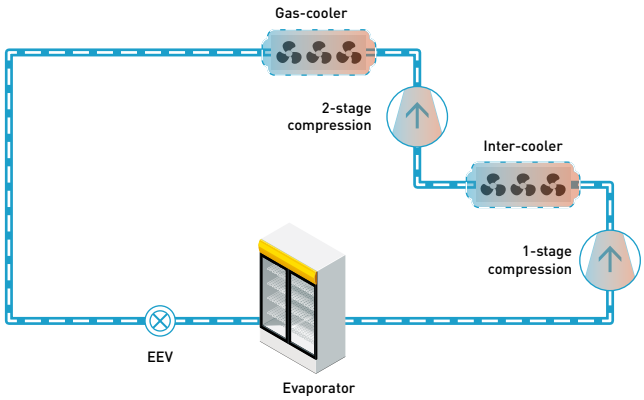
· Panasonic 2-stage rotary compressor delivering powerful performance for more than 20 years
· Split cycle* enhances cooling effect

* Available for 200VF5A, 400VF8A, 1000VF8A and 2000VF8A models.
** In the case that the standard cycle with 1-stage rotary compressor was compared.

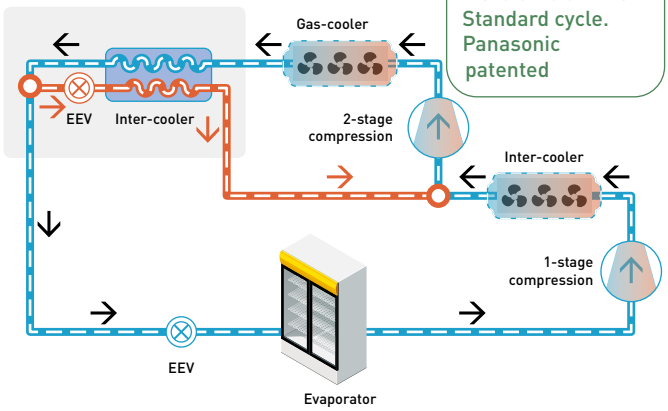
Watch the highlighted technology video.



Standard cycle.



Split cycle.



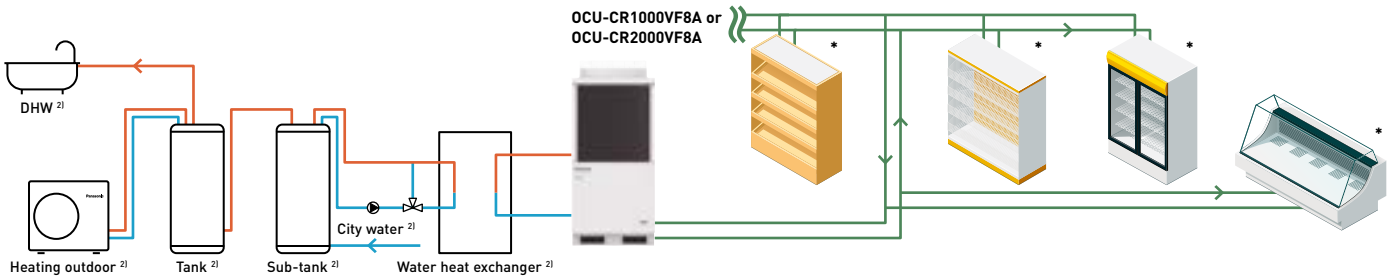
Up to 50%** More efficient than Standard cycle. Panasonic patented

Heat recovery function for heating

This function offers refrigeration combined with heating all in one system. The ground-breaking solution allows for increased opportunity to cut running costs by utilizing exhausted heat from refrigeration and transferring to the energy source for heating.

16,7 kW 1) of hot water for free

What is heat recovery function?
Solution example.
Heat recovery system can produce both heating and refrigeration.



1) Tested with OCU-CR1000VF8A. Under the condition: ambient temperature 32 °C, evaporation temperature -10 °C. 100% Partial load. 2) Local supply.
* Controllers: PAW-CO2-PANEL-C or local supply.

Refrigeration designer available in Panasonic PRO Club.

This simple design tool supports engineers, installers, and technicians to make a quick calculation for commercial refrigeration systems.

· Evaporation temperature selection
· Cooling capacity calculator
· Refrigerant pipe calculation
· Electric expansion valves calculation
· Refrigerant amount calculation

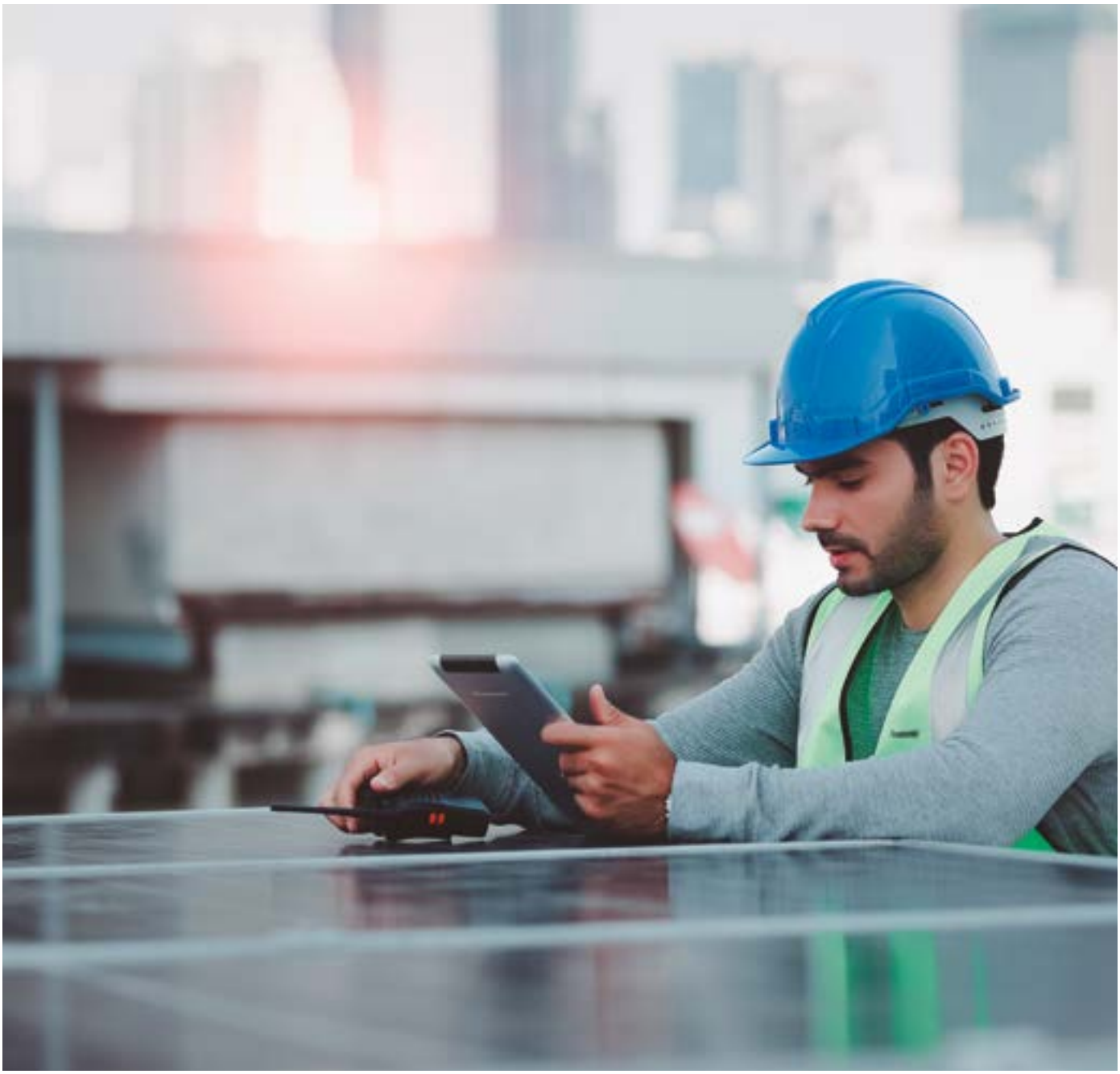
Ready to works on all devices, computers, tablets and smartphones!!

PRO Club

www.panasonicproclub.com or connect simply with your smartphone to the PRO Club using this QR

Control and connectivity

Panasonic CO_2 condensing units - iCORE OCU-CR CO_2 Series is optimized with Panel-C intelligent controller and a service checker for professionals. It can be easily integrated with major monitoring systems.



Modbus compatibility with monitoring system

Panasonic CO_2 condensing units - iCORE OCU-CR CO_2 Series can be supervised by major monitoring system such as CAREL, Eliwell, COPELAND, Danfoss, RDM and Pego. Monitoring system ensures the recording, monitoring and reporting of temperature conditions etc... of entire CO_2 condensing units - iCORE OCU-CR CO_2 Series system at shops.

Monitoring system					
CAREL	Danfoss	eliwell by Schneider Electric	Copeland Controls Xweb	Resource Data Management	Pego
Standard boss & boss-mini	AK-SM Series*	TelevisGo	Xweb	DMTOUCH	TeleNET

* M2M1-10 gateway (Model code: FDS021) is required in addition to the monitoring system. M2M1-10 gateway is a local supply.

Control panel and electric expansion valves

Panel-C, an intelligent controller with a compact chassis. This controller has the smart program especially for showcases and cold rooms. Electric expansion valves (EEVs) are ready with 8 different sizes to meet precisely the field demand and it's delivered with Panel-C as a kit.

Intelligent controller with compact chassis. Panel-C.

· MPXPRO control fully pre-programmed for MT and LT on the same panel
· Compact structure size: 300 x 220 x 120 mm
· Necessary cables, EEV stator, temperature and pressure probes as standard equipment
· Ultracap technology as standard equipment for emergency EEV's closing in the event of mains power failure
· Smart defrost functions, advanced superheat control, light and showcase curtain management, etc
· Own display user terminal plus keypad for programming, built-in switching power supply, Modbus, etc
· Management of HACCP alarms

Electric expansion valves (EEVs) line-up.

· EEV´s E2V-CW with 3/8" ODF copper fittings for high pressure applications (CO_2)
· Operation refrigerant temperature: -40 T 70 °C
· Maximum operating pressure for all the models 03, 05, 09, 11, 14, 18, 24 and 30 (MOP) 140 bar
· Maximum operating pressure difference for 03, 05, 09, 11, 14, 18, (MOPD) 120 bar, 24 (MOPD) 85 bar, and 30 (MOPD) 90 bar
· Bipolar stator hermetic IP69K as standard equipment (supplied on panel)
· Mechanical strainer as standard equipment (500 mm mesh)
· Equipercentile control particularly effective at partial load with reliable operation even after 1,2 billion steps

* Please refer the model references in page 26.

CO_2 service checker

PAW-CO2-CHECKER

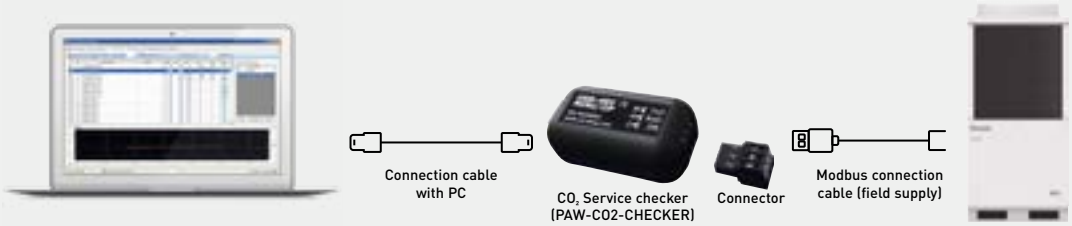
The service checker is a useful tool which supports your technical tasks on the field such as commissioning, maintenance and troubleshooting for Panasonic CO_2 condensing units - iCORE OCU-CR CO_2 Series.

Main features:

· Reading and recording variable technical parameters
· Main technical parameters available*: pressures, temperatures, opening of expansion valves, states of solenoid valves, rotational speeds of the gas-cooler fan motor, frequency and compressor's current, etc.
· Setting change of operating values possible
· 2D graph visualization for the detailed analysis
· Monitoring an alarm status, for example the status of the compressor oil level, etc.

* Please check all the parameters available in the manual.

To use it, is necessary to download free Device Manager software from the Eliwell website:
Visit: https://www.eliwell.com/en/Family/DeviceManager.html using this QR.
Eliwell product name: Device Manager 100. Eliwell part number: DMP1000002000.



iCORE OCU-CR CO_2 Series · R744
Specifications and capacity tables.

Model			OCU-CR200VF5A	OCU-CR400VF8	OCU-CR400VF8A	OCU-CR1000VF8	OCU-CR1000VF8A	OCU-CR2000VF8A
Anti corrosion coating model			OCU-CR200VF5ASL	OCU-CR400VF8SL	OCU-CR400VF8ASL	OCU-CR1000VF8SL	OCU-CR1000VF8ASL	OCU-CR2000VF8ASL
Compressor			Single compressor	Single compressor	Single compressor	Single compressor	Single compressor	Tandem compressor
Refrigerants			R744	R744	R744	R744	R744	R744
PED category			I	II	II	II	II	II
Application and nominal cooling capacity		MT/LT (kW)	MT (4) / LT (2)	MT (7)	MT (8) / LT (4)	MT (14)	MT (15) / LT (8)	MT (29) / LT (15)
Power supply	Voltage	V	220 - 230 - 240	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415
	Phase		Single phase	Three phase	Three phase	Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50	50	50	50
SEPR cooling at ET -10 °C AT 32 °C			3,83	3,17	3,20	2,62	2,86	3,10
SEPR freezing at ET -35 °C AT 32 °C			1,92	—	1,73	—	1,49	1,64
Annual electricity consumption at ET -10 °C AT 32 °C		kWh/a	6797	13384	14488	32815	32409	57076
Annual electricity consumption at ET -35 °C AT 32 °C		kWh/a	8021	—	16255	—	39985	66760
Evaporator connection			Multiple	Multiple	Multiple	Multiple	Multiple	Multiple
Evaporation temperature	Min ~ Max	°C	-45 ~ -5	-20 ~ -5	-45 ~ -5	-20 ~ -5	-45 ~ -5	-45 ~ -5
Ambient temperature	Min ~ Max	°C	-20 ~ +43	-20 ~ +45	-20 ~ +45	-20 ~ +43	-20 ~ +43	-20 ~ +45
PS line	Suction	bar	120	80	80	80	80	80
	Liquid	bar	80	80	80	80	80	80
User system external alarm. Non-voltage contact			Yes	Yes	Yes	Yes	Yes	Yes
Liquid tube electromagnetic valve output		Vac	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	Yes
Modbus communication line (RS485)		Ports	Yes	Yes	Yes	Yes	Yes	Yes
Compressor type			2- stage rotary	2- stage rotary	2- stage rotary	2- stage rotary	2- stage rotary	2- stage rotary
Dimension	W x H x D	mm	900 x 930 x 437	1143 x 948 x 609	1143 x 948 x 609	890 x 1941 x 890	890 x 1941 x 890	1190 x 1941 x 890
Weight		Kg	70	136	149	293	320	494
Connections [1]	Suction	Inch (mm)	3/8 (9,52)	1/2 (12,70)	1/2 (12,70)	3/4 (19,05)	3/4 (19,05)	7/8 (22,22)
	Liquid	Inch (mm)	1/4 (6,35)	3/8 (9,52)	3/8 (9,52)	5/8 (15,88)	5/8 (15,88)	3/4 (19,05)
Maximum recommended pipe distance		m	25	50 [2]	50 [2]	100 [2]	100 [2]	100 [2]
Air flow		m³/min	54	59	59	220	220	220
External static pressure		Pa	17	50	50	58	58	58
Performance - additional data	Ambient temperature	°C	32	32	32	32	32	32
	Evaporating temperature	°C	-10 / -35	-10	-10 / -35	-10	-10 / -35	-10 / -35
	Nominal load ampere	A	7,94 / 7,26	6,14	7,2 / 6,2	12,6	12,6 / 11,6	24,31 / 20,49
	Sound level	dB(A)	35,5 [3] / 35,5 [3]	33,0 [4]	36,1 [4] / 36,1 [4]	36,0 [3]	36,0 [3] / 36,0 [3]	42,0 [3] / 42,0 [3]
Necessary accessories								
Drier filter liquid line, Ø6,35 mm	**D-152T / DCY-P12**		Yes (included)	—	—	Yes (included)	Yes (included)	—
Drier filter liquid line, Ø15,88 mm	**D-155T / DCY-P8**		—	Yes (included)	Yes (included)	—	—	Yes (included)
Suction filter, Ø19,05 mm (outer Ø welding)	**S-008T1 / S-006T**		—	Yes (included)	Yes (included)	Yes (included)	Yes (included)	Yes (included)

1) These diameters correspond to the output of the unit. The required diameter 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) ET -10 °C, 65 S-1, 10 m from product. 4) ET -10 °C, 80 S-1, 10 m from product.

45 °C AMBIENT TEMPERATURE: For OCU-CR400VF8(SL), OCU-CR400VF8A(SL) and OCU-CR2000VF8A(SL).

MT/LT	Cooling capacity at				R744						
	ET				-45 °C	-35 °C	-30 °C	-25 °C	-15 °C	-10 °C	-5 °C
OCU-CR200VF5A OCU-CR200VF5ASL	AT	32 °C	Min - Max	kW	0,7 - 1,2	1,1 - 1,9	1,3 - 2,3	1,5 - 2,6	1,9 - 3,3	2,1 - 3,7	2,3 - 4,0
		38 °C	Min - Max	kW	0,6 - 1,1	1,0 - 1,8	1,2 - 2,1	1,4 - 2,5	1,8 - 3,1	2,0 - 3,5	2,2 - 3,8
		43 °C	Min - Max	kW	0,6 - 1,0	0,9 - 1,6	1,1 - 2,0	1,3 - 2,3	1,6 - 2,9	1,8 - 3,2	2,0 - 3,5

MT	Cooling capacity at				R744						
	ET				—	—	—	—	-15 °C	-10 °C	-5 °C
OCU-CR400VF8 OCU-CR400VF8SL	AT	32 °C	Min - Max	kW	—	—	—	—	2,9 - 5,9	3,4 - 6,9	3,7 - 7,4
		38 °C	Min - Max	kW	—	—	—	—	2,7 - 5,3	3,1 - 6,2	3,3 - 6,7
		43 °C	Min - Max	kW	—	—	—	—	2,3 - 4,6	2,7 - 5,4	2,9 - 5,8

MT/LT	Cooling capacity at				R744						
	ET				-45 °C	-35 °C	-30 °C	-25 °C	-15 °C	-10 °C	-5 °C
OCU-CR400VF8A OCU-CR400VF8ASL	AT	32 °C	Min - Max	kW	1,7 - 3,3	1,9 - 3,8	2,2 - 4,4	2,6 - 5,1	3,4 - 6,7	3,8 - 7,5	4,1 - 7,4
		38 °C	Min - Max	kW	1,5 - 3,1	1,7 - 3,5	2,0 - 4,0	2,3 - 4,7	3,1 - 6,2	3,5 - 6,1	3,8 - 5,6
		43 °C	Min - Max	kW	1,4 - 2,7	1,5 - 3,1	1,8 - 3,6	2,1 - 4,2	2,8 - 5,0	3,2 - 4,7	3,4 - 4,2

MT	Cooling capacity at				R744						
	ET				—	—	—	—	-15 °C	-10 °C	-5 °C
OCU-CR1000VF8 OCU-CR1000VF8SL	AT	32 °C	Min - Max	kW	—	—	—	—	5,8 - 11,6	6,8 - 13,5	7,4 - 14,8
		38 °C	Min - Max	kW	—	—	—	—	4,9 - 9,9	5,8 - 11,6	6,4 - 12,8
		43 °C	Min - Max	kW	—	—	—	—	3,6 - 7,3	4,4 - 8,8	4,9 - 9,7

MT/LT	Cooling capacity at				R744						
	ET				-45 °C	-35 °C	-30 °C	-25 °C	-15 °C	-10 °C	-5 °C
OCU-CR1000VF8A OCU-CR1000VF8ASL	AT	32 °C	Min - Max	kW	2,6 - 5,1	3,8 - 7,6	4,5 - 9,1	5,3 - 10,5	6,7 - 13,5	7,5 - 14,9	8,1 - 16,2
		38 °C	Min - Max	kW	2,3 - 4,7	3,5 - 7,1	4,2 - 8,4	4,9 - 9,8	6,3 - 12,7	7,0 - 14,0	7,6 - 15,3
		43 °C	Min - Max	kW	2,0 - 4,0	3,1 - 6,2	3,8 - 7,5	4,4 - 8,8	5,8 - 11,5	6,4 - 12,8	7,0 - 14,0

MT/LT	Cooling capacity at				R744						
	ET				-45 °C	-35 °C	-30 °C	-25 °C	-15 °C	-10 °C	-5 °C
OCU-CR2000VF8A OCU-CR2000VF8ASL	AT	32 °C	Min - Max	kW	2,6 - 9,7	3,8 - 14,6	4,6 - 17,4	5,3 - 20,2	6,8 - 25,9	7,5 - 28,7	8,2 - 31,3
		38 °C	Min - Max	kW	2,4 - 9,2	3,6 - 13,9	4,3 - 16,4	5,0 - 19,1	6,4 - 24,6	7,1 - 27,1	7,8 - 29,6
		43 °C	Min - Max	kW	2,3 - 8,6	3,4 - 12,9	4,0 - 15,4	4,7 - 18,0	6,1 - 23,1	6,7 - 25,6	7,3 - 27,9

iCORE OCU/SCU-CRC Custom-fit CO_2 Series

MADE IN EUROPE

Complement of the Panasonic's existing R744 units offering maintenance friendly solutions and customisation features.

MT/LT type:
OCU-CRC060A08

6 kW (MT).
3 kW (LT).

MT/LT type:
OCU-CRC150A08

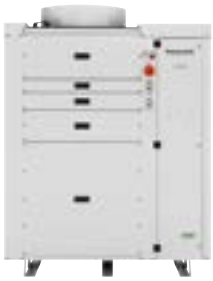
15 kW (MT).
7 kW (LT).

MT type:
OCU-CRC210M08

21 kW (MT).

MT/LT type:
SCU-CRC150A08

15 kW (MT).
7 kW (LT).



Smart interface (local wireless access).

Service door + panel with service valve connections.

Quick-change compressor skid. Based on plate and elastic hoses connections, decreasing the vibrations and noise.

Front wall integrated manometers.

Refrigeration factory in Europe.

Wrocław, Poland.
Equipped with a dedicated in-house R&D team focused on advancing refrigeration technologies, the site will also house its training hub and a state-of-the-art refrigeration laboratory, set to open in early 2026. With localised production and a streamlined supply chain, the factory will enable significantly shorter delivery lead times across Europe.

iCORE OCU/SCU-CRC Custom-fit CO_2 Series · R744
Specifications and capacity tables.

New 2025

Model			OCU-CRC060A08	OCU-CRC150A08	OCU-CRC210M08	SCU-CRC150A08
Compressor			**Single compressor**	**Single compressor**	**Single compressor**	**Single compressor**
Refrigerants			**R744**	**R744**	**R744**	**R744**
PED category			**II**	**II**	**III**	**II**
Application and nominal cooling capacity		**MT/LT (kW)**	**MT (6) / LT (3)**	**MT (15) / LT (7)**	**MT (21)**	**MT (15) / LT (7)**
Power supply	Voltage	V	380 - 420	380 - 420	380 - 420	380 - 420
	Phase		Three phase	Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50	50
SEPR cooling at ET -10 °C AT 32 °C			**2,78**	**3,07**	**3,00**	**3,07**
SEPR freezing at ET -35 °C AT 32 °C			**—**	**1,64**	**—**	**1,64**
Annual electricity consumption at ET -10 °C AT 32 °C		**kWh/a**	**13371**	**30019**	**42050**	**30019**
Annual electricity consumption at ET -35 °C AT 32 °C		**kWh/a**	**17883**	**33650**	**—**	**33650**
Evaporator connection			Multiple	Multiple	Multiple	Multiple
Evaporation temperature	Min ~ Max	°C	-35 ~ -5	-35 ~ 0	-20 ~ -5	-35 ~ 0
Ambient temperature	Min ~ Max	°C	-20 ~ 43	-20 ~ 43	-20 ~ 43	-20 ~ 43
PS line	Suction	bar	80	80	80	80
	Liquid	bar	80	80	90	80
User system external alarm. Non-voltage contact			Yes	Yes	Yes	Yes
Liquid tube electromagnetic valve output		Vac	—	—	—	—
Showcase operation ON / OFF signal. Digital output. Non-voltage contact			Yes	Yes	Yes	Yes
Modbus communication line (RS485)		Ports	Accessory	Accessory	Accessory	Accessory
Compressor type			2- stage rotary	2- stage rotary	2- stage rotary	2- stage rotary
Dimensions	W x H x D	mm	1426 x 1100 x 541	1426 x 1516 x 541	1600 x 1600 x 908	1326 x 1724 x 790
Weight		kg	200	290	390	300
Connections	Suction	Inch (mm)	3/8 (9,52)	1/2 (12,70)	5/8 (15,88)	1/2 (12,70)
	Liquid	Inch (mm)	3/8 (9,52)	1/2 (12,70)	1/2 (12,70)	1/2 (12,70)
Maximum recommended pipe distance		m	40	50	50	50
Air flow		m^3/h	1x5700	2x4600	2x7500	1x8200
External static pressure		Pa	N/A	N/A	N/A	120
Performance - additional data	Nominal operating current at ET -10 °C MT / -30 °C LT AT 32 °C and 230 - 400 V 50 Hz	A	9,4	18,3	26,9	20,6
	Maximum operating current (in the most loaded phase at 230 - 400 V 50 Hz)	A	11,2	23,4	30,1	26,0
	Sound level at 10 m	dB(A)	41,5	40,4	52,6	55,0

CO_2 R744 · INVERTER+ · HIGH EFFICIENCY COMPRESSOR · SUPER QUIET · 43 °C AMBIENT TEMPERATURE · CUSTOMIZATION OPTIONS · BMS CONNECTIVITY

MT/LT	Cooling capacity at				R744					
	ET				-35 °C	-30 °C	-25 °C	-15 °C	-10 °C	-5 °C
OCU-CRC060A08	AT	32 °C	Min - Max	kW	1,2 - 3,0	1,4 - 3,5	1,7 - 4,0	2,3 - 5,3	2,7 - 6,0	3,0 - 6,7
		38 °C	Min - Max	kW	1,0 - 2,8	1,2 - 3,2	1,5 - 3,8	2,0 - 4,9	2,3 - 5,5	2,6 - 6,0
		43 °C	Min - Max	kW	0,9 - 2,4	1,1 - 2,9	1,3 - 3,4	1,8 - 4,4	2,0 - 4,8	2,3 - 5,3

MT/LT	Cooling capacity at				R744					
	ET				-35 °C	-30 °C	-25 °C	-15 °C	-10 °C	-5 °C
OCU-CRC150A08	AT	32 °C	Min - Max	kW	3,0 - 7,3	3,7 - 8,7	4,3 - 10,2	5,9 - 13,5	6,8 - 15,2	7,7 - 16,8
		38 °C	Min - Max	kW	2,9 - 7,0	3,3 - 8,3	3,9 - 9,6	5,2 - 12,6	6,0 - 14,0	6,8 - 15,4
		43 °C	Min - Max	kW	— - —	3,3 - 7,8	3,8 - 9,0	4,8 - 11,5	5,5 - 12,8	6,2 - 13,9

MT	Cooling capacity at				R744					
	ET				—	—	—	-15 °C	-10 °C	-5 °C
OCU-CRC210M08	AT	32 °C	Min - Max	kW	—	—	—	5,1 - 18,6	6,0 - 20,6	6,9 - 22,8
		38 °C	Min - Max	kW	—	—	—	4,7 - 17,2	5,4 - 18,6	5,8 - 19,7
		43 °C	Min - Max	kW	—	—	—	3,2 - 15,5	3,5 - 15,9	3,3 - 15,8

MT/LT	Cooling capacity at				R744					
	ET				-35 °C	-30 °C	-25 °C	-15 °C	-10 °C	-5 °C
SCU-CRC150A08	AT	32 °C	Min - Max	kW	3,0 - 7,3	3,7 - 8,7	4,3 - 10,2	5,9 - 13,5	6,8 - 15,2	7,7 - 16,8
		38 °C	Min - Max	kW	2,9 - 7,0	3,3 - 8,3	3,9 - 9,6	5,2 - 12,6	6,0 - 14,0	6,8 - 15,4
		43 °C	Min - Max	kW	— - —	3,3 - 7,8	3,8 - 9,0	4,8 - 11,5	5,5 - 12,8	6,2 - 13,9

Refrigeration designer.

This simple design tool supports engineers, installers, and technicians to make a quick calculation for commercial refrigeration systems: http://www.panasonicproclub.com

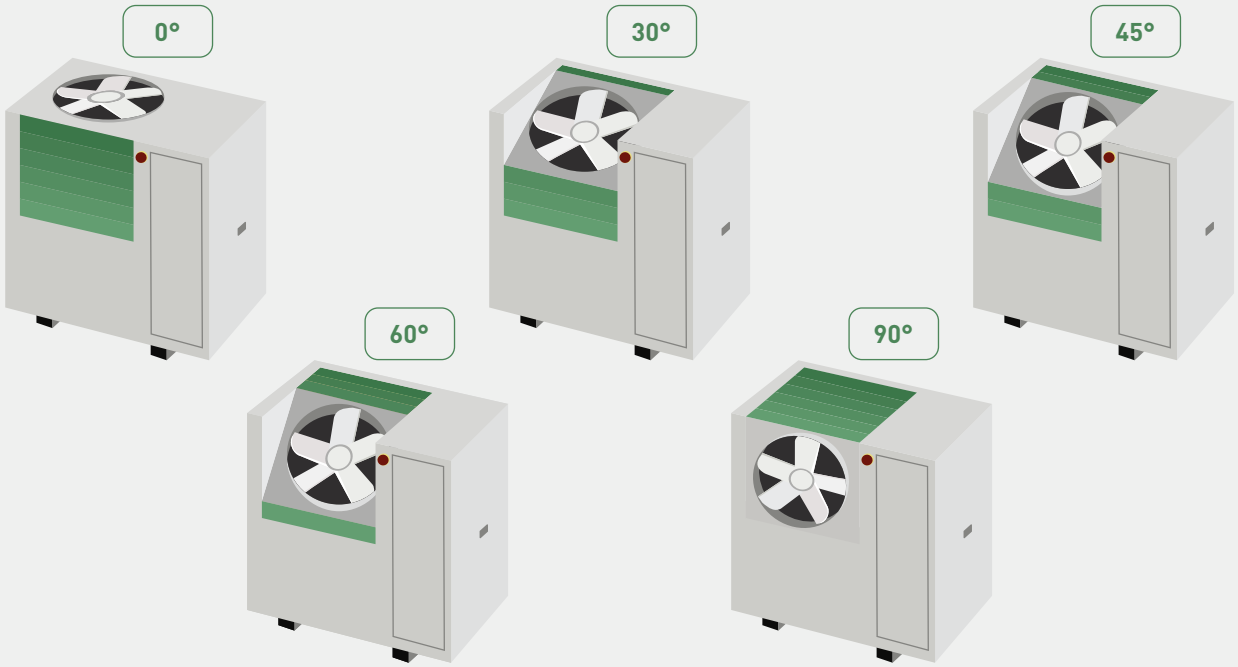
High pressure fan ready solution for iCORE SCU-CRC Custom-fit CO_2 Series

SCU-CRC150A08 model with high pressure fan for indoor mounting.

A Plug & Play solution designed specifically for indoor installations. This compact unit helps minimise installation time and reduce overall costs compared to central systems with remote condensers.

The high pressure fan feature for indoor mounting (factory-assembled customized option: stronger fan + special flange to connect the air duct to take out the hot air outside the building) is available when ordering a basic model, which was designed for indoor mounting from the very beginning.

Special high pressure fan with 0-90° adjustable angle flange.
Choose the most convenient way to connect your exhaust duct on field.



Refrigeration designer.

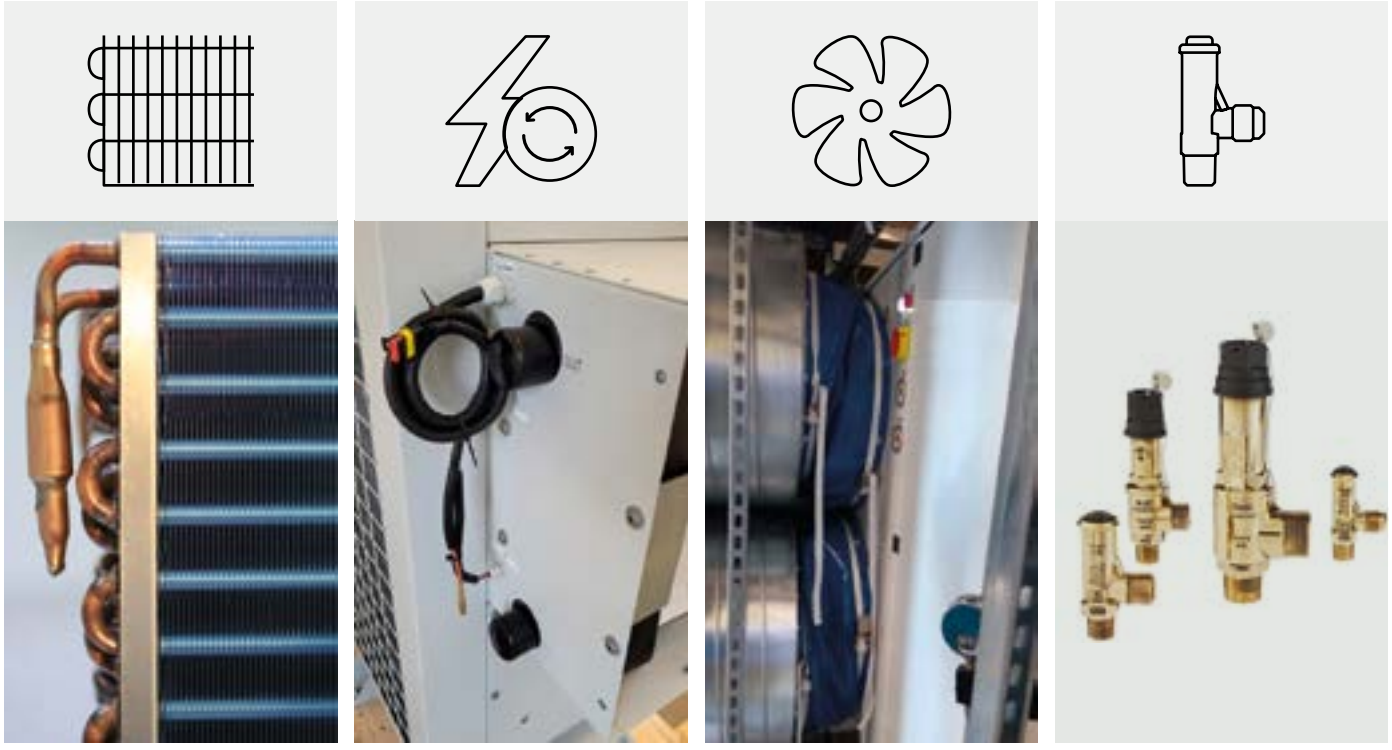
This simple design tool supports engineers, installers, and technicians to make a quick calculation for commercial refrigeration systems: http://www.panasonicproclub.com

Customization options for iCORE OCU/SCU-CRC Custom-fit CO_2 Series

The series offers customisable models that meet customer requirements.

- Factory pre-assembled options (customization options), tested and ready-to-use options list – cutting installation time and reducing labour costs
- Up to 3 customization options selectable*
- The final model name is composed with the customization selections

* Available configurations vary by series.



Coating.

Heat recovery.

High pressure fan.

Pressure relief valve (PRV) suction.

Base model code	Customization options (maximum 3 per single model)				Example final code with customization
	Coating	Heat recovery	High pressure fan	PRV suction	
	C	D	P	S	
OCU-CRC060A08	✔	–	✔	–	OCU-CRC060A08-CP
OCU-CRC150A08	✔	✔	–	✔	OCU-CRC150A08-CDS

Accessories and control – iCORE

Control panels and electric expansion valves for OCU-CR and OCU-CRC units

Control panel (Panel-C) with electric expansion valves (EEV) included.
Panel-C includes MPXPRO control, stator, probes, etc.

EEV size E2V03CWAC0.	EEV size E2V05CWAC0.	EEV size E2V09CWAC0.	EEV size E2V11CWAC0.	EEV size E2V14CWAC0.	EEV size E2V18CWAC0.	EEV size E2V24CWAC0.	EEV size E3V30CWM00.
————	————	————	————	————	————	————	————
KIT-CO2-PANEL-C-03	KIT-CO2-PANEL-C-05	KIT-CO2-PANEL-C-09	KIT-CO2-PANEL-C-11	KIT-CO2-PANEL-C-14	KIT-CO2-PANEL-C-18	KIT-CO2-PANEL-C-24	KIT-CO2-PANEL-C-30

Cold room management via condensing unit interface - Options 1-2-3 + Cold room display. Available for OCU-CRC units

Option 1

Room board for EEV control connection box*.

* Room board for 1×EEV control allows to connect Carel, Danfoss and Saginomiya EEV.

————
CZ-CO2-EEV-BOX

Option 2

Room board for EEV control connection kit*.

* Room board for 1×EEV control allows to connect Carel, Danfoss and Saginomiya EEV. KIT includes sensors.

————
CZ-CO2-EEV-KIT

Option 3

Room board for EEV control connection kit, with sensors and EEV.

EEV size E2V03CWAC0.	EEV size E2V05CWAC0.	EEV size E2V09CWAC0.	EEV size E2V11CWAC0.	EEV size E2V14CWAC0.	EEV size E2V18CWAC0.	EEV size E2V24CWAC0.	EEV size E2V30CWAC0.
————	————	————	————	————	————	————	————
CZ-CO2-EEV-KIT-03	CZ-CO2-EEV-KIT-05	CZ-CO2-EEV-KIT-09	CZ-CO2-EEV-KIT-11	CZ-CO2-EEV-KIT-14	CZ-CO2-EEV-KIT-18	CZ-CO2-EEV-KIT-24	CZ-CO2-EEV-KIT-30

Cold room display

Wall-mounted LED display. To be combined with options 1-2-3.

————
CZ-CO2-DISPLAY

CO_2 service checker. Available for OCU-CR units

CO_2 service checker for commissioning, maintenance and troubleshooting.

————
PAW-CO2-CHECKER

External CO_2 receivers. Available for OCU-CRC units

External CO_2 receiver, 24 L 80 bar, Housed (up to 8 kg additional refrigerant volume). Delivered with proper insulation.

————
CZ-CO2-R24L80-H

External CO_2 receiver, 24 L 90 bar, Housed (up to 8 kg additional refrigerant volume). Delivered with proper insulation.

————
CZ-CO2-R24L90-H

External CO_2 receiver, 24 L 80 bar, non-housed (up to 8 kg additional refrigerant volume). Delivered with proper insulation.

————
CZ-CO2-R24L80-E

External CO_2 receiver, 24 L 90 bar, non-housed (up to 8 kg additional refrigerant volume). Delivered with proper insulation.

————
CZ-CO2-R24L90-E

Accessories (model-specific compatibility - see individual descriptions)

Service adaptor for vacuum and service (HP and LP port). Available for OCU-CR units*.

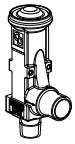
* 2 pcs. are recommended for OCU-CR2000VF8A.

SPK-TU125

Lubrication oil PZ-68S (0,5L) for OCU-CR and OCU-CRC units*.

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

CZ-CO2LBROL500



Pressure release valve (PRV) ⅜" (9,52) NPT x G ½" (12,70) Pset= 60,0 bar (PRV for suction line all units*)

* For OCU-CRC units a suction PRV is available also as customization option.

PAW-CO2-PRV60

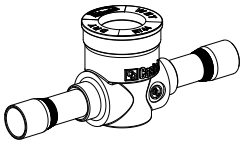
Pressure release valve (PRV) ⅜" (9,52) NPT x G ½" (12,70) Pset= 80,0 bar (PRV for suction line all units* or PRV for liquid receiver for OCU-CR400VF8(A), OCU-CR1000VF8(A) and OCU-CR2000VF8A).

* For OCU-CRC units a suction PRV is available also as customization option.

PAW-CO2-PRV80

Pressure release valve (PRV) ⅜" (9,52) NPT x G ½" (12,70) Pset= 120,0 bar (PRV for liquid receiver, for OCU-CR200VF5A).

PAW-CO2-PRV120



Sight glass, 130 bar, ¼" (6,35) ODS. For OCU-CR and OCU-CRC units.

PAW-SGT-GLASS-1/4

Sight glass, 130 bar, ⅜" (9,52) ODS. For OCU-CR and OCU-CRC units.

PAW-SGT-GLASS-3/8

Sight glass, 130 bar, ½" (12,70) ODS. For OCU-CR and OCU-CRC units.

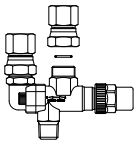
PAW-SGT-GLASS-1/2

Sight glass, 130 bar, ⅝" (15,88) - 16 mm ODS. For OCU-CR and OCU-CRC units.

PAW-SGT-GLASS-5/8

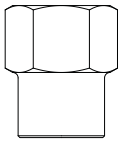
Sight glass, 130 bar, ¾" (19,05) ODS. For OCU-CR and OCU-CRC units.

PAW-SGT-GLASS-3/4



Changeover valve, ⅜" (9,52) NPT x ⅜" (9,52) NPT. For OCU-CR and OCU-CRC units.

PAW-CO2-CHANGE-0



Racord ⅜" (9,52) NPT x ⅜" (9,52) ODS (for K65 pipe connection). For OCU-CR and OCU-CRC units.

PAW-CO2-RACORD-3/8

Racord ⅜" (9,52) NPT x ½" (12,70) ODS (for K65 pipe connection). For OCU-CR and OCU-CRC units.

PAW-CO2-RACORD-1/2

Racord ⅜" (9,52) NPT x ⅝" (15,88) ODS (for K65 pipe connection). For OCU-CR and OCU-CRC units.

PAW-CO2-RACORD-5/8

Racord, ⅜" (9,52) NPT x ¾" (19,05) ODS (for K65 pipe connection). For OCU-CR and OCU-CRC units.

PAW-CO2-RACORD-3/4

Spare parts for service and maintenance (model-specific compatibility - see individual descriptions)

S-006T suction filter, ¾" (19,05) (outer Ø welding) for OCU-CR400VF8(A) and OCU-CRC060A08*.

* Sample image – actual product appearance may vary.

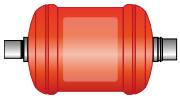
80203514142000

S-008T1 suction filter, ¾" (19,05) (outer Ø welding) for OCU-CR1000VF8(A), OCU-CR2000VF8A, OCU-CRC150A08 and SCU-CRC150A08.

80203514139000 (1)

D-155T filter dryer, ⅝" (15,88) (in Ø welding) (type CO-085-S) for OCU-CR1000VF8(A) and OCU-CR2000VF8A.

80203513180000 (2)

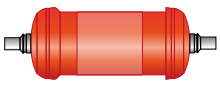


DCY-P8 165 S filter dryer, ⅝" (16,10) (in Ø welding) for OCU-CR1000VF8(A) and OCU-CR2000VF8A.

80203513187000 (3)

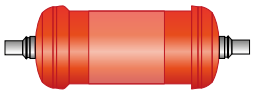
D-152T filter dryer, ¼" (6,35) (in Ø welding) (type CO-082-S) for OCU-CR200VF5A and OCU-CR400VF8(A).

80203513179000 (4)



DCY-P8 093S filter dryer, 3/8" (9,60) (in Ø welding) for OCU-CR400VF8(A).

80203513190000



DCY-P12 092 S filter dryer, ¼" (6,40) (in Ø welding) for OCU-CR200VF5A.

80203513186000 (5)

Compatibility relationship: (2) and (3) are compatible; (4) and (5) are compatible; (2) and (4) until end of stock.

iCOOL range – Inverter solutions for today and tomorrow

iCOOL

Panasonic's iCOOL range is built on flexibility and performance. iCOOL range units operate with HFO and HFC refrigerants – including next-generation A2L options with low Global Warming Potential (GWP) – providing a reliable bridge between today's needs and tomorrow's environmental goals.

Designed for high energy efficiency, each unit helps reduce operational costs and environmental impact while ensuring reliable, high-performance operation. iCOOL range is the smart choice for a market in transition – delivering future-ready innovation without compromising the needs of today.

MADE IN EUROPE

Easy online selection.

Easy installation.

Easy commissioning.

Easy maintenance.

Low noise.

Ambient temperature up to 43 °C.

1 Easy Selection

· Online selection software
· Support to select the best HFC or A2L solution for any application

2 Easy installation

· Lightweight units
· Integrated options from factory
· Refrigeration design
· Flexible and fast delivery

3 Easy maintenance

· 180° access to all components
· ModBus ready

4 Easy comissionning

· Less than 3 minutes
· Local language assistance
· 100% functionally tested

5 Advanced control

· Simple user interface
· Smooth start and stop function
· Working envelope control
· Oil return function

iCOOL is the modular solution of Inverter condensing unit that saves you time during installation and commissioning, as the unit is factory customized to your needs.

Thanks to its large modulation capacity and its multi-refrigerant compliance, it can be used for any commercial refrigeration application providing service down to a minimum of 500 W for a single evaporator. With a very simple user interface, low energy consumption, fast commissioning and easy maintenance, iCOOL is the perfect solution for convenience stores, restaurant cold rooms, fuel stations, food stores, milk cooling and ice making equipment.

iCOOL SE Series

Inverter technology at the cost of ON / OFF.

iCOOL SE Series - Simple Engineering solution.

From 2,5 to 10,0 kW MT and from 1,2 to 3,0 kW LT.
Easy to install, with a simplified commissioning process. Inverter technology has never been this easy.
Save time and operation cost with our energy-efficient units based on Inverter compressors.

- Similar investment cost and significant energy savings vs. ON / OFF technology
- Full BLDC Inverter technology
- Dedicated PLC controller
- Low noise operation
- Suitable for multi-evaporator applications (MT models)
- Designed and manufactured in Europe

Upgrade* of the existing range of iCOOL SE Series units to meet the A2L requirements. Inverter technology at the cost of ON / OFF. Simple engineering solution.

- **Multi-refrigerant compatibility (install today with HFC, retrofit to A2L after the new F-gas ban dates)**
- **A2L safety components (additional compressor's compartment ventilation fan + differential air-pressure switch + isolated e-box)**

A2L refrigerants are a class of low Global Warming Potential (GWP) gases that serve as alternatives to traditional HFCs, offering mild flammability and low toxicity.

* Currently under development.

A2L is lower flammability and lower toxicity

iCOOL SE Series · R448A / R449A / R134a / R513A / R454C / R455A
Specifications and capacity tables.

New 2025

Model				OCU-KRE025M05	OCU-KRE045M05	OCU-KRE070M05	OCU-LRC100M08
Compressor				**Single compressor**	**Single compressor**	**Single compressor**	**Single compressor**
Compatible refrigerants				**R448A, R449A, R134a, R513A**	**R448A, R449A, R134a, R513A**	**R448A, R449A, R134a, R513A**	**R448A, R449A, R134a, R513A, R454C, R455A**
PED category				**I**	**I**	**I**	**III**
Application and nominal cooling capacity			**MT/LT (kW)**	**MT (2,5)**	**MT (4,5)**	**MT (6,5)**	**MT (10,0)**
SEPR cooling at ET -10 °C AT 32 °C (R448A-OCU-K, R455A-OCU-L)				**—**	**—**	**3,80**	**3,44**
SEPR freezing at ET -35 °C AT 32 °C (R448A)				**—**	**—**	**—**	**—**
Annual electricity consumption at ET -10 °C AT 32 °C (R448A-OCU-K, R455A-OCU-L)			**kWh/a**	**—**	**—**	**10749**	**16470**
Annual electricity consumption at ET -35 °C AT 32 °C (R448A)			**kWh/a**	**—**	**—**	**—**	**—**
COP at ET -10°C, AT 32 °C (R448A)				**1,88**	**1,89**	**—**	**—**
COP at ET -35°C, AT 32 °C (R448A)				**—**	**—**	**—**	**—**
Nominal operating current at ET -10 °C MT / -30 °C LT AT 32 °C and 230 - 400 V 50 Hz			A	6,7	11,9	14,7	8,7
Maximum operating current (in the most loaded phase at 230 - 400 V 50 Hz)			A	7,9	13,5	17,4	11,7
Maximum power consumption			kW	1,6	2,8	3,6	5,2
Dimensions	W x H x D		mm	1000 x 605 x 450	1000 x 605 x 450	1100 x 805 x 450	1286 x 858 x 471
Weight			kg	70	70	80	170
Sound level at 10 m			dB(A)	42,5	42,5	42,5	39,0
Condenser	Fans x diameter		mm	1x450	1x450	1x500	1x710
	Air flow		m³/h	3600	3600	5200	6700
	Fan power supply		V / ph / Hz	220 - 240 / 1 / 50	220 - 240 / 1 / 50	220 - 240 / 1 / 50	220 - 277 / 1 / 50
	Fan power consumption		W	170	170	230	280
	Nominal fan amperage		A	1,4	1,4	2,1	1,2
Compressor	Model			C-6RVN63L0B	C-7RVN113L0B	C-7RVN153L0B	C-8RZ420L4AAL
	Volumetric flow		m³/h	0,6 - 4,1	1,25 - 7,5	1,7 - 10,4	2,3 - 15,1
	Rotation range		rps	30 - 90	30 - 90	30 - 90	20 - 90
	Current	Full load amperage	A	4	7,6	9,4	7,6
		Peak current limit / Locked rotor amperage	A	15 / —	25 / —	25 / —	25 / —
	Oil type			FV68S	FV68S	FV68S	FV68S (PVE)
	Oil compressor charge		dm³	0,6	0,7	0,7	1,35 + 0,6
	Crankcase heater power consumption		W	35	35	35	35
Connections		Suction	Inch	1/2	5/8	3/4	7/8
		Liquid		3/8	3/8	3/8	1/2
Liquid receiver			dm³	3,9	3,9	5,3	10,0
CU power supply	Voltage		V / ph / Hz	220 - 240 / 1 / 50	220 - 240 / 1 / 50	220 - 240 / 1 / 50	3x400 / 50 PE+N (TN-S)
	Recommended minimum cable cross-section		mm²	3x2,5	3x2,5	3x2,5	5x4,0
	Recommended minimum protection			C16	C20	C20	C25
Maximum recommended pipe distance			m	30	30	30	40
Maximum height distance		Evaporator above	m	7	7	7	12
		Evaporator below	m	7	7	7	12
Which pipes needs to be insulated		Suction / liquid / both		Suction	Suction	Suction	Suction
Recommended insulation thickness			mm	13	13	13	13
Maximum quantity of evaporators connected			Qty.	3	3	3	7
Evaporation temperature		Min ~ Max	°C	-15 ~ 0	-15 ~ 0	-15 ~ 0	-15 ~ 5
Ambient temperature		Min ~ Max	°C	-20 ~ 43	-20 ~ 43	-20 ~ 43	-20 ~ 43

INVERTER+ · HIGH EFFICIENCY COMPRESSOR · SUPER QUIET · 43 °C AMBIENT TEMPERATURE · AUTOMATIC FAN · BMS CONNECTIVITY

iCOOL SE Series · R448A / R449A
Specifications and capacity tables.

New 2025

Model				OCU-KRE012L05	OCU-KRE022L05	OCU-KRE030L05
Compressor				**Single compressor**	**Single compressor**	**Single compressor**
Compatible refrigerants				**R448A, R449A**	**R448A, R449A**	**R448A, R449A**
PED category				**I**	**I**	**I**
Application and nominal cooling capacity			**MT/LT (kW)**	**LT (1,2)**	**LT (2,2)**	**LT (2,9)**
SEPR cooling at ET -10 °C AT 32 °C (R448A-OCU-K, R455A-OCU-L)				**—**	**—**	**—**
SEPR freezing at ET -35 °C AT 32 °C (R448A)				**—**	**—**	**2,14**
Annual electricity consumption at ET -10 °C AT 32 °C (R448A-OCU-K, R455A-OCU-L)			**kWh/a**	**—**	**—**	**—**
Annual electricity consumption at ET -35 °C AT 32 °C (R448A)			**kWh/a**	**—**	**—**	**8475**
COP at ET -10°C, AT 32 °C (R448A)				**—**	**—**	**—**
COP at ET -35°C, AT 32 °C (R448A)				**0,95**	**0,98**	**—**
Nominal operating current at ET -10 °C MT / -30 °C LT AT 32 °C and 230 - 400 V 50 Hz			A	5,5	9,5	12,4
Maximum operating current (in the most loaded phase at 230 - 400 V 50 Hz)			A	7,2	12,7	17
Maximum power consumption			kW	1,4	2,6	3,6
Dimensions		W x H x D	mm	1000 x 605 x 450	1000 x 605 x 450	1000 x 605 x 450
Weight			kg	70	70	80
Sound level at 10 m			dB(A)	42,5	42,5	42,5
Condenser	Fans x diameter		mm	1x450	1x450	1x450
	Air flow		m³/h	3600	3600	3600
	Fan power supply		V / ph / Hz	220 - 240 / 1 / 50	220 - 240 / 1 / 50	220 - 240 / 1 / 50
	Fan power consumption		W	170	170	170
	Nominal fan amperage		A	1,4	1,4	1,4
Compressor	Model			C-6RVN63L0B	C-7RVN113L0B	C-7RVN153L0B
	Volumetric flow		m³/h	0,6 - 4,1	1,25 - 7,5	1,7 - 10,4
	Rotation range		rps	30 - 90	30 - 90	30 - 90
	Current	Full load amperage	A	3,6	7,1	9,6
		Peak current limit / Locked rotor amperage	A	15 / —	25 / —	25 / —
	Oil type			FV68S	FV68S	FV68S
	Oil compressor charge		dm³	0,6	0,7	0,7
	Crankcase heater power consumption		W	35	35	35
Connections		Suction	Inch	1/2	5/8	3/4
		Liquid		3/8	3/8	3/8
Liquid receiver			dm³	3,9	3,9	3,9
CU power supply	Voltage		V / ph / Hz	220 - 240 / 1 / 50	220 - 240 / 1 / 50	220 - 240 / 1 / 50
	Recommended minimum cable cross-section		mm²	3x2,5	3x2,5	3x2,5
	Recommended minimum protection			C16	C20	C20
Maximum recommended pipe distance			m	20	20	20
Maximum height distance		Evaporator above	m	7	7	7
		Evaporator below	m	7	7	7
Which pipes needs to be insulated		Suction / liquid / both		Suction	Suction	Suction
Recommended insulation thickness			mm	19	19	19
Maximum quantity of evaporators connected			Qty.	3	3	3
Evaporation temperature		Min ~ Max	°C	-35 ~ -15	-35 ~ -15	-35 ~ -15
Ambient temperature		Min ~ Max	°C	-20 ~ 43	-20 ~ 43	-20 ~ 43

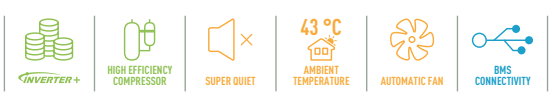
Accessories for iCOOL SE Series.

Compressor oil FV68S 2,0 l.
CZ-HFC-FV68SL20

Compressor oil FV68S 500 ml.
CZ-HFC-FV68SL05

Compressor oil FV32S 2,0 l.
CZ-HFC-FV32SL20

Compressor oil FV32S 500 ml.
CZ-HFC-FV32SL05



MT	Cooling capacity at				R449A*/R448A*			R134a*/R513A*		
	ET				-15 °C	-10 °C	-5 °C	-15 °C	-10 °C	-5 °C
OCU-KRE025M05	AT	32 °C	Min - Max	kW	0,7 - 2,1	0,8 - 2,6	1,0 - 3,0	0,4 - 1,2	0,5 - 1,5	0,6 - 1,8
		38 °C	Min - Max	kW	0,6 - 2,0	0,8 - 2,4	0,9 - 2,7	0,3 - 1,1	0,4 - 1,3	0,5 - 1,7
		43 °C	Min - Max	kW	0,6 - 1,8	0,7 - 2,0	0,8 - 2,2	0,3 - 1,0	0,4 - 1,2	0,5 - 1,5

MT	Cooling capacity at				R449A*/R448A*			R134a*/R513A*		
	ET				-15 °C	-10 °C	-5 °C	-15 °C	-10 °C	-5 °C
OCU-KRE045M05	AT	32 °C	Min - Max	kW	1,3 - 3,9	1,6 - 4,6	1,9 - 5,4	0,7 - 2,2	0,9 - 2,7	1,1 - 3,4
		38 °C	Min - Max	kW	1,2 - 3,7	1,5 - 4,1	1,8 - 4,6	0,6 - 2,0	0,8 - 2,5	1,0 - 3,1
		43 °C	Min - Max	kW	1,2 - 3,0	1,4 - 3,1	1,7 - 3,4	0,6 - 1,8	0,7 - 2,3	0,9 - 2,8

MT	Cooling capacity at			R449A*/R448A*			R134a*/R513A*		
	ET			-15 °C	-10 °C	-5 °C	-15 °C	-10 °C	-5 °C
OCU-KRE070M05	AT 32 °C	Min - Max	kW	1,9 - 5,5	2,3 - 6,6	2,8 - 7,6	0,9 - 3,1	1,2 - 3,9	1,5 - 4,8
	AT 38 °C	Min - Max	kW	1,8 - 5,0	2,2 - 6,0	2,6 - 6,8	0,9 - 2,8	1,1 - 3,5	1,4 - 4,4
	AT 43 °C	Min - Max	kW	1,7 - 4,6	2,0 - 5,3	2,4 - 5,9	0,8 - 2,6	1,0 - 3,3	1,3 - 4,0

MT	Cooling capacity at				R449A*/R448A*			R134a*/R513A*			R455A/R454C*		
	ET				-15 °C	-10 °C	-5 °C	-15 °C	-10 °C	-5 °C	-15 °C	-10 °C	-5 °C
OCU-LRC100M08	AT	32 °C	Min - Max	kW	1,9 - 8,0	2,3 - 9,5	2,7 - 11,2	0,8 - 4,0	1,0 - 5,3	1,4 - 6,7	1,9 - 8,4	2,3 - 9,8	2,7 - 11,2
		38 °C	Min - Max	kW	1,8 - 7,3	2,1 - 8,8	2,5 - 10,4	0,8 - 3,9	1,0 - 4,9	1,3 - 6,1	1,8 - 7,8	2,1 - 9,1	2,5 - 10,4
		43 °C	Min - Max	kW	1,6 - 6,8	2,0 - 8,2	2,4 - 9,6	0,8 - 3,6	1,0 - 4,5	1,3 - 5,5	1,6 - 7,3	2,0 - 8,5	2,4 - 9,8

LT	Cooling capacity at				R449A/R448A		
	ET				-35 °C	-30 °C	-25 °C
OCU-KRE012L05	AT	32 °C	Min - Max	kW	0,3 - 1,0	0,4 - 1,2	0,5 - 1,5
		38 °C	Min - Max	kW	0,3 - 0,9	0,3 - 1,1	0,4 - 1,4
		43 °C	Min - Max	kW	0,2 - 0,8	0,3 - 1,0	0,4 - 1,3

LT	Cooling capacity at				R449A/R448A		
	ET				-35 °C	-30 °C	-25 °C
OCU-KRE022L05	AT	32 °C	Min - Max	kW	0,6 - 1,8	0,7 - 2,2	0,9 - 2,8
		38 °C	Min - Max	kW	0,5 - 1,6	0,7 - 2,0	0,8 - 2,5
		43 °C	Min - Max	kW	0,5 - 1,5	0,6 - 1,9	0,8 - 2,3

LT	Cooling capacity at				R449A/R448A		
	ET				-35 °C	-30 °C	-25 °C
OCU-KRE030L05	AT	32 °C	Min - Max	kW	0,8 - 2,4	1,0 - 2,9	1,3 - 3,6
		38 °C	Min - Max	kW	0,7 - 2,2	0,9 - 2,7	1,2 - 3,3
		43 °C	Min - Max	kW	0,7 - 2,0	0,9 - 2,4	1,1 - 3,0

* Data for R449A/R448A, R134a/R513A and R454C regarding the OCU-LRC100M08 are tentative. For more detailed information, please contact Panasonic.

Refrigeration designer.

This simple design tool supports engineers, installers, and technicians to make a quick calculation for commercial refrigeration systems: http://www.panasonicproclub.com

iCOOL OCU/SCU Series

The possibility to address a larger audience, covering the Condensing Units (CDUs) market that CO_2 is not yet covering today.

MT/LT type: iCOOL OCU/SCU Series.

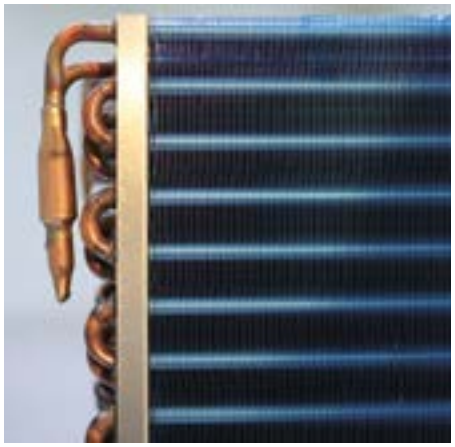
From 3,5 to 42,0 kW.

Recognising that HFC/HFO systems still represent the majority of demand in the European refrigeration market, the line-up is designed to support current needs while also enabling a smooth transition for those seeking more environmentally friendly alternatives. The iCOOL range addresses this directly, supporting continued use of HFCs and introducing A2L-ready feature, offering customers a flexible, future-proof solution that bridges today's realities with tomorrow's requirements.

- **Complete capacity range of compact CDUs for multi-evaporator applications**
- **Significant energy savings vs. ON / OFF**
- **Low noise units with special silent features: Inverter compressor, EC fan and 6-face soundproof insulation of the compressor compartment**
- **Customisation options – fully tested and factory mounted**

Customization options for iCOOL OCU/SCU Series

The range offers customisable models that meet customer requirements.



Coating.

Heat recovery.

High pressure fan.

Base model code	Customization options (maximum 3 per single model)			Example final code with customization
	Coating	Heat recovery	High pressure fan	
	C	D	P	
OCU-KRC045M08	✔	✔	✔	OCU-KRC045M08-CDP
OCU-KRC070M08	✔	✔	✔	OCU-KRC070M08-CDP
OCU-KRC100M08	✔	✔	✔	OCU-KRC100M08-CDP

iCOOL OCU Series · R448A / R449A / R134a / R513A
Specifications and capacity tables.

Model				OCU-KRC045M08	OCU-KRC070M08	OCU-KRC100M08	OCU-KSC120M08	OCU-KSC150M08
Compressor				**Single compressor**	**Single compressor**	**Single compressor**	**Single compressor**	**Single compressor**
Compatible refrigerants				**R448A, R449A, R134a, R513A**	**R448A, R449A, R134a, R513A**	**R448A, R449A, R134a, R513A**	**R448A, R449A, R134a, R513A**	**R448A, R449A, R134a, R513A**
PED category				**I**	**II**	**II**	**II**	**II**
Application and nominal cooling capacity			**MT/LT (kW)**	**MT (4,5)**	**MT (7,0)**	**MT (9,0)**	**MT (12,0)**	**MT (15,0)**
SEPR cooling at ET -10 °C AT 32 °C				**3,28**	**3,60**	**4,29**	**3,48**	**3,87**
SEPR freezing at ET -35 °C AT 32 °C				**—**	**—**	**—**	**—**	**—**
Annual electricity consumption at ET -10 °C AT 32 °C			**kWh/a**	**9070**	**12324**	**13347**	**20141**	**23139**
Annual electricity consumption at ET -35 °C AT 32 °C			**kWh/a**	**—**	**—**	**—**	**—**	**—**
Nominal operating current at ET -10 °C MT / -30 °C LT AT 32 °C and 230 - 400 V 50 Hz			A	5,0	6,9	7,2	14,8	15,2
Maximum operating current (in the most loaded phase at 230 - 400 V 50 Hz)			A	7,2	10,1	9,8	20,5	22,6
Maximum power consumption			kW	3,7	5,6	5,4	9,3	10,1
Dimensions		W x H x D	mm	1106 x 559 x 461	1140 x 758 x 439	1280 x 963 x 439	1420 x 963 x 439	1322 x 1493 x 475
Weight			kg	94	110	140	175	231
Sound level at 10 m			dB(A)	39,0	40,0	41,0	40,0	44,0
Condenser	Fans x diameter		mm	1x450	1x630	1x630	1x710	2x630
	Air flow		m³/h	3850	6150	6150	6920	11150
	Fan static pressure		Pa	N/A	N/A	N/A	N/A	N/A
	Fan power supply		V / ph / Hz	200 - 277 / 1 / 50	200 - 277 / 1 / 50	200 - 277 / 1 / 50	200 - 277 / 1 / 50	200 - 277 / 1 / 50
	Fan power consumption		W	170	220	220	280	2x230
	Nominal fan amperage		A	1,4	1,2	1,2	1,2	2x1
Compressor	Model			C-7RVN113L0A	C-7RZ320L4ABL	C-8RZ420L4AAL	C-SBS180H00B	C-SBVN373L0B
	Volumetric flow		m³/h	1,25 - 7,5	1,7 - 10,4	3,0 - 13,6	5,8 - 19,2	9,2 - 24,6
	Rotation range		rps	15 - 90	15 - 90	20 - 90	32 - 100	30 - 80
	Current	Full load amperage	A	5,8	8,7	8,8	15,8	16,9
		Peak current limit / Locked rotor amperage	A	17,8 / —	19,2 / —	31,9 / —	40 / —	46 / —
	Oil type			FV68S (PVE)	FV68S (PVE)	FV68S (PVE)	FV68S (PVE)	FV68S (PVE)
	Crankcase heater power consumption		W	35	40	35	70	90
Oil charge			dm³	0,7 + 0,4	0,7 + 0,4	1,35 + 0,4	2,0 + 0,4	2,0 + 0,6
Connections		Suction	Inch	5/8	3/4	7/8	7/8	1 1/8
		Liquid	Inch	3/8	3/8	1/2	1/2	5/8
Liquid receiver			dm³	3,9	7,1	10,0	10	15
CU power supply	Voltage		V / Hz	3x400 / 50 PE+N (TN-S)	3x400 / 50 PE+N (TN-S)	3x400 / 50 PE+N (TN-S)	3x400 / 50 PE+N (TN-S)	3x400 / 50 PE+N (TN-S)
	Recommended minimum cable cross-section		mm²	5x2,5	5x2,5	5x2,5	5x4,0	5x6,0
	Recommended minimum protection			C16	C16	C20	C25	C32
Maximum recommended pipe distance			m	40	40	40	40	50
Maximum height distance		Evaporator above	m	12	12	12	12	12
		Evaporator below	m	12	12	12	12	12
Which pipes needs to be insulated		Suction / liquid / both		Suction	Suction	Suction	Suction	Suction
Recommended insulation thickness			mm	13	13	13	13	13
Maximum quantity of evaporators connected			Qty.	5	5	7	7	7
Evaporation temperature		Min ~ Max	°C	-15 ~ 5	-15 ~ 5	-15 ~ 10	-15 ~ 10	-15 ~ 10
Ambient temperature		Min ~ Max	°C	-20 ~ 43	-20 ~ 43	-20 ~ 43	-20 ~ 43	-20 ~ 43

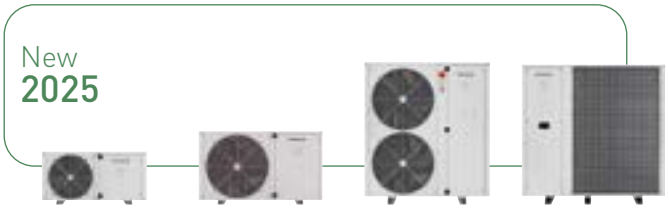
INVERTER+ | HIGH EFFICIENCY COMPRESSOR | SUPER QUIET | 43 °C AMBIENT TEMPERATURE | AUTOMATIC FAN | CUSTOMIZATION OPTIONS | BMS CONNECTIVITY

New 2025

Model				OCU-KSC160M08	OCU-KSC190M08	OCU-KSC240M08	OCU-KSC280M08	OCU-KSC400M08	OCU-KSC420M08
Compressor				**Tandem compressor**	**Tandem compressor**	**Tandem compressor**	**Tandem compressor**	**Tandem compressor**	**Tandem compressor**
Compatible refrigerants				**R448A, R449A, R134a, R513A**	**R448A, R449A, R134a, R513A**	**R448A, R449A, R134a, R513A**	**R448A, R449A, R134a, R513A**	**R448A, R449A, R134a, R513A**	**R448A, R449A, R134a, R513A**
PED category				**II**	**II**	**II**	**II**	**II**	**II**
Application and nominal cooling capacity			**MT/LT (kW)**	**MT (16,0)**	**MT (19,0)**	**MT (24,0)**	**MT (28,0)**	**MT (40,0)**	**MT (42,0)**
SEPR cooling at ET -10 °C AT 32 °C				**3,61**	**3,39**	**4,31**	**4,27**	**3,61**	**3,52**
SEPR freezing at ET -35 °C AT 32 °C				**—**	**—**	**—**	**—**	**—**	**—**
Annual electricity consumption at ET -10 °C AT 32 °C			**kWh/a**	**27903**	**33985**	**34316**	**39329**	**67049**	**73046**
Annual electricity consumption at ET -35 °C AT 32 °C			**kWh/a**	**—**	**—**	**—**	**—**	**—**	**—**
Nominal operating current at ET -10 °C MT / -30 °C LT AT 32 °C and 230 - 400 V 50 Hz			A	21,3	26,3	25,9	30,5	40,0	43,9
Maximum operating current (in the most loaded phase at 230 - 400 V 50 Hz)			A	27,9	32,3	34,8	40,4	53,8	57,3
Maximum power consumption			kW	14	17,1	17,4	20,9	28,5	31,4
Dimensions		W x H x D	mm	1521 x 1493 x 475	1521 x 1493 x 475	1528 x 1488 x 879	1528 x 1488 x 879	1670 x 1695 x 1090	1670 x 1695 x 1090
Weight			kg	283	285	397	426	520	520
Sound level at 10 m			dB(A)	44,0	44,0	44,0	44,0	43,0	43,0
Condenser	Fans x diameter		mm	2x630	2x630	2x630	2x630	1x800	1x800
	Air flow		m³/h	11150	11150	12600	12600	21000	21000
	Fan static pressure		Pa	N/A	N/A	N/A	N/A	160	160
	Fan power supply		V / ph / Hz	200 - 277 / 1 / 50	200 - 277 / 1 / 50	200 - 240 / 1 / 50	200 - 277 / 1 / 50	380 - 400 / 3 / 50	380 - 400 / 3 / 50
	Fan power consumption		W	2x230	2x230	2x230	2x230	1950	1950
	Nominal fan amperage		A	2x1	2x1	2x1	2x1	2,8	2,8
Compressor	Model			C-SBS180H00B/ C-SBN303H8G	C-SBS180H00B/ C-SBN453H8G	C-SBVN373L0B/ C-SBN453H8G	C-SBVN373L0B/ C-SCN603H8T	4CC149NA04/ C-SCN753H8T	4CC149NA04/ C-SCN903H8T
	Volumetric flow		m³/h	5,8 - 17,4 / 11,6	5,8 - 17,4 / 14,7	7,7 - 24,6 / 14,7	7,7 - 24,6 / 23,6	10,7 - 39,3 / 30,3	10,7 - 39,3 / 36,2
	Rotation range		rps	32 - 90	32 - 90	31 - 80	31 - 80	21 - 75	21 - 75
	Current	Full load amperage	A	14,7/8,0	15,2/11,9	17,2/11,9	18,4/16,0	26,0/19,4	25,8/23,2
		Peak current limit / Locked rotor amperage	A	34/48	34/66	46/66	46/80	52/96	52/96
	Oil type			FV68S (PVE)	FV68S (PVE)	FV68S (PVE)	FV68S (PVE)	FV68S (PVE)	FV68S (PVE)
	Crankcase heater power consumption		W	2x70	2x70	40	2x90	2x90	2x90
Oil charge			dm³	2,0 + 1,7 + 2x0,4	2,0 + 1,7 + 2x0,4	2,0 + 1,7 + 2x0,6	2,0 + 2,8 + 2x0,6	2x2,8 + 2,0	2x2,8 + 2,0
Connections		Suction	Inch	1 1/8	1 1/8	1 3/8	1 3/8	1 5/8	1 5/8
		Liquid	Inch	5/8	5/8	7/8	7/8	7/8	7/8
Liquid receiver			dm³	15	15	15	15	30	30
CU power supply	Voltage		V / Hz	3x400/50 PE+N (TN-S)	3x400/50 PE+N (TN-S)	3x400/50 PE+N (TN-S)	3x400/50 PE+N (TN-S)	3x400/50 PE+N (TN-S)	3x400/50 PE+N (TN-S)
	Recommended minimum cable cross-section		mm²	5x6,0	5x10,0	5x10,0	5x10,0	5x16,0	5x16,0
	Recommended minimum protection			C32	C40	C40	C50	C63	C63
Maximum recommended pipe distance			m	50	50	70	70	70	70
Maximum height distance		Evaporator above	m	12	12	12	12	12	12
		Evaporator below	m	12	12	12	12	12	12
Which pipes needs to be insulated		Suction / liquid / both		Suction	Suction	Suction	Suction	Suction	Suction
Recommended insulation thickness			mm	13	13	13	13	13	13
Maximum quantity of evaporators connected			Qty.	10	10	10	10	20	20
Evaporation temperature		Min ~ Max	°C	-15 ~ 10	-15 ~ 10	-15 ~ 10	-15 ~ 10	-15 ~ 10	-15 ~ 10
Ambient temperature		Min ~ Max	°C	-20 ~ 43	-20 ~ 43	-20 ~ 43	-20 ~ 43	-20 ~ 43	-20 ~ 43

INVERTER+ · HIGH EFFICIENCY COMPRESSOR · SUPER QUIET · 43 °C AMBIENT TEMPERATURE · AUTOMATIC FAN · CUSTOMIZATION OPTIONS · BMS CONNECTIVITY

iCOOL OCU Series · R448A / R449A
Specifications and capacity tables.



Model				OCU-KRC035L08	OCU-KRC050L08	OCU-KSC090L08	OCU-KSC140L08
Compressor				**Single compressor**	**Single compressor**	**Single compressor**	**Tandem compressor**
Compatible refrigerants				**R448A, R449A**	**R448A, R449A**	**R448A, R449A**	**R448A, R449A**
PED category				**I**	**II**	**II**	**II**
Application and nominal cooling capacity			**MT/LT (kW)**	**LT (3,5)**	**LT (5,0)**	**LT (9,0)**	**LT (14,0)**
SEPR cooling at ET -10 °C AT 32 °C				**—**	**—**	**—**	**—**
SEPR freezing at ET -35 °C AT 32 °C				**1,76**	**1,83**	**1,65**	**—**
Annual electricity consumption at ET -10 °C AT 32 °C			**kWh/a**	**—**	**—**	**—**	**—**
Annual electricity consumption at ET -35 °C AT 32 °C			**kWh/a**	**10630**	**18315**	**33998**	**—**
Nominal operating current at ET -10 °C MT / -30 °C LT AT 32 °C and 230 - 400 V 50 Hz			A	5,9	10,1	20,7	32,9
Maximum operating current (in the most loaded phase at 230 - 400 V 50 Hz)			A	7,9	12,8	29,9	43
Maximum power consumption			kW	4,1	7,2	13,6	21
Dimensions		W x H x D	mm	1105 x 559 x 466	1289 x 758 x 439	1322 x 1493 x 475	1528 x 1488 x 879
Weight			kg	96	132	286	460
Sound level at 10 m			dB(A)	39,0	44,0	44,0	44,0
Condenser	Fans x diameter		mm	1x450	1x630	2x630	2x630
	Air flow		m³/h	3850	6150	11150	12600
	Fan static pressure		Pa	N/A	N/A	N/A	N/A
	Fan power supply		V / ph / Hz	200 - 277 / 1 / 50	200 - 277 / 1 / 50	200 - 277 / 1 / 50	200 - 277 / 1 / 50
	Fan power consumption		W	170	220	2x230	2x230
	Nominal fan amperage		A	1,4	1,2	2x1	2x1
Compressor	Model			C-7RZ320L4ABL	C-9RZ580L4AAL	ACC144NA03	ACC144NA03/ C-SCN603L8H
	Volumetric flow		m³/h	1,7 - 10,4	5,2 - 18,7	10,0 - 37,6	10 - 37,6 / 23,8
	Rotation range		rps	15 - 90	25 - 90	25 - 72	25 - 72
	Current	Full load amperage	A	6,4	10	22,9	21,6 / 14,8
		Peak current limit / Locked rotor amperage	A	19,2 / —	28,4 / —	46 / —	46 / 90
	Oil type			FV68S (PVE)	FV68S (PVE)	FV32S (PVE)	FV32S (PVE)
	Crankcase heater power consumption		W	35	35	90	2x90
Oil charge			dm³	0,7 + 0,4	2,1 + 0,4	2,5 + 0,4	2x2,5 + 2x0,6
Connections		Suction	Inch	7/8	7/8	1 1/8	1 3/8
		Liquid	Inch	3/8	3/8	5/8	7/8
Liquid receiver			dm³	3,9	7,1	15	15
CU power supply	Voltage		V / Hz	3x400 / 50 PE+N (TN-S)	3x400 / 50 PE+N (TN-S)	3x400 / 50 PE+N (TN-S)	3x400 / 50 PE+N (TN-S)
	Recommended minimum cable cross-section		mm²	5x2,5	5x2,5	5x6,0	5x10,0
	Recommended minimum protection			C16	C20	C32	C50
Maximum recommended pipe distance			m	40	40	40	50
Maximum height distance		Evaporator above	m	12	12	12	12
		Evaporator below	m	12	12	12	12
Which pipes needs to be insulated		Suction / liquid / both		Suction	Suction	Suction	Suction
Recommended insulation thickness			mm	19	19	19	19
Maximum quantity of evaporators connected			Qty.	5	5	5	7
Evaporation temperature		Min ~ Max	°C	-35 ~ -15	-35 ~ -15	-35 ~ -10	-35 ~ -10
Ambient temperature		Min ~ Max	°C	-20 ~ 43	-20 ~ 43	-20 ~ 43	-20 ~ 43

Accessories for iCOOL OCU Series.

Compressor oil FV68S 2,0 l.
CZ-HFC-FV68SL20

Compressor oil FV68S 500 ml.
CZ-HFC-FV68SL05

Compressor oil FV32S 2,0 l.
CZ-HFC-FV32SL20

Compressor oil FV32S 500 ml.
CZ-HFC-FV32SL05

INVERTER+ | HIGH EFFICIENCY COMPRESSOR | SUPER QUIET | 43 °C AMBIENT TEMPERATURE | AUTOMATIC FAN | CUSTOMIZATION OPTIONS | BMS CONNECTIVITY

iCOOL SCU Series · R448A / R449A / R134a / R513A
Specifications and capacity tables.

New 2025

Model				SCU-KSC160M08	SCU-KSC190M08	SCU-KSC090L08
Compressor				Tandem compressor	Tandem compressor	Single compressor
Compatible refrigerants				R448A, R449A, R134a, R513A	R448A, R449A, R134a, R513A	R448A, R449A
PED category				II	II	II
Application and nominal cooling capacity			MT/LT (kW)	MT (16,0)	MT (19,0)	LT (9,0)
SEPR cooling at ET -10 °C AT 32 °C				3,14	3,19	—
SEPR freezing at ET -35 °C AT 32 °C				—	—	—
Annual electricity consumption at ET -10 °C AT 32 °C			kWh/a	31411	35312	—
Annual electricity consumption at ET -35 °C AT 32 °C			kWh/a	—	—	—
Nominal operating current at ET -10 °C MT / -30 °C LT AT 32 °C and 230 - 400 V 50 Hz			A	23,6	28,7	23,0
Maximum operating current (in the most loaded phase at 230 - 400 V 50 Hz)			A	30,5	34,9	32,5
Maximum power consumption			kW	14,6	17,7	14,1
Dimensions		W x H x D	mm	1327 x 1558 x 745	1327 x 1558 x 745	1327 x 1558 x 745
Weight			kg	342	344	325
Sound level at 10 m			dB(A)	55,0	55,0	55,0
Condenser	Fans x diameter		mm	1x560	1x560	1x560
	Air flow		m³/h	9000	9000	9000
	Fan static pressure		Pa	120	80	120
	Fan power supply		V / ph / Hz	200 - 277 / 1 / 50	200 - 277 / 1 / 50	200 - 277 / 1 / 50
	Fan power consumption		W	1050	1050	1050
	Nominal fan amperage		A	4,6	4,6	4,6
Compressor	Model			C-SBS180H00B/ C-SBN303H8G	C-SBS180H00B/ C-SBN453H8G	ACC144NA03
	Volumetric flow		m³/h	5,8 - 17,4 / 11,6	5,8 - 17,4 / 14,7	10,0 - 37,6
	Rotation range		rps	32 - 90	32 - 90	25 - 72
	Current	Full load amperage	A	14,7 / 8,0	15,2 / 11,9	22,9
		Peak current limit / Locked rotor amperage	A	34 / 48	34 / 66	46 / —
	Oil type			FV68S (PVE)	FV68S (PVE)	FV32S (PVE)
	Crankcase heater power consumption		W	2x70	2x70	90
Oil charge			dm³	2,0 + 1,7 + 2x0,4	2,0 + 1,7 + 2x0,4	2,5 + 0,4
Connections		Suction	Inch	1 1/8	1 1/8	1 1/8
		Liquid	Inch	5/8	5/8	5/8
Liquid receiver			dm³	15	15	15
CU power supply	Voltage		V / Hz	3x400 / 50 PE+N (TN-S)	3x400 / 50 PE+N (TN-S)	3x400 / 50 PE+N (TN-S)
	Recommended minimum cable cross-section		mm²	5x6,0	5x10,0	5x10,0
	Recommended minimum protection			C32	C40	C40
Maximum recommended pipe distance			m	50	50	40
Maximum height distance		Evaporator above	m	12	12	12
		Evaporator below	m	12	12	12
Which pipes needs to be insulated		Suction / liquid / both		Suction	Suction	Suction
Recommended insulation thickness			mm	13	13	19
Maximum quantity of evaporators connected			Qty.	10	10	5
Evaporation temperature		Min ~ Max	°C	-15 ~ 10	-15 ~ 10	-35 ~ -10
Ambient temperature		Min ~ Max	°C	-20 ~ 43	-20 ~ 43	-20 ~ 43

Accessories for iCOOL SCU Series.

Compressor oil FV68S 2,0 l.
CZ-HFC-FV68SL20

Compressor oil FV68S 500 ml.
CZ-HFC-FV68SL05

Compressor oil FV32S 2,0 l.
CZ-HFC-FV32SL20

Compressor oil FV32S 500 ml.
CZ-HFC-FV32SL05

INVERTER+ · HIGH EFFICIENCY COMPRESSOR · SUPER QUIET · 43 °C AMBIENT TEMPERATURE · AUTOMATIC FAN · CUSTOMIZATION OPTIONS · BMS CONNECTIVITY

iCOOL OCU/SCU Series · R448A / R449A / R134a / R513A
Specifications and capacity tables.

MT	Cooling capacity at				R449A/R448A			R134a/R513A		
	ET				-15 °C	-10 °C	-5 °C	-15 °C	-10 °C	-5 °C
OCU-KRC045M08	AT	32 °C	Min - Max	kW	0,6 - 3,9	0,8 - 4,7	0,9 - 5,7	— - —	0,5 - 3,4	0,6 - 4,0
		38 °C	Min - Max	kW	0,6 - 3,8	0,8 - 4,6	0,9 - 5,6	— - —	0,5 - 3,2	0,5 - 3,7
		43 °C	Min - Max	kW	0,6 - 3,8	0,7 - 4,6	0,9 - 5,6	— - —	0,4 - 2,9	0,5 - 3,4

MT	Cooling capacity at				R449A/R448A			R134a/R513A		
	ET				-15 °C	-10 °C	-5 °C	-15 °C	-10 °C	-5 °C
OCU-KRC070M08	AT	32 °C	Min - Max	kW	1,0 - 6,1	1,2 - 7,2	1,4 - 8,4	— - —	0,8 - 4,1	1,0 - 4,9
		38 °C	Min - Max	kW	0,9 - 6,0	1,2 - 7,1	1,4 - 8,3	— - —	0,8 - 3,8	0,9 - 4,5
		43 °C	Min - Max	kW	0,9 - 6,0	1,1 - 7,1	1,4 - 8,3	— - —	0,7 - 3,5	0,9 - 4,2

MT	Cooling capacity at				R449A/R448A			R134a/R513A		
	ET				-15 °C	-10 °C	-5 °C	-15 °C	-10 °C	-5 °C
OCU-KRC100M08	AT	32 °C	Min - Max	kW	1,8 - 7,9	2,2 - 9,4	2,6 - 11,1	1,1 - 4,8	1,3 - 5,8	1,6 - 7,0
		38 °C	Min - Max	kW	1,7 - 7,2	2,0 - 8,7	2,4 - 10,2	1,0 - 4,4	1,2 - 5,4	1,5 - 6,6
		43 °C	Min - Max	kW	1,5 - 6,7	1,9 - 8,0	2,3 - 9,5	0,9 - 4,1	1,1 - 5,1	1,4 - 6,1

MT	Cooling capacity at				R449A/R448A			R134a/R513A		
	ET				-15 °C	-10 °C	-5 °C	-15 °C	-10 °C	-5 °C
OCU-KSC120M08	AT	32 °C	Min - Max	kW	2,4 - 9,8	3,0 - 11,9	3,7 - 14,3	1,6 - 5,5	2,1 - 6,8	2,6 - 8,3
		38 °C	Min - Max	kW	2,1 - 9,0	2,7 - 10,8	3,4 - 13,1	1,5 - 5,1	1,9 - 6,3	2,4 - 7,8
		43 °C	Min - Max	kW	2,0 - 8,5	2,5 - 10,3	3,1 - 12,5	1,4 - 4,8	1,8 - 6,0	2,2 - 7,3

MT	Cooling capacity at				R449A/R448A			R134a/R513A		
	ET				-15 °C	-10 °C	-5 °C	-15 °C	-10 °C	-5 °C
OCU-KSC150M08	AT	32 °C	Min - Max	kW	3,4 - 12,1	4,2 - 14,7	5,2 - 17,6	2,1 - 8,4	2,5 - 10,0	3,0 - 12,0
		38 °C	Min - Max	kW	3,1 - 10,8	3,8 - 13,0	4,7 - 15,6	1,9 - 7,6	2,3 - 9,1	2,8 - 11,0
		43 °C	Min - Max	kW	2,8 - 9,7	3,5 - 11,8	4,3 - 14,2	1,7 - 7,0	2,1 - 8,5	2,6 - 10,2

MT	Cooling capacity at				R449A/R448A			R134a/R513A		
	ET				-15 °C	-10 °C	-5 °C	-15 °C	-10 °C	-5 °C
OCU-KSC160M08	AT	32 °C	Min - Max	kW	2,3 - 13,2	2,9 - 16,3	3,6 - 19,8	1,7 - 9,0	2,2 - 10,9	2,8 - 13,2
		38 °C	Min - Max	kW	2,0 - 11,8	2,6 - 14,6	3,2 - 17,9	1,6 - 8,3	2,0 - 10,1	2,6 - 12,3
		43 °C	Min - Max	kW	1,9 - 10,7	2,4 - 13,3	3,0 - 16,4	1,5 - 7,8	1,9 - 9,5	2,4 - 11,5

MT	Cooling capacity at				R449A/R448A			R134a/R513A		
	ET				-15 °C	-10 °C	-5 °C	-15 °C	-10 °C	-5 °C
OCU-KSC190M08	AT	32 °C	Min - Max	kW	2,3 - 15,2	2,9 - 18,7	3,6 - 22,7	1,7 - 10,7	2,2 - 13,1	2,8 - 15,6
		38 °C	Min - Max	kW	2,1 - 13,5	2,6 - 16,7	3,2 - 20,5	— - —	2,0 - 11,9	2,6 - 14,6
		43 °C	Min - Max	kW	— - —	2,4 - 15,2	3,0 - 18,8	— - —	1,9 - 11,5	2,4 - 14,5

MT	Cooling capacity at				R449A/R448A			R134a/R513A		
	ET				-15 °C	-10 °C	-5 °C	-15 °C	-10 °C	-5 °C
OCU-KSC240M08	AT	32 °C	Min - Max	kW	3,4 - 19,8	4,3 - 24,2	5,3 - 29,3	2,7 - 14,4	3,2 - 17,2	3,9 - 20,5
		38 °C	Min - Max	kW	3,1 - 17,5	3,9 - 21,5	4,8 - 26,2	2,4 - 13,0	3,0 - 15,7	3,6 - 18,8
		43 °C	Min - Max	kW	2,9 - 15,7	3,5 - 19,5	4,4 - 23,8	2,2 - 12,0	2,7 - 14,5	3,3 - 17,5

MT	Cooling capacity at				R449A/R448A			R134a/R513A		
	ET				-15 °C	-10 °C	-5 °C	-15 °C	-10 °C	-5 °C
OCU-KSC280M08	AT	32 °C	Min - Max	kW	3,3 - 17,5	4,3 - 27,5	5,3 - 32,8	2,7 - 16,4	3,2 - 19,5	3,9 - 23,3
		38 °C	Min - Max	kW	3,1 - 20,6	3,9 - 24,7	4,8 - 29,5	2,4 - 14,9	3,0 - 17,8	3,6 - 21,4
		43 °C	Min - Max	kW	— - —	3,5 - 22,6	4,4 - 27,0	— - —	2,7 - 16,5	3,3 - 20,0

MT	Cooling capacity at				R449A/R448A			R134a/R513A		
	ET				-15 °C	-10 °C	-5 °C	-15 °C	-10 °C	-5 °C
OCU-KSC400M08	AT	32 °C	Min - Max	kW	5,0 - 32,9	6,5 - 39,7	8,4 - 48,0	2,8 - 19,6	3,5 - 23,9	4,3 - 29,0
		38 °C	Min - Max	kW	4,8 - 30,1	5,9 - 36,3	7,5 - 43,7	2,5 - 18,0	3,1 - 22,0	3,9 - 26,6
		43 °C	Min - Max	kW	4,4 - 28,0	5,4 - 33,6	6,7 - 40,4	2,2 - 16,8	2,8 - 20,4	3,5 - 24,7

MT	Cooling capacity at				R449A/R448A			R134a/R513A		
	ET				-15 °C	-10 °C	-5 °C	-15 °C	-10 °C	-5 °C
OCU-KSC420M08	AT	32 °C	Min - Max	kW	5,0 - 35,0	6,5 - 42,2	8,4 - 50,7	2,8 - 20,7	3,5 - 25,3	4,3 - 30,7
		38 °C	Min - Max	kW	4,8 - 32,0	5,9 - 38,5	7,5 - 46,3	2,5 - 19,1	3,1 - 23,2	3,9 - 28,2
		43 °C	Min - Max	kW	4,4 - 30,0	5,4 - 35,7	6,7 - 42,8	2,2 - 17,8	2,8 - 21,6	3,5 - 26,2

LT	Cooling capacity at			R449A/R448A		
	ET			-35 °C	-30 °C	-25 °C
OCU-KRC035L08	AT	32 °C	Min - Max kW	0,4 - 2,8	0,5 - 3,5	0,7 - 4,2
		38 °C	Min - Max kW	0,4 - 2,8	0,5 - 3,4	0,6 - 4,1
		43 °C	Min - Max kW	0,4 - 2,7	0,5 - 3,3	0,6 - 4,0

LT	Cooling capacity at			R449A/R448A		
	ET			-35 °C	-30 °C	-25 °C
OCU-KRC050L08	AT	32 °C	Min - Max kW	1,2 - 4,4	1,5 - 5,4	1,9 - 6,6
		38 °C	Min - Max kW	1,1 - 4,0	1,4 - 4,9	1,7 - 6,0
		43 °C	Min - Max kW	1,0 - 3,6	1,3 - 4,5	1,6 - 5,4

LT	Cooling capacity at			R449A/R448A		
	ET			-35 °C	-30 °C	-25 °C
OCU-KSC090L08	AT	32 °C	Min - Max kW	1,7 - 6,8	2,2 - 8,5	2,8 - 10,6
		38 °C	Min - Max kW	1,4 - 6,3	1,9 - 7,9	2,5 - 10,0
		43 °C	Min - Max kW	1,2 - 5,9	1,6 - 7,4	2,2 - 9,3

LT	Cooling capacity at			R449A/R448A		
	ET			-35 °C	-30 °C	-25 °C
OCU-KSC140L08	AT	32 °C	Min - Max kW	1,7 - 11,6	2,2 - 14,2	2,8 - 17,5
		38 °C	Min - Max kW	1,4 - 10,5	1,9 - 13,0	2,5 - 16,1
		43 °C	Min - Max kW	1,2 - 9,7	1,6 - 12,1	2,2 - 15,0

MT	Cooling capacity at			R449A/R448A			R134a/R513A		
	ET			-15 °C	-10 °C	-5 °C	-15 °C	-10 °C	-5 °C
SCU-KSC160M08	AT	32 °C	Min - Max kW	2,3 - 13,2	2,9 - 16,3	3,6 - 19,8	1,7 - 8,9	2,2 - 10,8	2,8 - 13,1
		38 °C	Min - Max kW	2,1 - 11,8	2,6 - 14,6	3,2 - 17,9	1,6 - 8,2	2,0 - 10,0	2,6 - 12,2
		43 °C	Min - Max kW	1,9 - 10,7	2,4 - 13,3	3,0 - 16,4	— - —	1,9 - 9,4	2,4 - 11,4

MT	Cooling capacity at			R449A/R448A			R134a/R513A		
	ET			-15 °C	-10 °C	-5 °C	-15 °C	-10 °C	-5 °C
SCU-KSC190M08	AT	32 °C	Min - Max kW	2,3 - 15,2	2,9 - 18,7	3,6 - 22,7	1,7 - 10,7	2,2 - 13,1	2,8 - 15,6
		38 °C	Min - Max kW	2,1 - 13,5	2,6 - 16,7	3,2 - 20,5	— - —	2,0 - 11,9	2,6 - 14,6
		43 °C	Min - Max kW	— - —	2,4 - 15,2	3,0 - 18,8	— - —	1,9 - 11,5	2,4 - 14,5

LT	Cooling capacity at			R449A/R448A		
	ET			-35 °C	-30 °C	-25 °C
SCU-KSC090L08	AT	32 °C	Min - Max kW	1,7 - 6,8	2,2 - 8,5	2,8 - 10,6
		38 °C	Min - Max kW	1,4 - 6,3	1,9 - 7,9	2,5 - 9,9
		43 °C	Min - Max kW	1,2 - 5,9	1,6 - 7,4	2,2 - 9,3

Refrigeration designer.

This simple design tool supports engineers, installers, and technicians to make a quick calculation for commercial refrigeration systems: http://www.panasonicproclub.com

iCOOL LCU/WCU Series

The variation of iCOOL to meet demanding installation environment requirements.

iCOOL LCU Series MT/LT type.

Remote compressor base.
MT: From 5,1 to 38,0 kW.
LT: From 2,0 to 8,7 kW.

iCOOL WCU Series MT/LT type.

Water/glycol cooled condensing units.
MT: From 5,1 to 38,0 kW.
LT: From 2,0 to 8,7 kW.

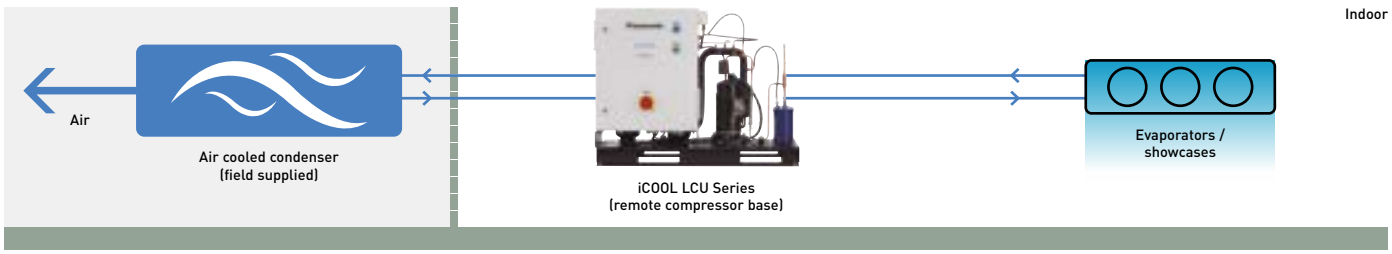
A customization option with a soundproof insulated housing is available for both the LCU and WCU Series.

Noise reduction (indoor installation).

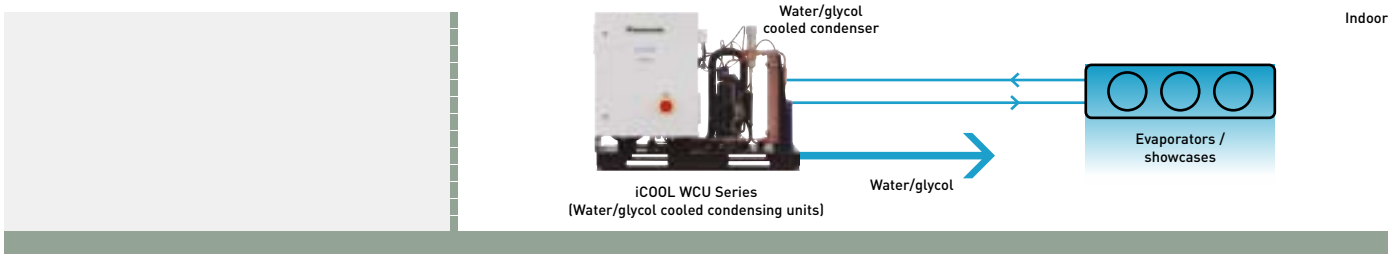
No space pollution (city-centres focus).

Available with water cooled condenser option, for shorter installations and heat reclaim benefits.

Example installation type:
Inverter units dedicated for indoor mounting.



or



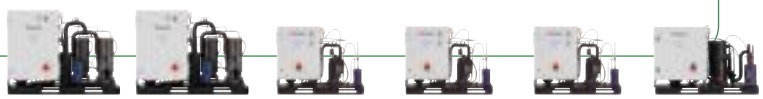
High performance Inverter compressor base or compressor set for large, medium, and small commercial installations. Designed for mid-high or low temperature applications. Equipped with hermetic scroll or rotary compressor. Perfect for low noise and city center applications.

iCOOL LCU Series (remote compressor base) · R448A / R449A / R134a / R513A
Specifications and capacity tables.

Model				LCU-KRC045M08	LCU-KRC070M08	LCU-KSC100M08	LCU-KSC160M08	LCU-KSC190M08
Compressor				**Single compressor**	**Single compressor**	**Single compressor**	**Tandem compressor**	**Tandem compressor**
Compatible refrigerants				**R448A, R449A, R134a, R513A**	**R448A, R449A, R134a, R513A**	**R448A, R449A, R134a, R513A**	**R448A, R449A, R134a, R513A**	**R448A, R449A, R134a, R513A**
PED category				**I**	**II**	**II**	**II**	**II**
Application and nominal cooling capacity			**MT/LT (kW)**	**MT (5,1)**	**MT (7,2)**	**MT (10,0)**	**MT (16,3)**	**MT (19,6)**
Nominal operating current at ET -10 °C MT / -30 °C LT AT 32 °C and 400 V 50 Hz			A	4,9	7,5	12,1	19,5	24,5
Maximum operating current (in the most loaded phase at 400 V 50 Hz)			A	7,5	11,4	17,9	25,9	30,3
Maximum power consumption			kW	3,5	5,4	8,4	13,6	16,7
Dimensions		W x H x D	mm	1000 x 705 x 530	1000 x 772 x 507	1200 x 775 x 561	1300 x 874 x 662	1300 x 874 x 662
Weight			kg	85	89	124	209	211
Sound level at 10 m			dB(A)	39,0	42,0	54,0	54,0	54,0
Compressor	Model			C-7RVN113L0A	C-7RZ320L4ABL	C-SBS180H00B	C-SBS180H00B/ C-SBN303H8G	C-SBS180H00B/ C-SBN453H8G
	Volumetric flow		m³/h	1,25 - 7,5	1,7 - 10,4	5,8 - 17,4	5,8 - 17,4 / 11,6	5,8 - 17,4 / 14,7
	Rotation range		rps	15-90	15-90	32-90	32-90	32-90
	Current	Full load amperage	A	5,8	8,7	14,7	14,7 / 8,0	15,2 / 11,9
		Peak current limit / Locked rotor amperage	A	11,2 / —	15 / —	34 / —	34 / 48	34 / 66
	Oil type			FV68S (PVE)	FV68S (PVE)	FV68S (PVE)	FV68S (PVE)	FV68S (PVE)
	Crankcase heater power consumption		W	35	40	70	2x70	2x70
Oil charge			dm³	0,7 + 0,4	0,7 + 0,4	2,0 + 0,4	2,0 + 1,7 + 2x0,4	2,0 + 1,7 + 2x0,4
Connections		Suction	Inch	5/8	3/4	7/8	1 1/8	1 1/8
		Liquid	Inch	3/8	3/8	1/2	5/8	5/8
Liquid receiver			dm³	3,9	7,1	10,0	14	14
CU power supply	Voltage		V / Hz	3x400/50 PE+N (TN-S)	3x400/50 PE+N (TN-S)	3x400/50 PE+N (TN-S)	3x400/50 PE+N (TN-S)	3x400/50 PE+N (TN-S)
	Recommended minimum cable cross-section		mm²	5x2,5	5x2,5	5x4,0	5x6,0	5x10,0
	Recommended minimum protection			C16	C16	C25	C32	C40
Maximum recommended pipe distance			m	40	40	40	50	50
Maximum height distance		Evaporator above	m	12	12	12	12	12
		Evaporator below	m	12	12	12	12	12
Which pipes needs to be insulated		Suction / liquid / both		Suction	Suction	Suction	Suction	Suction
Recommended insulation thickness			mm	13	13	13	13	13
Maximum quantity of evaporators connected			Qty.	5	5	7	10	10
Evaporation temperature		Min ~ Max	°C	-15 ~ 5	-15 ~ 5	-15 ~ 10	-15 ~ 10	-15 ~ 10
Ambient temperature		Min ~ Max	°C	-20 ~ 43	-20 ~ 43	-20 ~ 43	-20 ~ 43	-20 ~ 43

INVERTER+ | HIGH EFFICIENCY COMPRESSOR | BMS CONNECTIVITY

New 2025



Model				LCU-KSC280M08	LCU-KSC400M08	LCU-KRC020L08	LCU-KRC035L08	LCU-KRC050L08	LCU-KSC090L08
Compressor				**Tandem compressor**	**Tandem compressor**	**Single compressor**	**Single compressor**	**Single compressor**	**Single compressor**
Compatible refrigerants				**R448A, R449A, R134a, R513A**	**R448A, R449A, R134a, R513A**	**R448A, R449A**	**R448A, R449A**	**R448A, R449A**	**R448A, R449A**
PED category				**II**	**II**	**II**	**I**	**II**	**II**
Application and nominal cooling capacity			**MT/LT (kW)**	**MT (27,7)**	**MT (38,0)**	**LT (2,0)**	**LT (3,0)**	**LT (5,4)**	**LT (8,7)**
Nominal operating current at ET -10 °C MT / -30 °C LT AT 32 °C and 400 V 50 Hz			A	28,7	36,9	3,9	6,1	11,7	18,9
Maximum operating current (in the most loaded phase at 400 V 50 Hz)			A	38,4	51	5,7	8,4	14,9	27,9
Maximum power consumption			kW	20,4	26,6	2,7	3,9	7,0	13,1
Dimensions		W x H x D	mm	1650 x 975 x 649	1860 x 975 x 890	1000 x 705 x 530	1000 x 705 x 530	1000 x 772 x 536	1300 x 705 x 530
Weight			kg	301	380	85	85	132	159
Sound level at 10 m			dB(A)	52,0	55,0	39,0	42,0	50,0	55,0
Compressor	Model			C-SBVN373L0B/ C-SCN603H8T	4CC149NA04/ C-SCN753H8T	C-7RVN113L0A	C-7RZ320L4ABL	C-9RZ580L4AAL	ACC144NA03
	Volumetric flow		m³/h	7,7 - 24,6 / 23,6	10,7 - 39,3/30,3	1,25 - 7,5	1,7 - 10,4	5,2 - 18,7	10,0 - 37,6
	Rotation range		rps	31-80	21-75	15-90	15-90	25-90	25-72
	Current	Full load amperage	A	18,4 / 16,0	26,0 / 19,4	4,4	6,4	10	22,9
		Peak current limit/Locked rotor amperage	A	46/80	52/96	11,2/—	15/—	28/—	46/—
	Oil type			FV68S (PVE)	FV68S (PVE)	FV68S (PVE)	FV68S (PVE)	FV68S (PVE)	FV32S (PVE)
	Crankcase heater power consumption		W	2x90	2x90	35	35	35	2x90
Oil charge			dm³	2,0 + 2,8 + 2x0,6	2x2,8 + 2,0	0,7 + 0,4	0,7 + 0,4	2,1 + 0,4	2,5 + 0,4
Connections		Suction	Inch	1 3/8	1 5/8	5/8	7/8	7/8	1 1/8
		Liquid	Inch	7/8	7/8	3/8	3/8	3/8	5/8
Liquid receiver			dm³	14	30	3,9	3,9	7,1	14
CU power supply	Voltage		V / Hz	3x400/50 PE+N (TN-S)	3x400/50 PE+N (TN-S)	3x400/50 PE+N (TN-S)	3x400/50 PE+N (TN-S)	3x400/50 PE+N (TN-S)	3x400/50 PE+N (TN-S)
	Recommended minimum cable cross-section		mm²	5x10,0	5x16,0	5x2,5	5x2,5	5x4,0	5x6,0
	Recommended minimum protection			C50	C63	C16	C16	C25	C32
Maximum recommended pipe distance			m	70	70	40	40	40	40
Maximum height distance		Evaporator above	m	12	12	12	12	12	12
		Evaporator below	m	12	12	12	12	12	12
Which pipes needs to be insulated		Suction / liquid / both		Suction	Suction	Suction	Suction	Suction	Suction
Recommended insulation thickness			mm	13	13	13	19	19	19
Maximum quantity of evaporators connected			Qty.	10	20	5	5	5	5
Evaporation temperature		Min ~ Max	°C	-15 ~ 10	-15 ~ 10	-35 ~ 5	-35 ~ -15	-35 ~ -15	-35 ~ -10
Ambient temperature		Min ~ Max	°C	-20 ~ 43	-20 ~ 43	-20 ~ 43	-20 ~ 43	-20 ~ 43	-20 ~ 43

Accessories for iCOOL LCU Series.

Compressor oil FV68S 2,0 l.
CZ-HFC-FV68SL20

Compressor oil FV68S 500 ml.
CZ-HFC-FV68SL05

Compressor oil FV32S 2,0 l.
CZ-HFC-FV32SL20

Compressor oil FV32S 500 ml.
CZ-HFC-FV32SL05

INVERTER+ HIGH EFFICIENCY COMPRESSOR BMS CONNECTIVITY

iCOOL WCU Series (water/glycol cooled condensing units) · R448A / R449A / R134a / R513A
Specifications and capacity tables.

Model				WCU-KRC045M08	WCU-KRC070M08	WCU-KSC100M08	WCU-KSC160M08	WCU-KSC190M08
Compressor				**Single compressor**	**Single compressor**	**Single compressor**	**Tandem compressor**	**Tandem compressor**
Compatible refrigerants				**R448A, R449A, R134a, R513A**	**R448A, R449A, R134a, R513A**	**R448A, R449A, R134a, R513A**	**R448A, R449A, R134a, R513A**	**R448A, R449A, R134a, R513A**
PED category				**I**	**I**	**II**	**II**	**II**
Application and nominal cooling capacity			**MT/LT (kW)**	**MT (5,1)**	**MT (7,2)**	**MT (10,0)**	**MT (16,3)**	**MT (19,6)**
Nominal operating current at ET -10 °C MT / -30 °C LT AT 32 °C and 400 V 50 Hz			A	4,9	7,5	12,1	19,5	24,5
Maximum operating current (in the most loaded phase at 400 V 50 Hz)			A	7,5	11,4	17,9	25,9	30,3
Maximum power consumption			kW	3,5	5,4	8,4	13,6	16,7
Dimensions		W x H x D	mm	1000 x 705 x 530	1000 x 772 x 507	1200 x 775 x 561	1300 x 874 x 662	1300 x 874 x 662
Weight			kg	90	94	134	219	221
Sound level at 10 m			dB(A)	39,0	42,0	54,0	54,0	54,0
Compressor	Model			C-7RVN113L0A	C-7RZ320L4ABL	C-SBS180H00B	C-SBS180H00B/ C-SBN303H8G	C-SBS180H00B/ C-SBN453H8G
	Volumetric flow		m^3/h	1,25 - 7,5	1,7 - 10,4	5,8 - 17,4	5,8 - 17,4 / 11,6	5,8 - 17,4 / 14,7
	Rotation range		rps	15 - 90	15 - 90	32 - 90	32 - 90	32 - 90
	Current	Full load amperage	A	5,8	8,7	14,7	14,7/8,0	15,2/11,9
		Peak current limit / Locked rotor amperage	A	11,2/—	15/—	34/—	34/48	34/66
	Oil type			FV68S (PVE)	FV68S (PVE)	FV68S (PVE)	FV68S (PVE)	FV68S (PVE)
	Crankcase heater power consumption		W	35	40	70	2x70	2x70
Oil charge			dm^3	0,7+0,4	0,7+0,4	2,0+0,4	2,0+1,7+2x0,4	2,0+1,7+2x0,4
Connections		Suction	Inch	5/8	3/4	7/8	1 1/8	1 1/8
		Liquid	Inch	3/8	3/8	1/2	5/8	5/8
Liquid receiver			dm^3	3,9	7,1	10,0	14	14
CU power supply	Voltage		V / Hz	3x400/50 PE+N (TN-S)	3x400/50 PE+N (TN-S)	3x400/50 PE+N (TN-S)	3x400/50 PE+N (TN-S)	3x400/50 PE+N (TN-S)
	Recommended minimum cable cross-section		mm^2	5x2,5	5x2,5	5x4,0	5x6,0	5x10,0
	Recommended minimum protection			C16	C16	C25	C32	C40
Maximum recommended pipe distance			m	40	40	40	50	50
Maximum height distance		Evaporator above	m	12	12	12	12	12
		Evaporator below	m	12	12	12	12	12
Which pipes needs to be insulated		Suction / liquid / both		Suction	Suction	Suction	Suction	Suction
Recommended insulation thickness			mm	13	13	13	13	13
Maximum quantity of evaporators connected			Qty.	5	5	7	10	10
Evaporation temperature		Min ~ Max	°C	-15 ~ 5	-15 ~ 5	-15 ~ 10	-15 ~ 10	-15 ~ 10
Ambient temperature		Min ~ Max	°C	-20 ~ 43	-20 ~ 43	-20 ~ 43	-20 ~ 43	-20 ~ 43
Plate heat exchanger connections		Inlet	Inch	1/2	1/2	1	1	1
		Outlet	Inch	3/4	3/4	1/2	1	1

INVERTER+ | HIGH EFFICIENCY COMPRESSOR | BMS CONNECTIVITY

New 2025

Model				WCU-KSC280M08	WCU-KSC400M08	WCU-KRC020L08	WCU-KRC035L08	WCU-KRC050L08	WCU-KSC090L08
Compressor				**Tandem compressor**	**Tandem compressor**	**Single compressor**	**Single compressor**	**Single compressor**	**Single compressor**
Compatible refrigerants				**R448A, R449A, R134a, R513A**	**R448A, R449A, R134a, R513A**	**R448A, R449A**	**R448A, R449A**	**R448A, R449A**	**R448A, R449A**
PED category				**II**	**II**	**I**	**I**	**I**	**II**
Application and nominal cooling capacity			**MT/LT (kW)**	**MT (27,7)**	**MT (38,0)**	**LT (2,0)**	**LT (3,0)**	**LT (5,4)**	**LT (8,7)**
Nominal operating current at ET -10 °C MT / -30 °C LT AT 32 °C and 400 V 50 Hz			A	28,7	36,9	3,9	6,1	11,7	18,9
Maximum operating current (in the most loaded phase at 400 V 50 Hz)			A	38,4	51	5,7	8,4	14,9	27,9
Maximum power consumption			kW	20,4	26,6	2,7	3,9	7,0	13,1
Dimensions	W x H x D		mm	1650 x 975 x 649	1860 x 975 x 890	1000 x 705 x 530	1000 x 705 x 530	1000 x 772 x 536	1300 x 705 x 530
Weight			kg	316	395	92	92	139	169
Sound level at 10 m			dB(A)	52,0	55,0	39,0	42,0	50,0	55,0
Compressor	Model			C-SBVN373L0B/ C-SCN603H8T	4CC149NA04/ C-SCN753H8T	C-7RVN113L0A	C-7RZ320L4ABL	C-9RZ580L4AAL	ACC144NA03
	Volumetric flow		m^3/h	7,7 - 24,6 / 23,6	10,7 - 39,3/30,3	1,25 - 7,5	1,7 - 10,4	5,2 - 18,7	10,0 - 37,6
	Rotation range		rps	31 - 80	21 - 75	15 - 90	15 - 90	25 - 90	25 - 72
	Current	Full load amperage	A	18,4 / 16,0	26,0 / 19,4	4,4	6,4	10	22,9
		Peak current limit / Locked rotor amperage	A	46 / 80	52 / 96	11,2 / —	15 / —	28 / —	46 / —
	Oil type			FV68S (PVE)	FV68S (PVE)	FV68S (PVE)	FV68S (PVE)	FV68S (PVE)	FV32S (PVE)
	Crankcase heater power consumption		W	2x90	2x90	35	35	35	2x90
Oil charge			dm^3	2,0 + 2,8 + 2x0,6	2x2,8 + 2,0	0,7 + 0,4	0,7 + 0,4	2,1 + 0,4	2,5 + 0,4
Connections		Suction	Inch	1 3/8	1 5/8	5/8	7/8	7/8	1 1/8
		Liquid	Inch	7/8	7/8	3/8	3/8	3/8	5/8
Liquid receiver			dm^3	14	30	3,9	3,9	7,1	14
CU power supply	Voltage		V / Hz	3x400/50 PE+N (TN-S)	3x400/50 PE+N (TN-S)	3x400/50 PE+N (TN-S)	3x400/50 PE+N (TN-S)	3x400/50 PE+N (TN-S)	3x400/50 PE+N (TN-S)
	Recommended minimum cable cross-section		mm^2	5x10,0	5x16,0	5x2,5	5x2,5	5x4,0	5x6,0
	Recommended minimum protection			C50	C63	C16	C16	C25	C32
Maximum recommended pipe distance			m	70	70	40	40	40	40
Maximum height distance		Evaporator above	m	12	12	12	12	12	12
		Evaporator below	m	12	12	12	12	12	12
Which pipes needs to be insulated		Suction / liquid / both		Suction	Suction	Suction	Suction	Suction	Suction
Recommended insulation thickness			mm	13	13	13	19	19	19
Maximum quantity of evaporators connected			Qty.	10	20	5	5	5	5
Evaporation temperature		Min ~ Max	°C	-15 ~ 10	-15 ~ 10	-35 ~ 5	-35 ~ -15	-35 ~ -15	-35 ~ -10
Ambient temperature		Min ~ Max	°C	-20 ~ 43	-20 ~ 43	-20 ~ 43	-20 ~ 43	-20 ~ 43	-20 ~ 43
Plate heat exchanger connections		Inlet	Inch	1 1/2	1 1/2	3/4	1/2	1/2	1
		Outlet	Inch	1	1	3/4	3/4	3/4	1

Accessories for iCOOL WCU Series.

Compressor oil FV68S 2,0 l.
CZ-HFC-FV68SL20

Compressor oil FV68S 500 ml.
CZ-HFC-FV68SL05

Compressor oil FV32S 2,0 l.
CZ-HFC-FV32SL20

Compressor oil FV32S 500 ml.
CZ-HFC-FV32SL05

INVERTER+ HIGH EFFICIENCY COMPRESSOR BMS CONNECTIVITY

iCOOL LCU/WCU Series · R448A / R449A / R134a / R513A
Specifications and capacity tables.

MT	Cooling capacity at			R449A/R448A			R134a/R513A		
	ET			-15 °C	-10 °C	-5 °C	-15 °C	-10 °C	-5 °C
LCU-KRC045M08	CT	40 °C	Min - Max kW	0,6 - 4,5	0,7 - 5,4	0,9 - 6,5	0,4 - 2,4	0,5 - 3,0	0,6 - 3,6
		45 °C	Min - Max kW	0,5 - 4,2	0,7 - 5,1	0,8 - 6,1	0,4 - 2,3	0,5 - 2,8	0,5 - 3,4
		50 °C	Min - Max kW	0,5 - 3,9	0,6 - 4,7	0,7 - 5,7	0,3 - 2,1	0,4 - 2,6	0,5 - 3,2

MT	Cooling capacity at			R449A/R448A			R134a/R513A		
	ET			-15 °C	-10 °C	-5 °C	-15 °C	-10 °C	-5 °C
LCU-KRC070M08	CT	40 °C	Min - Max kW	0,9 - 6,4	1,1 - 7,7	1,3 - 9,3	0,5 - 3,4	0,6 - 4,2	0,7 - 5,1
		45 °C	Min - Max kW	0,8 - 5,9	1,0 - 7,2	1,2 - 8,7	0,5 - 3,2	0,6 - 3,9	0,7 - 4,8
		50 °C	Min - Max kW	0,7 - 5,5	0,9 - 6,7	1,1 - 8,1	0,5 - 2,9	0,5 - 3,6	0,6 - 4,5

MT	Cooling capacity at			R449A/R448A			R134a/R513A		
	ET			-15 °C	-10 °C	-5 °C	-15 °C	-10 °C	-5 °C
LCU-KSC100M08	CT	40 °C	Min - Max kW	1,9 - 8,8	2,8 - 11,1	3,8 - 13,9	1,8 - 4,9	2,2 - 6,1	2,7 - 7,6
		45 °C	Min - Max kW	1,4 - 7,7	2,3 - 10,0	3,3 - 12,7	1,6 - 4,6	2,0 - 5,8	2,5 - 7,2
		50 °C	Min - Max kW	0,8 - 6,7	1,9 - 9,0	2,9 - 11,6	1,5 - 4,3	1,9 - 5,4	2,3 - 6,8

MT	Cooling capacity at			R449A/R448A			R134a/R513A		
	ET			-15 °C	-10 °C	-5 °C	-15 °C	-10 °C	-5 °C
LCU-KSC160M08	CT	40 °C	Min - Max kW	1,9 - 14,2	2,8 - 18,1	3,8 - 22,8	1,8 - 8,8	2,2 - 10,8	2,7 - 13,3
		45 °C	Min - Max kW	1,4 - 12,6	2,3 - 16,3	3,3 - 20,8	1,6 - 8,2	2,0 - 10,1	2,5 - 12,5
		50 °C	Min - Max kW	0,8 - 11,1	1,9 - 14,7	2,9 - 19,0	1,5 - 7,7	1,9 - 9,5	2,3 - 11,7

MT	Cooling capacity at			R449A/R448A			R134a/R513A		
	ET			-15 °C	-10 °C	-5 °C	-15 °C	-10 °C	-5 °C
LCU-KSC190M08	CT	40 °C	Min - Max kW	1,9 - 17,0	2,8 - 21,8	3,8 - 27,4	1,8 - 10,9	2,2 - 13,3	2,7 - 16,3
		45 °C	Min - Max kW	1,4 - 15,1	2,3 - 19,6	3,3 - 25,0	1,6 - 10,1	2,0 - 12,4	2,5 - 15,3
		50 °C	Min - Max kW	0,8 - 13,3	1,9 - 17,7	2,9 - 22,8	1,5 - 9,4	1,9 - 11,6	2,3 - 14,3

MT	Cooling capacity at			R449A/R448A			R134a/R513A		
	ET			-15 °C	-10 °C	-5 °C	-15 °C	-10 °C	-5 °C
LCU-KSC280M08	CT	40 °C	Min - Max kW	4,0 - 24,5	5,0 - 30,5	6,2 - 37,9	2,0 - 15,9	2,6 - 19,9	3,3 - 24,8
		45 °C	Min - Max kW	3,7 - 22,4	4,6 - 27,7	5,7 - 34,4	1,7 - 14,6	2,3 - 18,1	2,9 - 22,5
		50 °C	Min - Max kW	3,3 - 20,4	4,2 - 25,2	5,2 - 31,2	1,5 - 13,3	2,0 - 16,4	2,6 - 20,4

MT	Cooling capacity at			R449A/R448A			R134a/R513A		
	ET			-15 °C	-10 °C	-5 °C	-15 °C	-10 °C	-5 °C
LCU-KSC400M08	CT	40 °C	Min - Max kW	4,7 - 33,3	5,1 - 41,0	7,4 - 50,7	2,9 - 23,5	3,6 - 29,0	4,5 - 35,7
		45 °C	Min - Max kW	4,4 - 30,9	5,4 - 38,0	6,7 - 46,8	2,7 - 21,7	3,4 - 26,7	4,2 - 32,8
		50 °C	Min - Max kW	3,8 - 28,7	4,9 - 35,2	6,1 - 43,2	2,5 - 20,0	3,1 - 24,5	3,9 - 30,1

LT	Cooling capacity at			R449A/R448A		
	ET			-35 °C	-30 °C	-25 °C
LCU-KRC020L08	CT	40 °C	Min - Max kW	0,2 - 1,7	0,3 - 2,2	0,4 - 2,8
		45 °C	Min - Max kW	0,2 - 1,6	0,3 - 2,0	0,3 - 2,6
		50 °C	Min - Max kW	— - —	0,2 - 1,8	0,3 - 2,3

LT	Cooling capacity at			R449A/R448A		
	ET			-35 °C	-30 °C	-25 °C
LCU-KRC035L08	CT	40 °C	Min - Max kW	0,3 - 2,6	0,4 - 3,3	0,5 - 4,1
		45 °C	Min - Max kW	0,3 - 2,4	0,4 - 3,0	0,5 - 3,8
		50 °C	Min - Max kW	— - —	0,3 - 2,8	0,4 - 3,5

LT	Cooling capacity at			R449A/R448A		
	ET			-35 °C	-30 °C	-25 °C
LCU-KRC050L08	CT	40 °C	Min - Max kW	1,1 - 4,6	1,4 - 5,8	1,7 - 7,3
		45 °C	Min - Max kW	1,0 - 4,3	1,3 - 5,4	1,6 - 6,8
		50 °C	Min - Max kW	— - —	1,2 - 5,0	1,5 - 6,3

LT	Cooling capacity at			R449A/R448A		
	ET			-35 °C	-30 °C	-25 °C
LCU-KSC090L08	CT	40 °C	Min - Max kW	2,0 - 7,3	2,6 - 9,1	3,3 - 11,4
		45 °C	Min - Max kW	1,8 - 6,9	2,3 - 8,7	3,0 - 10,9
		50 °C	Min - Max kW	— - —	2,0 - 8,3	2,6 - 10,3

* ET: Evaporation Temperature. CT: Condensing Temperature.

MT	Cooling capacity at						R449A/R448A			R134a/R513A		
	ET						-15 °C	-10 °C	-5 °C	-15 °C	-10 °C	-5 °C
WCU-KRC045M08	WT	15 °C	CT	30 °C	Min - Max	kW	0,7 - 5,2	0,9 - 6,3	1,0 - 7,4	0,4 - 2,6	0,5 - 3,2	0,6 - 4,0
		30 °C		40 °C	Min - Max	kW	0,6 - 4,5	0,7 - 5,4	0,9 - 6,5	0,4 - 2,4	0,5 - 3,0	0,6 - 3,6
		40 °C		50 °C	Min - Max	kW	0,5 - 3,9	0,6 - 4,7	0,7 - 5,7	0,3 - 2,1	0,4 - 2,6	0,5 - 3,2

MT	Cooling capacity at						R449A/R448A			R134a/R513A		
	ET						-15 °C	-10 °C	-5 °C	-15 °C	-10 °C	-5 °C
WCU-KRC070M08	WT	15 °C	CT	30 °C	Min - Max	kW	1,1 - 7,4	1,3 - 8,9	1,6 - 10,5	0,5 - 3,7	0,6 - 4,5	0,7 - 5,5
		30 °C		40 °C	Min - Max	kW	0,9 - 6,3	1,1 - 7,7	1,3 - 9,3	0,5 - 3,4	0,6 - 4,2	0,7 - 5,1
		40 °C		50 °C	Min - Max	kW	0,7 - 5,5	0,9 - 6,7	1,1 - 8,1	0,5 - 2,9	0,5 - 3,6	0,6 - 4,5

MT	Cooling capacity at						R449A/R448A			R134a/R513A		
	ET						-15 °C	-10 °C	-5 °C	-15 °C	-10 °C	-5 °C
WCU-KSC100M08	WT	15 °C	CT	30 °C	Min - Max	kW	3,3 - 11,2	4,0 - 13,7	4,8 - 16,6	2,1 - 5,5	2,6 - 6,8	3,2 - 8,5
		30 °C		40 °C	Min - Max	kW	1,9 - 8,8	2,8 - 11,1	3,8 - 13,9	1,8 - 4,9	2,2 - 6,1	2,7 - 7,6
		40 °C		50 °C	Min - Max	kW	0,8 - 6,7	1,9 - 9,0	2,9 - 11,6	1,5 - 4,3	1,9 - 5,4	2,3 - 6,8

MT	Cooling capacity at						R449A/R448A			R134a/R513A		
	ET						-15 °C	-10 °C	-5 °C	-15 °C	-10 °C	-5 °C
WCU-KSC160M08	WT	15 °C	CT	30 °C	Min - Max	kW	3,3 - 17,9	4,0 - 22,2	4,8 - 27,2	2,1 - 10,1	2,6 - 12,4	3,2 - 15,1
		30 °C		40 °C	Min - Max	kW	1,9 - 14,2	2,8 - 18,1	3,8 - 22,8	1,8 - 8,8	2,2 - 10,8	2,7 - 13,3
		40 °C		50 °C	Min - Max	kW	0,8 - 11,1	1,9 - 14,7	2,9 - 19,0	1,5 - 7,7	1,9 - 9,5	2,3 - 11,7

MT	Cooling capacity at						R449A/R448A			R134a/R513A		
	ET						-15 °C	-10 °C	-5 °C	-15 °C	-10 °C	-5 °C
WCU-KSC190M08	WT	15 °C	CT	30 °C	Min - Max	kW	3,3 - 21,4	4,0 - 26,6	4,8 - 32,7	2,1 - 12,5	2,6 - 15,2	3,2 - 18,6
		30 °C		40 °C	Min - Max	kW	1,9 - 17,0	2,8 - 21,8	3,8 - 27,4	1,8 - 10,9	2,2 - 13,3	2,7 - 16,3
		40 °C		50 °C	Min - Max	kW	0,8 - 13,3	1,9 - 17,7	2,9 - 22,8	1,5 - 9,4	1,9 - 11,6	2,3 - 14,3

MT	Cooling capacity at						R449A/R448A			R134a/R513A		
	ET						-15 °C	-10 °C	-5 °C	-15 °C	-10 °C	-5 °C
WCU-KSC280M08	WT	15 °C	CT	30 °C	Min - Max	kW	4,7 - 29,2	5,9 - 36,9	7,4 - 46,0	2,5 - 18,8	3,3 - 23,8	4,1 - 29,9
		30 °C		40 °C	Min - Max	kW	4,0 - 24,5	5,0 - 30,5	6,2 - 37,9	2,0 - 15,9	2,6 - 19,9	3,3 - 24,8
		40 °C		50 °C	Min - Max	kW	3,3 - 20,4	4,2 - 25,2	5,2 - 31,2	1,5 - 13,3	2,0 - 16,4	2,6 - 20,4

MT	Cooling capacity at						R449A/R448A			R134a/R513A		
	ET						-15 °C	-10 °C	-5 °C	-15 °C	-10 °C	-5 °C
WCU-KSC400M08	WT	15 °C	CT	30 °C	Min - Max	kW	5,1 - 38,3	6,8 - 47,7	9,2 - 59,4	3,3 - 27,4	4,2 - 34,0	5,2 - 42,0
		30 °C		40 °C	Min - Max	kW	4,7 - 33,3	5,9 - 41,0	7,4 - 50,7	2,9 - 23,5	3,6 - 29,0	4,5 - 35,7
		40 °C		50 °C	Min - Max	kW	3,8 - 28,7	4,9 - 35,2	6,1 - 43,2	2,5 - 20,0	3,1 - 24,5	3,9 - 30,1

LT	Cooling capacity at						R449A/R448A		
	ET						-35 °C	-30 °C	-25 °C
WCU-KRC020L08	WT	15 °C	CT	30 °C	Min - Max	kW	0,3 - 2,2	0,4 - 2,7	0,5 - 3,4
		30 °C		40 °C	Min - Max	kW	0,2 - 1,7	0,3 - 2,2	0,4 - 2,8
		40 °C		50 °C	Min - Max	kW	— - —	0,2 - 1,8	0,3 - 2,3

LT	Cooling capacity at						R449A/R448A		
	ET						-35 °C	-30 °C	-25 °C
WCU-KRC035L08	WT	15 °C	CT	30 °C	Min - Max	kW	0,4 - 3,3	0,5 - 4,0	0,7 - 4,9
		30 °C		40 °C	Min - Max	kW	0,3 - 2,6	0,4 - 3,3	0,5 - 4,1
		40 °C		50 °C	Min - Max	kW	— - —	0,3 - 2,8	0,4 - 3,5

LT	Cooling capacity at						R449A/R448A		
	ET						-35 °C	-30 °C	-25 °C
WCU-KRC050L08	WT	15 °C	CT	30 °C	Min - Max	kW	1,2 - 5,8	1,5 - 7,1	1,9 - 8,7
		30 °C		40 °C	Min - Max	kW	1,1 - 4,6	1,4 - 5,8	1,7 - 7,3
		40 °C		50 °C	Min - Max	kW	— - —	1,2 - 5,0	1,5 - 6,3

LT	Cooling capacity at						R449A/R448A		
	ET						-35 °C	-30 °C	-25 °C
WCU-KSC090L08	WT	15 °C	CT	30 °C	Min - Max	kW	2,6 - 8,2	3,3 - 10,1	4,2 - 12,6
		30 °C		40 °C	Min - Max	kW	2,0 - 7,3	2,6 - 9,1	3,3 - 11,4
		40 °C		50 °C	Min - Max	kW	— - —	2,0 - 8,3	2,6 - 10,3

* ET: Evaporating Temperature. WT: Water (or glycol Inlet Temperature. CT: Condensing Temperature.

PACi NX Elite can cool rooms down to 8 °C

PACi

Panasonic PACi NX Elite offers a high quality and efficient solution for high temperature refrigeration applications for facilities such as wine cellars, food processing facilities and supermarkets.

Solutions for cold rooms. Set the room temperature to 8 °C.

Complete range from 2,10 to 23,77 kW. This unique solution is perfect for:
Wine cellars, ice cream factories, flower shops, supermarkets, grain stores, food storage, food processing, food distribution, lunchrooms, vegetable processing...

Just like all the indoor units in the PACi NX range, these units are compatible with all Panasonic control and monitoring solutions, which can be scaled from controlling a single zone to monitoring geographically distributed facilities.

Alternative controller.
Wired remote control.
CZ-RTC6W/WBL/WBLW2
or CZ-RTC6/BL/BLW2.

Wide range of indoor units.
To meet your needs.

PACi NX outdoor unit.
PACi NX, the next generation of developed commercial air conditioning, with an energy-saving concept. The use of energy-saving designs in the construction of fans, fan motors, compressors and heat exchangers has resulted in a high SEER value.

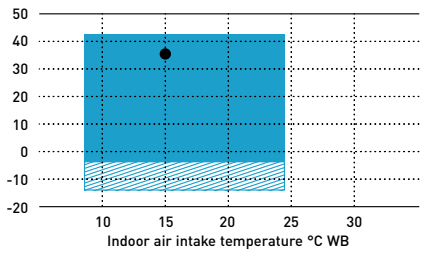
- Flexibility with different type of indoors
- Benefits of hydroxyl radicals
- Out of the box solution from Panasonic. Outdoor, indoor, controller comes as package
- Provides wide scale of control options (individual, central, cloud)
- Redundancy for 2 systems with CONEX controller range and up to 4 indoor unit groups with PAW-PACR4 optional redundancy controller

Wine cellars and special high temperature rooms

One of the main features of the PACi NX series is the possibility of adjusting the product for special applications, not just for regular cooling applications. The purpose of this product information is to explain in detail these special applications that need a cooling operation to maintain the room temperature at +8 ~ +24 °C WB (or +10 ~ +30 °C DB). In order to do this in terms of enthalpy, the indoor unit needs to be overdimensioned and certain parameters need to be adjustable.

Temperature range for wine cellar		
	Indoor	Outdoor
Cooling operation	+8 ~ +24 °C WB	-5 (-15) ~ 43 °C DB

Temperature range for wine cellar.
In cooling. Outdoor air intake temperature °C DB.



Only allowed after installation of wind and snow vents.

Area where cooling capacity is established for this purpose.

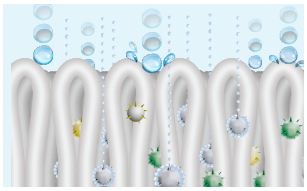
Bringing nature's balance indoors

nanoe™ X, technology with the benefits of hydroxyl radicals.

Abundant in nature, hydroxyl radicals (also known as OH radicals) have the capacity to inhibit pollutants, viruses, and bacteria to clean and deodorise. nanoe™ X technology can bring these incredible benefits indoors so that hard surfaces, soft furnishings, and the indoor environment can be a cleaner and more pleasant place to be.

What is unique about nanoe™ X?

Effective on fabrics and surfaces.



1 | At one billionth of a metre, nanoe™ X is much smaller than steam and can deeply penetrate cloth fabrics to deodorise.

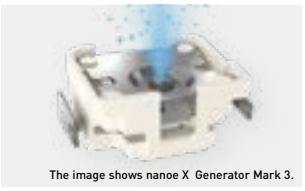
Longer lifespan.

2 | Contained in tiny water particles, nanoe™ X has a long lifespan, which is about 600 seconds, to spread easily around the room.

Huge quantity.

3 | nanoe X Generator Mark 3 produces 48 trillion hydroxyl radicals per second. Greater amounts of hydroxyl radicals contained in nanoe™ X lead to higher performance on inhibition of pollutants.

Maintenance-free.

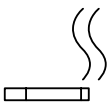


The image shows nanoe X Generator Mark 3.

4 | No service and maintenance required. nanoe™ X is a filter free solution that does not require maintenance, as its atomisation electrode is enveloped with water during its generation process and it is made with Titatium.

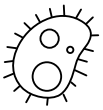
7 effects of nanoe™ X – Panasonic unique technology

Deodorises



Odours

Capacity to inhibit 5 types of pollutants



Bacteria and viruses

Mould

Allergens

Pollen

Hazardous substances

Moisturises

Skin and hair

* Refer to https://aircon.panasonic.eu for more details and validation data.

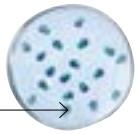
First nanoe™ device was developed by Panasonic in 2003

Generator: nanoe™

2003

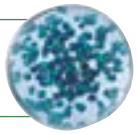
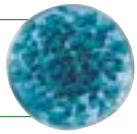
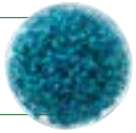
480 billion hydroxyl radicals/sec

Ion particle structure



Hydroxyl radicals

Generator: nanoe™ X

Mark 1 - 2016	**Mark 2** - 2019	**Mark 3** - 2022
4,8 trillion hydroxyl radicals/sec	9,6 trillion hydroxyl radicals/sec	48 trillion hydroxyl radicals/sec
10x times 	20x times 	100x times 

nanoe™ X, internationally-validated technology in testing facilities.

The effectiveness of nanoe™ X technology has been tested by 3rd party laboratories in Germany, France, Denmark, Japan and China.

The nanoe™ X performance varies depending on the room size, environment and usage and it may take several hours to reach the full effect. nanoe™ X is not medical device, local regulations on building design and sanitary recommendations must be followed. Test results conducted under controlled laboratory conditions. Performance of nanoe™ X might differ in real life environment.

	Tested contents		Generator	Result	Capacity	Time	Testing organisation	Report No.
Airborne	Virus	Influenza (H1N1)	Mark 2	98,3% inhibited	30 m³	1,5 h	China Electronic Product Reliability and Environmental Testing Research Institute	J2003WT8888-00889
		Bacteriophage ΦX174	Mark 1	99,2% inhibited	Approx. 25 m³	6 h	Kitasato Research Center for Environmental Science	24_0300_1
	Bacteria	Staphylococcus aureus	Mark 1	99,7% inhibited	Approx. 25 m³	4 h	Kitasato Research Center for Environmental Science	24_0301_1
Adhering	Virus	SARS-CoV-2	Mark 1	91,4% inhibited	6,7 m³	8 h	Texcell (France)	1140-01 C3
		SARS-CoV-2	Mark 1	99,9% inhibited	45 L	2 h	Texcell (France)	1140-01 A1
		Bacteriophage ΦX174	Mark 1	99,8% inhibited	Approx. 25 m³	8 h	Japan Food Research Laboratories	13001265005-01
		Xenotropic murine leukemia virus	Mark 1	99,999% inhibited	45 L	6 h	Charles River Biopharmaceutical Services GmbH	—
		Coxsackie virus (CA16)	Mark 2	99,9%inhibited	30 m³	4 h	China Electronic Product Reliability and Environmental Testing Research Institute	J2002WT8888-00439
		Bacteriophage	**Mark 3**	98,81% inhibited	Approx. 139,3 m³	4 h	SGS Inc	SHES210901902584
		MS2 Phage Virus	**Mark 3**	99,99% inhibited	Approx. 25 m³	2 h	Shokukanken, Inc.	227131N
	Bacteria	Staphylococcus aureus	Mark 1	99,9% inhibited	20 m³	8 h	Danish Technological Institute	868988
	Pollen	Cedar pollen	**Mark 3**	99%inhibited	Approx. 24 m³	12 h	Panasonic Product Analysis Center	H21YA017-1
		Ambrosia pollen	Mark 1	99,4% inhibited	20 m³	8 h	Danish Technological Institute	868988
	Odours	Cigarette smoke odour	Mark 1	Odour intensity reduced by 2,4 levels	Approx. 23 m³	0,2 h	Panasonic Product Analysis Center	4AA33-160615-N04
			Mark 3	Odour intensity reduced 1,7 levels	Approx. 139,3 m³	0,5 h	SGS Inc	SHES210901902478

Licensed in VDI 6022

Certification of a HVAC system under VDI 6022 guarantees that the system fulfills the market's strictest hygiene requirements.

VDI 6022 – Part 5 [1] Certification.

Avoidance of allergenic exposure.

Inhibits a wide range of harmful bacteria, viruses, mould, pollen and allergens.

VDI 6022 – Part 1 [1] & 1.1 [2] Certification.

Ventilation and indoor-air quality.

Panasonic nanoe™ X technology improving indoor air quality.

1) Certification mark only valid for nanoe X Generator Mark 3. 2) Certification mark only valid for nanoe X Generator Mark 2 and Mark 3.

nanoe™ X: improving protection 24/7

Acts to clean the work area, such as meat or fish handling in hotel kitchens, food handling in industrial processes, laboratories, wine cellars, etc. So that the indoor environment can be a cleaner and more pleasant place to be all day long and keep the processes in better bacterial conditions.
nanoe™ X works together with the cooling function when during the day but can work independently when the area is not occupied.
Give the system the strength to increase the protection of persons, air, colds stuffs and working surfaces with nanoe™ X technology and convenient control via the Panasonic Comfort Cloud App.

nanoeX Improving Protection 24/7

Cleans the air even when there is no work activity.
Leave the nanoe™ X mode ON to inhibit certain pollutants and deodorize before start the work activity again.

Improves your environment and better protects the products handled when you are or not at work.
Enjoy a cleaner comfortable space both when working indoors and simply when it comes to better protecting products in the cold room.

Panasonic Heating & Cooling Solutions is incorporating nanoe™ technology in a wide range of equipment

Wall-mounted.
Built-in nanoe X Generator Mark 3.

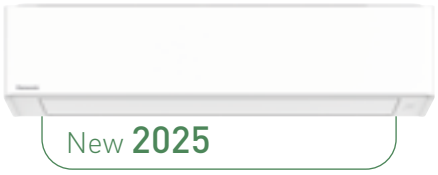
Ceiling.
Built-in nanoe X Generator Mark 2.

4 Way 90x90 cassette.
Built-in nanoe X Generator Mark 1.

Adaptive ducted unit.
Built-in nanoe X Generator Mark 2.

NEW PACi NX Series Elite wall-mounted - PK4 · R32

For light refrigeration applications.



nanoe™ X as a standard.

				High temperature						
Kit				**36**	**50**	**60**	**71**	**100**	**125**	**140**
Indoor unit - 1				**S-5010PK4E**	**S-5010PK4E**	**S-5010PK4E**	**S-5010PK4E**	**S-5010PK4E**	**S-5010PK4E**	**S-5010PK4E**
Indoor unit - 2							**S-5010PK4E**	**S-5010PK4E**	**S-5010PK4E**	**S-5010PK4E**
Outdoor unit				**U-36PZH3E5**	**U-50PZH3E5**	**U-60PZH3E5**	**U-71PZH4E5/8**	**U-100PZH4E5/8**	**U-125PZH4E5/8**	**U-140PZH4E5/8**
Outdoor 35 °C (DB)	Indoor 15 °C (WB)	Cooling capacity	kW	3,50	4,90	5,80	6,90	8,80	11,60	13,00
		EER		4,27	3,83	3,45	3,40	3,15	3,41	3,61
		Input power	kW	0,82	1,28	1,68	2,03	2,79	3,40	3,60
	Indoor 12 °C (WB)	Cooling capacity	kW	3,19	4,46	5,28	6,28	8,01	10,56	11,83
		EER		3,96	3,55	3,21	3,16	2,93	3,17	3,35
		Input power	kW	0,80	1,25	1,65	1,99	2,73	3,33	3,53
	Indoor 8 °C (WB)	Cooling capacity	kW	2,10	2,94	3,48	4,14	5,28	6,96	7,80
		EER		3,28	2,94	2,66	2,62	2,42	2,62	2,78
		Input power	kW	0,64	1,00	1,31	1,58	2,18	2,65	2,81
Outdoor 30 °C (DB)	Indoor 15 °C (WB)	Cooling capacity	kW	3,75	5,24	5,92	7,04	9,42	12,41	13,91
		EER		4,96	4,45	3,75	3,69	3,66	3,97	4,20
		Input power	kW	0,75	1,18	1,58	1,91	2,57	3,13	3,31
	Indoor 12 °C (WB)	Cooling capacity	kW	3,43	4,80	5,39	6,42	8,62	11,37	12,74
		EER		4,65	4,17	3,49	3,44	3,43	3,71	3,93
		Input power	kW	0,74	1,15	1,55	1,87	2,51	3,06	3,24
	Indoor 8 °C (WB)	Cooling capacity	kW	2,10	2,94	3,48	4,14	5,28	6,96	7,80
		EER		3,66	3,28	2,88	2,83	2,70	2,92	3,09
		Input power	kW	0,57	0,90	1,21	1,46	2,15	2,38	2,52
Indoor unit		Dimension (H x W x D)	mm	295 x 1060 x 249	295 x 1060 x 249	295 x 1060 x 249	295 x 1060 x 249	295 x 1060 x 249	295 x 1060 x 249	295 x 1060 x 249
		Net weight	kg	14	14	14	14	14	14	14
		nanoe X Generator		Mark 3	Mark 3	Mark 3	Mark 3	Mark 3	Mark 3	Mark 3
Outdoor unit		Dimension (H x W x D)	mm	695 x 875 x 320	695 x 875 x 320	695 x 875 x 320	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370	996 x 980 x 370
		Net weight	kg	42	42	43	66	84	86	86

Accessories	
CZ-RTC6W	CONEX wired remote controller (non-wireless), white
CZ-RTC6WBL	CONEX wired remote controller with Bluetooth®, white
CZ-RTC6WBLW2	CONEX wired remote controller with Wi-Fi and Bluetooth®, white
CZ-RTC6	CONEX wired remote controller (non-wireless), black
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®, black
CZ-RTC6BLW2	CONEX wired remote controller with Wi-Fi and Bluetooth®, black
CZ-RTC5B	Wired remote controller with Econavi function
CZ-RWS3	Infrared remote controller

Accessories	
PAW-PACR4	Interface to run up to 4 indoor unit groups on backup and alternative run
PAW-WTRAY	Tray for condenser water compatible with outdoor elevation platform
PAW-GRDBSE20	Outdoor base ground support for noise and vibration absorption
PAW-GRDSTD40	Outdoor elevation platform 400 x 900 x 400 mm
CZ-CENSC1	Econavi energy saving sensor

Technical focus

- Modern, flat design with a stylish matte white finish featuring
- DC fan for better efficiency and control
- Five-direction automatic air flow adjustment for cooling and heating
- Six directional piping outlet
- Quiet operation
- nanoe™ X (Generator Mark 3: 48 trillion hydroxyl radicals/sec) as standard for better indoor air quality
- Wired remote control CZ-RTC6WBL and CZ-RTC6BL allows easy system setting via Bluetooth®
- Easy connection and control of external fan or ERV using the connector PAW-FDC on the indoor unit PCB. The external device can be controlled by the remote control of the Panasonic indoor unit

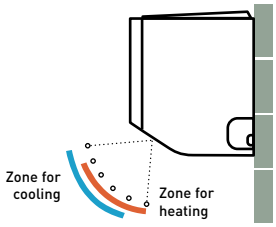
Closed discharge port

When the unit is turned OFF, the flap closes completely to prevent dust getting into the unit and to keep the equipment clean.

Piping outlet in six directions

Piping outlet is possible in six directions of; right, right rear, right bottom, left, left rear and left bottom, making the installation work more flexible.

Air distribution is automatically altered depending on the operational mode of the unit



PACi NX Series Elite 4 way 90x90 cassette - PU3 · R32

For light refrigeration applications.

Standard panel, white (RAL9003).
CZ-KPU3

nanoe™ X as a standard.

				High temperature								
Kit				**36**	**50**	**60**	**71**	**100**	**125**	**140**	**200**	**250**
Indoor unit - 1				**S-6071PU3E**	**S-6071PU3E**	**S-1014PU3E**	**S-1014PU3E**	**S-1014PU3E**	**S-1014PU3E**	**S-1014PU3E**	**S-1014PU3E**	**S-1014PU3E**
Indoor unit - 2				**—**	**—**	**—**	**—**	**—**	**—**	**S-1014PU3E**	**S-1014PU3E**	**S-1014PU3E**
Outdoor unit				**U-36PZH3E5**	**U-50PZH3E5**	**U-60PZH3E5**	**U-71PZH4E5/8**	**U-100PZH4E5/8**	**U-125PZH4E5/8**	**U-140PZH4E5/8**	**U-200PZH4E8**	**U-250PZH4E8**
Outdoor 35 °C (DB)	Indoor 15 °C (WB)	Cooling capacity	kW	3,50	4,90	5,80	6,90	8,80	11,60	13,00	18,50	23,20
		EER		5,12	4,05	3,81	3,67	4,09	3,47	3,82	3,38	2,97
		Input power	kW	0,68	1,21	1,52	1,88	2,15	3,34	3,40	5,48	7,82
	Indoor 12 °C (WB)	Cooling capacity	kW	3,19	4,46	5,28	6,28	8,01	10,56	11,83	16,84	21,11
		EER		4,78	3,76	3,54	3,41	3,80	3,22	3,55	3,13	2,75
		Input power	kW	0,67	1,19	1,49	1,84	2,11	3,27	3,33	5,37	7,66
	Indoor 8 °C (WB)	Cooling capacity	kW	2,10	2,94	3,48	4,14	5,28	6,96	7,80	11,10	13,92
		EER		3,96	3,12	2,94	2,82	3,15	2,67	2,94	2,60	2,28
		Input power	kW	0,53	0,94	1,19	1,47	1,68	2,61	2,65	4,27	6,10
Outdoor 30 °C (DB)	Indoor 15 °C (WB)	Cooling capacity	kW	3,75	5,24	5,92	7,04	9,42	12,41	13,91	20,17	25,29
		EER		5,99	4,71	4,14	3,98	4,76	4,04	4,45	4,00	3,51
		Input power	kW	0,63	1,11	1,43	1,77	1,98	3,07	3,13	5,04	7,19
	Indoor 12 °C (WB)	Cooling capacity	kW	3,43	4,80	5,39	6,42	8,62	12,41	12,74	18,50	23,20
		EER		5,60	4,41	3,86	3,71	4,46	4,04	4,16	3,75	3,30
		Input power	kW	0,61	1,09	1,40	1,73	1,94	3,07	3,06	4,93	7,04
	Indoor 8 °C (WB)	Cooling capacity	kW	2,10	2,94	3,48	4,14	5,28	6,96	7,80	11,10	13,92
		EER		4,41	3,47	3,18	3,06	3,51	2,98	3,28	2,89	2,54
		Input power	kW	0,48	0,85	1,09	1,35	1,51	2,34	2,38	3,84	5,47
Indoor unit		Dimension (H x W x D)	mm	256x840x840	256x840x840	256x840x840	319x840x840	319x840x840	319x840x840	319x840x840	319x840x840	319x840x840
		Net weight	kg	19	19	20	25	25	25	25	25	25
		nanoe X Generator		Mark 1	Mark 1	Mark 1	Mark 1	Mark 1	Mark 1	Mark 1	Mark 1	Mark 1
Outdoor unit		Dimension (H x W x D)	mm	695x875x320	695x875x320	695x875x320	996x980x370	996x980x370	996x980x370	996x980x370	996x1140x460	996x1140x460
		Net weight	kg	42	42	43	66	84	86	86	109	109

Accessories	
CZ-RTC6W	CONEX wired remote controller (non-wireless), white
CZ-RTC6WBL	CONEX wired remote controller with Bluetooth®, white
CZ-RTC6WBLW2	CONEX wired remote controller with Wi-Fi and Bluetooth®, white
CZ-RTC6	CONEX wired remote controller (non-wireless), black
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®, black
CZ-RTC6BLW2	CONEX wired remote controller with Wi-Fi and Bluetooth®, black
CZ-RTC5B	Wired remote controller with Econavi function
CZ-RWS3 + CZ-RWRU3	Infrared remote controller and receiver

Accessories	
CZ-KPU3A	Econavi exclusive panel, white (RAL9003)
CZ-KPU3B	**NEW** Standard panel, graphite black (RAL9011)
PAW-WTRAY	Tray for condenser water compatible with outdoor elevation platform
PAW-GRDBSE20	Outdoor base ground support for noise and vibration absorption
PAW-GRDSTD40	Outdoor elevation platform 400 x 900 x 400 mm
CZ-FDU3 + CZ-ATU2	Fresh air-intake kit

Technical focus

- High performance turbo fan
- Econavi: An optional intelligent sensor to reduce waste of energy
- nanoe™ X (Generator Mark 1: 4,8 trillion hydroxyl radicals/sec) as standard for better indoor air quality, indoor unit internal cleaning with nanoe™ X plus dry operation
- **New** graphite black and white panels providing options to suit a variety of light commercial applications
- Lower noise in low fan operation
- Light weight, easy piping and integrated drain pump for quick installation
- Wired remote control CZ-RTC6WBL and CZ-RTC6BL allows easy system setting via Bluetooth®
- High volume fresh air input with optional air-intake plenum and chamber (CZ-FDU3 + CZ-ATU2)

White and graphite black panels available for the 4 way 90x90 cassette.

Standard panel, white (RAL9003).
CZ-KPU3

Econavi panel, white (RAL9003).
CZ-KPU3A

Standard panel, graphite black (RAL9011).
CZ-KPU3B

PACi NX Series Elite ceiling - PT3 · R32

For light refrigeration applications.

nanoe™ X as a standard.

				High temperature								
Kit				**36**	**50**	**60**	**71**	**100**	**125**	**140**	**200**	**250**
Indoor unit - 1				**S-6071PT3E**	**S-6071PT3E**	**S-1014PT3E**	**S-1014PT3E**	**S-1014PT3E**	**S-1014PT3E**	**S-1014PT3E**	**S-1014PT3E**	**S-1014PT3E**
Indoor unit - 2				**—**	**—**	**—**	**—**	**—**	**—**	**S-1014PT3E**	**S-1014PT3E**	**S-1014PT3E**
Outdoor unit				**U-36PZH3E5**	**U-50PZH3E5**	**U-60PZH3E5**	**U-71PZH4E5/8**	**U-100PZH4E5/8**	**U-125PZH4E5/8**	**U-140PZH4E5/8**	**U-200PZH4E8**	**U-250PZH4E8**
Outdoor 35 °C (DB)	Indoor 15 °C (WB)	Cooling capacity	kW	3,50	4,90	5,80	6,60	8,80	11,20	13,00	18,50	23,20
		EER		4,67	3,71	3,63	3,53	3,76	3,15	3,40	3,32	2,92
		Input power	kW	0,75	1,32	1,60	1,87	2,34	3,56	3,82	5,57	7,94
	Indoor 12 °C (WB)	Cooling capacity	kW	3,19	4,46	5,28	6,01	8,01	10,19	11,83	16,84	21,11
		EER		4,33	3,45	3,37	3,28	3,49	2,92	3,16	3,08	2,71
		Input power	kW	0,74	1,29	1,57	1,83	2,29	3,49	3,74	5,46	7,78
	Indoor 8 °C (WB)	Cooling capacity	kW	2,10	2,94	3,48	3,96	5,28	6,72	7,80	11,10	13,92
		EER		3,59	2,86	2,79	2,71	2,89	2,42	2,62	2,55	2,25
		Input power	kW	0,59	1,03	1,25	1,46	1,83	2,78	2,98	4,34	6,19
Outdoor 30 °C (DB)	Indoor 15 °C (WB)	Cooling capacity	kW	3,75	5,24	5,92	6,73	9,42	11,98	13,91	20,17	25,29
		EER		5,43	4,32	3,93	3,83	4,37	3,66	3,96	3,94	3,46
		Input power	kW	0,69	1,21	1,50	1,76	2,15	3,28	3,51	5,12	7,30
	Indoor 12 °C (WB)	Cooling capacity	kW	3,43	4,80	5,39	6,14	8,62	10,98	12,74	18,50	23,20
		EER		5,08	4,04	3,66	3,57	4,09	3,43	3,71	3,69	3,25
		Input power	kW	0,68	1,19	1,47	1,72	2,11	3,20	3,44	5,01	7,15
	Indoor 8 °C (WB)	Cooling capacity	kW	2,10	2,94	3,48	3,96	5,28	6,72	7,80	11,10	13,92
		EER		4,00	3,18	3,02	2,94	3,22	2,70	2,92	2,85	2,50
		Input power	kW	0,53	0,92	1,15	1,35	1,64	2,49	2,67	3,90	5,56
Indoor unit		Dimension (H x W x D)	mm	235x1275x690	235x1275x690	235x1590x690	235x1590x690	235x1590x690	235x1590x690	235x1590x690	235x1590x690	235x1590x690
		Net weight	kg	34	34	40	40	40	40	40	40	40
		nanoe X Generator		Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2
Outdoor unit		Dimension (H x W x D)	mm	695x875x320	695x875x320	695x875x320	996x980x370	996x980x370	996x980x370	996x980x370	996x1140x460	996x1140x460
		Net weight	kg	42	42	43	66	84	86	86	109	109

Accessories	
CZ-RTC6W	CONEX wired remote controller (non-wireless), white
CZ-RTC6WBL	CONEX wired remote controller with Bluetooth®, white
CZ-RTC6WBLW2	CONEX wired remote controller with Wi-Fi and Bluetooth®, white
CZ-RTC6	CONEX wired remote controller (non-wireless), black
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®, black
CZ-RTC6BLW2	CONEX wired remote controller with Wi-Fi and Bluetooth®, black
CZ-RTC5B	Wired remote controller with Econavi function

Accessories	
CZ-RWS3 + CZ-RWRT3	Infrared remote controller and receiver
PAW-WTRAY	Tray for condenser water compatible with outdoor elevation platform
PAW-GRDBSE20	Outdoor base ground support for noise and vibration absorption
PAW-GRDSTD40	Outdoor elevation platform 400 x 900 x 400 mm
CZ-CENSC1	Econavi energy saving sensor

Technical focus

- Wide air distribution for large rooms
- Horizontal air flow reaches maximum 9,5 m
- Fresh air connection available on the unit
- Slim design with 235 mm height fits narrow space
- Silent operation
- nanoe™ X (Generator Mark 2: 9,6 trillion hydroxyl radicals/sec) as standard for better indoor air quality
- Wired remote control CZ-RTC6WBL and CZ-RTC6BL allows easy system setting via Bluetooth®
- Twin, Triple and Double-twin split options
- Easy connection and control of external fan or ERV using the connector PAW-FDC on the indoor unit PCB. The external device can be controlled by the remote control of the Panasonic indoor unit

Further comfort improvement with air flow distribution

Horizontal air flow reaches maximum 9,5 m. This is ideal for wide rooms.
The wide air discharge opening expands the air flow to the left and right. The unpleasant feeling caused when the air flow directly hits the human body is prevented by the "Draft prevention position", which changes the swing width, increasing the degree of comfort.

PACi NX Series Elite adaptive ducted unit - PF3 · R32

For light refrigeration applications.

nanoe™ X as a standard.

					High temperature								
Kit				**36**	**50**	**60**	**71**	**100**	**125**	**140**	**200**	**250**
Indoor unit - 1				**S-6071PF3E**	**S-6071PF3E**	**S-1014PF3E**	**S-1014PF3E**	**S-1014PF3E**	**S-1014PF3E**	**S-1014PF3E**	**S-1014PF3E**	**S-1014PF3E**
Indoor unit - 2				**—**	**—**	**—**	**—**	**—**	**—**	**S-1014PF3E**	**S-1014PF3E**	**S-1014PF3E**
Outdoor unit				**U-36PZH3E5**	**U-50PZH3E5**	**U-60PZH3E5**	**U-71PZH4E5/8**	**U-100PZH4E5/8**	**U-125PZH4E5/8**	**U-140PZH4E5/8**	**U-200PZH4E8**	**U-250PZH4E8**
Outdoor 35 °C (DB)	Indoor 15 °C (WB)	Cooling capacity	kW	3,50	4,90	5,80	6,60	8,80	11,20	13,00	18,50	23,20
		EER		3,98	3,20	3,52	3,37	3,79	3,21	3,59	3,50	3,08
		Input power	kW	0,88	1,53	1,65	1,96	2,32	3,49	3,62	5,29	7,54
	Indoor 12 °C (WB)	Cooling capacity	kW	3,19	4,46	5,28	6,01	8,01	10,19	11,83	16,84	21,11
		EER		3,69	2,97	3,26	3,13	3,52	2,98	3,33	3,25	2,86
		Input power	kW	0,86	1,50	1,62	1,92	2,27	3,42	3,55	5,18	7,39
	Indoor 8 °C (WB)	Cooling capacity	kW	2,10	2,94	3,48	3,96	5,28	6,72	7,80	11,10	13,92
		EER		3,06	2,46	2,70	2,59	2,92	2,47	2,76	2,69	2,37
		Input power	kW	0,69	1,19	1,29	1,53	1,81	2,72	2,82	4,13	5,88
Outdoor 30 °C (DB)	Indoor 15 °C (WB)	Cooling capacity	kW	3,75	5,24	5,92	6,73	9,42	11,98	13,91	20,17	25,29
		EER		4,63	3,72	3,81	3,65	4,41	3,73	4,18	4,14	3,65
		Input power	kW	0,81	1,41	1,55	1,84	2,13	3,21	3,33	4,87	6,94
	Indoor 12 °C (WB)	Cooling capacity	kW	3,43	4,80	5,39	6,14	8,62	10,98	12,74	18,50	23,20
		EER		4,33	3,49	3,55	3,40	4,13	3,49	3,91	3,89	3,42
		Input power	kW	0,79	1,38	1,52	1,80	2,09	3,14	3,26	4,76	6,79
	Indoor 8 °C (WB)	Cooling capacity	kW	2,10	2,94	3,48	3,96	5,28	6,72	7,80	11,10	13,92
		EER		3,41	2,75	2,93	2,81	3,25	2,75	3,08	3,00	2,64
		Input power	kW	0,62	1,07	1,19	1,41	1,62	2,44	2,53	3,70	5,28
Indoor unit		Dimension (H x W x D)	mm	250x1000x730	250x1000x730	250x1000x730	250x1400x730	250x1400x730	250x1400x730	250x1400x730	250x1400x730	250x1400x730
		Net weight	kg	30	30	30	39	39	39	39	39	39
		nanoe X Generator		Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2	Mark 2
Outdoor unit		Dimension (H x W x D)	mm	695x875x320	695x875x320	695x875x320	996x980x370	996x980x370	996x980x370	996x980x370	996x1140x460	996x1140x460
		Net weight	kg	42	42	43	66	84	86	84	109	109

Accessories	
CZ-RTC6W	CONEX wired remote controller (non-wireless), white
CZ-RTC6WBL	CONEX wired remote controller with Bluetooth®, white
CZ-RTC6WBLW2	CONEX wired remote controller with Wi-Fi and Bluetooth®, white
CZ-RTC6	CONEX wired remote controller (non-wireless), black
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®, black
CZ-RTC6BLW2	CONEX wired remote controller with Wi-Fi and Bluetooth®, black
CZ-RTC5B	Wired remote controller with Econavi function
CZ-RWS3 + CZ-RWRC3	Infrared remote controller and receiver
PAW-WTRAY	Tray for condenser water compatible with outdoor elevation platform

Accessories	
PAW-GRDBSE20	Outdoor base ground support for noise and vibration absorption
PAW-GRDSTD40	Outdoor elevation platform 400 x 900 x 400 mm
CZ-CENSC1	Econavi energy saving sensor
CZ-56DAF2	Air outlet plenum for S-3650PF3E
CZ-90DAF2	Air outlet plenum for S-6071PF3E
CZ-160DAF2	Air outlet plenum for S-1014PF3E
PAW-APF800F	BION air pollutant filter for S-3650PF3E
PAW-APF1000F	BION air pollutant filter for S-6071PF3E
PAW-APF1400F	BION air pollutant filter for S-1014PF3E

Technical focus

- 2 installation possibilities (horizontal / vertical)
- Maximum external static pressure: 150 Pa
- Selectable inlet air position (rear / bottom entry)
- Improved drain pan suitable for both horizontal / vertical installation
- Drain pump included
- nanoe™ X (Generator Mark 2: 9,6 trillion hydroxyl radicals/sec) as standard for the long duct piping case*
- BION air pollutant filter for certain types of pollutants, such as nitrogen dioxide (NO_2), nitrogen oxides (NO_x) and Ozone (O_3) (optional)
- Wired remote control CZ-RTC6WBL and CZ-RTC6BL allows easy system setting via Bluetooth®

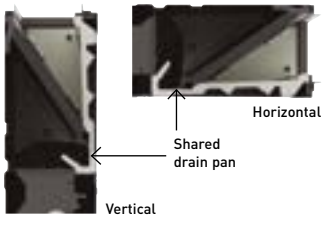
* The performance of nanoe™ X air can be expected even by 10 m long duct by Panasonic internal survey.

2 installation possibilities (horizontal / vertical)

Vertical installation is available. External static pressure 150 Pa, sufficient for remotely installing units away from the rooms.

Improved drain pan design

Just one drain pan for both horizontal and vertical installations. No need to modify the unit.



PACi NX Jet Air Stream · R32

For light refrigeration applications.

Touch panel controller.
PCZ-AHRX0012

					High temperature	
Kit					**140**	**250**
Indoor unit [1]					**P-VTVF140**	**P-VTVF250**
Outdoor unit					**U-140PZH4E5/8**	**U-250PZH4E8**
Outdoor 35 °C (DB)	Indoor 15 °C (WB)	Cooling capacity	kW		14,85	23,77
		EER			2,41	3,17
		Input power	kW		6,15	7,49
	Indoor 12 °C (WB)	Cooling capacity	kW		13,56	21,70
		EER			2,25	2,95
		Input power	kW		6,03	7,34
	Indoor 8 °C (WB)	Cooling capacity	kW		11,83	18,93
		EER			2,02	2,65
		Input power	kW		5,87	7,14
Outdoor 30 °C (DB)	Indoor 15 °C (WB)	Cooling capacity	kW		15,94	25,51
		EER			2,54	3,33
		Input power	kW		6,28	7,65
	Indoor 12 °C (WB)	Cooling capacity	kW		14,49	23,19
		EER			2,35	3,09
		Input power	kW		6,16	7,50
	Indoor 8 °C (WB)	Cooling capacity	kW		12,46	19,94
		EER			2,08	2,73
		Input power	kW		6,00	7,30
Indoor unit		Dimension (H x W x D)	mm		802 x 1105 x 893	1026 x 1458 x 953
		Net weight	kg		88	130
Outdoor unit		Dimension (H x W x D)	mm		996 x 980 x 370	996 x 1140 x 460
		Net weight	kg		86	109

1) The CONEX controller CZ-RTC6 (-BL/-BLW2) is not required.

Optional configurations*		**Front panel type**	**Air flow (m³/h)**
P-VTVF140NC5-PE	Jet Air Stream Standard	Manual nozzles	2500
P-VTVF250NC5-PE	Jet Air Stream Standard	Manual nozzles	5000
P-VTVF140PC5-PE	Jet Air Stream Ducted	Ducted front panel	2500
P-VTVF250PC5-PE	Jet Air Stream Ducted	Ducted front panel	5000

* The product technical data is the same as Jet Air Stream Smart.

Accessories	
CZ-RTC6W	CONEX wired remote controller (non-wireless), white
CZ-RTC6WBL	CONEX wired remote controller with Bluetooth®, white
CZ-RTC6WBLW2	CONEX wired remote controller with Wi-Fi and Bluetooth®, white
CZ-RTC6	CONEX wired remote controller (non-wireless), black
CZ-RTC6BL	CONEX wired remote controller with Bluetooth®, black
CZ-RTC6BLW2	CONEX wired remote controller with Wi-Fi and Bluetooth®, black
PCZ-AHRX0012	Touch panel controller with Modbus integration and group control up to 8 units

Accessories		
PCZ-AHRP0681		Recessed mounting box for controller
A	**PCZ-AHRX0051**	Ducted air intake plenum (1x DN 355 mm) for VTVF140N and VTVF140P
A	**PCZ-AHRX0052**	Ducted air intake plenum (2x DN 355 mm) for VTVF250N and VTVF250P
B	**PCZ-AHRX0061**	Ground air intake module (VTVF250 requires two of them)
C	**PCZ-AHRX0071**	Air supply grille for ducts

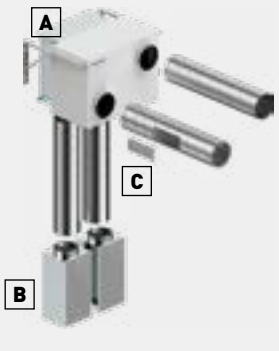
Technical focus

- Energy-saving solution for year-round heating and cooling in large and high spaces
- High air volume up to 5000 m³/h and long maximum air throw distance of 30 m
- Optimal comfort with Smart Jet - self-directing nozzles

Accessories for remote air intake configurations.

Manual version.

Ducted version.



Accessories and control – PACi NX

Panels

Standard panel for 4 way 90x90 cassette, white (RAL9003).

CZ-KPU3

Econavi panel for 4 way 90x90 cassette, white (RAL9003).

CZ-KPU3A

NEW Standard panel for 4 way 90x90 cassette, graphite black (RAL9011).

CZ-KPU3B

IAQ filter for adaptive ducted unit

* Tentative image.

BION air pollutant filter for S-3650PF3E.

PAW-APF800F

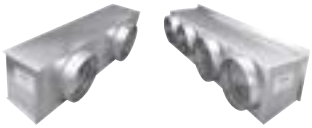
BION air pollutant filter for S-6071PF3E.

PAW-APF1000F

BION air pollutant filter for S-1014PF3E.

PAW-APF1400F

Plenums



Air outlet plenum for S-3650PF3E.

CZ-56DAF2

Air outlet plenum for S-6071PF3E.

CZ-90DAF2

Air outlet plenum for S-1014PF3E.

CZ-160DAF2

Special outdoor supports

Tray for condenser water compatible with outdoor elevation platform.

PAW-WTRAY

Outdoor elevation platform.
Dimension (H x W x D): 400 x 900 x 400 mm

PAW-GRDSTD40

Outdoor base ground support for noise and vibration absorption.
Dimension (H x W x D): 600 x 95 x 130 mm
Safe working load: 500 kg

PAW-GRDBSE20

Individual controls

CONEX wired remote controller (non-wireless), white.

CZ-RTC6W

CONEX wired remote controller with Bluetooth®, white.

CZ-RTC6WBL

CONEX wired remote controller with Wi-Fi and Bluetooth®, white.

CZ-RTC6WBLW2

CONEX wired remote controller (non-wireless), black.

CZ-RTC6

CONEX wired remote controller with Bluetooth®, black.

CZ-RTC6BL

CONEX wired remote controller with Wi-Fi and Bluetooth®, black.

CZ-RTC6BLW2

Design Wired remote controller with Econavi function.

CZ-RTC5B

Infrared remote controller for wall-mounted.

CZ-RWS3

Infrared remote controller and receiver for 4 way 90x90 cassette.

CZ-RWS3 + CZ-RWRU3

Infrared remote controller and receiver for ceiling.

CZ-RWS3 + CZ-RWRT3

Infrared remote controller and receiver for all indoor units.

CZ-RWS3 + CZ-RWRC3

Accessories PCB

PCB for server room application, control up to 4 indoor unit groups, redundancy, backup, etc.

PAW-PACR4

Sensors

Econavi energy saving sensor.

CZ-CENSC1

Fresh air-intake kit.

CZ-FDU3+CZ-ATU2

Accessories for Jet Air Stream

Touch panel controller with Modbus integration and group control up to 8 units.

PCZ-AHRX0012

Recessed mounting box for controller.

PCZ-AHRP0681

Ducted air intake plenum (1 x DN 355 mm) for VTVF140N and VTVF140P.

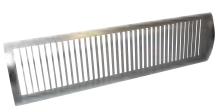
PCZ-AHRX0051

Ducted air intake plenum (2 x DN 355 mm) for VTVF250N and VTVF250P.

PCZ-AHRX0052

Ground air intake module (VTVF250 requires two of them).

PCZ-AHRX0061



Air supply grille for ducts.

PCZ-AHRX0071

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