Heatcharge. Energy Charge System

heatcharge

Energy class A +++ and offers maximum comfort and energy savings. This powerful air heat pump is designed for commercial and residential climate that places extremely high demands on the heating system.





+ nanoe™

+ SEE PRODUCT SPECIFICATIONS

1 Powerful, reliable heating even at low ambient winter temperatures

When the air conditioner is operating, the compressor, which is the power supply of the unit, generates heat.
Until now, this heat was released into the atmosphere. Panasonic has utilised this waste heat!

Constant heating.
Using stored heat provides stable heating with less drop in temperature.
Even when heating operation stops during defrost operation, stored heat continues to constantly warm the room. This eliminates the previous discomfort due to the temperature dropping when heating temporarily stops to ensure stable air conditioner heating.

2 Panasonic's full line-up of A+++ heat pumps

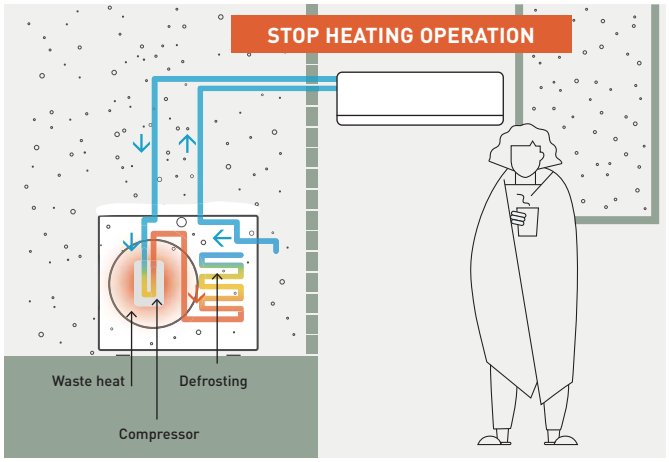
In response to the Kyoto Protocol, the European Union set some challenging targets for the reduction in greenhouse-gas emissions. By the year 2020, across the member states, the EU wants to have achieved the following objectives:
- A 20% cut in greenhouse gas emissions (from 1990 base levels)
- The share of renewables in the energy mix to increase by 20%
- An overall reduction of 20% in energy consumption

3 Comfort and efficiency

- nanoe™ technology with the benefits of hydroxyl radicals
- Higher efficiency and comfort with Econavi sunlight detection and human activity detection
- Powerful air flow to quickly reach the desired temperature

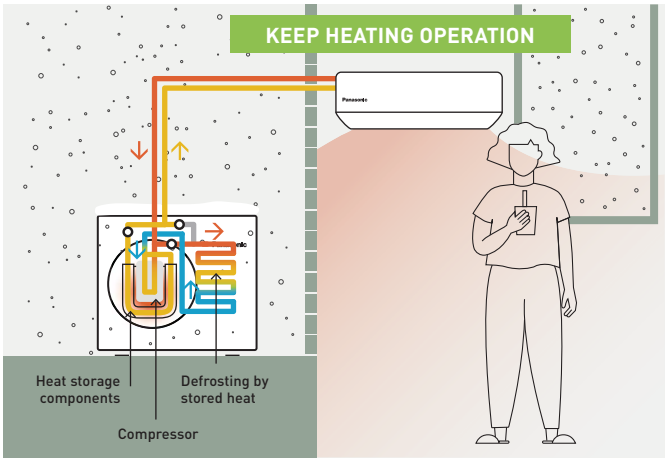
Conventional. The room gradually becomes cold.

Defrost operation: About 11 to 15 min. Fall in room temperature: About 5 to 6 °C.



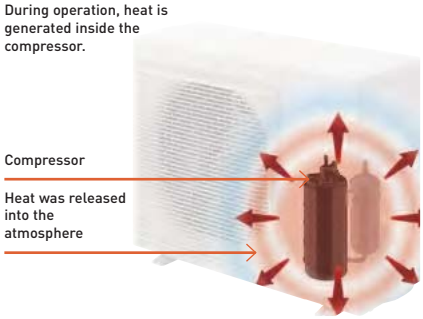
Heatcharge. The room is thoroughly warmed.

Defrost operation: About 5 to 6 min. Fall in room temperature: About 1 to 2 °C.



Conventional.

During operation, heat is generated inside the compressor.



Heatcharge.

Heat generated by the compressor is stored inside and used to warm the refrigerant to efficiently increase heating power.



Heatcharge.

The compressor is wrapped and exhaust heat is used for charging.

Heatcharge tank. Waste heat from the compressor is stored.

Finless heat exchanger. Stored heat is converted to energy.



* Defrost operation time and how low room temperature falls differ depending on the environment in which the unit is being used (how insulated and airtight the room is), operation conditions, and temperature conditions. Output air temperature falls during defrost operation. How low room temperature falls differs depending on the environment in which the unit is being used (how insulated and airtight the room is), operation conditions, and temperature conditions. In environments where a lot of frost accumulates, heating may stop during defrost operation.

Wall-mounted Heatcharge VZ · R32

- Energy Charge System. Heat storage unit which utilizes non-stop heating and fast heating function
- Econavi Sunlight Detection sensor: Even higher efficiency and great comfort
- nanoe™ technology to improve protection 24/7
- Super Quiet! Only 18 dB(A), equivalent to night-time in the countryside
- Performance tested at -35 °C outdoor temperature





nanoe™

Kit			KIT-VZ9-SKE	KIT-VZ12-SKE
Cooling capacity	Nominal (Min - Max)	kW	2,50 (0,60 - 3,00)	3,50 (0,60 - 4,00)
SEER [1]			**10,50 A+++**	**10,00 A+++**
Pdesign (cooling)		kW	2,50	3,50
Input power	Nominal (Min - Max)	kW	0,43 (0,14 - 0,61)	0,80 (0,14 - 0,98)
Annual energy consumption [3]		kWh/a	83	122
Heating capacity	Nominal (Min - Max)	kW	3,60 (0,60 - 7,80)	4,20 (0,60 - 9,20)
COP [2]		W/W	5,63	5,04
Heating capacity at -7 °C		kW	5,00	5,60
COP at -7 °C [2]		W/W	2,07	2,00
SCOP [1]			**6,20 A+++**	**5,90 A+++**
Pdesign at -10 °C		kW	3,60	4,20
Input power	Nominal (Min - Max)	kW	0,64 (0,14 - 2,72)	0,83 (0,14 - 3,16)
Annual energy consumption [3]		kWh/a	812	995
Indoor unit			**CS-VZ9SKE**	**CS-VZ12SKE**
Power supply		V	230	230
Recommended fuse		A	16	16
Connection indoor / outdoor		mm²	4x1,5	4x1,5
Air flow	Cool / Heat (Hi)	m³/min	12,5 / 15,5	12,9 / 15,9
Sound pressure [4]	Cool (Hi / Lo / Q-Lo)	dB(A)	44 / 27 / 18	45 / 33 / 18
	Heat (Hi / Lo / Q-Lo)	dB(A)	44 / 26 / 18	45 / 29 / 18
Dimension	H x W x D	mm	295 x 798 x 375	295 x 798 x 375
Net weight		kg	14,5	14,5
Outdoor unit			**CU-VZ9SKE**	**CU-VZ12SKE**
Air flow	Cool / Heat (Hi)	m³/min	33,1 / 33,1	35,4 / 33,9
Sound pressure [4]	Cool / Heat (Hi)	dB(A)	49 / 49	50 / 50
Dimension [5]	H x W x D	mm	630 x 799 x 299	630 x 799 x 299
Net weight		kg	39,5	39,5
Piping diameter	Liquid	Inch (mm)	1/4 (6,35)	1/4 (6,35)
	Gas	Inch (mm)	3/8 (9,52)	3/8 (9,52)
Pipe length range		m	3 ~ 15	3 ~ 15
Elevation difference (in / out)		m	12	12
Pre-charged pipe length		m	7,5	7,5
Additional gas amount		g/m	20	20
Refrigerant (R32) / CO_2 Eq.		kg / T	1,05 / 0,70875	1,10 / 0,7425
Operating range	Cool Min ~ Max	°C	-10 ~ +43	-10 ~ +43
	Heat Min ~ Max	°C	-30 ~ +24	-30 ~ +24
Lowest outdoor temperature tested by 3rd party laboratory [6]		°C	-35	-35

1) Energy Label Scale from A+++ to D. 2) EER and COP calculation is based in accordance to EN14511. 3) The annual energy consumption is calculated in accordance to EU/626/2011. 4) The sound pressure of the indoor unit shows the value measured of a position of 1 m in front of the main body and 0,8 m below the unit. For outdoor unit 1 m in front and 1 m in rear side of main body. The sound pressure is measured in accordance with JIS C 9612. Q-Lo: Quiet mode. Lo: The lowest set fan speed. 5) Add 70 mm for piping port. 6) Tested by 3rd party laboratory, SP, according to EN14511:2013 and SP Method 1721, this temperature is not guaranteed by Factory.

Accessories	
CZ-TACG1	Wi-Fi adapter for smart control via Panasonic Comfort Cloud App

Accessories	
CZ-CAPRA1	RAC interface adapter for integration into S-Link

R32 | A+++ 10,50 SEER | A+++ 6,20 SCOP | 38% ECONAVI | INVERTER+ | R2 ROTARY COMPRESSOR | nanoe | 18 dB(A) | -35 °C HEATING MODE TESTED BY SP | SUMMER HOUSE | R22 R410A R32 R22 / R410A RENEWAL | INTEGRATION TO S-LINK | OPTIONAL WI-FI | BMS CONNECTIVITY | 5 YEARS COMPRESSOR WARRANTY

SEER and SCOP: For KIT-VZ9-SKE. -35 °C HEATING MODE: Heating performance tested at -35 °C by SP, European third party laboratory. INTERNET CONTROL: Optional.