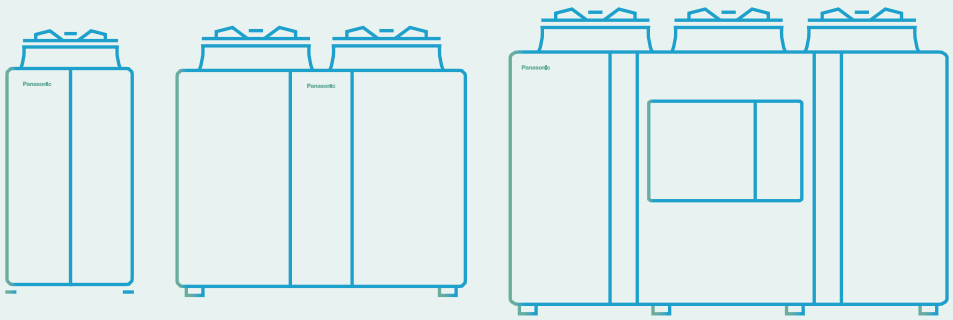
Panasonic

ECO i-W

ECOi-W Chiller Catalogue 2022/2023

Cooling only and heat pumps chillers



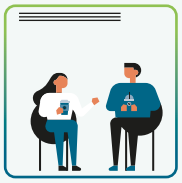
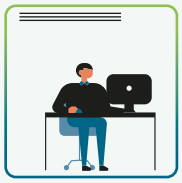
heating & cooling solutions

ECO i - W

Discover a new era of ECOi, the ECOi-W. Cooling only and heat pumps chillers

Panasonic introduces the new ECOi-W cooling only and heat pumps chiller series.
These new series provides a wide variety of HVAC system solutions, to meet all of your residential, commercial and industrial needs.



ECOi-W meets the customer's needs, with these fully customisable heat pumps and cooling only chillers

Unrivaled reliability and quality.
Panasonic solutions can be enjoyed for years to come, even in the most extreme climates. Panasonic does not compromise on product quality, safety or durability, in order to provide the ultimate comfort when you need it most.

There is a reason to choose Panasonic as your partner.

ECOi-W

Panasonic does not compromise on product quality, always striving for 100 % quality.
ECOi-W series offers smart technology meeting your needs at home and business.

Energy saving

R32

Refrigerant gas R32 .
Our heat pumps containing the refrigerant R32 show a drastic reduction in the value of Global Warming Potential (GWP).

HIGH SEER 4,78

High seasonal efficiency in cooling mode.
SEER follows COMMISSION REGULATION (EU) No 2016/2281.

* U-020 R410A Cooling Only.

HIGH SCOP 3,73

High seasonal efficiency in heating mode.
SCOP follows COMMISSION REGULATION (EU) No 813/2013.

* U-130 R32 Heat Pump Chiller.

EC MOTOR GREEN VENTILATION

EC motor green ventilation.
Range of fan coil with improved efficiency with optional EC fan motor.

* Only available with R32 units.

High performance and comfortability

SUPER QUIET

Super quiet.
Extra quiet operation is available as standard (with sizes 20 – 40, 140 - 210).

BLUEFIN

Bluefin.
Bluefin coil comes as standard on all heat pump models. The life time of coils have been extended thanks to the hydrophilic coating.

ULTIMATE CUSTOMISATION

Ultimate customisation.
Various pump, hydraulic, ambient options offered, plus many more.
Ultimate customization for your needs and environment.

AUTOMATIC FAN

Automatic fan operation.
The microprocessor control automatically adjusts the fan speed as a function of the operating conditions.

-17 °C HEATING MODE

Down to -17 °C in heating mode.
The ECOi-W system works in heating mode at outdoor temperature down to -17 °C.

* Available on R410A units.

50 °C COOLING MODE

Up to 50 °C in cooling mode.
The ECOi-W system works in cooling mode at outdoor temperature up to 50 °C.

* Up to 48 °C with R32 models.

DEFROST LIMITING

Defrost limiting cycle (140 – 210).
Each pair of coils can be defrosted wisely while the other pair of coils are running in heating mode.
This alternated defrost cycle ensures stable hot water even at low ambient conditions.

* Available on R410A models 140 - 210.

High connectivity

BMS CONNECTIVITY

BMS connectivity.
The communication port can be integrated into the ECOi-W system and provides easy connection and control.
Modbus RTU is equipped as standard. Modbus TCP/IP, BACnet IP and BACnet MSTP as optional availability.

Reliable quality

100% QUALITY
QUALITY CERTIFIED BY PANASONIC

Quality certified by Panasonic.
Panasonic does not compromise on product quality, safety, durability in order to provide the ultimate comfort when you need it most.

EUROVENT CERTIFIED PERFORMANCE

Eurovent certified performance.
The performance of ECOi-W Series has been certified by Eurovent to prove the high quality and high performance by Panasonic.
https://www.eurovent-certification.com/

ErP

ECOi-W Series are compliant with ErP regulation.
SEER follows COMMISSION REGULATION (EU) No 2016/2281.
SCOP follows COMMISSION REGULATION (EU) No 813/2013.

Support materials for customers

AutoCAD 2D files and BIM models for ECOi-W full range is readily available at Panasonic PROClub.
https://www.panasonicproclub.com

Solutions for Hospitals

ECOi-W Series offers a reliable solution with an optimised design for service and maintenance, making it ideal for hospital applications. Remote monitoring through the ECOi-W Cloud offers enhanced service support and a highly efficient fan coil range delivers increased comfort.

1

High quality heat pumps and cooling only chillers.
ECOi-W Series provides a fully customisable design to meet the business application needs, with a capacity range from 20 kW to 210 kW. Reliable quality and an optimised design for service and maintenance are ideal for a hospital project.

2

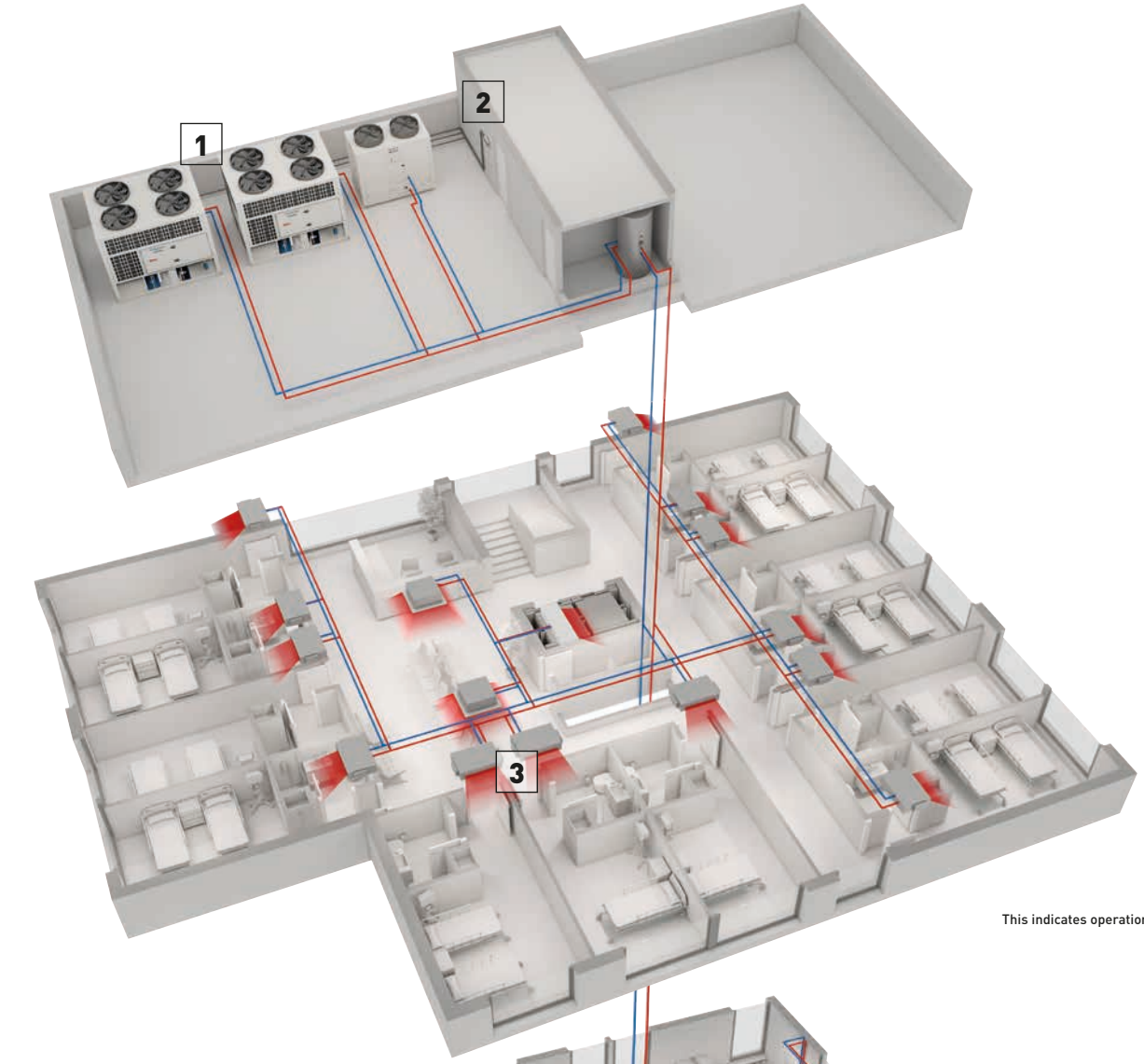
ECOi-W Cloud - remote monitoring.
This control provides remote access, in real time, to optimise service and maintenance work.
It is a useful solution for a project requiring high levels of safety and non-stop operation, such as hospitals.

3

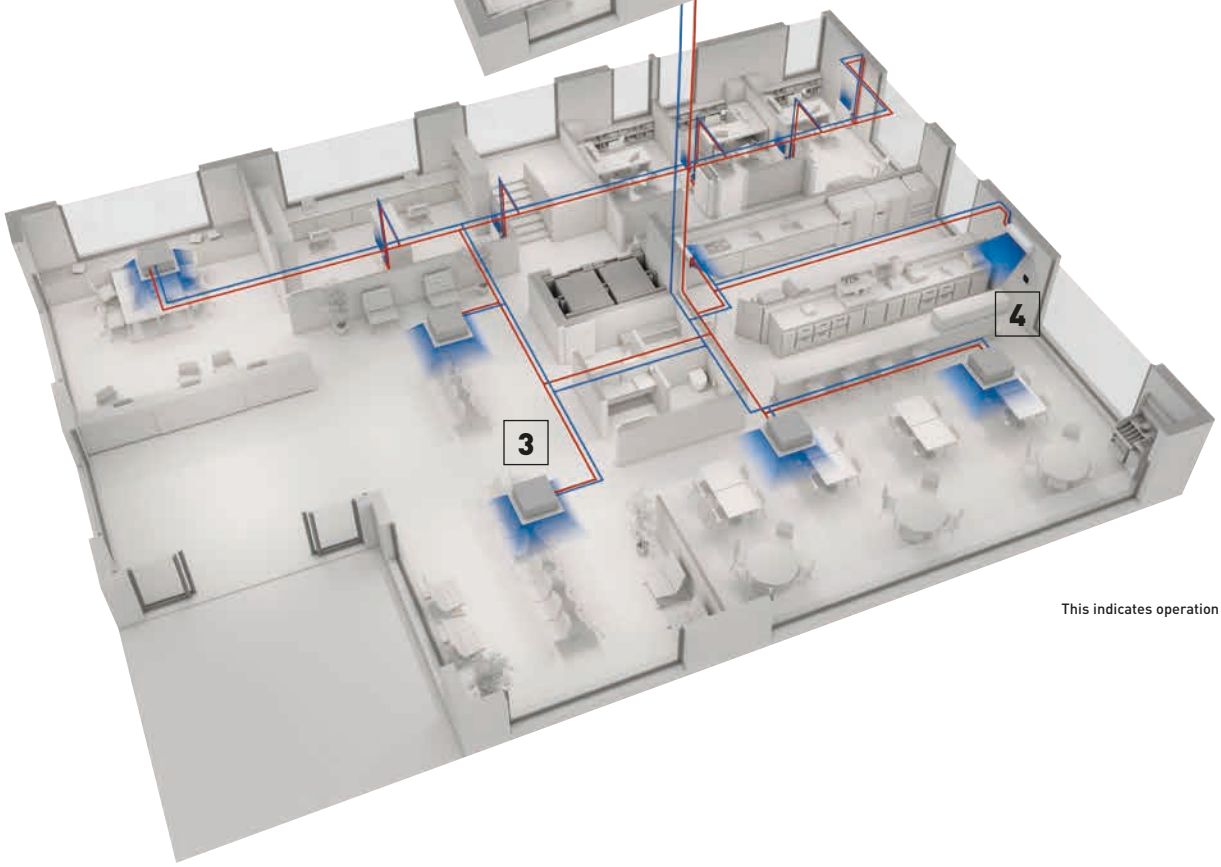
A wide variety of fan coils.
A wide variety of units to suit your needs, with flexible installation options. High efficiency and low noise operation allows for optimum comfort.
Operation in heating and cooling is possible.

4

Intuitive controllers for fan coils.
Controllers with sophisticated designs provide a user friendly interface. An easy and low cost integration to building management systems.



This indicates operation in winter.



This indicates operation in summer.

ECOi-W R32, the new range of sustainable chiller solutions to suit a variety of commercial and industrial applications

ECOi-W provides the optimal performance in any climatic condition.

1 High efficiency level

· High efficiency levels thanks to an efficient compressor's performance, specially designed for R32 refrigerant.

2 R32 Refrigerant

· Thanks to a GWP (Global Warming Potential) of 675, this refrigerant is 3 times less polluting than the standard R410A.

3 High flexibility

· Capacity range from 50 to 170 kW
· Customisable design
· Operating range: -15 °C (heating) to 48 °C (cooling)

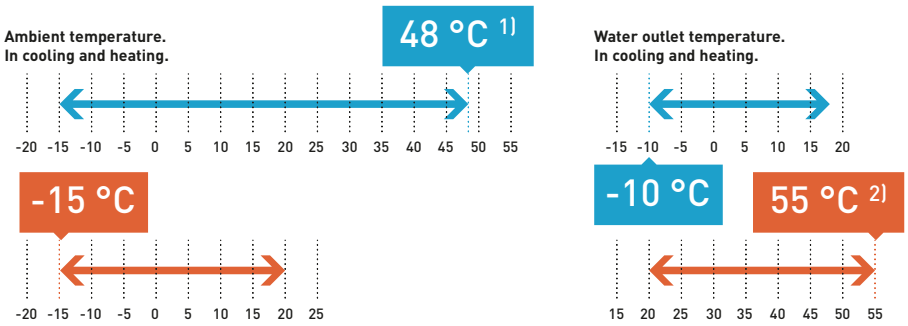
4 High quality

· Defrost limiting coil design
· Optimised design for service and maintenance
· Compact footprint

Operating conditions

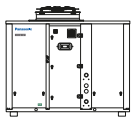
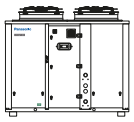
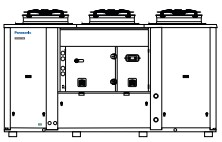
Panasonic ECOi-W provides a wide operating range from -15 °C in heating to 48 °C in cooling.

Water outlet temperature in cooling.
A water outlet temperature of -10 °C in cooling offers a uniqueness to the ECOi-W Series, which can ensure the operation temperature of the process equipment in factories.



Cooling: Outside air temperature (°C (DB)). Heating: Outside air temperature (°C (WB)).
1) 47 °C (models 150 - 170). 2) 53 °C (models 150 - 170).

ECOi-W R32 line-up

	ECOi-W R32 size	50	60	70	75	85	100	115	130	150	170
Cooling only range	Cooling capacities (kW)	52,6	60,4	70,0	75,3	84,2	102,0	121,0	135,0	156,0	176,0
	SEER	4,23	4,40	4,57	4,60	4,52	4,30	4,53	4,47	4,64	4,56
Heat pump range	ECOi-W R32 size	50	60	70	75	85	100	115	130	150	170
	Cooling capacities (kW)	49,9	60,4	70,0	75,3	84,2	102,0	121,0	135,0	156,0	176,0
	Heating capacities (kW)	53,5	61,5	71,7	80,0	86,2	105,0	123,0	137,0	158,0	182,0
	SEER 1)	4,36	4,32	4,54	4,47	4,48	4,35	4,34	4,33	4,61	4,62
	SCOP 1)	3,63	3,52	3,55	3,57	3,57	3,63	3,60	3,73	3,65	3,60
	Energy efficiency class (heating) 1) 2)	A+	A+	A+	—	—	—	—	—	—	—
	Dimension (H x W x D)	 1986x2180x1160		 1986x2180x1160		 2286x2180x1160				 2285 x 3789 x 1151	

1) Those are the data with variable flow. 2) Following Eurovent and COMMISSION REGULATION (EU) No 811/2013 for low-temperature heat pumps. Scale from A+++ to D, as of 26th September 2019.

ECOi-W R32. Quality, efficiency and sustainability

Offering a highly efficient and environmentally friendly solution; the combination of a 3 times less polluting refrigerant along with a new generation of outdoor heat exchangers helps to reduce the carbon footprint of each unit by 84%.[1]
Better for your buildings, therefore better for the planet.

Key points

- 10 sizes - 4 chassis
- Cooling only or Reversible units
- Low GWP R32 refrigerant
- High efficiency
- Wide operating limits
- Low footprint
- New advanced control system
- Easy maintenance
- Standard or Super low noise versions
- Remotely controllable with ECOi-W Cloud
- 100% factory tested

Outstanding water pump configuration

Units can be equipped with a variable speed pump that automatically adjusts its speed according to the required capacity.
Compared to a fixed-speed pump, and depending on the operating profile of a pump working at partial load, the annual energy consumption of the pump can be reduced.

GWP - Measurement scale.

1) Comparison made between equivalent units operating respectively with R410A and R32 refrigerants. Impact only considers the refrigerants and not the units as a whole. 2) U-150 R32 Cooling Only. 3) U-130 R32 Heat Pump Chiller.

Compact units

The ECOi-W R32 range has been designed in a compact manner to ensure the smallest possible footprint. The first chassis measures 2,53 m^2 and the third chassis features **one of the smallest footprint on the market** with an average ratio of 37 kW/m^2.

Super low noise versions

For the entire range, customers can choose between a standard unit or a super low noise version. The super low noise version features EC fans and compressor sound jackets for improved sound levels.

New advanced control system

The ECOi-W R32 units are equipped with a brand-new controller and a user-friendly external control panel that displays the operating parameters and alarms.

Optimised for EC fans control and electronic expansion valve management, the new controller comes built-in with the following communication protocols: Modbus RTU, Modbus TCP/IP, Bacnet MSTP, Bacnet IP.

EC fans

For an even better efficiency level and improved acoustic performance, ECOi-W R32 units can be equipped with EC fans*.

*EC type high pressure fans also available.

Removable panels

Great accessibility to internal components for easy service operations.

Highly optimised external heat exchanger

New coil design enables a refrigerant charge reduction of 40%.

Scroll Compressors

The two Scroll compressors are optimized for the R32 refrigerant and are covered with sound jackets in "Super low noise" (S) versions.

Electronic expansion valve

This reliable and high-performance valve minimises overheating of the evaporator. It is directly managed from the control system.

Range of ECOi-W R32 outdoor units

Page	Outdoor units	50 kW	60 kW	70 kW	75 kW
	ECOi-W R32 50 to 60				
P. 14	Cooling only	U-050CQNB / U-050CQBM / U-050CRNB / U-050CRBM / U-050CSNB / U-050CSBM	U-060CQNB / U-060CQBM / U-060CRNB / U-060CRBM / U-060CSNB / U-060CSBM		
P. 20	Heat pump	U-050CMNB / U-050CMBM / U-050CNNB / U-050CNBM / U-050CONB / U-050COBM	U-060CMNB / U-060CMBM / U-060CNNB / U-060CNBM / U-060CONB / U-060COBM		
	ECOi-W R32 70 to 75				
P. 14	Cooling only			U-070CQNB / U-070CQBM / U-070CRNB / U-070CRBM / U-070CSNB / U-070CSBM	U-075CQNB / U-075CQBM / U-075CRNB / U-075CRBM / U-075CSNB / U-075CSBM
P. 20	Heat pump			U-070CMNB / U-070CMBM / U-070CNNB / U-070CNBM / U-070CONB / U-070COBM	U-075CMNB / U-075CMBM / U-075CNNB / U-075CNBM / U-075CONB / U-075COBM
	ECOi-W R32 85 to 130				
P. 16	Cooling only				
P. 22	Heat pump				
	ECOi-W R32 150 to 170				
P. 18	Cooling only				
P. 24	Heat pump				

85 kW	100 kW	115 kW	130 kW	150 kW	170 kW
					
U-085CQNB / U-085CQBL / U-085CRNB / U-085CRBL / U-085CSNB / U-085CSBL	U-100CQNB / U-100CQBL/ U-100CRNB / U-100CRBL / U-100CSNB / U-100CSBL	U-115CQNB / U-115CQBL/ U-115CRNB / U-115CRBL / U-115CSNB / U-115CSBL	U-130CQNB / U-130CQBL / U-130CRNB / U-130CRBL / U-130CSNB / U-130CSBL		
U-085CMNB / U-085CMBL / U-085CNNB / U-085CNBL / U-085CONB / U-085COBL	U-100CMNB / U-100CMBL / U-100CNNB / U-100CNBL / U-100CONB / U-100COBL	U-115CMNB / U-115CMBL / U-115CNNB / U-115CNBL / U-115CONB / U-115COBL	U-130CONB / U-130COBL / U-130CMNB / U-130CMBL / U-130CNNB / U-130CNBL		
					
				U-150CQNB / U-150CQBL / U-150CRNB / U-150CRBL / U-150CSNB / U-150CSBL	U-170CQNB / U-170CQBL / U-170CRNB / U-170CRBL / U-170CSNB / U-170CSBL
				U-150CMNB / U-150CMBL / U-150CNNB / U-150CNBL / U-150CONB / U-150COBL	U-170CMNB / U-170CMBL / U-170CNNB / U-170CNBL / U-170CONB / U-170COBL

U - 050/060/070/075 CQ, CR, CS

Cooling capacity: 52,6 to 75,3 kW

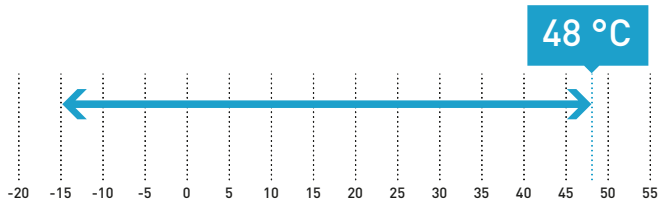
High seasonal efficiency and wide range options to meet the exact requirements of your project.

- High seasonal efficiency
- Ambient temperature operating range: -15 to +48 °C
- Water outlet temperature range: -10 to +18 °C
- Optional acoustically insulating compressor jacket
- Optimised design for service and maintenance
- Simple user friendly control as standard
- Modbus RTU & TCP/IP, BACnet MSTP & IP as standard
- Electronic expansion valves

Technical focus

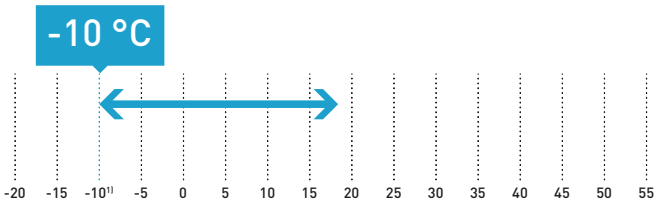
- Chiller type: cooling only
- Compressor type (number): Scroll compressors (2)
- Refrigerant type: R32
- Refrigerant circuit: 1
- Fan type (number): axial fan (1 for 50/60, 2 for 70/75), optional EC and high pressure EC fans
- Heat exchanger: stainless steel plate heat exchanger
- Flow switch, water safety & air purge valves included
- Water filter included (mandatory to be installed on site)
- Night mode setting to save energy and reduce noise level
- Water compensation curve control

Ambient temperature.



Cooling: Outside air temperature (°C (DB)).

Water outlet temperature.



Available options

Options					
Pump	**Pump drive**	**Hydraulic options**	**Ambient options**	**Control options**	**Electrical options**
Single pump low pressure	Fixed speed	Low water pressure sensor [1]	Finned coil treatment - epoxy	Energy meter	EC fan(s) option
	Variable twin speed (single pump)	Desuperheater	Finned coil Blygold treatment	Digital input for: Cooling/ heating or Night mode or Load Shedding	Soft starter
Single pump high pressure		Water isolation valves	Outdoor coil protection grid		
	Variable twin speed (double pump)		Rubber pads (supplied loose)		**Refrigerant options**
Double pump low pressure			Spring damper (supplied loose)		Refrigerant gauges (HP and LP manometers)
	Constant outlet pressure (single pump) [2]		Container transport		
Double pump high pressure			Acoustically insulating compressor jacket		
	Constant outlet pressure (double pump) [2]				

1) Low water pressure sensor is supplied loose when selected as an option without pump and hydraulic kit. To be installed on site. 2) Available on special quotation, please contact your local sales representative

Optional remote control.
PAW-SYSREMKIT1

Optional Shut off valves kit for model 50 - 75.
PAW-SYSS0V4

REFER TO PAGE 26 TO SEE MORE OPTIONS FOR R32 OUTDOOR UNITS

Model			**50**	**60**	**70**	**75**
AC fan model w/o buffer / w buffer			**U-050CQNB/U-050CQBM**	**U-060CQNB/U-060CQBM**	**U-070CQNB/U-070CQBM**	**U-075CQNB/U-075CQBM**
EC fan model w/o buffer / w buffer			**U-050CRNB/U-050CRBM**	**U-060CRNB/U-060CRBM**	**U-070CRNB/U-070CRBM**	**U-075CRNB/U-075CRBM**
High pressure EC fan model w/o buffer / w buffer			**U-050CSNB/U-050CSBM**	**U-060CSNB/U-060CSBM**	**U-070CSNB/U-070CSBM**	**U-075CSNB/U-075CSBM**
Power supply	Voltage	V	400	400	400	400
	Phase		Three phase	Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50	50
Cooling capacity [1]		kW	52,6	60,4	70,0	75,3
Input power cooling [1]		kW	16,8	19,8	22,3	25,7
Total EER 100 % [1]			3,12	3,05	3,15	2,93
SEER [2]			**4,23**	**4,40**	**4,57**	**4,60**
$\eta_{s,c}$ [2]		**%**	**166**	**173**	**180**	**181**
Startup type			Direct	Direct	Direct	Direct
Maximum operating current		A	43,3	52,7	60	69,4
Startup current w/o softstarter / w softstarter		A	161/119	162/121	200/148	209/157
Sound power (w AC / EC fans)		dB(A)	83,2	83,8	81,3	81,3
Sound pressure (w AC / EC fans) [3]		dB(A)	51,4	52	49,5	49,5
Sound power (w HP EC fans)		dB(A)	87,2	87,3	89,2	89,3
Sound pressure (w HP EC fans) [3]		dB(A)	55,4	55,5	57,4	57,5
Dimension (w AC fans) w/o buffer	H x W x D	mm	1986 x 2180 x 1160	1986 x 2180 x 1160	1986 x 2180 x 1160	1986 x 2180 x 1160
Dimension (w AC fans) w buffer	H x W x D	mm	1986 x 2680 x 1160	1986 x 2680 x 1160	1986 x 2680 x 1160	1986 x 2680 x 1160
Dimension (w EC / HP EC fans) w/o buffer	H x W x D	mm	2034 x 2180 x 1160	2034 x 2180 x 1160	2034 x 2180 x 1160	2034 x 2180 x 1160
Dimension (w EC / HP EC fans) w buffer	H x W x D	mm	2034 x 2680 x 1160	2034 x 2680 x 1160	2034 x 2680 x 1160	2034 x 2680 x 1160
Operating weight w/o buffer		kg	527	547	621	637
Operating weight w buffer		kg	1018	1038	1114	1130
Refrigerant (R32)		kg	7,9	8,1	10,3	10,6
Number of refrigerant circuit			1	1	1	1
Compressors						
Number			2	2	2	2
Type			Scroll	Scroll	Scroll	Scroll
Part load step		%	0/47/53/100	0/41/59/100	0/40/60/100	0/46/54/100
Crankcase heater		W	70/70	70/66	70/66	66/66
Evaporator						
Number			1	1	1	1
Type			Plate	Plate	Plate	Plate
Nominal water flow	Cool	m³/h	9,2	10,6	12,2	13,2
Water pressure drop	Cool	kPa	35,4	46,8	33,1	38,2
Water volume		l	4,1	4,1	6,1	6,1
Antifreeze heater		W	30	30	2x30	2x30
Coils						
Number			1	1	2	2
Frontal surface		m²	4,2	4,2	5,6	5,6
Number of rows			2	2	2	2
Fans standard						
Number			1	1	2	2
Air flow	AC	m³/h	21200	21200	30000	30000
Rotation speed	AC	r.p.m.	870	870	690	690
Power input (each fan)	AC	W	2,1	2,1	1	1
Air flow	EC	m³/h	21200	21200	30000	30000
Rotation speed	EC	r.p.m.	780	780	620	620
Power input (each fan)	EC	W	1,1	1,1	0,6	0,6
Air flow	HP EC	m³/h	21200	21200	30000	30000
Rotation speed	HP EC	r.p.m.	940	940	940	940
Power input (each fan)	HP EC	W	1,6	1,6	1,9	1,9
Static pressure		Pa	85	85	180	180
Water connections						
Type			Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228
Inlet - diameter	Evaporator	Inch	2	2	2	2
Outlet - diameter	Evaporator	Inch	2	2	2	2
Inlet - diameter	Desuperheater	Inch	1 ¼	1 ¼	1 ¼	1 ¼
Outlet - diameter	Desuperheater	Inch	1 ¼	1 ¼	1 ¼	1 ¼

1) Data refers to 7 °C leaving chilled water temperature and 35 °C condenser air temperature, according EN14511 standard. 2) Following COMMISSION REGULATION (EU) No 2016/2281 for comfort application chillers. 3) Sound pressure levels calculated at 10 meters. Sound pressure levels refer to ISO standard 3744 with parallel piped shape.
* w: with, w/o: without. ** The data are calculated with variable flow.

Accessories	
PAW-SYSREMKIT1	Remote control
PAW-CM000SP041	Cloudgate plug and play IP65 box mobile 4G Europe
PAW-CM000K0001	Extension kit and cable glande for mobile (2/4G) antenna (3 m)

Accessories	
PAW-00SRTS011	Tservice wireless fee for 1 year
PAW-SYSS0V4	Shut off valves kit for model 50 - 75

HIGH SEER 4,60 | ErP | ULTIMATE CUSTOMISATION | 48 °C COOLING MODE | BMS CONNECTIVITY

Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

U - 085/100/115/130 CQ, CR, CS

Cooling capacity: 84,2 to 135,0 kW

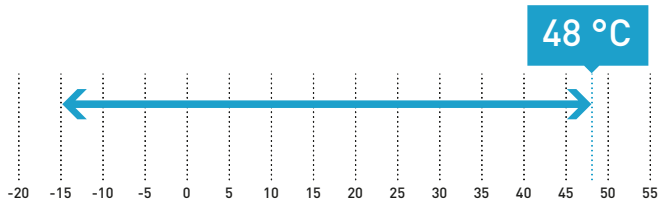
Customizable design gives high flexibility. Wide range of communication protocols fulfill the requirements in hotels, offices, industry applications.

- High seasonal efficiency
- Ambient temperature operating range: -15 to +48 °C
- Water outlet temperature range: -10 to +18 °C
- Optional acoustically insulating compressor jacket
- Optimised design for service and maintenance
- Simple user friendly control as standard
- Modbus RTU & TCP/IP, BACnet MSTP & IP as standard
- Electronic expansion valves

Technical focus

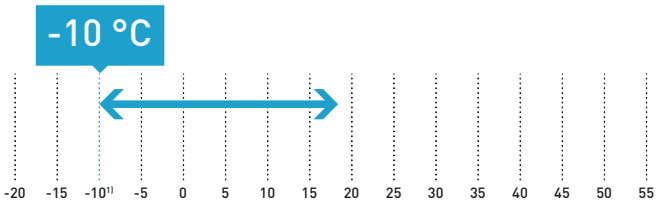
- Chiller type: cooling only
- Compressor type (number): Scroll compressors (2)
- Refrigerant type: R32
- Refrigerant circuit: 1
- Fan type (number): axial fan (2), optional EC and high pressure EC fans
- Heat exchanger: stainless steel plate heat exchanger
- Flow switch, water safety & air purge valves included
- Water filter included (mandatory to be installed on site)
- Night mode setting to save energy and reduce noise level
- Water compensation curve control

Ambient temperature.



Cooling: Outside air temperature (°C (DB)).

Water outlet temperature.



Available options

Options					
Pump	**Pump drive**	**Hydraulic options**	**Ambient options**	**Control options**	**Electrical options**
Single pump low pressure	Fixed speed	Low water pressure sensor [1]	Finned coil treatment - epoxy	Energy meter	EC fan(s) option
	Variable twin speed (single pump)	Desuperheater	Finned coil Blygold treatment	Digital input for: Cooling/ heating or Night mode or Load Shedding	Soft starter
Single pump high pressure		Water isolation valves	Outdoor coil protection grid		
	Variable twin speed (double pump)		Rubber pads (supplied loose)		**Refrigerant options**
Double pump low pressure			Spring damper (supplied loose)		Refrigerant gauges (HP and LP manometers)
	Constant outlet pressure (single pump) [2]		Container transport		
Double pump high pressure			Acoustically insulating compressor jacket		
	Constant outlet pressure (double pump) [2]				

1) Low water pressure sensor is supplied loose when selected as an option without pump and hydraulic kit. To be installed on site. 2) Available on special quotation, please contact your local sales representative

Optional remote control.
PAW-SYSREMKIT1

Optional Shut off valves kit for model 85-170.
PAW-SYSS0V5

REFER TO PAGE 26 TO SEE MORE OPTIONS FOR R32 OUTDOOR UNITS

Model			**85**	**100**	**115**	**130**
AC fan model w/o buffer / w buffer			**U-085CQNB/U-085CQBL**	**U-100CQNB/U-100CQBL**	**U-115CQNB/U-115CQBL**	**U-130CQNB/U-130CQBL**
EC fan model w/o buffer / w buffer			**U-085CRNB/U-085CRBL**	**U-100CRNB/U-100CRBL**	**U-115CRNB/U-115CRBL**	**U-130CRNB/U-130CRBL**
High pressure EC fan model w/o buffer / w buffer			**U-085CSNB/U-085CSBL**	**U-100CSNB/U-100CSBL**	**U-115CSNB/U-115CSBL**	**U-130CSNB/U-130CSBL**
Power supply	Voltage	V	400	400	400	400
	Phase		Three phase	Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50	50
Cooling capacity [1]		kW	84,2	102,2	121,0	135,0
Input power cooling [1]		kW	29,1	34,1	37,8	42,6
Total EER 100 % [1]			2,89	3,00	3,19	3,16
SEER [2]			**4,52**	**4,30**	**4,53**	**4,47**
$\eta_{s,c}$ [2]		**%**	**178**	**169**	**178**	**176**
Startup type			Direct	Direct	Direct	Direct
Maximum operating current		A	75,0	86,6	93,8	104,2
Startup current w/o softstarter / w softstarter		A	215/129	326/240	333/247	343/257
Sound power (w AC / EC fans)		dB(A)	84,4	86,0	87,0	87,4
Sound pressure (w AC / EC fans) [3]		dB(A)	52,5	54,1	55,1	55,5
Sound power (w HP EC fans)		dB(A)	89,3	89,7	90,0	90,2
Sound pressure (w HP EC fans) [3]		dB(A)	57,4	57,8	58,1	58,3
Dimension (w AC fans) w/o buffer	H x W x D	mm	2286 x 2180 x 1160	2286 x 2180 x 1160	2286 x 2180 x 1160	2286 x 2180 x 1160
Dimension (w AC fans) w buffer	H x W x D	mm	2286 x 2680 x 1160	2286 x 2680 x 1160	2286 x 2680 x 1160	2286 x 2680 x 1160
Dimension (w EC / HP EC fans) w/o buffer	H x W x D	mm	2334 x 2180 x 1160	2334 x 2180 x 1160	2334 x 2180 x 1160	2334 x 2180 x 1160
Dimension (w EC / HP EC fans) w buffer	H x W x D	mm	2334 x 2680 x 1160	2334 x 2680 x 1160	2334 x 2680 x 1160	2334 x 2680 x 1160
Operating weight w/o buffer		kg	701	731	813	815
Operating weight w buffer		kg	1202	1232	1317	1319
Refrigerant (R32)		kg	12,8	10,9	13	15
Number of refrigerant circuit			1	1	1	1
Compressors						
Number			2	2	2	2
Type			Scroll	Scroll	Scroll	Scroll
Part load step		%	0/50/100	0/34/66/100	0/44/56/100	0/50/100
Crankcase heater		W	66/66	66/66	66/66	66/66
Evaporator						
Number			1	1	1	1
Type			Plate	Plate	Plate	Plate
Nominal water flow	Cool	m³/h	14,7	17,9	21,1	23,6
Water pressure drop	Cool	kPa	22,6	33,5	46,6	58,1
Water volume		l	7,8	7,8	7,8	7,8
Antifreeze heater		W	2 x 30	2 x 30	2 x 30	2 x 30
Coils						
Number			2	2	2	2
Frontal surface		m²	6,4	6,4	6,4	6,4
Number of rows			2	2	3	3
Fans standard						
Number			2	2	2	2
Air flow	AC	m³/h	41300	41300	41300	41300
Rotation speed	AC	r.p.m.	870	870	870	870
Power input (each fan)	AC	W	2,1	2,1	1,6	1,6
Air flow	EC	m³/h	41300	41300	41300	41300
Rotation speed	EC	r.p.m.	780	780	780	780
Power input (each fan)	EC	W	0,8	0,8	1	1
Air flow	HP EC	m³/h	41300	41300	41300	41300
Rotation speed	HP EC	r.p.m.	940	940	940	940
Power input (each fan)	HP EC	W	1,6	1,6	1,6	1,6
Static pressure		Pa	85	85	85	85
Water connections						
Type			Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228
Inlet - diameter	Evaporator	Inch	2 ½	2 ½	2 ½	2 ½
Outlet - diameter	Evaporator	Inch	2 ½	2 ½	2 ½	2 ½
Inlet - diameter	Desuperheater	Inch	1 ¼	1 ¼	1 ¼	1 ¼
Outlet - diameter	Desuperheater	Inch	1 ¼	1 ¼	1 ¼	1 ¼

1) Data refers to 7 °C leaving chilled water temperature and 35 °C condenser air temperature, according EN14511 standard. 2) Following COMMISSION REGULATION (EU) No 2016/2281 for comfort application chillers. 3) Sound pressure levels calculated at 10 meters. Sound pressure levels refer to ISO standard 3744 with parallel piped shape.
* w: with, w/o: without. ** The data are calculated with variable flow.

Accessories	
PAW-SYSREMKIT1	Remote control
PAW-CM000SP041	Cloudgate plug and play IP65 box mobile 4G Europe
PAW-CM000K0001	Extension kit and cable glande for mobile (2/4G) antenna (3 m)

Accessories	
PAW-00SRTS011	Tservice wireless fee for 1 year
PAW-SYSS0V5	Shut off valves kit for model 80 - 170

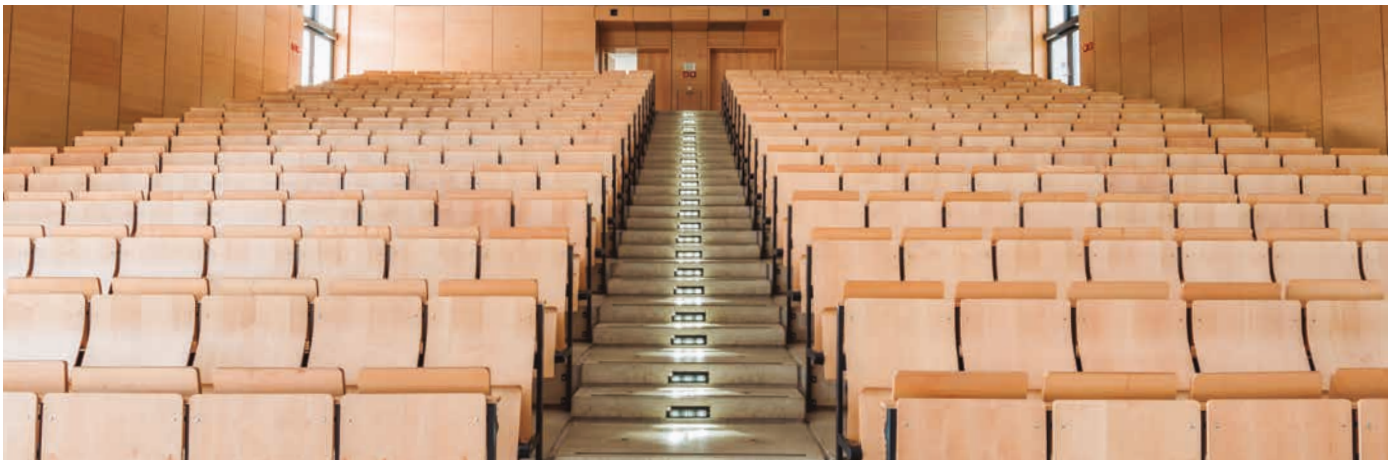
HIGH SEER 4,55 | ErP | ULTIMATE CUSTOMISATION | 48 °C COOLING MODE | BMS CONNECTIVITY

Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

U - 150/170 CQ, CR, CS

Cooling capacity: 156,0 to 176,0 kW

Powerful and efficient operation with 2 scroll compressors and superior flexibility with plug and play hydraulic options.

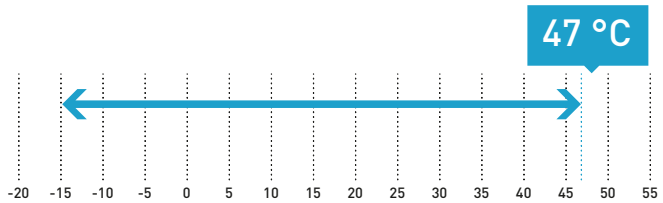


- High seasonal efficiency
- Ambient temperature operating range: -15 to +47 °C
- Water outlet temperature range: -10 to +18 °C
- Victaulic water connections
- Optimised design for service and maintenance
- Simple user friendly control as standard
- Modbus RTU & TCP/IP, BACnet MSTP & IP as standard
- Electronic expansion valves

Technical focus

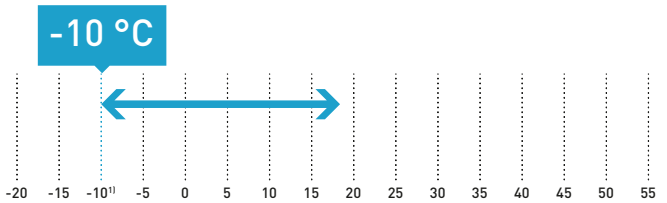
- Chiller type: cooling only
- Compressor type (number): Scroll compressors (2)
- Refrigerant type: R32
- Refrigerant circuit: 2
- Fan type (number): axial fan (3), optional EC and high pressure EC fans
- Heat exchanger: stainless steel plate heat exchanger
- Flow switch, water safety & air purge valves included
- Water filter included (mandatory to be installed on site)
- Night mode setting to save energy and reduce noise level
- Water compensation curve control

Ambient temperature.



Cooling: Outside air temperature (°C (DB)).

Water outlet temperature.



Available options

Options					
Pump	**Pump drive**	**Hydraulic options**	**Ambient options**	**Control options**	**Electrical options**
Single pump low pressure	Fixed speed	Low water pressure sensor [1]	Finned coil treatment - epoxy	Energy meter	EC fan(s) option
Single pump high pressure	Variable twin speed (single pump)	Desuperheater	Finned coil Blygold treatment	Digital input for: Cooling/ heating or Night mode or Load Shedding	Power factor correction capacitors
Double pump low pressure	Variable twin speed (double pump)	Water isolation valves	Outdoor coil protection grid		Soft starter
Double pump high pressure	Constant outlet pressure (single pump) [2]		Rubber pads (supplied loose)		
	Constant outlet pressure (double pump) [2]		Spring damper (supplied loose)		**Refrigerant options**
			Container transport		Refrigerant gauges (HP and LP manometers)
			Acoustically insulating compressor jacket		

1) Low water pressure sensor is supplied loose when selected as an option without pump and hydraulic kit. To be installed on site. 2) Available on special quotation, please contact your local sales representative

Optional remote control.
PAW-SYSREMKIT1

Optional Shut off valves kit for model 85-170.
PAW-SYSSOV5

REFER TO PAGE 26 TO SEE MORE OPTIONS FOR R32 OUTDOOR UNITS

Model			**150**	**170**
AC fan model w/o buffer / w buffer			**U-150CQNB / U-150CQBL**	**U-170CQNB / U-170CQBL**
EC fan model w/o buffer / w buffer			**U-150CRNB / U-150CRBL**	**U-170CRNB / U-170CRBL**
High pressure EC fan model w/o buffer / w buffer			**U-150CSNB / U-150CSBL**	**U-170CSNB / U-170CSBL**
Power supply	Voltage	V	400	400
	Phase		Three phase	Three phase
	Frequency	Hz	50	50
Cooling capacity [1]		kW	156,0	176,0
Input power cooling [1]		kW	47,9	55,5
Total EER 100 % [1]			3,26	3,17
SEER [2]			**4,64**	**4,56**
$\eta_{s,c}$ [2]		**%**	**183**	**179**
Startup type			Direct	Direct
Maximum operating current		A	125	142
Startup current w/o softstarter / w softstarter		A	363/277	380/294
Sound power (w AC / EC fans)		dB(A)	88,9	91,1
Sound pressure (w AC / EC fans) [3]		dB(A)	57,0	59,2
Sound power (w HP EC fans)		dB(A)	91,6	92,3
Sound pressure (w HP EC fans) [3]		dB(A)	59,7	60,4
Dimension (w AC fans) w/o buffer	H x W x D	mm	2285 x 3789 x 1151	2285 x 3789 x 1151
Dimension (w AC fans) w buffer	H x W x D	mm	2285 x 3789 x 1151	2285 x 3789 x 1151
Dimension (w EC / HP EC fans) w/o buffer	H x W x D	mm	2333 x 3789 x 1151	2333 x 3789 x 1151
Dimension (w EC / HP EC fans) w buffer	H x W x D	mm	2333 x 3789 x 1151	2333 x 3789 x 1151
Operating weight w/o buffer		kg	1265	1279
Operating weight w buffer		kg	1683	1697
Refrigerant (R32)		kg	19,2	20,0
Number of refrigerant circuit			1	1
Compressors				
Number			2	2
Type			Scroll	Scroll
Part load step		%	0/45/55/100	0/38/62/100
Crankcase heater		W	66/105	66/105
Evaporator				
Number			1	1
Type			Plate	Plate
Nominal water flow	Cool	m³/h	27,3	30,7
Water pressure drop	Cool	kPa	39,1	49,7
Water volume		l	11,5	12,9
Antifreeze heater		W	130	130
Coils				
Number			2	2
Frontal surface		m²	8,7	8,7
Number of rows			3	3
Fans standard				
Number			3	3
Air flow	AC	m³/h	56200	56200
Rotation speed	AC	r.p.m.	870	870
Power input (each fan)	AC	W	1,4	1,4
Air flow	EC	m³/h	56200	56200
Rotation speed	EC	r.p.m.	780	780
Power input (each fan)	EC	W	0,8	0,8
Air flow	HP EC	m³/h	56200	56200
Rotation speed	HP EC	r.p.m.	940	940
Power input (each fan)	HP EC	W	1,7	1,7
Static pressure	HP EC	Pa	110	110
Water connections				
Type			Male gas threaded BSPP ISO 229	Male gas threaded BSPP ISO 230
Inlet - diameter	Evaporator	Inch	2 ½	2 ½
Outlet - diameter	Evaporator	Inch	2 ½	2 ½
Inlet - diameter	Desuperheater	Inch	1 ¼	1 ¼
Outlet - diameter	Desuperheater	Inch	1 ¼	1 ¼

1) Data refers to 7 °C leaving chilled water temperature and 35 °C condenser air temperature, according EN14511 standard. 2) Following COMMISSION REGULATION (EU) No 2016/2281 for comfort application chillers. 3) Sound pressure levels calculated at 10 meters. Sound pressure levels refer to ISO standard 3744 with parallel piped shape.
* w: with, w/o: without. ** The data are calculated with variable flow.

Accessories	
PAW-SYSREMKIT1	Remote control
PAW-CM000SP041	Cloudgate plug and play IP65 box mobile 4G Europe
PAW-CM000K0001	Extension kit and cable glande for mobile (2/4G) antenna (3 m)

Accessories	
PAW-00SRTS011	Tservice wireless fee for 1 year
PAW-SYSSOV5	Shut off valves kit for model 80 - 170

HIGH SEER 4,64 | ErP | ULTIMATE CUSTOMISATION | 47 °C COOLING MODE | BMS CONNECTIVITY

Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

U - 050/060/070/075 CM, CN, CO

Cooling capacity: 49,9 to 75,3 kW
Heating capacity: 53,5 to 80,0 kW

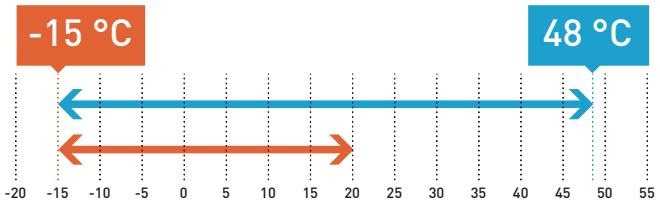
High seasonal efficiency in cooling, maximum SEER 4,54 in this range. ECOi-W Series offers a variety of options to meet your needs.

- High seasonal efficiency in cooling and heating
- Ambient temperature operating range: -15 to +48 °C in cooling, -15 to +20 °C in heating
- Water outlet temperature range: -10 to +18 °C in cooling, +20 to +55 °C in heating
- Optional acoustically insulating compressor jacket
- Optimised design for service and maintenance
- Simple user friendly control as standard
- Modbus RTU & TCP/IP, BACnet MSTP & IP as standard
- Electronic expansion valves

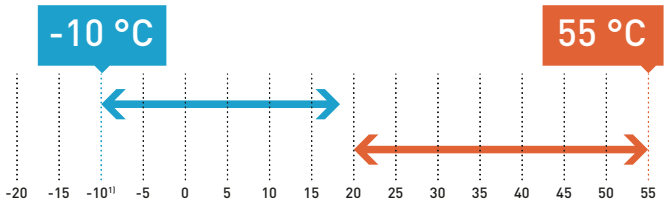
Technical focus

- Chiller type: heat pump
- Compressor type (number): Scroll compressors (2)
- Refrigerant type: R32
- Refrigerant circuit: 1
- Fan type (number): axial fan (1 for 50/60, 2 for 70/75), optional EC and high pressure EC fans
- Heat exchanger: stainless steel plate heat exchanger
- Flow switch, water safety & air purge valves included
- Water filter included (mandatory to be installed on site)
- Night mode setting to save energy and reduce noise level
- Water compensation curve control
- Bluefin anti-corrosion coating

Ambient temperature.



Water outlet temperature.



Cooling: Outside air temperature (°C (DB)). Heating: Outside air temperature (°C (WB)).

Available options

Options					
Pump	**Pump drive**	**Hydraulic options**	**Ambient options**	**Control options**	**Electrical options**
Single pump low pressure	Fixed speed	Low water pressure sensor [1]	Finned coil treatment - epoxy	Energy meter	EC fan(s) option
	Variable twin speed (single pump)	Desuperheater	Finned coil Blygold treatment	Digital input for: Cooling/ heating or Night mode or Load Shedding	Soft starter
Single pump high pressure		Water isolation valves	Outdoor coil protection grid		
	Variable twin speed (double pump)		Rubber pads (supplied loose)		**Refrigerant options**
Double pump low pressure			Spring damper (supplied loose)		Refrigerant gauges (HP and LP manometers)
	Constant outlet pressure (single pump) [2]		Container transport		
Double pump high pressure			Acoustically insulating compressor jacket		
	Constant outlet pressure (double pump) [2]				

1) Low water pressure sensor is supplied loose when selected as an option without pump and hydraulic kit. To be installed on site. 2) Available on special quotation, please contact your local sales representative

Optional remote control.
PAW-SYSREMKIT1

Optional Shut off valves kit for model 50 - 75.
PAW-SYSS0V4

REFER TO PAGE 26 TO SEE MORE OPTIONS FOR R32 OUTDOOR UNITS

Model			50	60	70	75
AC fan model w/o buffer / w buffer			**U-050CMNB/U-050CMBM**	**U-060CMNB/U-060CMBM**	**U-070CMNB/U-070CMBM**	**U-075CMNB/U-075CMBM**
EC fan model w/o buffer / w buffer			**U-050CNNB/U-050CNBM**	**U-060CNNB/U-060CNBM**	**U-070CNNB/U-070CNBM**	**U-075CNNB/U-075CNBM**
High pressure EC fan model w/o buffer / w buffer			**U-050CONB/U-050COBM**	**U-060CONB/U-060COBM**	**U-070CONB/U-070COBM**	**U-075CONB/U-075COBM**
Power supply	Voltage	V	400	400	400	400
	Phase		Three phase	Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50	50
Cooling capacity [1]		kW	49,9	60,4	70,0	75,3
Input power [1]		kW	17,0	19,8	22,3	25,7
Total EER 100 % [1]			2,94	3,05	3,15	2,93
SEER [2] [3]			**4,36**	**4,32**	**4,54**	**4,47**
$\eta_{s,c}$ [2] [3]		**%**	**171**	**170**	**178**	**176**
Heating capacity [4]		kW	53,5	61,5	71,7	80,0
Input power [4]		kW	17,3	19,5	22,2	24,7
SCOP [3] [5]			**3,63**	**3,52**	**3,55**	**3,57**
$\eta_{s,c}$ [3] [5]		**%**	**142**	**138**	**139**	**140**
Energy efficiency class (Scale A+++ to D) [6]			A+	A+	A+	-
Startup type			Direct	Direct	Direct	Direct
Maximum operating current		A	43,3	52,7	60,0	69,4
Startup current w/o softstarter / w softstarter		A	161/119	162/120	200/148	209/157
Sound power (w AC / EC fans)		dB(A)	83,2	83,8	81,3	81,3
Sound pressure (w AC / EC fans) [7]		dB(A)	51,4	52,0	49,5	49,5
Sound power (w HP EC fans)		dB(A)	87,2	87,3	89,2	89,3
Sound pressure (w HP EC fans) [7]		dB(A)	55,4	55,5	57,4	57,5
Dimension (w AC fans) w/o buffer	H x W x D	mm	1986 x 2180 x 1160	1986 x 2180 x 1160	1986 x 2180 x 1160	1986 x 2180 x 1160
Dimension (w AC fans) w buffer	H x W x D	mm	1986 x 2680 x 1160	1986 x 2680 x 1160	1986 x 2680 x 1160	1986 x 2680 x 1160
Dimension (w EC / HP EC fans) w/o buffer	H x W x D	mm	2034 x 2180 x 1160	2034 x 2180 x 1160	2034 x 2180 x 1160	2034 x 2180 x 1160
Dimension (w EC / HP EC fans) w buffer	H x W x D	mm	2034 x 2680 x 1160	2034 x 2680 x 1160	2034 x 2680 x 1160	2034 x 2680 x 1160
Operating weight w/o buffer		kg	527	547	621	637
Operating weight w buffer		kg	1018	1038	1114	1130
Refrigerant (R32)		kg	7,9	8,1	10,3	10,6
Number of refrigerant circuit			1	1	1	1
Compressors						
Number			2	2	2	2
Type			Scroll	Scroll	Scroll	Scroll
Part load step		%	0/47/53/100	0/41/59/100	0/40/60/100	0/46/54/100
Crankcase heater		W	70/70	70/66	70/66	66/66
Evaporator						
Number			1	1	1	1
Type			Plate	Plate	Plate	Plate
Nominal water flow	Cool / Heat	m³/h	8,7/9,3	10,6/10,7	12,2/12,5	13,2/13,9
Water pressure drop	Cool / Heat	kPa	31,8/36,4	46,8/48,1	33,1/34,4	38,2/42,8
Water volume		l	4,1	4,1	6,1	6,1
Antifreeze heater		W	30	30	2x30	2x30
Coils						
Number			1	1	2	2
Frontal surface		m²	4,2	4,2	5,6	5,6
Number of rows			2	2	2	2
Fans standard						
Number			1	1	2	2
Air flow		m³/h	21200/21200	21200/21200	30000/30000	30000/30000
Rotation speed	AC / EC	r.p.m.	870/780	870/780	690/620	690/620
Power input (each fan)		W	2,1/1,1	2,1/1,1	1,0/0,6	1,0/0,6
Air flow		m³/h	21200	21200	30000	30000
Rotation speed	HP EC	r.p.m.	940	940	940	940
Power input (each fan)		W	1,6	1,6	1,9	1,9
Static pressure		Pa	85	85	180	180
Water connections						
Type			Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228
Inlet - Outlet - diameter	Evaporator	Inch	2 - 2	2 - 2	2 - 2	2 - 2
Inlet - Outlet - diameter	Desuperheater	Inch	1 ¼ - 1 ¼	1 ¼ - 1 ¼	1 ¼ - 1 ¼	1 ¼ - 1 ¼

1) Data refers to 7°C leaving chilled water temperature and 35°C condenser air temperature, according EN14511 standard. 2) Following COMMISSION REGULATION (EU) No 2016/2281 for comfort application chillers. 3) Those are the data with variable flow. 4) Data refers to 45°C leaving warm water temperature and 7°C ambient coil air temperature with 87% R.H., according EN14511 standard. 5) Following COMMISSION REGULATION (EU) No 813/2013 for low-temperature heat pumps. 6) Following Eurovent and COMMISSION REGULATION (EU) No 811/2013 for low-temperature heat pumps. Scale from A+++ to D, as of 26th September 2019. 7) Sound pressure levels calculated at 10 meters. Sound pressure levels refer to ISO standard 3744 with parallel piped shape.
* w: with, w/o: without.

Accessories	
PAW-SYSREMKIT1	Remote control
PAW-CM000SP041	Cloudgate plug and play IP65 box mobile 4G Europe
PAW-CM000K0001	Extension kit and cable glande for mobile (2/4G) antenna (3 m)

Accessories	
PAW-00SRTS011	Tservice wireless fee for 1 year
PAW-SYSS0V4	Shut off valves kit for model 50 - 75

HIGH SEER 4,54 | HIGH SCOP 3,62 | ErP | BLUEFIN | ULTIMATE CUSTOMISATION | AUTOMATIC FAN | -15 °C HEATING MODE | 48 °C COOLING MODE | BMS CONNECTIVITY

U - 085/100/115/130 CM, CN, CO

Cooling capacity: 84,2 to 135,0 kW
Heating capacity: 86,2 to 137,0 kW

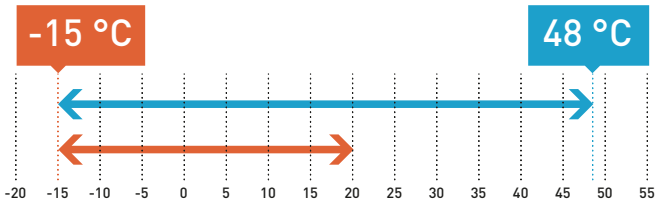
Customizable design gives high flexibility. Wide range of communication protocols fulfill the requirements in hotels, offices, industry applications.

- High seasonal efficiency in cooling and heating
- Ambient temperature operating range: -15 to +48 °C in cooling, -15 to +20 °C in heating
- Water outlet temperature range: -10 to +18 °C in cooling, +20 to +55 °C in heating
- Optional acoustically insulating compressor jacket
- Optimised design for service and maintenance
- Simple user friendly control as standard
- Modbus RTU & TCP/IP, BACnet MSTP & IP as standard
- Electronic expansion valves

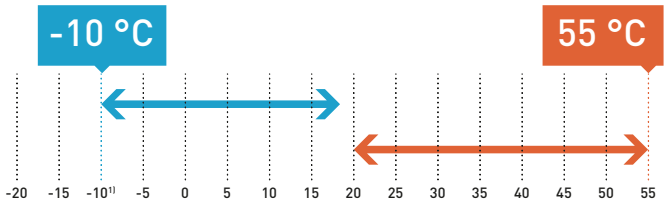
Technical focus

- Chiller type: heat pump
- Compressor type (number): Scroll compressors (2)
- Refrigerant type: R32
- Refrigerant circuit: 1
- Fan type (number): axial fan (2), optional EC and high pressure EC fans
- Heat exchanger: stainless steel plate heat exchanger
- Flow switch, water safety & air purge valves included
- Water filter included (mandatory to be installed on site)
- Night mode setting to save energy and reduce noise level
- Water compensation curve control
- Bluefin anti-corrosion coating

Ambient temperature.



Water outlet temperature.



Cooling: Outside air temperature (°C (DB)). Heating: Outside air temperature (°C (WB)).

Available options

Options					
Pump	**Pump drive**	**Hydraulic options**	**Ambient options**	**Control options**	**Electrical options**
Single pump low pressure	Fixed speed	Low water pressure sensor [1]	Finned coil treatment - epoxy	Energy meter	EC fan(s) option
	Variable twin speed (single pump)	Desuperheater	Finned coil Blygold treatment	Digital input for: Cooling/ heating or Night mode or Load Shedding	Soft starter
Single pump high pressure		Water isolation valves	Outdoor coil protection grid		
	Variable twin speed (double pump)		Rubber pads (supplied loose)		**Refrigerant options**
Double pump low pressure			Spring damper (supplied loose)		Refrigerant gauges (HP and LP manometers)
	Constant outlet pressure (single pump) [2]		Container transport		
Double pump high pressure			Acoustically insulating compressor jacket		
	Constant outlet pressure (double pump) [2]				

1) Low water pressure sensor is supplied loose when selected as an option without pump and hydraulic kit. To be installed on site. 2) Available on special quotation, please contact your local sales representative

Optional remote control.
PAW-SYSREMKIT1

Optional Shut off valves kit for model 85 - 170.
PAW-SYSS0V5

REFER TO PAGE 26 TO SEE MORE OPTIONS FOR R32 OUTDOOR UNITS

Model			85	100	115	130
AC fan model w/o buffer / w buffer			**U-085CMNB/U-085CMBL**	**U-100CMNB/U-100CMBL**	**U-115CMNB/U-115CMBL**	**U-130CMNB/U-130CMBL**
EC fan model w/o buffer / w buffer			**U-085CNNB/U-085CNBL**	**U-100CNNB/U-100CNBL**	**U-115CNNB/U-115CNBL**	**U-130CNNB/U-130CNBL**
High pressure EC fan model w/o buffer / w buffer			**U-085CONB/U-085COBL**	**U-100CONB/U-100COBL**	**U-115CONB/U-115COBL**	**U-130CONB/U-130COBL**
Power supply	Voltage	V	400	400	400	400
	Phase		Three phase	Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50	50
Cooling capacity [1]		kW	84,2	102,0	121,0	135,0
Input power [1]		kW	29,1	34,1	37,7	42,4
Total EER 100 % [1]			2,89	3,00	3,20	3,18
SEER [2] [3]			**4,48**	**4,35**	**4,34**	**4,33**
$\eta_{s,c}$ [2] [3]		**%**	**176**	**171**	**171**	**170**
Heating capacity [4]		kW	86,2	105,0	123,0	137,0
Input power [4]		kW	28,5	33,3	36,9	40,6
SCOP [3] [5]			**3,57**	**3,63**	**3,60**	**3,73**
$\eta_{s,c}$ [3] [5]		**%**	**140**	**142**	**141**	**146**
Startup type			Direct	Direct	Direct	Direct
Maximum operating current		A	75,0	86,6	93,8	104,2
Startup current w/o softstarter / w softstarter		A	215/129	326/240	333/247	343/257
Sound power (w AC / EC fans)		dB(A)	84,4	86,0	87,0	87,4
Sound pressure (w AC / EC fans) [6]		dB(A)	52,5	54,1	55,1	55,5
Sound power (w HP EC fans)		dB(A)	89,3	89,7	90,0	90,2
Sound pressure (w HP EC fans) [6]		dB(A)	57,4	57,8	58,1	58,3
Dimension (w AC fans) w/o buffer	H x W x D	mm	2286 x 2180 x 1160	2286 x 2180 x 1160	2286 x 2180 x 1160	2286 x 2180 x 1160
Dimension (w AC fans) w buffer	H x W x D	mm	2286 x 2680 x 1160	2286 x 2680 x 1160	2286 x 2680 x 1160	2286 x 2680 x 1160
Dimension (w EC / HP EC fans) w/o buffer	H x W x D	mm	2334 x 2180 x 1160	2334 x 2180 x 1160	2334 x 2180 x 1160	2334 x 2180 x 1160
Dimension (w EC / HP EC fans) w buffer	H x W x D	mm	2334 x 2680 x 1160	2334 x 2680 x 1160	2334 x 2680 x 1160	2334 x 2680 x 1160
Operating weight w/o buffer		kg	701	731	813	815
Operating weight w buffer		kg	1202	1232	1317	1319
Refrigerant (R32)		kg	13,9	13,5	17,2	18,5
Number of refrigerant circuit			1	1	1	1
Compressors						
Number			2	2	2	2
Type			Scroll	Scroll	Scroll	Scroll
Part load step		%	0/50/100	0/34/66/100	0/44/56/100	0/50/100
Crankcase heater		W	66/66	66/66	66/66	66/66
Evaporator						
Number			1	1	1	1
Type			Plate	Plate	Plate	Plate
Nominal water flow	Cool / Heat	m³/h	14,2/14,7	17,1/18,0	19,9/20,9	22,0/22,3
Water pressure drop	Cool / Heat	kPa	21,3/22,5	30,5/33,8	41,4/45,9	50,7/52,3
Water volume		l	7,8	7,8	7,8	7,8
Antifreeze heater		W	2 x 30	2 x 30	2 x 30	2 x 30
Coils						
Number			2	2	2	2
Frontal surface		m²	6,4	6,4	6,4	6,4
Number of rows			2	2	3	3
Fans standard						
Number			2	2	2	2
Air flow		m³/h	41300/41300	41300/41300	41300/41300	41300/41300
Rotation speed	AC / EC	r.p.m.	870/780	870/780	870/780	870/780
Power input (each fan)		W	2,1/0,8	2,1/0,8	1,6/1,0	1,6/1,0
Air flow		m³/h	41300	41300	41300	41300
Rotation speed	HP EC	r.p.m.	940	940	940	940
Power input (each fan)		W	1,6	1,6	1,6	1,6
Static pressure		Pa	85	85	85	85
Water connections						
Type			Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228
Inlet - Outlet - diameter	Evaporator	Inch	2 ½ - 2 ½	2 ½ - 2 ½	2 ½ - 2 ½	2 ½ - 2 ½
Inlet - Outlet - diameter	Desuperheater	Inch	1 ¼ - 1 ¼	1 ¼ - 1 ¼	1 ¼ - 1 ¼	1 ¼ - 1 ¼

1) Data refers to 7°C leaving chilled water temperature and 35°C condenser air temperature, according EN14511 standard. 2) Following COMMISSION REGULATION (EU) No 2016/2281 for comfort application chillers. 3) Those are the data with variable flow. 4) Data refers to 45°C leaving warm water temperature and 7°C ambient coil air temperature with 87% R.H., according EN14511 standard. 5) Following COMMISSION REGULATION (EU) No 813/2013 for low-temperature heat pumps. 6) Sound pressure levels calculated at 10 meters. Sound pressure levels refer to ISO standard 3744 with parallel piped shape.
* w: with, w/o: without.

Accessories	
PAW-SYSREMKIT1	Remote control
PAW-CM000SP041	Cloudgate plug and play IP65 box mobile 4G Europe
PAW-CM000K0001	Extension kit and cable glande for mobile (2/4G) antenna (3 m)

Accessories	
PAW-00SRTS011	Tservice wireless fee for 1 year
PAW-SYSS0V5	Shut off valves kit for model 85 - 170

HIGH SEER 4,48 | HIGH SCOP 3,73 | ErP | BLUEFIN | ULTIMATE CUSTOMISATION | AUTOMATIC FAN | -15 °C HEATING MODE | 48 °C COOLING MODE | BMS CONNECTIVITY

U - 150/170 CM, CN, CO

Cooling capacity: 156,0 to 176,0 kW
Heating capacity: 158,0 to 182,0 kW

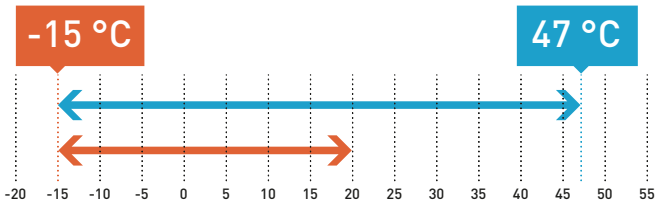
Heat pump chiller series with powerful operation by 2 scroll compressors. Maximum water outlet temperature in heating is up to 53 °C. Defrost limiting design ensures to provide stable hot water even at low ambient conditions.

- High seasonal efficiency in cooling and heating
- Ambient temperature operating range: -15 to +47 °C in cooling, -15 to +20 °C in heating
- Water outlet temperature range: -10 to +18 °C in cooling, +20 to +53 °C in heating
- Optional acoustically insulating compressor jacket
- Victaulic water connections
- Optimised design for service and maintenance
- Simple user friendly control as standard
- Modbus RTU & TCP/IP, BACnet MSTP & IP as standard
- Electronic expansion valves

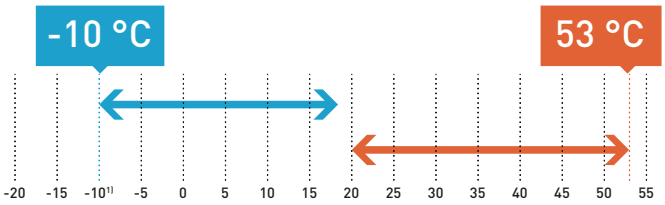
Technical focus

- Chiller type: heat pump
- Compressor type (number): Scroll compressors (2)
- Refrigerant type: R32
- Refrigerant circuit: 1
- Fan type (number): axial fan (3), optional AC, EC and high pressure EC fans
- Heat exchanger: stainless steel plate heat exchanger
- Flow switch, water safety & air purge valves included
- Water filter included (mandatory to be installed on site)
- Night mode setting to save energy and reduce noise level
- Water compensation curve control
- Bluefin anti-corrosion coating
- Remote LAN connection as standard

Ambient temperature.



Water outlet temperature.



Cooling: Outside air temperature (°C (DB)). Heating: Outside air temperature (°C (WB)).

Available options

Options					
Pump	**Pump drive**	**Hydraulic options**	**Ambient options**	**Control options**	**Electrical options**
Single pump low pressure	Fixed speed	Low water pressure sensor 1)	Finned coil treatment - epoxy	Energy meter	EC fan(s) option
Single pump high pressure	Variable twin speed (single pump)	Desuperheater	Finned coil Blygold treatment	Digital input for: Cooling/ heating or Night mode or Load Shedding	Power factor correction capacitors
Double pump low pressure	Variable twin speed (double pump)	Water isolation valves	Outdoor coil protection grid		Soft starter
Double pump high pressure	Constant outlet pressure (single pump) 2)		Rubber pads (supplied loose)		
	Constant outlet pressure (double pump) 2)		Spring damper (supplied loose)		**Refrigerant options**
			Container transport		Refrigerant gauges (HP and LP manometers)
			Acoustically insulating compressor jacket		

1) Low water pressure sensor is supplied loose when selected as an option without pump and hydraulic kit. To be installed on site. 2) Available on special quotation, please contact your local sales representative

Optional remote control.
PAW-SYSREMKIT1

Optional Shut off valves kit for model 85 - 170.
PAW-SYSS0V5

REFER TO PAGE 26 TO SEE MORE OPTIONS FOR R32 OUTDOOR UNITS

Model			**150**	**170**
AC fan model w/o buffer / w buffer			**U-150CMNB/U-150CMBL**	**U-170CMNB/U-170CMBL**
EC fan model w/o buffer / w buffer			**U-150CNNB/U-150CNBL**	**U-170CNNB/U-170CNBL**
High pressure EC fan model w/o buffer / w buffer			**U-150CONB/U-150COBL**	**U-170CONB/U-170COBL**
Power supply	Voltage	V	400	400
	Phase		Three phase	Three phase
	Frequency	Hz	50	50
Cooling capacity [1]		kW	156,0	176,0
Input power [1]		kW	47,9	55,5
Total EER 100 % [1]			3,26	3,17
SEER [2] [3]			**4,61**	**4,62**
$\eta_{s,c}$ [2] [3]		**%**	**181**	**182**
Heating capacity [4]		kW	158,0	182,0
Input power [4]		kW	47,7	54,0
SCOP [3] [5]			**3,65**	**3,60**
$\eta_{s,c}$ [3] [5]		**%**	**143**	**141**
Startup type			Direct	Direct
Maximum operating current		A	125	142
Startup current w/o softstarter / w softstarter		A	363/277	380/294
Sound power (w AC / EC fans)		dB(A)	88,9	91,1
Sound pressure (w AC / EC fans) [6]		dB(A)	57,0	59,2
Sound power (w HP EC fans)		dB(A)	91,6	92,3
Sound pressure (w HP EC fans) [6]		dB(A)	59,7	60,4
Dimension (w AC fans) w/o buffer	H x W x D	mm	2285 x 3789 x 1151	2285 x 3789 x 1151
Dimension (w AC fans) w buffer	H x W x D	mm	2285 x 3789 x 1151	2285 x 3789 x 1151
Dimension (w EC / HP EC fans) w/o buffer	H x W x D	mm	2333 x 3789 x 1151	2333 x 3789 x 1151
Dimension (w EC / HP EC fans) w buffer	H x W x D	mm	2333 x 3789 x 1151	2333 x 3789 x 1151
Operating weight w/o buffer		kg	1265	1279
Operating weight w buffer		kg	1683	1697
Refrigerant (R32)		kg	19,2	20,0
Number of refrigerant circuit			1	1
Compressors				
Number			2	2
Type			Scroll	Scroll
Part load step		%	0/45/55/100	0/38/62/100
Crankcase heater		W	66/105	66/105
Evaporator				
Number			1	1
Type			Plate	Plate
Nominal water flow	Cool / Heat	m³/h	26,2/26,8	29,2/31,3
Water pressure drop	Cool / Heat	kPa	36,2/37,8	44,8/51,5
Water volume		l	11,5	12,9
Antifreeze heater		W	130	130
Coils				
Number			2,00	2,00
Frontal surface		m²	8,7	8,7
Number of rows			3	3
Fans standard				
Number			3	3
Air flow	AC / EC	m³/h	56200/56200	56200/56200
Rotation speed		r.p.m.	870/780	870/780
Power input (each fan)		W	1,4/0,8	1,4/0,8
Air flow	HP EC	m³/h	56200	56200
Rotation speed		r.p.m.	940	940
Power input (each fan)		W	1,7	1,7
Static pressure		Pa	110	110
Water connections				
Type			Male gas threaded BSPP ISO 229	Male gas threaded BSPP ISO 230
Inlet - Outlet - diameter	Evaporator	Inch	2 ½ - 2 ½	2 ½ - 2 ½
Inlet - Outlet - diameter	Desuperheater	Inch	1 ¼ - 1 ¼	1 ¼ - 1 ¼

1) Data refers to 7°C leaving chilled water temperature and 35°C condenser air temperature, according EN14511 standard. 2) Following COMMISSION REGULATION (EU) No 2016/2281 for comfort application chillers. 3) Those are the data with variable flow. 4) Data refers to 45°C leaving warm water temperature and 7°C ambient coil air temperature with 87% R.H., according EN14511 standard. 5) Following COMMISSION REGULATION (EU) No 813/2013 for low-temperature heat pumps. 6) Sound pressure levels calculated at 10 meters. Sound pressure levels refer to ISO standard 3744 with parallel piped shape.
* w: with, w/o: without.

Accessories	
PAW-SYSREMKIT1	Remote control
PAW-CM000SP041	Cloudgate plug and play IP65 box mobile 4G Europe
PAW-CM000K0001	Extension kit and cable glande for mobile (2/4G) antenna (3 m)

Accessories	
PAW-00SRTS011	Tservice wireless fee for 1 year
PAW-SYSS0V5	Shut off valves kit for model 85 - 170

HIGH SEER 4,62 | HIGH SCOP 3,66 | ErP | SUPER QUIET | BLUEFIN | ULTIMATE CUSTOMISATION | AUTOMATIC FAN | -15 °C HEATING MODE | 47 °C COOLING MODE | DEFROST LIMITING | BMS CONNECTIVITY

Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

Options for outdoor units

Options table 50 - 85

Option	Type	Ref.	Description	Model				
1	Capacity			50	60	70	75	85
2	Refrigerant, fan and compressor type	Q	R32, AC fan, fixed speed compressor - Cooling Only	•	•	•	•	•
		R	R32, EC fan, fixed speed compressor - Cooling Only	•	•	•	•	•
		S	R32, high pressure EC fan, fixed speed compressor - Cooling Only	•	•	•	•	•
		M	R32, AC fan, fixed speed compressor - Heat Pump	•	•	•	•	•
		N	R32, EC fan, fixed speed compressor - Heat Pump	•	•	•	•	•
		O	R32, high pressure EC fan, fixed speed compressor - Heat Pump	•	•	•	•	•
3	Buffer tank option	NB	No buffer	Std	Std	Std	Std	Std
		BM	Buffer tank (medium)	•	•	•	•	
		BL	Buffer tank (large)					•
4	Pump option		No pump	Std	Std	Std	Std	Std
			Single pump low pressure	•	•	•	•	•
			Single pump high pressure	•	•	•	•	•
			Double pump low pressure	•	•	•	•	•
			Double pump high pressure	•	•	•	•	•
5	Pump drive option		Pump drive - fixed speed	Std	Std	Std	Std	Std
			Pump drive - variable twin speed (single pump)	•	•	•	•	•
			Pump drive - variable twin speed (double pump)	•	•	•	•	•
			Pump drive - constant outlet pressure (single pump)	•	•	•	•	•
			Pump drive - constant outlet pressure (double pump)	•	•	•	•	•
6	Hydraulic options		Flow switch	Std	Std	Std	Std	Std
			Low water pressure sensor [1]	•	•	•	•	•
			Desuperheater	•	•	•	•	•
			Water isolation valves	•	•	•	•	•
7	Control options		Standard BMS option (Modbus RTU)	Std	Std	Std	Std	Std
			Modbus TCP/IP	•	•	•	•	•
			BACnet MSTP	•	•	•	•	•
			BACnet IP	•	•	•	•	•
			Digital input for: Cooling/heating or Night mode or Load Shedding	Std	Std	Std	Std	Std
			Energy meter	•	•	•	•	•
8	Electrical options		Automatic circuit breaker	Std	Std	Std	Std	Std
			Phase sequence control	Std	Std	Std	Std	Std
			Fan speed controller	•	•	•	•	•
			Power supply w neutral [2]	SO	SO	SO	SO	SO
			Electrical backup heater 12 kW - Heat Pump [3]	•	•	•	•	
			Electrical backup heater 24 kW - Heat Pump [3]	•	•	•	•	•
			Electrical backup heater 36 kW - Heat Pump [3]					•
			Soft starter	•	•	•	•	•
9	Refrigerant options		Electronic expansion valves	Std	Std	Std	Std	Std
			Refrigerant gauges (HP and LP manometers)	•	•	•	•	•
10	Ambient options		Aluminium finned coil - Cooling Only	Std	Std	Std	Std	Std
			Bluefin coil treatment - Heat Pump	Std	Std	Std	Std	Std
			Finned coil treatment - epoxy	•	•	•	•	•
			Finned coil Blygold treatment	SO	SO	SO	SO	SO
			Outdoor coil protection grid	•	•	•	•	•
			Rubber pads (supplied loose)	•	•	•	•	•
			Spring damper (supplied loose)	•	•	•	•	•
			Container transport	•	•	•	•	•
			Acoustically insulating compressor jacket	•	•	•	•	•

1) Low water pressure sensor is supplied loose when selected as an option without pump and hydraulic kit. To be installed on site.
2) Systems are supplied without neutral terminal as standard, please contact local sales representative.
3) Electrical backup heaters can only be selected when combined with buffer tank option.

Std: Standard item included.
•: Optional item that can be selected.
SO: Special order item.

Options table 100 - 170

Option	Type	Ref.	Description	Model				
1	Capacity			100	115	130	150	170
2	Refrigerant, fan and compressor type	Q	R32, AC fan, fixed speed compressor - Cooling Only	•	•	•	•	•
		R	R32, EC fan, fixed speed compressor - Cooling Only	•	•	•	•	•
		S	R32, high pressure EC fan, fixed speed compressor - Cooling Only	•	•	•	•	•
		M	R32, AC fan, fixed speed compressor - Heat Pump	•	•	•	•	•
		N	R32, EC fan, fixed speed compressor - Heat Pump	•	•	•	•	•
		O	R32, high pressure EC fan, fixed speed compressor - Heat Pump	•	•	•	•	•
3	Buffer tank option	NB	No buffer	Std	Std	Std	Std	Std
		BL	Buffer tank (large)	•	•	•	•	•
4	Pump option		No pump [1]	Std	Std	Std	Std	Std
			Single pump low pressure	•	•	•	•	•
			Single pump high pressure	•	•	•	•	•
			Double pump low pressure	•	•	•	•	•
			Double pump high pressure	•	•	•	•	•
5	Pump drive option		Pump drive - fixed speed [2]	Std	Std	Std	Std	Std
			Pump drive - variable twin speed (single pump)	•	•	•	•	•
			Pump drive - variable twin speed (double pump)	•	•	•	•	•
			Pump drive - constant outlet pressure (single pump)	•	•	•	•	•
			Pump drive - constant outlet pressure (double pump)	•	•	•	•	•
6	Hydraulic options		Flow switch	Std	Std	Std	Std	Std
			Low water pressure sensor [1]	•	•	•	•	•
			Desuperheater	•	•	•	•	•
			Water isolation valves	•	•	•	•	•
7	Control options		Standard BMS option (Modbus RTU)	Std	Std	Std	Std	Std
			Modbus TCP/IP	•	•	•	•	•
			BACnet MSTP	•	•	•	•	•
			BACnet IP	•	•	•	•	•
			Digital input for: Cooling/heating or Night mode or Load Shedding	Std	Std	Std	Std	Std
			Energy meter	•	•	•	•	•
8	Electrical options		Automatic circuit breaker	Std	Std	Std	Std	Std
			Phase sequence control	Std	Std	Std	Std	Std
			Power supply w neutral [2]	SO	SO	SO		
			Power factor correction capacitors				•	•
			Electrical backup heater 24 kW - Heat Pump [3]	•	•	•		
			Electrical backup heater 36 kW - Heat Pump [3]	•	•	•		
			Soft starter	•	•	•	•	•
9	Refrigerant options		Electronic expansion valves	Std	Std	Std	Std	Std
			Refrigerant gauges (HP and LP manometers)	•	•	•	•	•
10	Ambient options		Aluminium finned coil - Cooling Only	Std	Std	Std	Std	Std
			Bluefin coil treatment - Heat Pump	Std	Std	Std	Std	Std
			Finned coil treatment - epoxy	•	•	•	•	•
			Finned coil Blygold treatment	SO	SO	SO	SO	SO
			Outdoor coil protection grid	•	•	•	•	•
			Rubber pads (supplied loose)	•	•	•	•	•
			Spring damper (supplied loose)	•	•	•	•	•
			Container transport	•	•	•	•	•
			Acoustically insulating compressor jacket	•	•	•	•	•

1) Low water pressure sensor is supplied loose when selected as an option without pump and hydraulic kit. To be installed on site.
2) Systems are supplied without neutral terminal as standard, please contact local sales representative.
3) Electrical backup heaters can only be selected when combined with buffer tank option.

Std: Standard item included.
•: Optional item that can be selected.
SO: Special order item.

ECOi-W R410A, the solution for hotels, offices and industry

ECOi-W provides the optimal performance in any climate.

1 High energy saving and comfort

- High SEER / SCOP
- Quiet operation
- Integration with ECOi VRF systems via BMS control
- Centralized remote management system

2 High flexibility

- Capacity range from 20 to 210 kW
- Customisable design
- Operating range: -17 °C (heating) to 50 °C (cooling)
- Wide range of hydraulic options
- Wide range of communication protocols

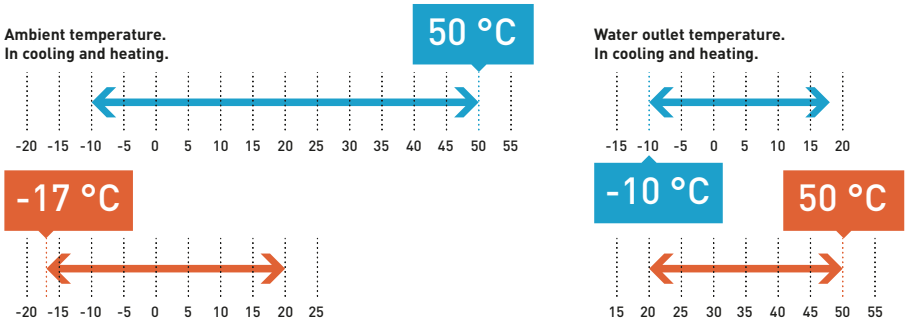
3 High quality

- Defrost limiting coil design (140 to 210 kW)
- Optimised design for service and maintenance
- Compact footprint

Operating conditions

Panasonic ECOi-W provides a wide operating range from -17 °C in heating to 50 °C in cooling.

Water outlet temperature in cooling.
A water outlet temperature of -10 °C in cooling offers a uniqueness to the ECOi-W Series, which can ensure the operation temperature of the process equipment in factories.



Cooling: Outside air temperature (°C (DB)). Heating: Outside air temperature (°C (WB)).

ECOi-W line-up

	ECOi-W size	20	25	30	35	40	45	55	65	75	90	105	125	140	150	170	190	210
Cooling only range	Cooling capacities (kW)	19,2	24,3	27,1	36,7	39,0	45,3	52,0	66,1	73,1	90,7	104,0	123,0	132,0	146,0	164,0	181,0	208,0
	SEER	4,78	4,38	4,43	4,43	4,48	4,40	4,53	4,53	4,68	4,45	4,50	4,55	4,40	4,45	4,38	4,40	4,25
Heat pump range	ECOi-W size	20	25	30	35	40	45	55	65	75	90	105	125	140	150	170	190	210
	Cooling capacities (kW)	18,7	23,7	26,4	35,8	38,1	44,3	50,9	64,1	71,0	88,7	100,8	119,3	128,3	142,1	163,9	177,5	207,9
	Heating capacities (kW)	19,5	26,9	29,7	37,3	41,6	48,5	58,2	67,2	75,9	88,1	101,0	119,1	144,0	154,0	170,0	195,0	218,0
	SEER [1]	4,68	4,31	4,28	4,25	4,33	4,20	4,41	4,51	4,63	4,40	4,44	4,49	4,39	4,36	4,31	4,23	4,28
	SCOP [1]	3,50	3,38	3,45	3,50	3,50	3,38	3,38	3,55	3,53	3,40	3,43	3,43	3,30	3,33	3,30	3,28	3,23
	Energy efficiency class (heating) [1] [2]	A+	A+	A+	A+	A+	A+	A+	A+	—	—	—	—	—	—	—	—	—
	Dimension (H x W x D)	1983x1000x1000			1983x1000x1000		1986x2180x1160		1986x2180x1160		2286x2180x1160			2295x2856x2210		2321x2856x2210		

1) Those are the data with variable flow. 2) Following Eurovent and COMMISSION REGULATION (EU) No 811/2013 for low-temperature heat pumps. Scale from A+++ to D, as of 26th September 2019.

Panasonic Certified Quality

Panasonic does not compromise on product quality, safety or durability, providing the ultimate comfort when you need it most.

Class A pump

Units can be equipped with an efficient pump. A wide range of single and double pump, plus pump drive option is available.

Axial AC

The microprocessor control automatically adjusts the fan speed as a function of the operating conditions.

BP heat exchanger

Very compact & long durability Braze Plate Heat Exchanger.
Unique design for the size 140 - 210 improving frost protection and efficiency.

Model type supplied may vary.

Energy recovery

The "Desuperheater" option consists of a stainless-steel brazed plate heat exchanger which is mounted in series between the compressors and the air-cooled condenser. It can supply hot water up to 50°C free-of-charge while operating in the cooling mode, thanks to the partial recovery of condensation heat that would otherwise be rejected to the external heat source.
The unit's efficiency is increased as condensing pressure can be reduced due to air cooled condenser becoming oversized.

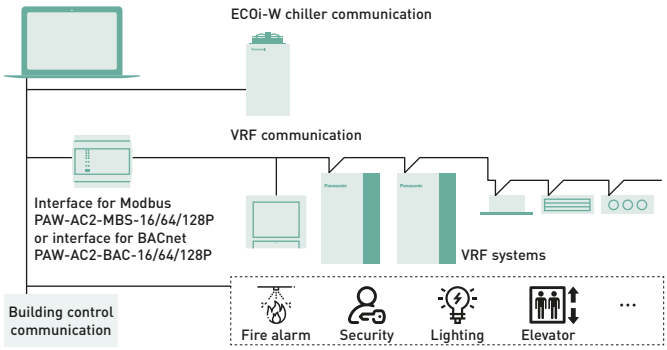
* Optional. Available in 45-125.

Simple user friendly control

In addition to basic control functions...
- Intelligent logic control for inlet water temperature
- Night setback operation to reduce electrical consumption and noise
- Automatic test operation at the push of a button

BMS integration

Modbus RTU as standard.
Modbus TCP/IP, BACnet IP and BACnet MSTP as optional availability.
Integrated systems with ECOi-W Chiller, VRF and BMS control can be offered.

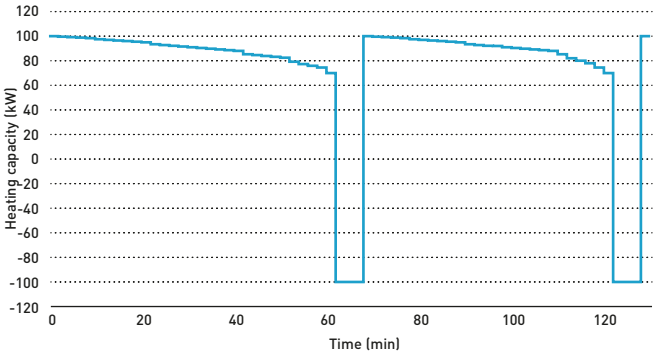


Defrost limiting coil design

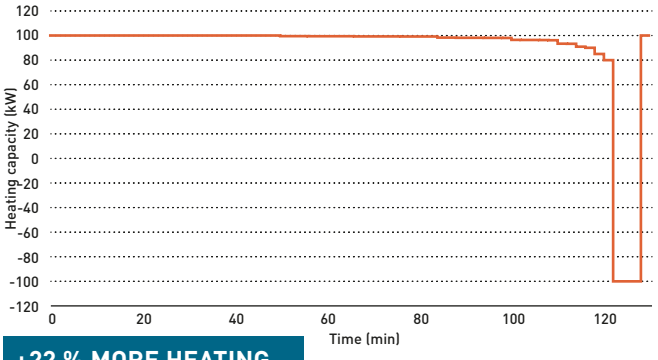
- Fin space increased to prevent the coil freezing
- Number of rows increased to maintain the same capacity in standard conditions
- Designed to decrease freezing frequency as soon as outdoor air temperature goes below 7 °C

* Available in heat pump range size 140-210.

Standard coil: 2 defrost cycles every 130 min.



Special coil design: 1 defrost cycle every 130 min.



+22 % MORE HEATING
+15 % HIGHER COP
SCOP IMPROVED

Victaulic grooved connection

Victaulic Installation-Ready™ couplings assure proper piping installation. Optimised design to reduce installation effects, including noise and vibration attenuation.

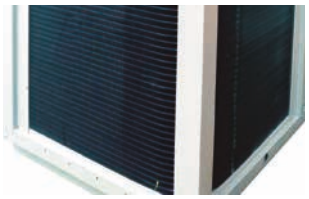
* Available in 140-210.
** Threaded Victaulic connection kit (PAW-SYSVICTH) is optional.

Model type supplied may vary.

Bluefin for more durability

Bluefin hygrophillic coating improves defrost performance and reduces damage for a longer life time.

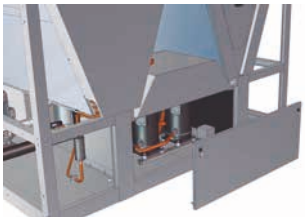
* Available in heat pump range.



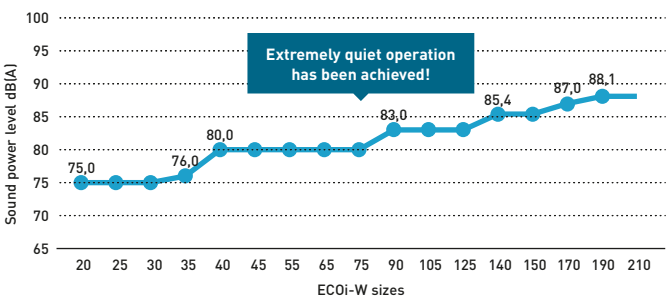
Low noise

ECOi-W series is equipped with the compressor phonic insulation box as a standard.

* Standard in 20-40, 140-210. Optional in 45-125.



ECOi-W quiet operation in full range.



* Performance with standard fans. In the range 45-125, noise performance without low noise option.

Range of ECOi-W R410A outdoor units

Page	Outdoor units	20 kW	25 kW	30 kW	35 kW	40 kW	45 kW	55 kW	65 kW	75 kW
	ECOi-W 20 to 40									
P. 34	Cooling only	U-020CVNB U-020CVBS	U-025CVNB U-025CVBS	U-030CVNB U-030CVBS	U-035CVNB U-035CVBS	U-040CVNB U-040CVBS				
P. 42	Heat pump	U-020CWNB U-020CWBS	U-025CWNB U-025CWBS	U-030CWNB U-030CWBS	U-035CWNB U-035CWBS	U-040CWNB U-040CWBS				
	ECOi-W 45 to 75									
P. 36	Cooling only						U-045CVNB U-045CVBM	U-055CVNB U-055CVBM	U-065CVNB U-065CVBM	U-075CVNB U-075CVBM
P. 44	Heat pump						U-045CWNB U-045CWBM	U-055CWNB U-055CWBM	U-065CWNB U-065CWBM	U-075CWNB U-075CWBM
	ECOi-W 90 to 125									
P. 38	Cooling only									
P. 46	Heat pump									
	ECOi-W 140 to 210									
P. 40	Cooling only									
P. 48	Heat pump									

	90 kW	105 kW	125 kW	140 kW	150 kW	170 kW	190 kW	210 kW
								
	U-090CVNB U-090CVBM	U-105CVNB U-105CVBM	U-125CVNB U-125CVBM					
	U-090CWNB U-090CWBM	U-105CWNB U-105CWBM	U-125CWNB U-125CWBM					
								
				U-140CVNB U-140CVBL	U-150CVNB U-150CVBL	U-170CVNB U-170CVBL	U-190CVNB U-190CVBL	U-210CVNB U-210CVBL
				U-140CWNB U-140CWBL	U-150CWNB U-150CWBL	U-170CWNB U-170CWBL	U-190CWNB U-190CWBL	U-210CWNB U-210CWBL

U - 020/025/030/035/040 CV

Cooling capacity: 19,2 to 39,0 kW

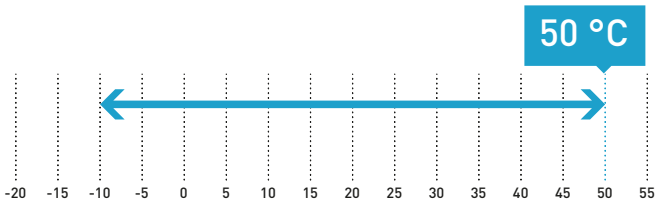
Compact and highly efficient chiller series, with SEER up to 4,78.

· High seasonal efficiency
· Ambient temperature operating range: -10 to +50 °C
· Water outlet temperature range: -10 to +18 °C
· Super quiet operation
· Optimised design for service and maintenance
· Simple user friendly control as standard
· Modbus RTU as standard

Technical focus

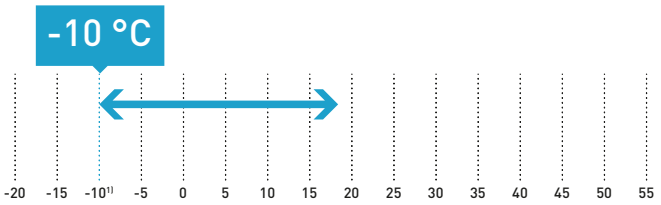
· Chiller type: cooling only
· Compressor type (number): Scroll compressors (2)
· Refrigerant type: R410A
· Refrigerant circuit: 1
· Fan type (number): axial fan (1)
· Heat exchanger: stainless steel plate heat exchanger
· Flow switch, water safety & air purge valves included
· Water filter included (mandatory to be installed on site)
· Night mode setting to save energy and reduce noise level
· Water compensation curve control

Ambient temperature.



Cooling: Outside air temperature (°C (DB)).

Water outlet temperature.



Available options

Options				
Pump	**Pump drive**	**Hydraulic options**	**Ambient options**	**Miscellaneous options**
Single pump (as standard)	Fixed speed [1]	Low water pressure sensor	Finned coil treatment - epoxy	Soft starter
	Variable twin speed	Water isolation valves	Rubber pads	Power supply w/o neutral
	Constant outlet pressure		Spring damper	Modbus TCP/IP
	Constant differential pressure		All seasons	BACnet MSTP
			High pressure fan [2]	BACnet IP

1) Available for non-EU installation. 2) Available on models 25 - 40.

REFER TO PAGE 50 TO SEE MORE OPTIONS FOR R410A OUTDOOR UNITS

Optional remote control.
PAW-SYSREMKIT

Optional Shut off valves kit for model 45 - 75.
PAW-SYSSOV2

Model			**20**	**25**	**30**	**35**	**40**
Standard without buffer tank			**U-020CVNB**	**U-025CVNB**	**U-030CVNB**	**U-035CVNB**	**U-040CVNB**
With buffer tank			**U-020CVBS**	**U-025CVBS**	**U-030CVBS**	**U-035CVBS**	**U-040CVBS**
Power supply	Voltage	V	400	400	400	400	400
	Phase		Three phase	Three phase	Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50	50	50
Cooling capacity [1]		kW	19,2	24,3	27,1	36,7	39,0
Input power [1]		kW	5,9	7,7	9,3	12,2	13,0
Total EER 100 % [1]			3,25	3,17	2,90	3,01	3,00
SEER [2]			**4,78**	**4,38**	**4,43**	**4,43**	**4,48**
$\eta_{s,c}$ [2]		**%**	**188**	**172**	**174**	**174**	**176**
Startup type			Direct	Direct	Direct	Direct	Direct
Maximum operating current		A	17,7	22,2	24,3	31,8	33,8
Startup current w/o softstarter / w softstarter		A	53/28	64/35	77/49	118/53	119/54
Sound power (w standard fans)		dB(A)	75,0	75,0	75,0	76,0	76,0
Sound pressure (w standard fans) [3]		dB(A)	42,8	42,8	42,8	43,8	43,8
Dimension (w standard fans) w/o buffer tank	H x W x D	mm	1983 x 1000 x 1000	1983 x 1000 x 1000	1983 x 1000 x 1000	1983 x 1000 x 1000	1983 x 1000 x 1000
Dimension (w standard fans) w buffer tank	H x W x D	mm	1983 x 1000 x 1507	1983 x 1000 x 1507	1983 x 1000 x 1507	1983 x 1000 x 1507	1983 x 1000 x 1507
Weight (w 1 pump) w/o buffer tank		kg	265	275	305	315	320
Weight (w 1 pump) w buffer tank		kg	330	340	370	380	385
Refrigerant (R410A)		kg	6,5	8,4	8,4	9,1	9,2
Number of refrigerant circuit			1	1	1	1	1
Compressors							
Number			2	2	2	2	2
Type			Scroll	Scroll	Scroll	Scroll	Scroll
Part load step		%	0/50/100	0/50/100	0/50/100	0/50/100	0/50/100
Crankcase heater		W	2 x 40	2 x 40	2 x 49	2 x 49	2 x 49
Evaporator							
Number			1	1	1	1	1
Type			Plate	Plate	Plate	Plate	Plate
Nominal water flow	Cool	m^3/h	3,35	4,36	4,64	6,16	6,44
Water pressure drop	Cool	kPa	23	37	22	37	40
Water volume		l	1,78	1,78	2,55	2,55	2,55
Antifreeze heater		W	30	30	30	30	30
Coils							
Number			1	1	1	1	1
Frontal surface		m^2	2,4	2,4	2,4	2,8	2,8
Number of rows			2	2	2	2	2
Fans standard							
Number			1	1	1	1	1
Air flow		m^3/h	9000	13000	13000	16000	16000
Rotation speed		r.p.m.	900	900	900	650	650
Power input (each fan)		W	620	940	940	930	930
Water connections							
Type			Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228
Inlet - diameter		Inch	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2
Outlet - diameter		Inch	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2

1) Data refers to 7 °C leaving chilled water temperature and 35 °C condenser air temperature, according EN14511 standard. 2) Following COMMISSION REGULATION (EU) No 2016/2281 for comfort application chillers. 3) Sound pressure levels calculated at 10 meters. Sound pressure levels refer to ISO standard 3744 with parallel piped shape.
* w: with, w/o: without. ** The data are calculated with variable flow.

Accessories	
PAW-SYSREMKIT	Remote control
PAW-CM000SP041	Cloudgate plug and play IP65 box mobile 4G Europe
PAW-CM000K0001	Extension kit and cable glande for mobile (2/4G) antenna (3 m)

Accessories	
PAW-00SRTS011	Tservice wireless fee for 1 year
PAW-SYSSOV1	Shut off valves kit for model 20 - 40

HIGH SEER 4,78 | ErP | SUPER QUIET | ULTIMATE CUSTOMISATION | 50 °C COOLING MODE | BMS CONNECTIVITY

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

U - 045/055/065/075 CV

Cooling capacity: 45,3 to 73,1 kW

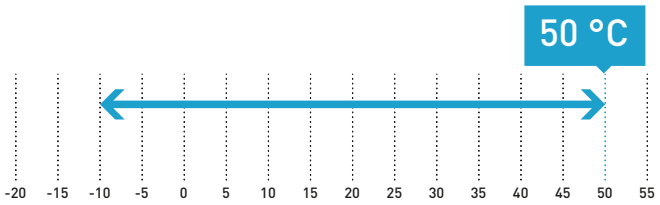
High seasonal efficiency and wide range options to meet the exact requirements of your project.

- High seasonal efficiency
- Ambient temperature operating range: -10 to +50 °C
- Water outlet temperature range: -10 to +18 °C
- Optional extra-low noise kit available
- Optimised design for service and maintenance
- Simple user friendly control as standard
- Modbus RTU as standard

Technical focus

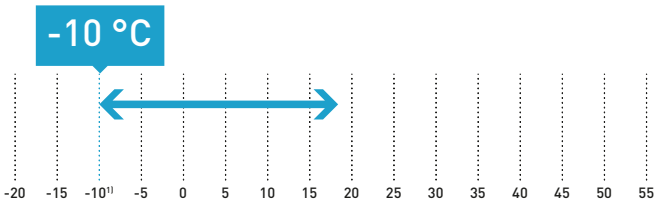
- Chiller type: cooling only
- Compressor type (number): Scroll compressors (2)
- Refrigerant type: R410A
- Refrigerant circuit: 1
- Fan type (number): axial fan (1 for 45/55, 2 for 65/75)
- Heat exchanger: stainless steel plate heat exchanger
- Flow switch, water safety & air purge valves included
- Water filter included (mandatory to be installed on site)
- Night mode setting to save energy and reduce noise level
- Water compensation curve control

Ambient temperature.



Cooling: Outside air temperature (°C (DB)).

Water outlet temperature.



Available options

Options				
Pump	**Pump drive**	**Hydraulic options**	**Ambient options**	**Miscellaneous options**
Single pump	Fixed speed [1]	Low water pressure sensor	Finned coil treatment - epoxy	Soft starter
Double pump	Variable twin speed	Water isolation valves	Outdoor coil protection grid	Power supply w/o neutral
	Constant outlet pressure		Rubber pads	Modbus TCP/IP
	Constant differential pressure		Spring damper	BACnet MSTP
			All seasons fan control	BACnet IP
			Extra-low noise kit	Container transport
			High pressure fan	Refrigerant gauge
				Desuperheater

1) Available for non-EU installation.

REFER TO PAGE 50 TO SEE MORE OPTIONS FOR R410A OUTDOOR UNITS

Optional remote control.
PAW-SYSREMKIT

Optional Shut off valves kit for model 45 - 75.
PAW-SYSSOV2

Model			**45**	**55**	**65**	**75**
Standard without buffer tank			**U-045CVNB**	**U-055CVNB**	**U-065CVNB**	**U-075CVNB**
With buffer tank			**U-045CVBM**	**U-055CVBM**	**U-065CVBM**	**U-075CVBM**
Power supply	Voltage	V	400	400	400	400
	Phase		Three phase	Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50	50
Cooling capacity [1]		kW	45,3	52,0	66,1	73,1
Input power [1]		kW	15,4	17,6	21,7	24,0
Total EER 100 % [1]			2,95	2,96	3,05	3,05
SEER [2]			**4,40**	**4,53**	**4,53**	**4,68**
$\eta_{s,c}$ [2]		**%**	**173**	**178**	**178**	**184**
Startup type			Direct	Direct	Direct	Direct
Maximum operating current		A	40,2	44,2	58,4	64,4
Startup current w/o softstarter / w softstarter		A	133,2/65,8	140,2/72,8	201,4/101,0	206,4/106,0
Sound power (w standard fans)		dB(A)	80,0	80,0	80,0	80,0
Sound pressure (w standard fans) [3]		dB(A)	47,8	47,8	47,8	47,8
Dimension (w standard fans) w/o buffer tank	H x W x D	mm	1986 x 2180 x 1160	1986 x 2180 x 1160	1986 x 2180 x 1160	1986 x 2180 x 1160
Dimension (w standard fans) w buffer tank	H x W x D	mm	1986 x 2680 x 1160	1986 x 2680 x 1160	1986 x 2680 x 1160	1986 x 2680 x 1160
Weight (w 1 pump) w/o buffer tank		kg	515	520	580	590
Weight (w 1 pump) w buffer tank		kg	675	680	740	750
Refrigerant (R410A)		kg	14,5	14,9	18,9	19,0
Number of refrigerant circuit			1	1	1	1
Compressors						
Number			2	2	2	2
Type			Scroll	Scroll	Scroll	Scroll
Part load step		%	0/50/100	0/43/57/100	0/40/60/100	0/45/55/100
Crankcase heater		W	2 x 66	2 x 66	2 x 66	2 x 66
Evaporator						
Number			1	1	1	1
Type			Plate	Plate	Plate	Plate
Nominal water flow	Cool	m^3/h	8,06	9,18	11,30	12,31
Water pressure drop	Cool	kPa	30	35	28	37
Water volume		l	4,10	4,10	6,10	6,10
Antifreeze heater		W	30	30	2 x 30	2 x 30
Coils						
Number			1	1	2	2
Frontal surface		m^2	4,20	4,20	5,55	5,55
Number of rows			2	2	2	2
Fans standard						
Number			1	1	2	2
Air flow		m^3/h	22500	22500	30000	30000
Rotation speed		r.p.m.	790	790	650	650
Power input (each fan)		W	1650	1650	930	930
Water connections						
Type			Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228
Inlet - diameter		Inch	2	2	2	2
Outlet - diameter		Inch	2	2	2	2

1) Data refers to 7 °C leaving chilled water temperature and 35 °C condenser air temperature, according EN14511 standard. 2) Following COMMISSION REGULATION (EU) No 2016/2281 for comfort application chillers. 3) Sound pressure levels calculated at 10 meters. Sound pressure levels refer to ISO standard 3744 with parallel piped shape.
* w: with, w/o: without. ** The data are calculated with variable flow.

Accessories	
PAW-SYSREMKIT	Remote control
PAW-CM000SP041	Cloudgate plug and play IP65 box mobile 4G Europe
PAW-CM000K0001	Extension kit and cable glande for mobile (2/4G) antenna (3 m)

Accessories	
PAW-00SRTS011	Tservice wireless fee for 1 year
PAW-SYSSOV2	Shut off valves kit for model 45 - 75

HIGH SEER 4,68 | ErP | ULTIMATE CUSTOMISATION | 50 °C COOLING MODE | BMS CONNECTIVITY

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

U - 090/105/125 CV

Cooling capacity: 90,7 to 123,0 kW

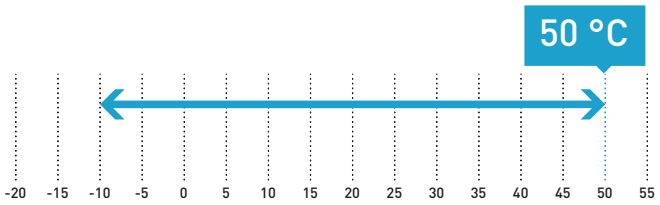
Customizable design gives high flexibility. Wide range of communication protocols fulfill the requirements in hotels, offices, industry applications.

- High seasonal efficiency
- Ambient temperature operating range: -10 to +50 °C
- Water outlet temperature range: -10 to +18 °C
- Optional extra-low noise kit available
- Optimised design for service and maintenance
- Simple user friendly control as standard
- Modbus RTU as standard

Technical focus

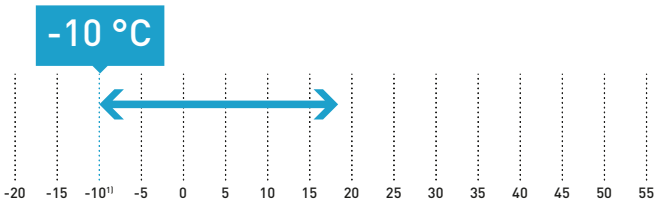
- Chiller type: cooling only
- Compressor type (number): Scroll compressors (2)
- Refrigerant type: R410A
- Refrigerant circuit: 1
- Fan type (number): axial fan (2)
- Heat exchanger: stainless steel plate heat exchanger
- Flow switch, water safety & air purge valves included
- Water filter included (mandatory to be installed on site)
- Night mode setting to save energy and reduce noise level
- Water compensation curve control

Ambient temperature.



Cooling: Outside air temperature (°C (DB)).

Water outlet temperature.



Available options

Options				
Pump	**Pump drive**	**Hydraulic options**	**Ambient options**	**Miscellaneous options**
Single pump	Fixed speed [1]	Low water pressure sensor	Finned coil treatment - epoxy	Soft starter
Double pump	Variable twin speed	Water isolation valves	Outdoor coil protection grid	Power supply w/o neutral
	Constant outlet pressure		Rubber pads	Modbus TCP/IP
	Constant differential pressure		Spring damper	BACnet MSTP
			Extra-low noise kit	Container transport
			High pressure fan	Refrigerant gauge
				Desuperheater

1) Available for non-EU installation.

REFER TO PAGE 50 TO SEE MORE OPTIONS FOR R410A OUTDOOR UNITS

Optional remote control.
PAW-SYSREMKIT

Optional Shut off valves kit for model 90 - 125.
PAW-SYSSOV3

Model			**90**	**105**	**125**
Standard without buffer tank			**U-090CVNB**	**U-105CVNB**	**U-125CVNB**
With buffer tank			**U-090CVBM**	**U-105CVBM**	**U-125CVBM**
Power supply	Voltage	V	400	400	400
	Phase		Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50
Cooling capacity [1]		kW	90,7	104,0	123,0
Input power [1]		kW	30,6	34,9	40,6
Total EER 100 % [1]			2,96	2,98	3,03
SEER [2]			**4,45**	**4,50**	**4,55**
$\eta_{s,c}$ [2]		**%**	**175**	**177**	**179**
Startup type			Direct	Direct	Direct
Maximum operating current		A	77,9	86,0	102,0
Startup current w/o softstarter / w softstarter		A	264,9 / 127,3	312,0 / 145,8	350,0 / 182,6
Sound power (w standard fans)		dB(A)	83,0	83,0	83,0
Sound pressure (w standard fans) [3]		dB(A)	50,8	50,8	50,8
Dimension (w standard fans) w/o buffer tank	H x W x D	mm	2286 x 2180 x 1160	2286 x 2180 x 1160	2286 x 2180 x 1160
Dimension (w standard fans) w buffer tank	H x W x D	mm	2286 x 2680 x 1160	2286 x 2680 x 1160	2286 x 2680 x 1160
Weight (w 1 pump) w/o buffer tank		kg	750	855	875
Weight (w 1 pump) w buffer tank		kg	910	1015	1035
Refrigerant (R410A)		kg	22,0	27,0	28,5
Number of refrigerant circuit			1	1	1
Compressors					
Number			2	2	2
Type			Scroll	Scroll	Scroll
Part load step		%	0 / 45 / 55 / 100	0 / 38 / 62 / 100	0 / 33 / 67 / 100
Crankcase heater		W	66 / 82	66 / 95	66 / 95
Evaporator					
Number			1	1	1
Type			Plate	Plate	Plate
Nominal water flow	Cool	m^3/h	15,73	18,25	20,95
Water pressure drop	Cool	kPa	26	34	45
Water volume		l	10,80	10,80	10,80
Antifreeze heater		W	2 x 30	2 x 30	2 x 30
Coils					
Number			2	2	2
Frontal surface		m^2	6,4	6,4	6,4
Number of rows			2	3	3
Fans standard					
Number			2	2	2
Air flow		m^3/h	42000	42000	42000
Rotation speed		r.p.m.	790	790	790
Power input (each fan)		W	1650	1650	1650
Water connections					
Type			Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228
Inlet - diameter		Inch	2 1/2	2 1/2	2 1/2
Outlet - diameter		Inch	2 1/2	2 1/2	2 1/2

1) Data refers to 7 °C leaving chilled water temperature and 35 °C condenser air temperature, according EN14511 standard. 2) Following COMMISSION REGULATION (EU) No 2016/2281 for comfort application chillers. 3) Sound pressure levels calculated at 10 meters. Sound pressure levels refer to ISO standard 3744 with parallel piped shape.
* w: with, w/o: without. ** The data are calculated with variable flow.

Accessories	
PAW-SYSREMKIT	Remote control
PAW-CM000SP041	Cloudgate plug and play IP65 box mobile 4G Europe
PAW-CM000K0001	Extension kit and cable glande for mobile (2/4G) antenna (3 m)

Accessories	
PAW-00SRTS011	Tservice wireless fee for 1 year
PAW-SYSSOV3	Shut off valves kit for model 90 - 125

HIGH SEER 4,55 | ErP | ULTIMATE CUSTOMISATION | 50 °C COOLING MODE | BMS CONNECTIVITY

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

U - 140/150/170/190/210 CV

Cooling capacity: 132,0 to 208,0 kW

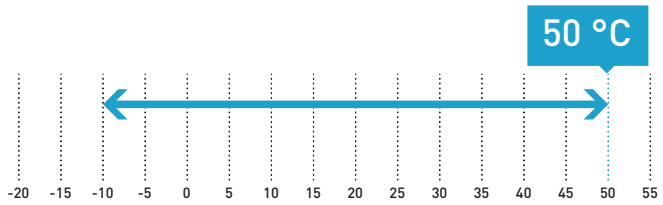
Powerful and efficient operation with 4 scroll compressors and superior flexibility with plug and play hydraulic options.

- High seasonal efficiency
- Ambient temperature operating range: -10 to +50 °C
- Water outlet temperature range: -10 to +18 °C
- Super quiet operation
- Victaulic water connections
- Optimised design for service and maintenance
- Simple user friendly control as standard
- Modbus RTU as standard
- Modbus TCP/IP as standard

Technical focus

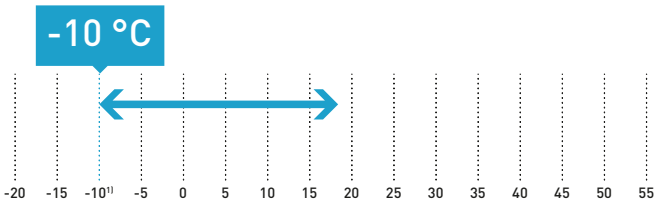
- Chiller type: cooling only
- Compressor type (number): Scroll compressors (4)
- Refrigerant type: R410A
- Refrigerant circuit: 2
- Fan type (number): axial fan (4)
- Heat exchanger: stainless steel plate heat exchanger
- Flow switch, water safety & air purge valves included
- Water filter included (mandatory to be installed on site)
- Night mode setting to save energy and reduce noise level
- Water compensation curve control
- Remote LAN connection as standard

Ambient temperature.



Cooling: Outside air temperature (°C (DB)).

Water outlet temperature.



Available options

Options				
Pump	**Pump drive**	**Hydraulic options**	**Ambient options**	**Miscellaneous options**
Single pump Low Pressure	Fixed speed [1]	Low water pressure sensor	Finned coil treatment - epoxy	Soft starter
Single pump High Pressure	Variable twin speed	Water isolation valves	Outdoor coil protection grid	Power supply w/o neutral
Double pump Low Pressure	Variable capacity	Hydraulic gauges	Rubber pads	Modbus TCP/IP
Double pump High Pressure	Constant outlet pressure		Spring damper	BACnet IP
	Constant differential pressure		All seasons fan control	Container transport
			High pressure fan [2]	Refrigerant gauge

1) Available for non-EU installation. 2) Available on special order only, please contact your local Panasonic sales representative

REFER TO PAGE 50 TO SEE MORE OPTIONS FOR R410A OUTDOOR UNITS

Optional remote control.
PAW-SYSREMKIT

Model			**140**	**150**	**170**	**190**	**210**
Standard without buffer tank			**U-140CVNB**	**U-150CVNB**	**U-170CVNB**	**U-190CVNB**	**U-210CVNB**
With buffer tank			**U-140CVBL**	**U-150CVBL**	**U-170CVBL**	**U-190CVBL**	**U-210CVBL**
Power supply	Voltage	V	400	400	400	400	400
	Phase		Three phase	Three phase	Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50	50	50
Cooling capacity [1]		kW	132,0	146,0	164,0	181,0	208,0
Input power [1]		kW	43,1	47,6	54,8	61,1	69,8
Total EER 100 % [1]			3,06	3,07	2,99	2,96	2,98
SEER [2]			**4,40**	**4,45**	**4,38**	**4,40**	**4,25**
$\eta_{s,c}$ [2]		**%**	**173**	**175**	**172**	**173**	**167**
Startup type			Direct	Direct	Direct	Direct	Direct
Maximum operating current		A	108,0	119,0	136,0	153,0	170,0
Startup current w/o softstarter / w softstarter		A	251/130	262/141	324/161	341/178	396/201
Sound power (w standard fans)		dB(A)	85,4	85,4	87,0	88,1	88,1
Sound pressure (w standard fans) [3]		dB(A)	53,4	53,4	55,0	56,1	56,1
Dimension (w standard fans) w/o buffer tank	H x W x D	mm	2295 x 2856 x 2210	2295 x 2856 x 2210	2295 x 2856 x 2210	2295 x 2856 x 2210	2295 x 2856 x 2210
Dimension (w standard fans) w buffer tank	H x W x D	mm	2295 x 3666 x 2210	2295 x 3666 x 2210	2295 x 3666 x 2210	2295 x 3666 x 2210	2295 x 3666 x 2210
Weight (w 1 low Pa pump) w/o buffer tank		kg	1510	1520	1610	1680	1940
Weight (w 1 low Pa pump) w buffer tank		kg	1640	1650	1740	1810	2070
Refrigerant (R410A)		kg	2 x 24,7	2 x 24,7	24,7/33,3	2 x 33,3	2 x 33,3
Number of refrigerant circuit			2	2	2	2	2
Compressors							
Number			4	4	4	4	4
Type			Scroll	Scroll	Scroll	Scroll	Scroll
Part load step		%	0 / 24 / 26 / 48 / 50 / 52 / 74 / 76 / 100	0 / 23 / 27 / 46 / 50 / 54 / 73 / 77 / 100	0 / 20 / 24 / 44 / 45 / 55 / 69 / 80 / 100	0 / 22 / 28 / 44 / 50 / 56 / 72 / 78 / 100	0 / 19 / 31 / 38 / 50 / 62 / 69 / 81 / 100
Crankcase heater		W	4 x 66	4 x 66	3 x 66/82	2 x 82/2 x 66	2 x 95/2 x 66
Evaporator							
Number			1	1	1	1	1
Type			Plate	Plate	Plate	Plate	Plate
Nominal water flow	Cool	m³/h	21,56	23,65	25,95	30,24	33,62
Water pressure drop	Cool	kPa	33	39	24	32	40
Water volume		l	8,49	8,49	12,21	12,21	12,21
Antifreeze heater		W	60	60	120	120	120
Coils							
Number			4	4	4	4	4
Frontal surface		m²	11,88	11,88	11,88	11,88	11,88
Number of rows			2+2	2+2	2+3	3+3	3+3
Fans standard							
Number			4	4	4	4	4
Air flow		m³/h	56000	56000	71000	86000	83000
Rotation speed		r.p.m.	900	900	900	900	900
Power input (each fan)		W	940	940	940 - 1650	1650	1650
Water connections							
Type			Victaulic	Victaulic	Victaulic	Victaulic	Victaulic
Inlet - diameter		Inch	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2
Outlet - diameter		Inch	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2

1) Data refers to 7 °C leaving chilled water temperature and 35 °C condenser air temperature, according EN14511 standard. 2) Following COMMISSION REGULATION (EU) No 2016/2281 for comfort application chillers. 3) Sound pressure levels calculated at 10 meters. Sound pressure levels refer to ISO standard 3744 with parallel piped shape.
* w: with, w/o: without. ** The data are calculated with variable flow.

Accessories	
PAW-SYSREMKIT	Remote control
PAW-CM000SP041	Cloudgate plug and play IP65 box mobile 4G Europe
PAW-CM000K0001	Extension kit and cable glande for mobile (2/4G) antenna (3 m)

Accessories	
PAW-00SRTS011	Tservice wireless fee for 1 year
PAW-SYSVICTH	Victaulic connection kit for model 140 - 210

HIGH SEER 4,45 | ErP | SUPER QUIET | ULTIMATE CUSTOMISATION | 50 °C COOLING MODE | BMS CONNECTIVITY

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

U - 020/025/030/035/040 CW

Cooling capacity: 18,7 to 38,1 kW
Heating capacity: 19,5 to 41,6 kW

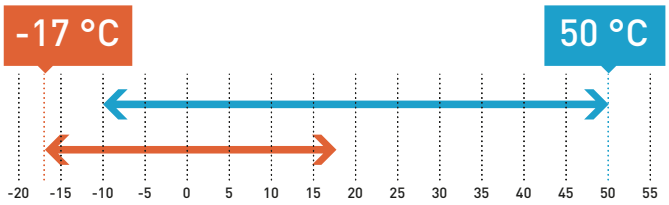
Compact and powerful heat pump chiller series with Panasonic quality verification.
ECOi-W Series guarantees quiet operation.

- High seasonal efficiency in cooling and heating
- Eurovent certified
- Ambient temperature operating range: -10 to +50 °C in cooling, -17 to +20 °C in heating
- Water outlet temperature range: -10 to +18 °C in cooling, +20 to +50 °C in heating
- Super quiet operation
- Optimised design for service and maintenance
- Simple user friendly control as standard
- Modbus RTU as standard

Technical focus

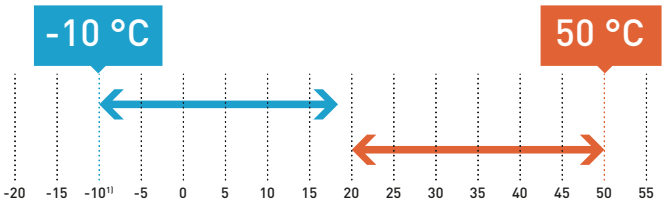
- Chiller type: heat pump
- Compressor type (number): Scroll compressors (2)
- Refrigerant type: R410A
- Refrigerant circuit: 1
- Fan type (number): axial fan (1)
- Heat exchanger: stainless steel plate heat exchanger
- Flow switch, water safety & air purge valves included
- Water filter included (mandatory to be installed on site)
- Night mode setting to save energy and reduce noise level
- Water compensation curve control
- Bluefin anti-corrosion coating

Ambient temperature.



Cooling: Outside air temperature (°C (DB)). Heating: Outside air temperature (°C (WB)).

Water outlet temperature.



Available options

Options				
Pump	**Pump drive**	**Hydraulic options**	**Ambient options**	**Miscellaneous options**
Single pump	Variable twin speed [1]	Low water pressure sensor	Finned coil treatment - epoxy	Soft starter
	Constant outlet pressure	Water isolation valves	Rubber pads	Power supply w/o neutral
	Constant differential pressure		Spring damper	Modbus TCP/IP
			All seasons	BACnet MSTP
			Nordic pack	BACnet IP
			High pressure fan [2]	

1) Available as standard on models 35 - 40 when pump is selected. 2) Available as standard on models 20 - 30 when pump is selected.

REFER TO PAGE 50 TO SEE MORE OPTIONS FOR R410A OUTDOOR UNITS

Optional remote control.
PAW-SYSREMKIT

Optional Shut off valves kit for model 20 - 40.
PAW-SYSSOV1

Model			**20**	**25**	**30**	**35**	**40**
Standard without buffer tank			**U-020CWNB**	**U-025CWNB**	**U-030CWNB**	**U-035CWNB**	**U-040CWNB**
With buffer tank			**U-020CWBS**	**U-025CWBS**	**U-030CWBS**	**U-035CWBS**	**U-040CWBS**
Power supply	Voltage	V	400	400	400	400	400
	Phase		Three phase	Three phase	Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50	50	50
Cooling capacity [1]		kW	18,7	23,7	26,4	35,8	38,1
Input power [1]		kW	5,9	7,7	9,4	12,3	13,1
Total EER 100 % [1]			3,15	3,07	2,81	2,92	2,91
SEER [2] [3]			**4,68**	**4,31**	**4,28**	**4,25**	**4,33**
$\eta_{s,c}$ [2] [3]		**%**	**184**	**169**	**168**	**167**	**170**
Heating capacity [4]		kW	19,5	26,9	29,7	37,3	41,6
Input power [4]		kW	6,1	9,3	9,9	13,2	13,5
SCOP [3] [5]			**3,50**	**3,38**	**3,45**	**3,50**	**3,50**
$\eta_{s,h}$ [3] [5]		**%**	**137**	**132**	**135**	**137**	**137**
Energy efficiency class (Scale A+++ to D) [6]			A+	A+	A+	A+	A+
Startup type			Direct	Direct	Direct	Direct	Direct
Maximum operating current		A	17,7	22,2	24,3	31,8	33,8
Startup current w/o softstarter / w softstarter		A	53/20	64/35	77/41	118/53	119/54
Sound power (w standard fans)		dB(A)	75,0	75,0	75,0	76,0	76,0
Sound pressure (w standard fans) [7]		dB(A)	42,8	42,8	42,8	43,8	43,8
Dimension (w standard fans) w/o buffer tank	H x W x D	mm	1983 x 1000 x 1000	1983 x 1000 x 1000	1983 x 1000 x 1000	1983 x 1000 x 1000	1983 x 1000 x 1000
Dimension (w standard fans) w buffer tank	H x W x D	mm	1983 x 1000 x 1507	1983 x 1000 x 1507	1983 x 1000 x 1507	1983 x 1000 x 1507	1983 x 1000 x 1507
Weight (w 1 pump) w/o buffer tank		kg	280	290	320	330	335
Weight (w 1 pump) w buffer tank		kg	345	355	385	395	400
Refrigerant (R410A)		kg	8,4	8,4	8,4	9,1	9,2
Number of refrigerant circuit			1	1	1	1	1
Compressors							
Number			2	2	2	2	2
Type			Scroll	Scroll	Scroll	Scroll	Scroll
Part load step		%	0/50/100	0/50/100	0/50/100	0/50/100	0/50/100
Crankcase heater		W	2 x 40	2 x 40	2 x 49	2 x 49	2 x 49
Evaporator							
Number			1	1	1	1	1
Type			Plate	Plate	Plate	Plate	Plate
Nominal water flow	Cool	m³/h	3,35	4,36	4,64	6,16	6,44
Water pressure drop	Cool	kPa	23	37	22	37	40
Water volume		l	1,78	1,78	2,55	2,55	2,55
Antifreeze heater		W	30	30	30	30	30
Coils							
Number			1	1	1	1	1
Frontal surface		m²	2,4	2,4	2,4	2,8	2,8
Number of rows			2	2	2	2	2
Fans standard							
Number			1	1	1	1	1
Air flow		m³/h	9000	13000	13000	16000	16000
Rotation speed		r.p.m.	900	900	900	650	650
Power input (each fan)		W	620	940	940	930	930
Water connections							
Type			Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228
Inlet - diameter		Inch	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2
Outlet - diameter		Inch	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2

1) Data refers to 7 °C leaving chilled water temperature and 35 °C condenser air temperature, according EN14511 standard. 2) Following COMMISSION REGULATION (EU) No 2016/2281 for comfort application chillers. 3) Those are the data with variable flow. 4) Data refers to 45 °C leaving warm water temperature and 7 °C ambient coil air temperature with 87 % R.H., according EN14511 standard. 5) Following COMMISSION REGULATION (EU) No 813/2013 for low-temperature heat pumps. 6) Following Eurovent and COMMISSION REGULATION (EU) No 811/2013 for low-temperature heat pumps. Scale from A+++ to D, as of 26th September 2019. 7) Sound pressure levels calculated at 10 meters. Sound pressure levels refer to ISO standard 3744 with parallel piped shape. * w: with, w/o: without.

Accessories	
PAW-SYSREMKIT	Remote control
PAW-CM000SP041	Cloudgate plug and play IP65 box mobile 4G Europe
PAW-CM000K0001	Extension kit and cable glande for mobile (2/4G) antenna (3 m)

Accessories	
PAW-00SRTS011	Tservice wireless fee for 1 year
PAW-SYSSOV1	Shut off valves kit for model 20 - 40

HIGH SEER 4,68 | HIGH SCOP 3,50 | ErP | SUPER QUIET | BLUEFIN | ULTIMATE CUSTOMISATION | AUTOMATIC FAN | -17 °C HEATING MODE | 50 °C COOLING MODE | BMS CONNECTIVITY

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

U - 045/055/065/075 CW

Cooling capacity: 44,3 to 71,0 kW
Heating capacity: 48,5 to 75,9 kW

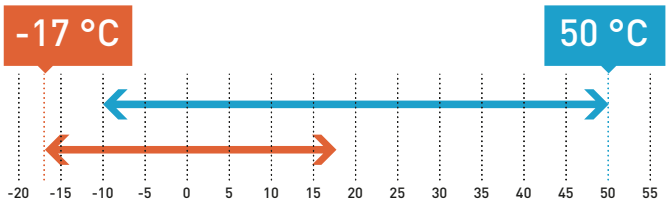
High seasonal efficiency in cooling, maximum SEER 4,63 in this range. ECOi-W Series offers a variety of options to meet your needs.

- High seasonal efficiency in cooling and heating
- Eurovent certified
- Ambient temperature operating range: -10 to +50 °C in cooling, -17 to +20 °C in heating
- Water outlet temperature range: -10 to +18 °C in cooling, +20 to +50 °C in heating
- Optional extra-low noise kit available
- Optimised design for service and maintenance
- Simple user friendly control as standard
- Modbus RTU as standard

Technical focus

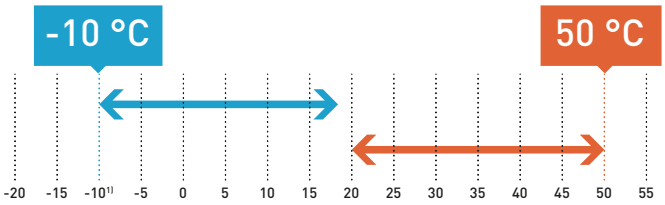
- Chiller type: heat pump
- Compressor type (number): Scroll compressors (2)
- Refrigerant type: R410A
- Refrigerant circuit: 1
- Fan type (number): axial fan (1 for 45/55, 2 for 65/75)
- Heat exchanger: stainless steel plate heat exchanger
- Flow switch, water safety & air purge valves included
- Water filter included (mandatory to be installed on site)
- Night mode setting to save energy and reduce noise level
- Water compensation curve control
- Bluefin anti-corrosion coating

Ambient temperature.



Cooling: Outside air temperature (°C (DB)). Heating: Outside air temperature (°C (WB)).

Water outlet temperature.



Available options

Options				
Pump	**Pump drive**	**Hydraulic options**	**Ambient options**	**Miscellaneous options**
Single pump	Fixed speed	Low water pressure sensor	Finned coil treatment - epoxy	Soft starter
Double pump	Variable twin speed	Water isolation valves	Outdoor coil protection grid	Power supply w/o neutral
	Constant outlet pressure	Electrical heater low power (only with buffer tank)	Rubber pads	Modbus TCP/IP
	Constant differential pressure		Spring damper	BACnet MSTP
		Electrical heater high power (only with buffer tank)	All seasons fan control	BACnet IP
			Extra-low noise kit	Container transport
			High pressure fan	Refrigerant gauge
				Desuperheater

REFER TO PAGE 50 TO SEE MORE OPTIONS FOR R410A OUTDOOR UNITS

Optional remote control.
PAW-SYSREMKIT

Optional Shut off valves kit for model 45 - 75.
PAW-SYSSOV2

Model			45	55	65	75
Standard without buffer tank			**U-045CWNB**	**U-055CWNB**	**U-065CWNB**	**U-075CWNB**
With buffer tank			**U-045CWBM**	**U-055CWBM**	**U-065CWBM**	**U-075CWBM**
Power supply	Voltage	V	400	400	400	400
	Phase		Three phase	Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50	50
Cooling capacity [1]		kW	44,3	50,9	64,1	71,0
Input power [1]		kW	15,9	18,0	21,8	24,0
Total EER 100 % [1]			2,78	2,83	2,95	2,96
SEER [2] [3]			**4,20**	**4,41**	**4,51**	**4,63**
$\eta_{s,c}$ [2] [3]		**%**	**165**	**174**	**177**	**182**
Heating capacity [4]		kW	48,5	58,2	67,2	75,9
Input power [4]		kW	17,3	20,4	22,5	24,3
SCOP [3] [5]			**3,38**	**3,38**	**3,55**	**3,53**
$\eta_{s,h}$ [3] [5]		**%**	**132**	**132**	**139**	**138**
Energy efficiency class (Scale A+++ to D) [6]			A+	A+	A+	—
Startup type			Direct	Direct	Direct	Direct
Maximum operating current		A	40,2	44,2	59,4	64,4
Startup current w/o softstarter / w softstarter		A	133/66	140/73	201/101	206/106
Sound power (w standard fans)		dB(A)	80,0	80,0	80,0	80,0
Sound pressure (w standard fans) [7]		dB(A)	47,8	47,8	47,8	47,8
Dimension (w standard fans) w/o buffer tank	H x W x D	mm	1986 x 2180 x 1160	1986 x 2180 x 1160	1986 x 2180 x 1160	1986 x 2180 x 1160
Dimension (w standard fans) w buffer tank	H x W x D	mm	1986 x 2680 x 1160	1986 x 2680 x 1160	1986 x 2680 x 1160	1986 x 2680 x 1160
Weight (w 1 pump) w/o buffer tank		kg	540	550	610	620
Weight (w 1 pump) w buffer tank		kg	700	710	770	780
Refrigerant (R410A)		kg	14,5	14,9	18,9	19,0
Number of refrigerant circuit			1	1	1	1
Compressors						
Number			2	2	2	2
Type			Scroll	Scroll	Scroll	Scroll
Part load step		%	0/50/100	0/43/57/100	0/40/60/100	0/45/55/100
Crankcase heater		W	2 x 66	2 x 66	2 x 66	2 x 66
Evaporator						
Number			1	1	1	1
Type			Plate	Plate	Plate	Plate
Nominal water flow	Cool	m³/h	8,06	9,18	11,30	12,31
Water pressure drop	Cool	kPa	30	35	28	37
Water volume		l	4,10	4,10	6,10	6,10
Antifreeze heater		W	30	30	2 x 30	2 x 30
Coils						
Number			1	1	2	2
Frontal surface		m²	4,20	4,20	5,55	5,55
Number of rows			2	2	2	2
Fans standard						
Number			1	1	2	2
Air flow		m³/h	22500	22500	30000	30000
Rotation speed		r.p.m.	790	790	650	650
Power input (each fan)		W	1650	1650	930	930
Water connections						
Type			Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228
Inlet - diameter		Inch	2	2	2	2
Outlet - diameter		Inch	2	2	2	2

1) Data refers to 7 °C leaving chilled water temperature and 35 °C condenser air temperature, according EN14511 standard. 2) Following COMMISSION REGULATION (EU) No 2016/2281 for comfort application chillers. 3) Those are the data with variable flow. 4) Data refers to 45 °C leaving warm water temperature and 7 °C ambient coil air temperature with 87 % R.H., according EN14511 standard. 5) Following COMMISSION REGULATION (EU) No 813/2013 for low-temperature heat pumps. 6) Following Eurovent and COMMISSION REGULATION (EU) No 811/2013 for low-temperature heat pumps. Scale from A+++ to D, as of 26th September 2019. 7) Sound pressure levels calculated at 10 meters. Sound pressure levels refer to ISO standard 3744 with parallel piped shape. * w: with, w/o: without.

Accessories	
PAW-SYSREMKIT	Remote control
PAW-CM000SP041	Cloudgate plug and play IP65 box mobile 4G Europe
PAW-CM000K0001	Extension kit and cable glande for mobile (2/4G) antenna (3 m)

Accessories	
PAW-00SRTS011	Tservice wireless fee for 1 year
PAW-SYSSOV2	Shut off valves kit for model 45 - 75

HIGH SEER 4,63 | HIGH SCOP 3,55 | ErP | BLUEFIN | ULTIMATE CUSTOMISATION | AUTOMATIC FAN | -17 °C HEATING MODE | 50 °C COOLING MODE | BMS CONNECTIVITY

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

U - 090/105/125 CW

Cooling capacity: 88,7 to 119,3 kW
Heating capacity: 88,1 to 119,1 kW

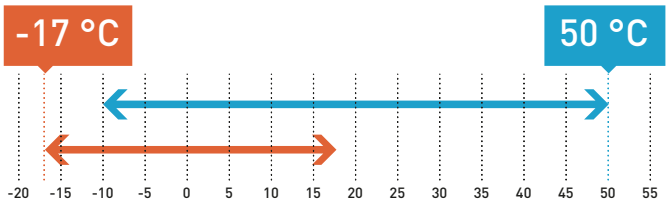
Customizable design gives high flexibility. Wide range of communication protocols fulfill the requirements in hotels, offices, industry applications.

- High seasonal efficiency in cooling and heating
- Eurovent certified
- Ambient temperature operating range: -10 to +50 °C in cooling, -17 to +20 °C in heating
- Water outlet temperature range: -10 to +18 °C in cooling, +20 to +50 °C in heating
- Optional extra-low noise kit available
- Optimised design for service and maintenance
- Simple user friendly control as standard
- Modbus RTU as standard

Technical focus

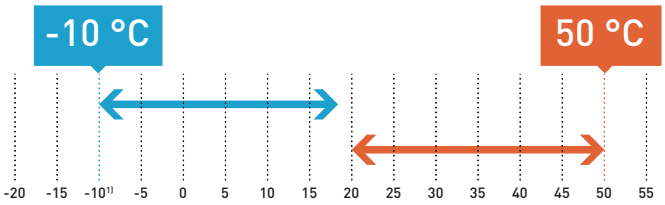
- Chiller type: heat pump
- Compressor type (number): Scroll compressors (2)
- Refrigerant type: R410A
- Refrigerant circuit: 1
- Fan type (number): axial fan (2)
- Heat exchanger: stainless steel plate heat exchanger
- Flow switch, water safety & air purge valves included
- Water filter included (mandatory to be installed on site)
- Night mode setting to save energy and reduce noise level
- Water compensation curve control
- Bluefin anti-corrosion coating

Ambient temperature.



Cooling: Outside air temperature (°C (DB)). Heating: Outside air temperature (°C (WB)).

Water outlet temperature.



Available options

Options				
Pump	**Pump drive**	**Hydraulic options**	**Ambient options**	**Miscellaneous options**
Single pump	Fixed speed	Low water pressure sensor	Finned coil treatment - epoxy	Soft starter
Double pump	Variable twin speed	Water isolation valves	Outdoor coil protection grid	Power supply w/o neutral
	Constant outlet pressure	Electrical heater low power (only with buffer tank)	Rubber pads	Modbus TCP/IP
	Constant differential pressure		Spring damper	BACnet MSTP
		Electrical heater high power (only with buffer tank)	All seasons fan control	BACnet IP
			Extra-low noise kit	Container transport
			High pressure fan	Refrigerant gauge
				Desuperheater

REFER TO PAGE 50 TO SEE MORE OPTIONS FOR R410A OUTDOOR UNITS

Optional remote control.
PAW-SYSREMKIT

Optional Shut off valves kit for model 90 - 125.
PAW-SYSSOV3

Model			**90**	**105**	**125**
Standard without buffer tank			**U-090CWNB**	**U-105CWNB**	**U-125CWNB**
With buffer tank			**U-090CWBM**	**U-105CWBM**	**U-125CWBM**
Power supply	Voltage	V	400	400	400
	Phase		Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50
Cooling capacity [1]		kW	88,7	100,8	119,3
Input power [1]		kW	30,6	34,8	40,4
Total EER 100 % [1]			2,90	2,89	2,96
SEER [2] [3]			**4,40**	**4,44**	**4,49**
$\eta_{s,c}$ [2] [3]		**%**	**173**	**175**	**177**
Heating capacity [4]		kW	88,1	101,0	119,1
Input power [4]		kW	33,8	38,4	45,5
SCOP [3] [5]			**3,40**	**3,43**	**3,43**
$\eta_{s,h}$ [3] [5]		**%**	**133**	**134**	**134**
Startup type			Direct	Direct	Direct
Maximum operating current		A	77,9	86,0	102,0
Startup current w/o softstarter / w softstarter		A	265/127	312/146	345/183
Sound power (w standard fans)		dB(A)	83,0	83,0	83,0
Sound pressure (w standard fans) [6]		dB(A)	50,8	50,8	50,8
Dimension (w standard fans) w/o buffer tank	H x W x D	mm	2286 x 2180 x 1160	2286 x 2180 x 1160	2286 x 2180 x 1160
Dimension (w standard fans) w buffer tank	H x W x D	mm	2286 x 2680 x 1160	2286 x 2680 x 1160	2286 x 2680 x 1160
Weight (w 1 pump) w/o buffer tank		kg	790	900	920
Weight (w 1 pump) w buffer tank		kg	950	1060	1080
Refrigerant (R410A)		kg	22,0	27,0	28,5
Number of refrigerant circuit			1	1	1
Compressors					
Number			2	2	2
Type			Scroll	Scroll	Scroll
Part load step		%	0/45/55/100	0/38/62/100	0/33/67/100
Crankcase heater		W	66/82	66/95	66/95
Evaporator					
Number			1	1	1
Type			Plate	Plate	Plate
Nominal water flow	Cool	m³/h	15,73	18,25	20,95
Water pressure drop	Cool	kPa	26	34	45
Water volume		l	10,80	10,80	10,80
Antifreeze heater		W	2 x 30	2 x 30	2 x 30
Coils					
Number			2	2	2
Frontal surface		m²	6,4	6,4	6,4
Number of rows			2	3	3
Fans standard					
Number			2	2	2
Air flow		m³/h	42000	42000	42000
Rotation speed		r.p.m.	790	790	790
Power input (each fan)		W	1650	1650	1650
Water connections					
Type			Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228
Inlet - diameter		Inch	2 1/2	2 1/2	2 1/2
Outlet - diameter		Inch	2 1/2	2 1/2	2 1/2

1) Data refers to 7 °C leaving chilled water temperature and 35 °C condenser air temperature, according EN14511 standard. 2) Following COMMISSION REGULATION (EU) No 2016/2281 for comfort application chillers. 3) Those are the data with variable flow. 4) Data refers to 45 °C leaving warm water temperature and 7 °C ambient coil air temperature with 87 % R.H., according EN14511 standard. 5) Following COMMISSION REGULATION (EU) No 813/2013 for low-temperature heat pumps. 6) Sound pressure levels calculated at 10 meters. Sound pressure levels refer to ISO standard 3744 with parallel piped shape. * w: with, w/o: without.

Accessories	
PAW-SYSREMKIT	Remote control
PAW-CM000SP041	Cloudgate plug and play IP65 box mobile 4G Europe
PAW-CM000K0001	Extension kit and cable glande for mobile (2/4G) antenna (3 m)

Accessories	
PAW-00SRTS011	Tservice wireless fee for 1 year
PAW-SYSSOV3	Shut off valves kit for model 90 - 125

HIGH SEER 4,49 | HIGH SCOP 3,43 | ErP | BLUEFIN | ULTIMATE CUSTOMISATION | AUTOMATIC FAN | -17 °C HEATING MODE | 50 °C COOLING MODE | BMS CONNECTIVITY

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

U - 140/150/170/190/210 CW

Cooling capacity: 128,3 to 207,9 kW
Heating capacity: 144,0 to 218,0 kW

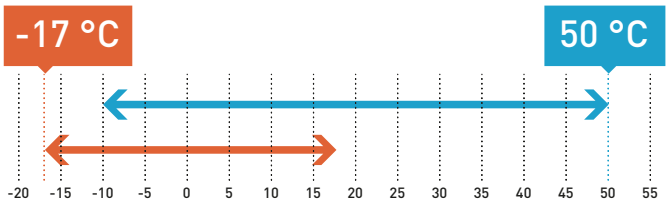
Heat pump chiller series with powerful operation by 4 scroll compressors. Maximum water outlet temperature in heating is up to 50 °C. Defrost limiting design ensures to provide stable hot water even at low ambient conditions.

- Smart defrost: Defrost limiting design to ensure a constant water outlet temperature even at very low temperatures
- High seasonal efficiency in cooling and heating
- Eurovent certified
- Ambient temperature operating range: -10 to +50 °C in cooling, -17 to +20 °C in heating
- Water outlet temperature range: -10 to +18 °C in cooling, +20 to +50 °C in heating
- Super quiet operation
- Victaulic water connections
- Optimised design for service and maintenance
- Simple user friendly control as standard
- Modbus RTU as standard
- Modbus TCP/IP as standard

Technical focus

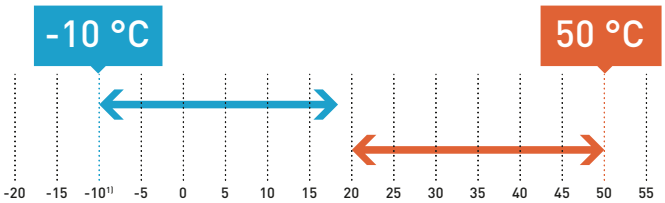
- Chiller type: heat pump
- Compressor type (number): Scroll compressors (4)
- Refrigerant type: R410A
- Refrigerant circuit: 2
- Fan type (number): axial fan (4)
- Heat exchanger: stainless steel plate heat exchanger
- Flow switch, water safety & air purge valves included
- Water filter included (mandatory to be installed on site)
- Night mode setting to save energy and reduce noise level
- Water compensation curve control
- Bluefin anti-corrosion coating
- Remote LAN connection as standard

Ambient temperature.



Cooling: Outside air temperature (°C (DB)). Heating: Outside air temperature (°C (WB)).

Water outlet temperature.



Available options

Options				
Pump	**Pump drive**	**Hydraulic options**	**Ambient options**	**Miscellaneous options**
Single pump low pressure	Fixed speed	Low water pressure sensor	Finned coil treatment - epoxy	Soft starter
Single pump high pressure	Variable twin speed	Water isolation valves	Outdoor coil protection grid	Power supply w/o neutral
Double pump low pressure	Variable capacity	Hydraulic gauges	Rubber pads	Modbus TCP/IP
Double pump high pressure	Constant outlet pressure		Spring damper	BACnet IP
	Constant differential pressure		All seasons fan control	Container transport
			Nordic pack	Refrigerant gauge
			High pressure fan	Desuperheater 1)

1) Available on special order only, please contact your local Panasonic sales representative.

1 DEFROST CYCLE EVERY 130 MINUTES.
Heating Capacity: +22 %
Integrated COP: +15 %
Improved SCOP Class

REFER TO PAGE 50 TO SEE MORE OPTIONS FOR R410A OUTDOOR UNITS

Optional remote control.
PAW-SYSREMKIT

Model			**140**	**150**	**170**	**190**	**210**
Standard without buffer tank			**U-140CWNB**	**U-150CWNB**	**U-170CWNB**	**U-190CWNB**	**U-210CWNB**
With buffer tank			**U-140CWBL**	**U-150CWBL**	**U-170CWBL**	**U-190CWBL**	**U-210CWBL**
Power supply	Voltage	V	400	400	400	400	400
	Phase		Three phase	Three phase	Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50	50	50
Cooling capacity [1]		kW	128,3	142,1	163,9	177,5	207,9
Input power [1]		kW	43,2	47,7	54,7	61,3	69,7
Total EER 100 % [1]			2,97	2,98	2,99	2,90	2,98
SEER [2] [3]			**4,39**	**4,36**	**4,31**	**4,23**	**4,28**
$\eta_{s,c}$ [2] [3]		**%**	**173**	**171**	**169**	**166**	**168**
Heating capacity [4]		kW	144,0	154,0	170,0	195,0	218,0
Input power [4]		kW	45,7	50,3	55,5	67,4	78,3
SCOP [3] [5]			**3,30**	**3,33**	**3,30**	**3,23**	**3,23**
$\eta_{s,h}$ [3] [5]		**%**	**129**	**130**	**129**	**128**	**126**
Startup type			Direct	Direct	Direct	Direct	Direct
Maximum operating current		A	108,0	119,0	136,0	153,0	170,0
Startup current w/o softstarter / w softstarter		A	251 / 130	262 / 141	324 / 161	341 / 178	396 / 201
Sound power (w standard fans)		dB(A)	85,4	85,4	87,0	88,1	88,1
Sound pressure (w standard fans) [6]		dB(A)	53,4	53,4	55,0	56,1	56,1
Dimension (w standard fans) w/o buffer tank	H x W x D	mm	2295 x 2856 x 2210	2295 x 2856 x 2210	2295 x 2856 x 2210	2295 x 2856 x 2210	2295 x 2856 x 2210
Dimension (w standard fans) w buffer tank	H x W x D	mm	2295 x 3666 x 2210	2295 x 3666 x 2210	2295 x 3666 x 2210	2295 x 3666 x 2210	2295 x 3666 x 2210
Weight (w 1 low Pa pump) w/o buffer tank		kg	1570	1580	1680	1750	2020
Weight (w 1 low Pa pump) w buffer tank		kg	1700	1710	1810	1880	2150
Refrigerant (R410A)		kg	2 x 24,7	2 x 24,7	24,7/33,3	2 x 33,3	2 x 33,3
Number of refrigerant circuit			2	2	2	2	2
Compressors							
Number			4	4	4	4	4
Type			Scroll	Scroll	Scroll	Scroll	Scroll
Part load step		%	0 / 24 / 26 / 48 / 50 / 52 / 74 / 76 / 100	0 / 23 / 27 / 46 / 50 / 54 / 73 / 77 / 100	0 / 20 / 24 / 44 / 45 / 55 / 69 / 80 / 100	0 / 22 / 28 / 44 / 50 / 56 / 72 / 78 / 100	0 / 19 / 31 / 38 / 50 / 62 / 69 / 81 / 100
Crankcase heater		W	4 x 66	4 x 66	3 x 66 / 82	2 x 82 / 2 x 66	2 x 95 / 2 x 66
Evaporator							
Number			1	1	1	1	1
Type			Plate	Plate	Plate	Plate	Plate
Nominal water flow	Cool	m³/h	21,56	23,65	25,95	30,24	33,62
Water pressure drop	Cool	kPa	33	39	24	32	40
Water volume		l	8,49	8,49	12,21	12,21	12,21
Antifreeze heater		W	60	60	120	120	120
Coils							
Number			4	4	4	4	4
Frontal surface		m²	11,88	11,88	11,88	11,88	11,88
Number of rows			2+2	2+2	2+3	3+3	3+3
Fans standard							
Number			4	4	4	4	4
Air flow		m³/h	56000	56000	71000	86000	83000
Rotation speed		r.p.m.	900	900	900	900	900
Power input (each fan)		W	940	940	940 - 1650	1650	1650
Water connections							
Type			Victaulic	Victaulic	Victaulic	Victaulic	Victaulic
Inlet - diameter		Inch	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2
Outlet - diameter		Inch	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2

1) Data refers to 7 °C leaving chilled water temperature and 35 °C condenser air temperature, according EN14511 standard. 2) Following COMMISSION REGULATION (EU) No 2016/2281 for comfort application chillers. 3) Those are the data with variable flow. 4) Data refers to 45 °C leaving warm water temperature and 7 °C ambient coil air temperature with 87 % R.H., according EN14511 standard. 5) Following COMMISSION REGULATION (EU) No 813/2013 for low-temperature heat pumps. 6) Sound pressure levels calculated at 10 meters. Sound pressure levels refer to ISO standard 3744 with parallel piped shape. * w: with, w/o: without.

Accessories	
PAW-SYSREMKIT	Remote control
PAW-CM000SP041	Cloudgate plug and play IP65 box mobile 4G Europe
PAW-CM000K0001	Extension kit and cable glande for mobile (2/4G) antenna (3 m)

Accessories	
PAW-00SRTS011	Tservice wireless fee for 1 year
PAW-SYSVICTH	Victaulic connection kit for model 140 - 210

HIGH SEER 4,39 | HIGH SCOP 3,33 | ErP | SUPER QUIET | BLUEFIN | ULTIMATE CUSTOMISATION | AUTOMATIC FAN | -17 °C HEATING MODE | 50 °C COOLING MODE | DEFROST LIMITING | BMS CONNECTIVITY

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

Options for outdoor units

Options table 20 - 125

Option	Type	Ref.	Description	Model											
1	Capacity			20	25	30	35	40	45	55	65	75	90	105	125
2	Refrigerant and compressor type	V	R410A, fixed speed compressor - Cooling only	•	•	•	•	•	•	•	•	•	•	•	•
		W	R410A, fixed speed compressor - Heat Pump	•	•	•	•	•	•	•	•	•	•	•	•
3	Buffer tank option	NB	No buffer	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std
		BS	Buffer tank (small)	•	•	•	•	•							
		BM	Buffer tank (medium)						•	•	•	•	•	•	•
4	Pump option		No pump [1]	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std
			Single pump	•	•	•	•	•	•	•	•	•	•	•	•
			Double pump						•	•	•	•	•	•	•
5	Pump drive option		Pump drive - fixed speed - Cooling only [2]	•	•	•	•	•	•	•	•	•	•	•	•
			Pump drive - fixed speed - Heat Pump						Std	Std	Std	Std	Std	Std	Std
			Pump drive - variable twin speed (single pump) [3]	Std	Std	Std	Std	Std	•	•	•	•	•	•	•
			Pump drive - variable twin speed (double pump)						•	•	•	•	•	•	•
			Pump drive - constant outlet pressure (single pump)	•	•	•	•	•	•	•	•	•	•	•	•
			Pump drive - constant outlet pressure (double pump)						•	•	•	•	•	•	•
			Pump drive - constant differential pressure (single pump) [4]	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
6	Hydraulic options		Flow switch	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std
			Low water pressure sensor [5]	•	•	•	•	•	•	•	•	•	•	•	•
			Water isolation valves	•	•	•	•	•	•	•	•	•	•	•	•
			Desuperheater	SO	SO	SO	SO	SO	•	•	•	•	•	•	•
7	Control options		Standard BMS option (Modbus RTU)	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std
			Modbus TCP/IP	•	•	•	•	•	•	•	•	•	•	•	•
			BACnet MSTP	•	•	•	•	•	•	•	•	•	•	•	•
			BACnet IP	•	•	•	•	•	•	•	•	•	•	•	•
			Digital input for: Cooling/heating or Night mode or Load Shedding	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std
8	Electrical options		Automatic circuit breaker	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std
			Phase sequence control	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std
			Fan speed controller	•	•	•	•	•	•	•	•	•	•	•	•
			Electrical backup heater 12 kW - Heat pump [6]						•	•	•	•			
			Electrical backup heater 24 kW - Heat pump [6]						•	•	•	•	•	•	•
			Electrical backup heater 36 kW - Heat pump [6]										•	•	•
			Power supply w/o neutral [7]	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
			Soft starter	•	•	•	•	•	•	•	•	•	•	•	•
9	Refrigerant options		Refrigerant gauges (HP and LP manometers)						•	•	•	•	•	•	•
10	Ambient options		Aluminium finned coil - Cooling Only	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std
			Bluefin coil treatment - Heat Pump	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std
			Finned coil epoxy treatment	•	•	•	•	•	•	•	•	•	•	•	•
			Finned coil Blygold treatment	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO
			Outdoor coil protection grid	•	•	•	•	•	•	•	•	•	•	•	•
			Rubber pads (supplied loose)	•	•	•	•	•	•	•	•	•	•	•	•
			Spring damper (supplied loose)	•	•	•	•	•	•	•	•	•	•	•	•
			Container transport						•	•	•	•	•	•	•
			Low noise option	Std	Std	Std	Std	Std	•	•	•	•	•	•	•
			High pressure fan [8]	SO	•	•	•	•	•	•	•	•	•	•	•

1) The system may be supplied without a pump, but in order to meet EU ErP compliance, the installation must include a variable speed pump.
2) Fixed speed pump drive on cooling only chiller, is only suitable for installation outside of the EU due to ErP compliance.
3) Variable twin speed drive is supplied as standard with models 20 - 40, when selecting single pump option. Please select alternate pump drive if required.
4) Constant differential pump drive option is only available on a special order basis, and requires additional production time. Please contact your local sales representative.
5) Low water pressure sensor is supplied loose when selected as an option without pump and hydraulic kit. To be installed on site.
6) Electrical backup heaters can only be selected when combined with buffer tank option.
7) Power supply without neutral is only available on a special order and requires additional production time. Please contact your local sales representative.
8) High pressure fan is not available on model 20 due to body design.

Std: Standard item included.
•: Optional item that can be selected.
SO: Special order item.

Options table 140 - 210

Option	Type	Ref.	Description	Model				
1	Capacity			140	150	170	190	210
2	Refrigerant and compressor type	V	R410A, fixed speed compressor - Cooling only	•	•	•	•	•
		W	R410A, fixed speed compressor - Heat Pump	•	•	•	•	•
3	Buffer tank option	NB	No buffer	Std	Std	Std	Std	Std
		BL	Buffer tank (large)	•	•	•	•	•
4	Pump option		No pump [1]	Std	Std	Std	Std	Std
			Single pump low pressure	•	•	•	•	•
			Single pump high pressure	•	•	•	•	•
			Double pump low pressure	•	•	•	•	•
			Double pump high pressure	•	•	•	•	•
5	Pump drive option		Pump drive - fixed speed [2]	Std	Std	Std	Std	Std
			Pump drive - variable twin speed (single pump)	•	•	•	•	•
			Pump drive - variable twin speed (double pump)	•	•	•	•	•
			Pump drive - variable capacity (single pump)	•	•	•	•	•
			Pump drive - variable capacity (double pump)	•	•	•	•	•
			Pump drive - constant outlet pressure (single pump)	•	•	•	•	•
			Pump drive - constant outlet pressure (double pump)	•	•	•	•	•
			Pump drive - constant differential pressure (single pump) [3]	SO	SO	SO	SO	SO
			Pump drive - constant differential pressure (double pump) [3]	SO	SO	SO	SO	SO
6	Hydraulic options		Flow switch	Std	Std	Std	Std	Std
			Low water pressure sensor [4]	•	•	•	•	•
			Water isolation valves	•	•	•	•	•
			Hydraulic gauges	•	•	•	•	•
7	Control options		Standard BMS option (Modbus RTU)	Std	Std	Std	Std	Std
			Modbus TCP/IP	•	•	•	•	•
			BACnet MSTP	•	•	•	•	•
			BACnet IP	•	•	•	•	•
			Digital input for: Cooling/heating or Night mode or Load Shedding	Std	Std	Std	Std	Std
8	Electrical options		Automatic circuit breaker	Std	Std	Std	Std	Std
			Phase sequence control	Std	Std	Std	Std	Std
			Fan speed controller	•	•	•	•	•
			Power supply w/o neutral	•	•	•	•	•
			Soft starter	•	•	•	•	•
9	Refrigerant options		Refrigerant gauges (HP and LP manometers)	•	•	•	•	•
10	Ambient options		Aluminium finned coil - Cooling Only	Std	Std	Std	Std	Std
			Bluefin coil treatment - Heat Pump	Std	Std	Std	Std	Std
			Finned coil treatment - epoxy	•	•	•	•	•
			Finned coil Blygold treatment	SO	SO	SO	SO	SO
			Outdoor coil protection grid	•	•	•	•	•
			Rubber pads (supplied loose)	•	•	•	•	•
			Spring damper (supplied loose)	•	•	•	•	•
			Container transport	•	•	•	•	•
			Low noise option	Std	Std	Std	Std	Std
			High pressure fan	SO	SO	SO	SO	SO

1) The system may be supplied without a pump, but in order to meet EU ErP compliance, the installation must include a variable speed pump.
2) Fixed speed pump drive on cooling only chiller, is only suitable for installation outside of the EU due to ErP compliance.
3) Constant differential pump drive option is only available on a special order basis, and requires additional production time. Please contact your local sales representative.
4) Low water pressure sensor is supplied loose when selected as an option without pump and hydraulic kit. To be installed on site.

Std: Standard item included.
•: Optional item that can be selected.
SO: Special order item.

Explore the new range of fan coils. Designed to fit with your environment and enhance comfort

Designed to provide performance, comfort and seamless integration within your environment

Fan coils highlighted features.
Available in a wide range of designs, the fan coils are perfectly adapted to fit within almost any location.

1 Innovation for an optimum comfort
Range of fan coils for heating and cooling with capacities from 0,5 to 21,9 kW in cooling and from 0,6 to 21,5 kW in heating. Bring full year comfort with water based systems.

2 Energy efficient and low noise fan
Dynamically balanced and specially designed fans, reinforced acoustic insulation and optimised fan speed staging for lower noise levels.
Improved efficiency with optional EC fan motor.

3 Quality and efficient coil
Constructed from staggered copper tubes, mechanically expanded into aluminium fins, providing maximum heat transfer efficiency, durability and hygiene.

4 Flexible installation
Various types of unit to fit your needs with flexible installation options. A choice of service side for hydraulic connections, piping configuration and horizontal or vertical installation for ducted units.

Offering a great range of capacities and performance, available in a wide range of designs, the fan coils are perfectly adapted to fit within almost any location. Whether the requirements are for cooling only, or for both heating and cooling, there is a fan coil to suit. With a variety of piping and fan configuration, the range is capable of meeting the most stringent of requirements. Line up available in AC and EC fans, it is possible to achieve both powerful performance, but with sustainability in mind.

Controllers with sophisticated designs, provide a user friendly interface while enabling an easy and low cost integration to building management systems.

Optional wired remote controller for AC fan, 2-pipe and 4-pipe application.

PAW-FC-RC1

Optional wired remote controller for AC fan 2-pipe application

PAW-FC-903AC **PAW-FC-907AC**

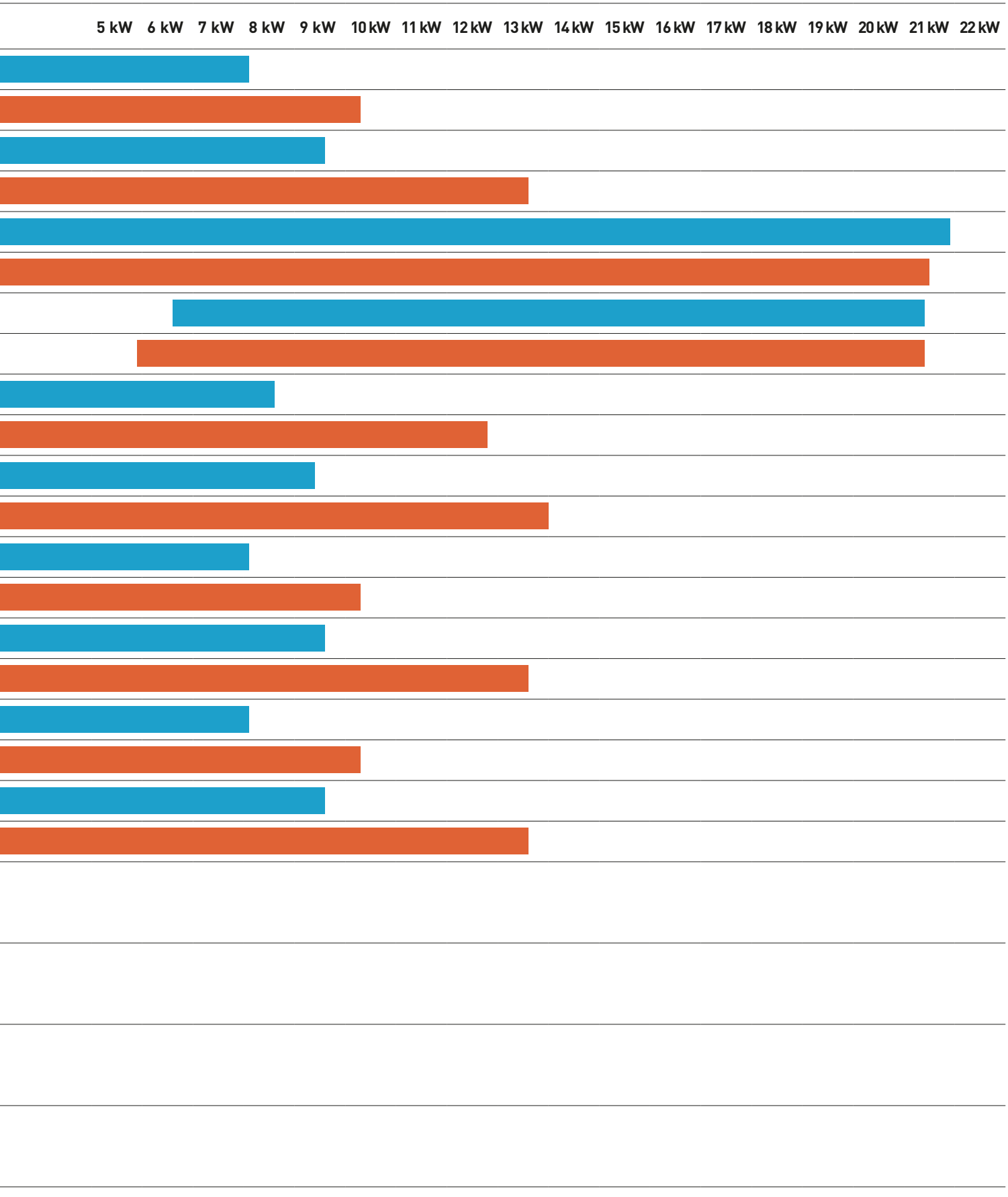
Optional wired remote controller for EC fan, 2-pipe and 4-pipe application.

PAW-FC-903EC **PAW-FC-907EC**

Range of fan coils

Page		Fan Type	Operation	Capacity range	0 kW 1 kW 2 kW 3 kW 4 kW
P. 56	Ducted 	AC	Cooling	0,7 to 8,1 kW	
			Heating	0,7 to 10,3 kW	
		EC	Cooling	0,5 to 9,6 kW	
			Heating	0,6 to 13,6 kW	
P. 58	High static pressure ducted 	AC	Cooling	4,1 to 21,9 kW	
			Heating	4,7 to 21,5 kW	
		EC	Cooling	6,6 to 21,4 kW	
			Heating	5,9 to 21,4 kW	
P. 60	4 way cassette 	AC	Cooling	1.4 to 8,6 kW	
			Heating	1,1 to 12,8 kW	
		EC	Cooling	1,4 to 9,4 kW	
			Heating	1,1 to 14,0 kW	
P. 62	Ceiling chassis 	AC	Cooling	0,7 to 8,1 kW	
			Heating	0,7 to 10,3 kW	
		EC	Cooling	0,5 to 9,6 kW	
			Heating	0,6 to 13,6 kW	
P. 64	Floor-standing chassis 	AC	Cooling	0,7 to 8,1 kW	
			Heating	0,7 to 10,3 kW	
		EC	Cooling	0,5 to 9,6 kW	
			Heating	0,6 to 13,6 kW	
P. 66	Wall-mounted 	AC	Cooling	1,0 to 3,9 kW	
			Heating	1,4 to 4,1 kW	
P. 67	Smart fan coils 	AC	Cooling	0,2 to 1,7 kW	
			Heating	0,2 to 1,7 kW	

Values indicated are for the full operating range. The data shown within the tables following are indicative of specific installation conditions.
For full details relating to performance and operating conditions, please refer to the technical data manual.


5 kW
6 kW
7 kW
8 kW
9 kW
10 kW
11 kW
12 kW
13 kW
14 kW
15 kW
16 kW
17 kW
18 kW
19 kW
20 kW
21 kW
22 kW

Fan coils - ducted (AC)

Optional controller. Advanced wired remote controller.
PAW-FC-RC1

Optional controller. Wired remote controller with touch control.
PAW-FC-907AC

Optional controller. Wired remote controller.
PAW-FC-903AC

2-pipe - Left connection (PAW-)			**FC2A-D010L**	**FC2A-D020L**	**FC2A-D030L**	**FC2A-D040L**	**FC2A-D050L**	**FC2A-D060L**	**FC2A-D070L**	**FC2A-D080L**
2-pipe - Right connection (PAW-)			**FC2A-D010R**	**FC2A-D020R**	**FC2A-D030R**	**FC2A-D040R**	**FC2A-D050R**	**FC2A-D060R**	**FC2A-D070R**	**FC2A-D080R**
Total cooling capacity [1]	Lo/Med/Hi	kW	0,7/1,0/1,5	0,7/1,2/1,7	1,0/2,0/2,5	1,2/2,4/3,2	1,7/3,2/4,6	2,7/4,6/5,8	3,4/6,1/7,3	4,6/6,1/8,1
Sensible cooling capacity [1]	Lo/Med/Hi	kW	0,5/0,8/1,1	0,6/0,9/1,3	0,8/1,5/1,9	0,9/1,8/2,3	1,2/2,2/3,3	1,9/3,3/4,5	2,4/4,3/5,1	3,4/4,6/6,3
Water flow	Lo/Med/Hi	l/h	124/172/250	127/213/289	172/341/430	206/413/547	296/544/798	466/784/1003	587/1058/1252	798/1048/1400
Water pressure drop	Lo/Med/Hi	kPa	10,7/19,5/39,2	1,9/3,9/6,3	6,3/19,3/28,8	5,4/17,1/28,0	7,5/22,8/46,9	13,9/37,4/60,2	4,8/15,4/21,5	11,9/19,3/32,5
Heating capacity [2]	Lo/Med/Hi	kW	0,9/1,4/2,0	0,9/1,5/2,2	1,3/2,4/3,1	1,4/2,9/4,0	2,1/4,1/5,7	3,1/5,3/7,1	4,3/7,9/9,3	5,9/8,1/11,6
4-pipe - Left connection (PAW-)			**FC4A-D010L**	**FC4A-D020L**	**FC4A-D030L**	**FC4A-D040L**	**FC4A-D050L**	**FC4A-D060L**	**FC4A-D070L**	**FC4A-D080L**
4-pipe - Right connection (PAW-)			**FC4A-D010R**	**FC4A-D020R**	**FC4A-D030R**	**FC4A-D040R**	**FC4A-D050R**	**FC4A-D060R**	**FC4A-D070R**	**FC4A-D080R**
Total cooling capacity [1]	Lo/Med/Hi	kW	0,7/0,9/1,3	0,6/1,1/1,6	1,0/1,9/2,4	1,1/2,3/3,0	1,7/3,0/4,3	2,6/4,4/5,6	3,3/5,9/6,9	4,5/5,9/8,0
Sensible cooling capacity [1]	Lo/Med/Hi	kW	0,5/0,7/1,0	0,5/0,8/1,2	0,8/1,5/1,8	0,8/1,7/2,2	1,2/2,2/3,1	1,8/3,2/4,3	2,3/4,2/4,9	3,3/4,4/6,2
Water flow	Lo/Med/Hi	l/h	114/159/225	109/192/268	165/327/414	194/388/517	284/522/748	449/756/967	575/1019/1193	775/1020/1380
Water pressure drop	Lo/Med/Hi	kPa	8,3/15,2/29,0	1,5/3,4/5,6	3,0/9,5/14,4	6,4/22,3/36,8	4,2/12,8/25,1	10,2/27,7/44,5	5,9/17,9/24,4	19,3/31,1/53,6
Heating capacity [2]	Lo/Med/Hi	kW	0,5/0,7/1,0	0,6/0,9/1,1	1,0/1,4/1,6	0,9/1,6/2,1	1,5/2,3/3,0	1,9/2,9/3,7	2,7/3,6/4,3	3,9/5,6/7,1
Water flow	Lo/Med/Hi	l/h	79/127/178	100/146/190	164/232/274	160/273/354	251/401/508	325/505/633	456/626/736	673/963/1226
Water pressure drop	Lo/Med/Hi	kPa	1,9/3,5/5,6	1,5/3,2/5,3	5,1/9,0/11,9	9,2/26,5/42,7	10,7/24,6/29,5	20,3/43,9/52,9	67,2/117,9/137,8	33,1/63,7/75
Sound levels										
Global sound power	Lo/Med/Hi	dB(A)	33/40/49	31/43/50	30/45/52	30/44/51	34/46/56	38/51/58	43/56/61	50/55/64
Global sound pressure [3]	Lo/Med/Hi	dB(A)	24/31/40	22/34/41	21/36/43	21/35/42	25/37/47	29/42/49	34/47/52	41/46/55
Fan										
Number			1	1	1	2	2	2	2	3
Air flow 2-pipe	Lo/Med/Hi	m³/h	111/190/283	105/179/265	138/274/390	173/357/499	253/486/716	350/640/933	480/893/1064	660/936/1397
Air flow 4-pipe	Lo/Med/Hi	m³/h	95/168/253	89/161/241	132/263/369	162/335/467	242/466/671	334/614/885	470/859/1012	634/905/1370
Maximum external pressure		Pa	55	55	65	85	85	115	125	70
Filter			G2	G2	G2	G2	G2	G2	G2	G2
Electrical data										
Power supply	Voltage	V	230	230	230	230	230	230	230	230
	Phase		Single phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase
	Frequency	Hz	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Power consumption 2-pipe	Lo/Med/Hi	W	13/24/36	10/18/29	16/37/45	15/37/56	28/55/72	37/75/105	53/100/147	90/112/188
Power consumption 4-pipe	Lo/Med/Hi	W	13/24/36	10/18/28	16/37/44	15/37/55	28/54/70	37/74/104	53/99/145	90/112/188
Water connections										
Type			Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded
2-pipe		Inch	1/2	1/2	1/2	1/2	1/2	1/2	3/4	3/4
4-pipe	Cooling	Inch	1/2	1/2	1/2	1/2	1/2	1/2	3/4	3/4
	Heating	Inch	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Dimension and weight										
Dimension	H x W x D	mm	220 x 570 x 430	220 x 570 x 430	220 x 730 x 430	220 x 938 x 430	220 x 1122 x 430	220 x 1307 x 430	220 x 1121 x 530	220 x 1316 x 530
Weight	2 / 4-pipes	kg	13/14	13/14	15/16	20/22	22/24	26/28	27/29	38/40

1) According to Eurovent standard. Air: 27 °C DB / 19 °C WB. Water in / out: 7 °C / 12 °C. 2) Air: 20 °C. Water in / out: 50 °C / 45 °C. 3) The sound pressure levels are based on (NR) characteristics of a room having volume of 100 m³ with reverberation of 0,5 seconds.
Values indicated are for 0 Pa external static pressure, for additional pressure characteristics, please refer the selection software.

Technical focus

· Cooling capacity from 0,7 to 8,1 kW
· Heating capacity from 0,7 to 10,3 kW
· 5-speed AC fan motor(s)

Operating limits	
Entering water temperature	From 5 to 90 °C
Indoor air temperature	From 5 to 32 °C

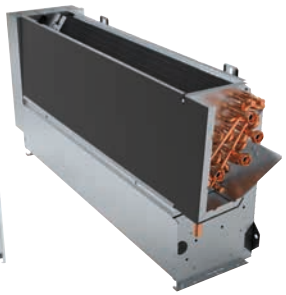
Main features and accessories

· 2 and 4-pipe configurations
· Left or right hand arrangements
· Ease of installation
· Very low acoustic levels
· 2 way or 3 way ON / OFF valves
· Auxiliary drain pan
· Air intake with removable grid
· G2 filter

ErP

ERP 2018: compliant following COMMISSION REGULATION (EU) No2016/2281.

Fan coils - ducted (EC)



Optional controller. Wired remote controller with touch control.
PAW-FC-907EC

Optional controller. Wired remote controller.
PAW-FC-903EC

2-pipe - Left connection (PAW-)			**FC2E-D010L**	**FC2E-D020L**	**FC2E-D030L**	**FC2E-D040L**	**FC2E-D050L**	**FC2E-D060L**	**FC2E-D070L**	**FC2E-D080L**	**FC2E-F040L**
2-pipe - Right connection (PAW-)			**FC2E-D010R**	**FC2E-D020R**	**FC2E-D030R**	**FC2E-D040R**	**FC2E-D050R**	**FC2E-D060R**	**FC2E-D070R**	**FC2E-D080R**	**FC2E-F040R**
Total cooling capacity [1]	Lo/Med/Hi	kW	0,6/1,2/2,1	0,6/1,4/2,4	0,9/2,1/3,1	1,3/2,9/4,2	1,3/4,0/5,0	2,0/4,5/5,2	2,7/5,9/6,9	5,1/6,5/8,8	3,6/6,6/9,2
Sensible cooling capacity [1]	Lo/Med/Hi	kW	0,5/1,1/1,9	0,5/1,1/1,9	0,6/1,6/2,4	1,0/2,1/3,0	1,1/3,0/3,7	1,4/3,5/4,0	2,0/4,3/5,2	3,7/4,8/6,6	2,9/6,1/9,1
Water flow	Lo/Med/Hi	l/h	107/210/356	110/237/406	148/354/532	230/506/722	231/685/743	341/767/800	463/1008/1098	879/1111/1254	627/1142/1575
Water pressure drop	Lo/Med/Hi	kPa	8,2/28,2/76,9	1,5/4,6/11,0	5,0/20,5/42,1	6,4/24,4/46,3	4,9/35,1/41,0	7,8/35,8/38,8	3,0/14,0/16,6	14,1/21,4/26,6	10,6/51,2/93,8
Heating capacity [2]	Lo/Med/Hi	kW	0,8/1,6/2,9	0,9/1,9/3,3	1,0/2,2/3,4	1,4/3,0/5,3	1,7/5,2/5,5	2,3/5,9/6,1	3,8/7,3/8,2	6,2/8,0/9,3	4,4/8,3/11,8
4-pipe - Left connection (PAW-)			**FC4E-D010L**	**FC4E-D020L**	**FC4E-D030L**	**FC4E-D040L**	**FC4E-D050L**	**FC4E-D060L**	**FC4E-D070L**	**FC4E-D080L**	**FC4E-F040L**
4-pipe - Right connection (PAW-)			**FC4E-D010R**	**FC4E-D020R**	**FC4E-D030R**	**FC4E-D040R**	**FC4E-D050R**	**FC4E-D060R**	**FC4E-D070R**	**FC4E-D080R**	**FC4E-F040R**
Total cooling capacity [1]	Lo/Med/Hi	kW	0,5/1,1/1,9	0,6/1,2/2,2	0,8/1,9/2,9	1,2/2,7/4,0	1,2/3,6/4,6	1,8/4,1/4,9	2,6/5,1/6,4	5,0/6,2/9,6	3,3/6,4/8,8
Sensible cooling capacity [1]	Lo/Med/Hi	kW	0,4/0,9/1,7	0,4/1,0/1,8	0,6/1,5/2,2	0,9/1,9/2,8	1,0/2,8/3,5	1,2/3,2/3,8	1,9/3,8/4,8	3,6/4,6/7,2	2,7/5,6/8,0
Water flow	Lo/Med/Hi	l/h	92/185/327	97/206/375	129/321/493	205/457/681	212/625/686	306/707/749	443/886/977	855/1070/1242	567/1093/1511
Water pressure drop	Lo/Med/Hi	kPa	5,8/20,1/59,2	1,3/3,7/9,7	4,0/9,2/19,7	6,3/29,6/60,1	2,5/17,9/21,3	5,1/24,3/27,2	3,5/13,6/16,5	22,9/33,9/44,3	10,0/47,2/86,7
Heating capacity [2]	Lo/Med/Hi	kW	0,4/0,8/1,4	0,6/0,9/1,5	1,0/1,4/1,8	1,2/2,0/2,8	1,6/2,4/2,5	1,4/2,9/3,1	2,5/3,4/3,6	4,5/5,9/6,9	2,5/4,5/6,2
Water flow	Lo/Med/Hi	l/h	76/140/235	95/161/255	166/243/304	204/350/483	267/416/438	233/503/531	434/583/614	767/1011/1194	432/783/1065
Water pressure drop	Lo/Med/Hi	kPa	1,8/4,0/8,4	1,4/3,8/9,4	5,3/9,7/14,1	15,6/41,8/76,3	11,9/26,3/28,9	11,5/43,6/48,1	61,5/103,8/113,9	42,1/69,7/95,1	30,6/107,6/214,8
Sound levels											
Global sound power	Lo/Med/Hi	dB(A)	34/47/60	34/47/60	31/50/59	29/44/52	30/51/57	32/54/58	40/54/59	51/56/64	42/58/68 [3]
Global sound pressure [4]	Lo/Med/Hi	dB(A)	25/38/51	25/38/51	22/41/50	20/35/43	21/42/48	23/45/49	31/45/50	42/47/55	23/39/52
Fan											
Number			1	1	1	2	2	2	2	3	1
Air flow 2-pipe	Lo/Med/Hi	m³/h	108/228/417	98/234/413	145/380/585	170/412/678	203/645/816	245/737/912	350/850/1050	685/927/1398	592/1284/1935
Air flow 4-pipe	Lo/Med/Hi	m³/h	91/199/379	84/200/380	123/342/540	148/369/627	185/587/646	205/668/716	329/798/894	660/884/1079	523/1222/1864
Maximum external pressure		Pa	75	75	75	105	70	105	115	70	190
Filter			G2	G2	G2	G2	G2	G2	G2	G2	G2
Electrical data											
Power supply	Voltage	V	230	230	230	230	230	230	230	230	230
	Phase		Single phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase
	Frequency	Hz	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Power consumption 2-pipe	Lo/Med/Hi	W	5/11/41	5/13/41	4/16/42	2/13/43	4/24/46	2/30/54	11/44/77	23/42/108	11/62/197
Power consumption 4-pipe	Lo/Med/Hi	W	5/11/39	5/13/40	6/15/40	2/12/42	2/23/44	2/28/52	11/43/75	22/41/116	11/60/188
Water connections											
Type			Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded
2-pipe		Inch	1/2	1/2	1/2	1/2	1/2	1/2	3/4	3/4	3/4
4-pipe	Cooling	Inch	1/2	1/2	1/2	1/2	1/2	1/2	3/4	3/4	3/4
	Heating	Inch	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Dimension and weight											
Dimension	H x W x D	mm	220 x 570 x 430	220 x 570 x 430	220 x 730 x 430	220 x 938 x 430	220 x 1122 x 430	220 x 1307 x 430	220 x 1121 x 530	220 x 1316 x 530	223 x 1233 x 653
Weight	2 / 4-pipes	kg	13/14	13/14	15/16	20/22	22/24	26/28	27/29	38/40	19/19

1) According to Eurovent standard. Air: 27 °C DB / 19 °C WB. Water in / out: 7 °C / 12 °C. 2) Air: 20 °C. Water in / out: 50 °C / 45 °C. 3) The sound power levels indicated are from return and radiated measurements. 4) The sound pressure levels are based on (NR) characteristics of a room having volume of 100 m³ with reverberation of 0,5 seconds.
Values indicated are for 0 Pa external static pressure, for additional pressure characteristics, please refer the selection software.

Technical focus

- Cooling capacity from 0,5 to 9,6 kW
- Heating capacity from 0,6 to 13,6 kW
- Low energy consumption EC fan(s)

Operating limits	
Entering water temperature	From 5 to 90 °C
Indoor air temperature	From 5 to 32 °C

Main features and accessories

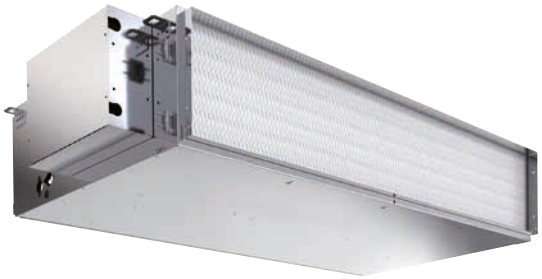
- 2 and 4-pipe configurations
- Left or right hand arrangements
- Can be installed both horizontally and vertically*
- Ease of installation
- Very low acoustic levels
- 2 way or 3 way ON / OFF valves
- Auxiliary drain pan
- Air intake with removable grid
- G2 filter

* PAW-FC2E-F040 and PAW-FC4E-F040 may only be installed horizontally.

ErP
EC MOTOR GREEN VENTILATION

ERP 2018: compliant following COMMISSION REGULATION (EU) No2016/2281.

Fan coils - High static pressure ducted (AC)



Optional controller. Advanced wired remote controller.
PAW-FC-RC1

Optional controller. Wired remote controller with touch control.
PAW-FC-907AC

Optional controller. Wired remote controller.
PAW-FC-903AC

2-pipe - Left connection			**PAW-FC2A-E070L**	**PAW-FC2A-E150L**	**PAW-FC2A-E180L**	**PAW-FC2A-E210L**	**PAW-FC2A-E240L***	**PAW-FC2A-E270L***
2-pipe - Right connection			**PAW-FC2A-E070R**	**PAW-FC2A-E150R**	**PAW-FC2A-E180R**	**PAW-FC2A-E210R**	**PAW-FC2A-E240R***	**PAW-FC2A-E270R***
Total cooling capacity [1]	Lo/Med/Hi	kW	4,4/5,5/6,4	5,6/11,5/14,2	4,9/11,5/15,0	5,2/13,7/18,6	14,3/19,8/23,3	15,8/23,0/27,5
Sensible cooling capacity [1]	Lo/Med/Hi	kW	3,12/5,1	3,9/9,2/12,2	3,7/9,5/13,1	3,5/9,9/13,7	10,3/14,9/17,8	11,0/16,3/19,7
Water flow	Lo/Med/Hi	l/h	749/951/1095	966/1979/2437	837/1979/2589	899/2357/3201	2468/3410/4015	2718/3951/4740
Water pressure drop	Lo/Med/Hi	kPa	26,5/42,5/56,2	5,5/19,9/29,3	4,4/19,6/32,0	4,9/28,8/51,5	13,8/25,2/34,2	12,8/25,2/35,3
Heating capacity [2]	Lo/Med/Hi	kW	5,4/8,6/12,7	6,2/14,2/20,0	6,3/16,3/23,2	6,1/16,5/23,4	17,2/26,3/32,6	17,9/27,5/33,7
4-pipe - Left connection			**PAW-FC4A-E070L**	**PAW-FC4A-E150L**	**PAW-FC4A-E180L**	**PAW-FC4A-E210L**	**PAW-FC4A-E240L***	**PAW-FC4A-E270L***
4-pipe - Right connection			**PAW-FC4A-E070R**	**PAW-FC4A-E150R**	**PAW-FC4A-E180R**	**PAW-FC4A-E210R**	**PAW-FC4A-E240R***	**PAW-FC4A-E270R***
Total cooling capacity [1]	Lo/Med/Hi	kW	4,0/5,4/6,0	5,3/10,1/11,9	5,5/11,2/13,6	5,9/14,4/18,8	13,3/17,7/20,5	14,3/19,9/23,4
Sensible cooling capacity [1]	Lo/Med/Hi	kW	2,8/4,1/4,7	3,7/8,4/10,9	3,9/9,1/12,0	4,0/10,6/14,5	9,9/13,9/16,3	10,3/14,9/17,8
Water flow	Lo/Med/Hi	l/h	680/924/1035	919/1739/2044	951/1928/2335	1013/2478/3241	2291/3053/3526	2464/3427/4032
Water pressure drop	Lo/Med/Hi	kPa	29,7/52,1/64,4	4,1/13,5/18,4	4,7/17,4/25,0	6,6/35,2/59,1	14,5/25,0/33,0	12,8/23,3/31,5
Heating capacity [2]	Lo/Med/Hi	kW	3,7/6,0/7,4	5,3/11,8/15,9	5,3/11,9/15,9	5,3/11,9/16,0	7,2/11,1/13,5	7,2/11,1/13,5
Water flow	Lo/Med/Hi	l/h	636/1029/1266	906/2038/2746	911/2045/2745	916/2051/2747	1242/1910/2329	1242/1910/2329
Water pressure drop	Lo/Med/Hi	kPa	14,2/30,7/43,6	39,0/167,6/293,0	23,9/100,8/174,3	24,2/101,4/174,6	45,8/87,8/120,3	28,3/53,3/72,5
Sound levels								
Sound power return + radiated	Lo/Med/Hi	dB(A)	54/60/63	52/66/72	54/66/74	52/66/72	65/73/75	65/73/75
Sound power discharge	Lo/Med/Hi	dB(A)	53/59/62	52/64/71	52/64/71	52/64/71	64/72/75	64/72/75
Sound pressure [3]	Lo/Med/Hi	dB(A)	33/39/42	31/45/51	31/45/51	31/45/51	44/52/54	44/52/54
Fan								
Number			1	1	1	1	1	1
Air flow 2-pipe	Lo/Med/Hi	m³/h	680/1091/1562	676/2110/3197	676/2110/3197	676/2110/3197	1927/3130/3923	1927/3130/3923
Air flow 4-pipe	Lo/Med/Hi	m³/h	552/1132/1496	676/2110/3197	676/2110/3197	676/2110/3197	1927/3130/3923	1927/3130/3923
Maximum external pressure		Pa	110	200	200	200	220	220
Filter			G3	G3	G3	G3	G3	G3
Electrical data								
Power supply	Voltage	V	230	230	230	230	230	230
	Phase		Single phase	Single phase	Single phase	Single phase	Single phase	Single phase
	Frequency	Hz	50/60	50/60	50/60	50/60	50/60	50/60
Power consumption	Lo/Med/Hi	W	132/182/222	180/421/675	180/421/675	180/421/675	420/530/673	420/530/673
Water connections								
Type			Female gas threaded	Gas Male threaded	Gas Male threaded	Gas Male threaded	Gas Male threaded	Gas Male threaded
2-pipe		Inch	1/2	1	1 ¼	1 ¼	1 ¼	1 ¼
4-pipe	Cooling	Inch	1/2	1	1	1	1 ¼	1 ¼
	Heating	Inch	1/2	3/4	3/4	3/4	3/4	3/4
Dimension and weight								
Dimension	H x W x D	mm	250 x 698 x 1200	375 x 798 x 1380	375 x 798 x 1380	375 x 798 x 1380	450 x 798 x 1500	450 x 798 x 1500
Weight		kg	42	63	65	67	76	80

1) According to Eurovent standard. Air: 27 °C DB / 19 °C WB. Water in / out: 7 °C / 12 °C. 2) Air: 20 °C. Water in / out: 50 °C / 45 °C. 3) Informative data: Considering an hypothetical sound attenuation of the room and installation of 21 dB.
Values indicated are for 50 Pa external static pressure, for additional pressure characteristics, please refer the selection software.
* High fan speed used for capacity, water flow, sound and air flow values.

Technical focus

- 6 sizes
- Cooling capacity from 4,1 to 21,9 kW
- Heating capacity from 4,7 to 21,5 kW
- 5-speed AC fan motor

Main features and accessories

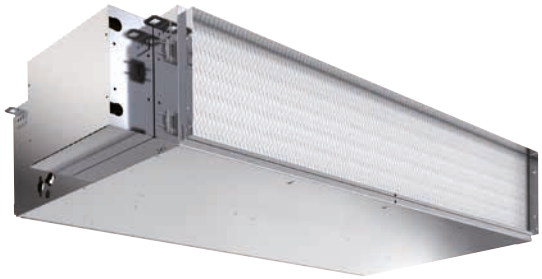
- 2 and 4-pipe, left and right hand configurations
- Static pressure up to 220Pa
- Double skin insulation
- 2 way or 3 way ON / OFF valves
- Auxiliary drain pan
- Air intake with removable grid
- G3 filter

Operating limits	
Entering water temperature	From 5 to 90 °C
Indoor air temperature	From 5 to 32 °C

ErP

ERP 2018: compliant following COMMISSION REGULATION (EU) No2016/2281.

Fan coils - High static pressure ducted (EC)



Optional controller. Wired remote controller with touch control.
PAW-FC-907EC

Optional controller. Wired remote controller.
PAW-FC-903EC

2-pipe - Left connection			**PAW-FC2E-E150L**	**PAW-FC2E-E180L**	**PAW-FC2E-E210L**	**PAW-FC2E-E240L**	**PAW-FC2E-E270L**
2-pipe - Right connection			**PAW-FC2E-E150R**	**PAW-FC2E-E180R**	**PAW-FC2E-E210R**	**PAW-FC2E-E240R**	**PAW-FC2E-E270R**
Total cooling capacity [1]	Lo/Med/Hi	kW	7,0/11,3/14,5	7,8/13,1/17,3	8,6/14,2/19,0	9,3/16,1/20,3	10,2/18,1/23,1
Sensible cooling capacity [1]	Lo/Med/Hi	kW	5,2/9,1/12,1	5,7/10,3/14,1	6,1/10,9/15,0	6,7/12,4/16,2	7,2/13,6/17,8
Water flow	Lo/Med/Hi	l/h	1207/1945/2498	1351/2259/2979	1476/2451/3275	1592/2766/3498	1751/3120/3972
Water pressure drop	Lo/Med/Hi	kPa	11,5/19,3/30,7	6,1/24,9/41,5	6,0/31,0/53,8	6,3/17,1/26,4	5,9/16,4/25,4
Heating capacity [2]	Lo/Med/Hi	kW	88/15,8/20,7	9,5/17,9/24,3	10,0/19,4/26,8	11,1/20,8/27,5	11,7/22,8/30,4
4-pipe - Left connection			**PAW-FC4E-E150L**	**PAW-FC4E-E180L**	**PAW-FC4E-E210L**	**PAW-FC4E-E240L**	**PAW-FC4E-E270L**
4-pipe - Right connection			**PAW-FC4E-E150R**	**PAW-FC4E-E180R**	**PAW-FC4E-E210R**	**PAW-FC4E-E240R**	**PAW-FC4E-E270R**
Total cooling capacity [1]	Lo/Med/Hi	kW	5,9/9,1/11,6	6,6/10,2/13,0	7,9/12,6/16,4	8,4/14,0/17,5	8,9/15,3/19,5
Sensible cooling capacity [1]	Lo/Med/Hi	kW	4,5/7,6/10,1	4,9/8,4/11,2	5,8/9,9/13,4	6,2/11,0/14,2	6,5/11,8/15,5
Water flow	Lo/Med/Hi	l/h	1011/1567/2005	1141/1764/2243	1361/2175/2826	1447/2409/3020	1529/2641/3359
Water pressure drop	Lo/Med/Hi	kPa	4,9/11,1/17,7	6,5/14,7/23,2	7,6/27,5/45,4	6,2/15,9/24,5	5,5/14,5/22,4
Heating capacity [2]	Lo/Med/Hi	kW	3,6/5,8/7,3	6,1/10,0/12,8	6,1/10,1/12,9	4,8/8,3/10,3	4,7/8,2/10,5
Water flow	Lo/Med/Hi	l/h	621/991/1264	1052/1729/2211	1057/1734/2227	832/1421/1780	804/1407/1804
Water pressure drop	Lo/Med/Hi	kPa	20,7/45,6/70,1	30,7/74,1/116,4	30,8/74,5/118,0	19,6/55,9/78,7	7,2/33,9/48,9
Sound levels							
Sound power return + radiated	Lo/Med/Hi	dB(A)	56/67/74	56/67/74	56/67/74	58/69/76	58/69/76
Sound power discharge	Lo/Med/Hi	dB(A)	56/65/74	56/65/74	56/65/74	58/67/76	58/67/76
Sound pressure [3]	Lo/Med/Hi	dB(A)	35/46/52	35/46/52	35/46/52	37/48/54	37/48/54
Fan							
Number			1	1	1	1	1
Air flow 2-pipe	Lo/Med/Hi	m³/h	1071/2418/3583	1071/2418/3583	1071/2418/3583	1227/2700/3829	1227/2700/3829
Air flow 4-pipe	Lo/Med/Hi	m³/h	1071/2418/3583	1071/2418/3583	1071/2418/3583	1227/2700/3829	1227/2700/3829
Maximum external pressure		Pa	300	300	300	300	300
Filter			G3	G3	G3	G3	G3
Electrical data							
Power supply	Voltage	V	230	230	230	230	230
	Phase		Single phase	Single phase	Single phase	Single phase	Single phase
	Frequency	Hz	50/60	50/60	50/60	50/60	50/60
Power consumption	Lo/Med/Hi	W	67/172/246	67/172/246	67/172/246	64/237/364	64/237/364
Water connections							
Type			Gas Male threaded	Gas Male threaded	Gas Male threaded	Gas Male threaded	Gas Male threaded
2-pipe		Inch	1	1 ¼	1 ¼	1 ¼	1 ¼
4-pipe	Cooling	Inch	1	1	1	1 ¼	1 ¼
	Heating	Inch	3/4	3/4	3/4	3/4	3/4
Dimension and weight							
Dimension	H x W x D	mm	375 x 798 x 1380	375 x 798 x 1380	375 x 798 x 1380	450 x 798 x 1500	450 x 798 x 1500
Weight		kg	63	65	67	76	80

1) According to Eurovent standard. Air: 27 °C DB / 19 °C WB. Water in / out: 7 °C / 12 °C. 2) Air: 20 °C. Water in / out: 50 °C / 45 °C. 3) Informative data: Considering an hypothetical sound attenuation of the room and installation of 21 dB.
Values indicated are for 50 Pa external static pressure, for additional pressure characteristics, please refer the selection software.

Technical focus

- 5 sizes
- Cooling capacity from 6,6 to 19,9 kW
- Heating capacity from 5,9 to 21,4 kW
- Low energy consumption EC fan

Main features and accessories

- 2 and 4-pipe, left and right hand configurations
- Static pressure up to 300Pa
- Double skin insulation
- 2 way or 3 way ON / OFF valves
- Auxiliary drain pan
- Air intake with removable grid
- G3 filter

Operating limits	
Entering water temperature	From 5 to 90 °C
Indoor air temperature	From 5 to 32 °C

ErP
EC MOTOR GREEN VENTILATION

ERP 2018: compliant following COMMISSION REGULATION (EU) No2016/2281.

Fan coils - 4 way cassette (AC)

Optional controller. Advanced wired remote controller.
PAW-FC-RC1

Optional controller. Wired remote controller with touch control.
PAW-FC-907AC

Optional controller. Wired remote controller.
PAW-FC-903AC

2-pipe			**PAW-FC2A-U020-2**	**PAW-FC2A-U030-2**	**PAW-FC2A-U040-2**	**PAW-FC2A-U050-2**	**PAW-FC2A-U060-2**	**PAW-FC2A-U070-2**
Total cooling capacity [1]	Lo/Med/Hi	kW	1,5/1,8/2,4	1,9/2,7/4,0	2,8/3,5/4,7	3,4/4,4/6,1	3,7/5,4/7,2	4,0/6,5/8,6
Sensible cooling capacity [1]	Lo/Med/Hi	kW	1,3/1,5/2,0	1,4/2,2/3,0	2,1/2,6/3,6	2,6/3,4/4,8	2,7/4,0/5,4	3,0/4,8/6,4
Water flow	Lo/Med/Hi	l/h	265/303/404	323/493/683	478/597/801	576/762/142	636/937/1233	695/1111/1476
Water pressure drop	Lo/Med/Hi	kPa	4,3/6,8/10,9	3,6/8,5/14,4	6,9/11,2/18,3	8,4/13,0/21,9	3,4/7,5/11,5	5,6/13,0/20,5
Heating capacity [2]	Lo/Med/Hi	kW	2,2/2,5/3,2	2,3/3,7/4,5	3,7/4,6/6,2	4,5/6,0/8,1	4,5/7,4/10,0	5,2/9,2/12,0
4-pipe			**PAW-FC4A-U020-2**	**PAW-FC4A-U030-2**	**PAW-FC4A-U040-2**	**—**	**PAW-FC4A-U060-2**	**PAW-FC4A-U070-2**
Total cooling capacity [1]	Lo/Med/Hi	kW	1,4/1,5/2,0	2,0/2,7/3,4	2,5/3,3/4,0	—	3,0/4,9/6,6	3,2/6,0/7,5
Sensible cooling capacity [1]	Lo/Med/Hi	kW	1,2/1,4/1,8	1,5/2,1/2,6	2,0/2,6/3,2	—	2,3/3,8/5,1	2,5/4,6/5,9
Water flow	Lo/Med/Hi	l/h	232/258/359	342/465/576	437/563/683	—	511/851/1137	543/1030/1294
Water pressure drop	Lo/Med/Hi	kPa	6,6/8,9/13,6	4,4/8,3/11,6	6,7/11,2/15,3	—	6,0/13,9/22,2	7,1/18,9/27,5
Heating capacity [2]	Lo/Med/Hi	kW	0,8/0,9/1,2	2,2/3,1/3,8	3,0/3,5/4,1	—	3,7/5,5/7,0	4,5/7,1/8,9
Water flow	Lo/Med/Hi	l/h	132/153/201	374/530/658	521/603/699	—	636/939/1210	776/1214/1540
Water pressure drop	Lo/Med/Hi	kPa	25,7/33,4/53,6	13,7/24,2/35	24,2/30,9/39,8	—	7,6/13,8/20,7	10,2/20,8/30,9
Sound levels								
Global sound power 2-pipe	Lo/Med/Hi	dB(A)	36/40/49	35/47/53	42/48/57	35/40/49	38/46/54	40/52/59
Global sound power 4-pipe	Lo/Med/Hi	dB(A)	36/40/49	35/47/53	42/48/57	—	38/46/54	40/52/59
Global sound pressure 2-pipe [3]	Lo/Med/Hi	dB(A)	27/31/40	26/35/44	33/39/48	26/31/40	29/37/45	31/43/50
Global sound pressure 4-pipe [3]	Lo/Med/Hi	dB(A)	27/31/40	26/35/44	33/39/48	—	29/37/45	31/43/50
Fan								
Number			1	1	1	1	1	1
Air flow	Lo/Med/Hi	m³/h	360/450/659	320/504/734	486/626/900	529/720/979	500/824/1159	601/1080/1447
Filter			G1	G1	G1	G1	G1	G1
Electrical data								
Power supply	Voltage	V	230	230	230	230	230	230
	Phase		Single phase	Single phase	Single phase	Single phase	Single phase	Single phase
	Frequency	Hz	50	50	50	50	50	50
Power consumption 2-pipe	Lo/Med/Hi	W	25/35/58	17/34/58	38/58/99	28/41/66	34/61/88	44/92/125
Power consumption 4-pipe	Lo/Med/Hi	W	25/35/58	17/34/58	38/58/99	—	34/61/88	44/92/125
Water connections								
Type			Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded
2-pipe		Inch	3/4	3/4	3/4	1	1	1
4-pipe	Cooling	Inch	3/4	3/4	3/4	—	1	1
	Heating	Inch	1/2	1/2	1/2	—	3/4	3/4
Dimension and weight								
Dimension including panel	H x W x D	mm	334 x 720 x 720	334 x 720 x 720	334 x 720 x 720	339 x 960 x 960	339 x 960 x 960	339 x 960 x 960
Weight		kg	14,8	16,5	16,5	37,1	37,1	39,6
Panel reference			**PAW-FC-KPY2040**	**PAW-FC-KPY2040**	**PAW-FC-KPY2040**	**PAW-FC-KPU5070**	**PAW-FC-KPU5070**	**PAW-FC-KPU5070**

1) According to Eurovent standard. Air: 27 °C DB / 19 °C WB. Water in / out: 7 °C / 12 °C. 2) According to Eurovent standard. Air: 20 °C. Water in / out: 45 °C / 40 °C. 3) Information data considering an hypothetical sound attenuation of the room and installation of -9 dB(A).

Technical focus

- 6 sizes*
- Cooling capacity from 1,4 to 8,6 kW
- Heating capacity from 1,1 to 12,8 kW
- 3-speed AC fan motor

Main features and accessories

- 2 and 4-pipe configurations
- Very low acoustic levels
- Quick access, by simply removing the front grille
- All connections: located at the same side
- Galvanized steel sheet with thermal and acoustical insulation, avoiding condensation on the casing and providing good sound attenuation
- Cleanable synthetic-type air filter

Operating limits	
Entering water temperature	From 5 to 90 °C
Indoor air temperature	From 5 to 32 °C

* 5 sizes available for 4-pipe configuration.

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ERP 2018: compliant following COMMISSION REGULATION (EU) No2016/2281.

Fan coils - 4 way cassette (EC)

Optional controller. Wired remote controller with touch control.
PAW-FC-907EC

Optional controller. Wired remote controller.
PAW-FC-903EC

2-pipe			**PAW-FC2E-U020-2**	**PAW-FC2E-U030-2**	**PAW-FC2E-U040-2**	**PAW-FC2E-U050-2**	**PAW-FC2E-U060-2**	**PAW-FC2E-U070-2**
Total cooling capacity [1]	Lo/Med/Hi	kW	1,6/1,8/2,4	1,9/2,9/4,0	2,8/3,5/4,7	3,4/4,4/6,1	3,7/5,5/7,2	4,1/6,5/9,6
Sensible cooling capacity [1]	Lo/Med/Hi	kW	1,3/1,5/2,0	1,4/2,2/3,1	2,1/2,7/3,6	2,6/3,5/4,7	2,7/4,1/5,4	3,0/4,9/7,2
Water flow	Lo/Med/Hi	l/h	267/306/409	325/497/688	481/604/808	579/765/1050	640/944/1243	700/1119/1649
Water pressure drop	Lo/Med/Hi	kPa	4,2/6,9/11,2	3,5/8,6/14,6	6,8/11,4/18,6	8,4/13,1/22,2	3,4/7,6/11,7	5,8/13,1/24,6
Heating capacity [2]	Lo/Med/Hi	kW	2,2/2,5/3,2	2,3/3,7/4,5	3,7/4,6/6,2	4,5/6,0/8,1	4,5/7,4/10,0	5,2/9,2/13,0
4-pipe			**PAW-FC4E-U020-2**	**PAW-FC4E-U030-2**	**PAW-FC4E-U040-2**	**—**	**PAW-FC4E-U060-2**	**PAW-FC4E-U070-2**
Total cooling capacity [1]	Lo/Med/Hi	kW	1,4/1,5/2,0	2,0/2,7/3,4	2,6/3,2/4,0	—	3,0/5,0/6,6	3,2/6,1/7,9
Sensible cooling capacity [1]	Lo/Med/Hi	kW	1,2/1,4/1,9	1,5/2,1/2,6	2,1/2,6/3,3	—	2,3/3,8/5,1	2,6/4,7/6,3
Water flow	Lo/Med/Hi	l/h	234/262/344	344/464/581	442/556/690	—	516/858/1144	549/1041/1366
Water pressure drop	Lo/Med/Hi	kPa	6,6/9,1/14,0	4,4/8,2/11,7	6,7/10,9/15,5	—	6,0/14,1/22,4	7,2/19,2/30,1
Heating capacity [2]	Lo/Med/Hi	kW	0,8/0,9/1,2	2,2/3,1/3,8	3,0/3,5/4,1	—	3,7/5,5/7,0	4,5/7,1/9,8
Water flow	Lo/Med/Hi	l/h	132/153/201	374/530/658	521/603/699	—	636/939/1210	776/1214/1686
Water pressure drop	Lo/Med/Hi	kPa	25,7/33,4/53,6	13,7/24,2/35	24,2/30,9/39,8	—	7,6/13,8/20,7	10,2/20,8/36
Sound levels								
Global sound power 2-pipe	Lo/Med/Hi	dB(A)	36/40/49	35/47/53	42/48/57	35/40/49	38/46/54	40/52/59
Global sound power 4-pipe	Lo/Med/Hi	dB(A)	36/40/49	35/44/53	42/48/57	—	38/46/54	40/52/59
Global sound pressure 2-pipe [3]	Lo/Med/Hi	dB(A)	27/31/40	26/35/44	33/39/48	26/31/40	29/37/45	31/43/50
Global sound pressure 4-pipe [3]	Lo/Med/Hi	dB(A)	27/31/40	26/35/44	33/39/48	—	29/37/45	31/43/50
Fan								
Number			1	1	1	1	1	1
Air flow	Lo/Med/Hi	m³/h	360/450/659	320/504/734	486/626/900	529/720/979	500/824/1159	601/1080/1598
Filter			G1	G1	G1	G1	G1	G1
Electrical data								
Power supply	Voltage	V	230	230	230	230	230	230
	Phase		Single phase	Single phase	Single phase	Single phase	Single phase	Single phase
	Frequency	Hz	50	50	50	50	50	50
Power consumption 2-pipe	Lo/Med/Hi	W	9/13/29	7/14/32	13/22/57	7/12/25	9/23/25	11/40/115
Power consumption 4-pipe	Lo/Med/Hi	W	9/13/29	7/14/32	13/22/57	—	9/23/46	11/40/115
Water connections								
Type			Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded
2-pipe		Inch	3/4	3/4	3/4	1	1	1
4-pipe	Cooling	Inch	3/4	3/4	3/4	—	1	1
	Heating	Inch	1/2	1/2	1/2	—	3/4	3/4
Dimension and weight								
Dimension including panel	H x W x D	mm	334 x 720 x 720	334 x 720 x 720	334 x 720 x 720	339 x 960 x 960	339 x 960 x 960	339 x 960 x 960
Weight		kg	14,8	16,5	16,5	37,1	37,1	39,6
Panel reference			**PAW-FC-KPY2040**	**PAW-FC-KPY2040**	**PAW-FC-KPY2040**	**PAW-FC-KPU5070**	**PAW-FC-KPU5070**	**PAW-FC-KPU5070**

1) According to Eurovent standard. Air: 27 °C DB / 19 °C WB. Water in / out: 7 °C / 12 °C. 2) According to Eurovent standard. Air: 20 °C. Water in / out: 45 °C / 40 °C. 3) Information data considering an hypothetical sound attenuation of the room and installation of -9 dB(A).

Technical focus

- 6 sizes*
- Cooling capacity from 1,4 to 9,4 kW
- Heating capacity from 1,1 to 14,0 kW
- Low energy consumption EC fan

Main features and accessories

- 2 and 4-pipe configurations
- Very low acoustic levels
- Quick access, by simply removing the front grille
- All connections: located at the same side
- Galvanized steel sheet with thermal and acoustical insulation, avoiding condensation on the casing and providing good sound attenuation
- Cleanable synthetic-type air filter

Operating limits	
Entering water temperature	From 5 to 90 °C
Indoor air temperature	From 5 to 32 °C

* 5 sizes available for 4-pipe configuration.

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EC MOTOR GREEN VENTILATION

ERP 2018: compliant following COMMISSION REGULATION (EU) No2016/2281.

Fan coils - ceiling chassis (AC)

Optional controller. Advanced wired remote controller.
PAW-FC-RC1

Optional controller. Wired remote controller with touch control.
PAW-FC-907AC

Optional controller. Wired remote controller.
PAW-FC-903AC

2-pipe - Left connection (PAW-)			**FC2A-T010L**	**FC2A-T020L**	**FC2A-T030L**	**FC2A-T040L**	**FC2A-T050L**	**FC2A-T060L**	**FC2A-T070L**	**FC2A-T080L**
2-pipe - Right connection (PAW-)			**FC2A-T010R**	**FC2A-T020R**	**FC2A-T030R**	**FC2A-T040R**	**FC2A-T050R**	**FC2A-T060R**	**FC2A-T070R**	**FC2A-T080R**
Total cooling capacity [1]	Lo/Med/Hi	kW	0,7/1,0/1,5	0,7/1,2/1,7	1,0/2,0/2,5	1,2/2,4/3,2	1,7/3,2/4,6	2,7/4,6/5,8	3,4/6,1/7,3	4,6/6,1/8,1
Sensible cooling capacity [1]	Lo/Med/Hi	kW	0,5/0,8/1,1	0,6/0,9/1,3	0,8/1,5/1,9	0,9/1,8/2,3	1,2/2,2/3,3	1,9/3,3/4,5	2,4/4,3/5,1	3,4/4,6/6,3
Water flow	Lo/Med/Hi	l/h	124/172/250	127/213/289	172/341/430	206/413/547	296/544/798	466/784/1003	587/1058/1252	798/1048/1400
Water pressure drop	Lo/Med/Hi	kPa	10,7/19,5/39,2	1,9/3,9/6,3	6,3/19,3/28,8	5,4/17,1/28,0	7,5/22,8/46,9	13,9/37,4/60,2	4,8/15,4/21,5	11,9/19,3/32,5
Heating capacity [2]	Lo/Med/Hi	kW	0,9/1,4/2,0	0,9/1,5/2,2	1,3/2,4/3,1	1,4/2,9/4,0	2,1/4,1/5,7	3,1/5,3/7,1	4,3/7,9/9,3	5,9/8,1/11,6
4-pipe - Left connection (PAW-)			**FC4A-T010L**	**FC4A-T020L**	**FC4A-T030L**	**FC4A-T040L**	**FC4A-T050L**	**FC4A-T060L**	**FC4A-T070L**	**FC4A-T080L**
4-pipe - Right connection (PAW-)			**FC4A-T010R**	**FC4A-T020R**	**FC4A-T030R**	**FC4A-T040R**	**FC4A-T050R**	**FC4A-T060R**	**FC4A-T070R**	**FC4A-T080R**
Total cooling capacity [1]	Lo/Med/Hi	kW	0,7/0,9/1,3	0,6/1,1/1,6	1,0/1,9/2,4	1,1/2,3/3,0	1,7/3,0/4,3	2,6/4,4/5,6	3,3/5,9/6,9	4,5/5,9/8,0
Sensible cooling capacity [1]	Lo/Med/Hi	kW	0,5/0,7/1,0	0,5/0,8/1,2	0,8/1,5/1,8	0,8/1,7/2,2	1,2/2,2/3,1	1,8/3,2/4,3	2,3/4,2/4,9	3,3/4,4/6,2
Water flow	Lo/Med/Hi	l/h	114/159/225	109/192/268	165/327/414	194/388/517	284/522/748	449/756/967	575/1019/1193	775/1020/1380
Water pressure drop	Lo/Med/Hi	kPa	8,3/15,2/29,0	1,5/3,4/5,6	3,0/9,5/14,4	6,4/22,3/36,8	4,2/12,8/25,1	10,2/27,7/44,5	5,9/17,9/24,4	19,3/31,1/53,6
Heating capacity [2]	Lo/Med/Hi	kW	0,5/0,7/1,0	0,6/0,9/1,1	1,0/1,4/1,6	0,9/1,6/2,1	1,5/2,3/3,0	1,9/2,9/3,7	2,7/3,6/4,3	3,9/5,6/7,1
Water flow	Lo/Med/Hi	l/h	79/127/178	100/146/190	164/232/274	160/273/354	251/401/508	325/505/633	456/626/736	673/963/1226
Water pressure drop	Lo/Med/Hi	kPa	1,9/3,5/5,6	1,5/3,2/5,3	5,1/9,0/11,9	9,2/26,5/42,7	10,7/24,6/29,5	20,3/43,9/52,9	67,2/117,9/137,8	33,1/63,7/75
Sound levels										
Global sound power	Lo/Med/Hi	dB(A)	33/40/49	31/43/50	30/45/52	30/44/51	34/46/56	38/51/58	43/56/61	50/55/64
Global sound pressure [3]	Lo/Med/Hi	dB(A)	24/31/40	22/34/41	21/36/43	21/35/42	25/37/47	29/42/49	34/47/52	41/46/55
Fan										
Number			1	1	1	2	2	2	2	3
Air flow 2-pipe	Lo/Med/Hi	m³/h	111/190/283	105/179/265	138/274/390	173/357/499	253/486/716	350/640/933	480/893/1064	660/936/1397
Air flow 4-pipe	Lo/Med/Hi	m³/h	95/168/253	89/161/241	132/263/369	162/335/467	242/466/671	334/614/885	470/859/1012	634/905/1370
Filter			G2	G2	G2	G2	G2	G2	G2	G2
Electrical data										
Power supply	Voltage	V	230	230	230	230	230	230	230	230
	Phase		Single phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase
	Frequency	Hz	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Power consumption 2-pipe	Lo/Med/Hi	W	13/24/36	10/18/29	16/37/45	15/37/56	28/55/72	37/75/105	53/100/147	90/112/188
Power consumption 4-pipe	Lo/Med/Hi	W	13/24/36	10/18/28	16/37/44	15/37/55	28/54/70	37/74/104	53/99/145	90/112/188
Water connections										
Type			Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded
2-pipe		Inch	1/2	1/2	1/2	1/2	1/2	1/2	3/4	3/4
4-pipe	Cooling	Inch	1/2	1/2	1/2	1/2	1/2	1/2	3/4	3/4
	Heating	Inch	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Dimension and weight										
Dimension	H x W x D	mm	225 x 766 x 477	225 x 766 x 477	225 x 951 x 477	225 x 1136 x 477	225 x 1321 x 477	225 x 1506 x 477	225 x 1319 x 477	225 x 1506 x 477
Weight	2 / 4-pipes	kg	19/20	19/20	22/23	27/29	30/32	35/37	35/37	47/49

1) According to Eurovent standard. Air: 27 °C DB / 19 °C WB. Water in / out: 7 °C / 12 °C. 2) Air: 20 °C. Water in / out: 50 °C / 45 °C. 3) The sound pressure levels are based on (NR) characteristics of a room having volume of 100 m³ with reverberation of 0,5 seconds.

Technical focus

- Cooling capacity from 0,7 to 8,1 kW
- Heating capacity from 0,7 to 10,3 kW
- 5-speed AC fan motor(s)

Main features and accessories

- 2 and 4-pipe configurations
- Left or right hand arrangements
- Ease of installation
- Very low acoustic levels
- 2 way or 3 way ON / OFF valves
- Auxiliary drain pan
- Air intake with removable grid
- G2 filter

Operating limits	
Entering water temperature	From 5 to 90 °C
Indoor air temperature	From 5 to 32 °C

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ERP 2018: compliant following COMMISSION REGULATION (EU) No2016/2281.

Fan coils - ceiling chassis (EC)

Optional controller. Wired remote controller with touch control.
PAW-FC-907EC

Optional controller. Wired remote controller.
PAW-FC-903EC

2-pipe - Left connection (PAW-)			**FC2E-T010L**	**FC2E-T020L**	**FC2E-T030L**	**FC2E-T040L**	**FC2E-T050L**	**FC2E-T060L**	**FC2E-T070L**	**FC2E-T080L**
2-pipe - Right connection (PAW-)			**FC2E-T010R**	**FC2E-T020R**	**FC2E-T030R**	**FC2E-T040R**	**FC2E-T050R**	**FC2E-T060R**	**FC2E-T070R**	**FC2E-T080R**
Total cooling capacity [1]	Lo/Med/Hi	kW	0,6/1,2/2,1	0,6/1,4/2,4	0,9/2,1/3,1	1,3/2,9/4,2	1,3/4,0/5,0	2,0/4,5/5,2	2,7/5,9/6,9	5,1/6,5/8,8
Sensible cooling capacity [1]	Lo/Med/Hi	kW	0,5/1,1/1,9	0,5/1,1/1,9	0,6/1,6/2,4	1,0/2,1/3,0	1,1/3,0/3,7	1,4/3,5/4,0	2,0/4,3/5,2	3,7/4,8/6,6
Water flow	Lo/Med/Hi	l/h	107/210/356	110/237/406	148/354/532	230/506/722	231/685/743	341/767/800	463/1008/1098	879/1111/1254
Water pressure drop	Lo/Med/Hi	kPa	8,2/28,2/76,9	1,5/4,6/11,0	5,0/20,5/42,1	6,4/24,4/46,3	4,9/35,1/41,0	7,8/35,8/38,8	3,0/14,0/16,6	14,1/21,4/26,6
Heating capacity [2]	Lo/Med/Hi	kW	0,8/1,6/2,9	0,9/1,9/3,3	1,0/2,2/3,4	1,4/3,0/5,3	1,7/5,2/5,5	2,3/5,9/6,1	3,8/7,3/8,2	6,2/8,0/9,3
4-pipe - Left connection (PAW-)			**FC4E-T010L**	**FC4E-T020L**	**FC4E-T030L**	**FC4E-T040L**	**FC4E-T050L**	**FC4E-T060L**	**FC4E-T070L**	**FC4E-T080L**
4-pipe - Right connection (PAW-)			**FC4E-T010R**	**FC4E-T020R**	**FC4E-T030R**	**FC4E-T040R**	**FC4E-T050R**	**FC4E-T060R**	**FC4E-T070R**	**FC4E-T080R**
Total cooling capacity [1]	Lo/Med/Hi	kW	0,5/1,1/1,9	0,6/1,2/2,2	0,8/1,9/2,9	1,2/2,7/4,0	1,2/3,6/4,6	1,8/4,1/4,9	2,6/5,1/6,4	5,0/6,2/9,6
Sensible cooling capacity [1]	Lo/Med/Hi	kW	0,4/0,9/1,7	0,4/1,0/1,8	0,6/1,5/2,2	0,9/1,9/2,8	1,0/2,8/3,5	1,2/3,2/3,8	1,9/3,8/4,8	3,6/4,6/7,2
Water flow	Lo/Med/Hi	l/h	92/185/327	97/206/375	129/321/493	205/457/681	212/625/686	306/707/749	443/886/977	855/1070/1242
Water pressure drop	Lo/Med/Hi	kPa	5,8/20,1/59,2	1,3/3,7/9,7	4,0/9,2/19,7	6,3/29,6/60,1	2,5/17,9/21,3	5,1/24,3/27,2	3,5/13,6/16,5	22,9/33,9/44,3
Heating capacity [2]	Lo/Med/Hi	kW	0,4/0,8/1,4	0,6/0,9/1,5	1,0/1,4/1,8	1,2/2,0/2,8	1,6/2,4/2,5	1,4/2,9/3,1	2,5/3,4/3,6	4,5/5,9/6,9
Water flow	Lo/Med/Hi	l/h	76/140/235	95/161/255	166/243/304	204/350/483	267/416/438	233/503/531	434/583/614	767/1011/1194
Water pressure drop	Lo/Med/Hi	kPa	1,8/4,0/8,4	1,4/3,8/9,4	5,3/9,7/14,1	15,6/41,8/76,3	11,9/26,3/28,9	11,5/43,6/48,1	61,5/103,8/113,9	42,1/69,7/95,1
Sound levels										
Global sound power	Lo/Med/Hi	dB(A)	34/47/60	34/47/60	31/50/59	29/44/52	30/51/57	32/54/58	40/54/59	51/56/64
Global sound pressure [3]	Lo/Med/Hi	dB(A)	25/38/51	25/38/51	22/41/50	20/35/43	21/42/48	23/45/49	31/45/50	42/47/55
Fan										
Number			1	1	1	2	2	2	2	3
Air flow 2-pipe	Lo/Med/Hi	m³/h	108/228/417	98/234/413	145/380/585	170/412/678	203/645/816	245/737/912	350/850/1050	685/927/1398
Air flow 4-pipe	Lo/Med/Hi	m³/h	91/199/379	84/200/380	123/342/540	148/369/627	185/587/646	205/668/716	329/798/894	660/884/1079
Filter			G2	G2	G2	G2	G2	G2	G2	G2
Electrical data										
Power supply	Voltage	V	230	230	230	230	230	230	230	230
	Phase		Single phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase
	Frequency	Hz	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Power consumption 2-pipe	Lo/Med/Hi	W	5/11/41	5/13/41	4/16/42	2/13/43	4/24/46	2/30/54	11/44/77	23/42/108
Power consumption 4-pipe	Lo/Med/Hi	W	5/11/39	5/13/40	6/15/40	2/12/42	2/23/44	2/28/52	11/43/75	22/41/116
Water connections										
Type			Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded
2-pipe		Inch	1/2	1/2	1/2	1/2	1/2	1/2	3/4	3/4
4-pipe	Cooling	Inch	1/2	1/2	1/2	1/2	1/2	1/2	3/4	3/4
	Heating	Inch	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Dimension and weight										
Dimension	H x W x D	mm	225 x 766 x 477	225 x 766 x 477	225 x 951 x 477	225 x 1136 x 477	225 x 1321 x 477	225 x 1506 x 477	225 x 1319 x 477	225 x 1506 x 477
Weight	2 / 4-pipes	kg	19/20	19/20	22/23	27/29	30/32	35/37	35/37	47/49

1) According to Eurovent standard. Air: 27 °C DB / 19 °C WB. Water in / out: 7 °C / 12 °C. 2) Air: 20 °C. Water in / out: 50 °C / 45 °C. 3) The sound pressure levels are based on (NR) characteristics of a room having volume of 100 m³ with reverberation of 0,5 seconds.

Technical focus

- Cooling capacity from 0,5 to 9,6 kW
- Heating capacity from 0,6 to 13,6 kW
- Low energy consumption EC fan(s)

Main features and accessories

- 2 and 4-pipe configurations
- Left or right hand arrangements
- Ease of installation
- Very low acoustic levels
- 2 way or 3 way ON / OFF valves
- Auxiliary drain pan
- Air intake with removable grid
- G2 filter

Operating limits	
Entering water temperature	From 5 to 90 °C
Indoor air temperature	From 5 to 32 °C

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EC MOTOR GREEN VENTILATION

ERP 2018: compliant following COMMISSION REGULATION (EU) No2016/2281.

Fan coils - floor-standing chassis (AC)

Optional controller. Advanced wired remote controller.
PAW-FC-RC1

Optional controller. Wired remote controller with touch control.
PAW-FC-907AC

Optional controller. Wired remote controller.
PAW-FC-903AC

2-pipe - Left connection (PAW-)			**FC2A-P010L**	**FC2A-P020L**	**FC2A-P030L**	**FC2A-P040L**	**FC2A-P050L**	**FC2A-P060L**	**FC2A-P070L**	**FC2A-P080L**
2-pipe - Right connection (PAW-)			**FC2A-P010R**	**FC2A-P020R**	**FC2A-P030R**	**FC2A-P040R**	**FC2A-P050R**	**FC2A-P060R**	**FC2A-P070R**	**FC2A-P080R**
Total cooling capacity [1]	Lo/Med/Hi	kW	0,7/1,0/1,5	0,7/1,2/1,7	1,0/2,0/2,5	1,2/2,4/3,2	1,7/3,2/4,6	2,7/4,6/5,8	3,4/6,1/7,3	4,6/6,1/8,1
Sensible cooling capacity [1]	Lo/Med/Hi	kW	0,5/0,8/1,1	0,6/0,9/1,3	0,8/1,5/1,9	0,9/1,8/2,3	1,2/2,2/3,3	1,9/3,3/4,5	2,4/4,3/5,1	3,4/4,6/6,3
Water flow	Lo/Med/Hi	l/h	124/172/250	127/213/289	172/341/430	206/413/547	296/544/798	466/784/1003	587/1058/1252	798/1048/1400
Water pressure drop	Lo/Med/Hi	kPa	10,7/19,5/39,2	1,9/3,9/6,3	6,3/19,3/28,8	5,4/17,1/28,0	7,5/22,8/46,9	13,9/37,4/60,2	4,8/15,4/21,5	11,9/19,3/32,5
Heating capacity [2]	Lo/Med/Hi	kW	0,9/1,4/2,0	0,9/1,5/2,2	1,3/2,4/3,1	1,4/2,9/4,0	2,1/4,1/5,7	3,1/5,3/7,1	4,3/7,9/9,3	5,9/8,1/11,6
4-pipe - Left connection (PAW-)			**FC4A-P010L**	**FC4A-P020L**	**FC4A-P030L**	**FC4A-P040L**	**FC4A-P050L**	**FC4A-P060L**	**FC4A-P070L**	**FC4A-P080L**
4-pipe - Right connection (PAW-)			**FC4A-P010R**	**FC4A-P020R**	**FC4A-P030R**	**FC4A-P040R**	**FC4A-P050R**	**FC4A-P060R**	**FC4A-P070R**	**FC4A-P080R**
Total cooling capacity [1]	Lo/Med/Hi	kW	0,7/0,9/1,3	0,6/1,1/1,6	1,0/1,9/2,4	1,1/2,3/3,0	1,7/3,0/4,3	2,6/4,4/5,6	3,3/5,9/6,9	4,5/5,9/8,0
Sensible cooling capacity [1]	Lo/Med/Hi	kW	0,5/0,7/1,0	0,5/0,8/1,2	0,8/1,5/1,8	0,8/1,7/2,2	1,2/2,2/3,1	1,8/3,2/4,3	2,3/4,2/4,9	3,3/4,4/6,2
Water flow	Lo/Med/Hi	l/h	114/159/225	109/192/268	165/327/414	194/388/517	284/522/748	449/756/967	575/1019/1193	775/1020/1380
Water pressure drop	Lo/Med/Hi	kPa	8,3/15,2/29,0	1,5/3,4/5,6	3,0/9,5/14,4	6,4/22,3/36,8	4,2/12,8/25,1	10,2/27,7/44,5	5,9/17,9/24,4	19,3/31,1/53,6
Heating capacity [2]	Lo/Med/Hi	kW	0,5/0,7/1,0	0,6/0,9/1,1	1,0/1,4/1,6	0,9/1,6/2,1	1,5/2,3/3,0	1,9/2,9/3,7	2,7/3,6/4,3	3,9/5,6/7,1
Water flow	Lo/Med/Hi	l/h	79/127/178	100/146/190	164/232/274	160/273/354	251/401/508	325/505/633	456/626/736	673/963/1226
Water pressure drop	Lo/Med/Hi	kPa	1,9/3,5/5,6	1,5/3,2/5,3	5,1/9,0/11,9	9,2/26,5/42,7	10,7/24,6/29,5	20,3/43,9/52,9	67,2/117,9/137,8	33,1/63,7/75
Sound levels										
Global sound power	Lo/Med/Hi	dB(A)	33/40/49	31/43/50	30/45/52	30/44/51	34/46/56	38/51/58	43/56/61	50/55/64
Global sound pressure [3]	Lo/Med/Hi	dB(A)	24/31/40	22/34/41	21/36/43	21/35/42	25/37/47	29/42/49	34/47/52	41/46/55
Fan										
Number			1	1	1	2	2	2	2	3
Air flow 2-pipe	Lo/Med/Hi	m³/h	111/190/283	105/179/265	138/274/390	173/357/499	253/486/716	350/640/933	480/893/1064	660/936/1397
Air flow 4-pipe	Lo/Med/Hi	m³/h	95/168/253	89/161/241	132/263/369	162/335/467	242/466/671	334/614/885	470/859/1012	634/905/1370
Filter			G2	G2	G2	G2	G2	G2	G2	G2
Electrical data										
Power supply	Voltage	V	230	230	230	230	230	230	230	230
	Phase		Single phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase
	Frequency	Hz	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Power consumption 2-pipe	Lo/Med/Hi	W	13/24/36	10/18/29	16/37/45	15/37/56	28/55/72	37/75/105	53/100/147	90/112/188
Power consumption 4-pipe	Lo/Med/Hi	W	13/24/36	10/18/28	16/37/44	15/37/55	28/54/70	37/74/104	53/99/145	90/112/188
Water connections										
Type			Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded
2-pipe		Inch	1/2	1/2	1/2	1/2	1/2	1/2	3/4	3/4
4-pipe	Cooling	Inch	1/2	1/2	1/2	1/2	1/2	1/2	3/4	3/4
	Heating	Inch	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Dimension and weight										
Dimension [4]	H x W x D	mm	477 x 225 x 766	766 x 225 x 477	477 x 225 x 951	477 x 225 x 1136	477 x 225 x 1321	477 x 225 x 1506	575 x 225 x 1319	575 x 225 x 1506
Weight	2 / 4-pipes	kg	19/20	19/20	22/23	27/29	30/32	35/37	35/37	47/49

1) According to Eurovent standard. Air: 27 °C DB / 19 °C WB. Water in / out: 7 °C / 12 °C. 2) Air: 20 °C. Water in / out: 50 °C / 45 °C. 3) The sound pressure levels are based on (NR) characteristics of a room having volume of 100 m³ with reverberation of 0,5 seconds. 4) Without support feet.

Technical focus

- Cooling capacity from 0,7 to 8,1 kW
- Heating capacity from 0,7 to 10,3 kW
- 5-speed AC fan motor(s)

Main features and accessories

- 2 and 4-pipe configurations
- Left or right hand arrangements
- Ease of installation
- Very low acoustic levels
- 2 way or 3 way ON / OFF valves
- Auxiliary drain pan
- Air intake with removable grid
- G2 filter
- PAW-FC-FSF feet for floor-standing units

Operating limits	
Entering water temperature	From 5 to 90 °C
Indoor air temperature	From 5 to 32 °C

ErP

ERP 2018: compliant following COMMISSION REGULATION (EU) No2016/2281.

Fan coils - floor-standing chassis (EC)

Optional controller. Wired remote controller with touch control.
PAW-FC-907EC

Optional controller. Wired remote controller.
PAW-FC-903EC

2-pipe - Left connection (PAW-)			**FC2E-P010L**	**FC2E-P020L**	**FC2E-P030L**	**FC2E-P040L**	**FC2E-P050L**	**FC2E-P060L**	**FC2E-P070L**	**FC2E-P080L**
2-pipe - Right connection (PAW-)			**FC2E-P010R**	**FC2E-P020R**	**FC2E-P030R**	**FC2E-P040R**	**FC2E-P050R**	**FC2E-P060R**	**FC2E-P070R**	**FC2E-P080R**
Total cooling capacity [1]	Lo/Med/Hi	kW	0,6/1,2/2,1	0,6/1,4/2,4	0,9/2,1/3,1	1,3/2,9/4,2	1,3/4,0/5,0	2,0/4,5/5,2	2,7/5,9/6,9	5,1/6,5/8,8
Sensible cooling capacity [1]	Lo/Med/Hi	kW	0,5/1,1/1,9	0,5/1,1/1,9	0,6/1,6/2,4	1,0/2,1/3,0	1,1/3,0/3,7	1,4/3,5/4,0	2,0/4,3/5,2	3,7/4,8/6,6
Water flow	Lo/Med/Hi	l/h	107/210/356	110/237/406	148/354/532	230/506/722	231/685/743	341/767/800	463/1008/1098	879/1111/1254
Water pressure drop	Lo/Med/Hi	kPa	8,2/28,2/76,9	1,5/4,6/11,0	5,0/20,5/42,1	6,4/24,4/46,3	4,9/35,1/41,0	7,8/35,8/38,8	3,0/14,0/16,6	14,1/21,4/26,6
Heating capacity [2]	Lo/Med/Hi	kW	0,8/1,6/2,9	0,9/1,9/3,3	1,0/2,2/3,4	1,4/3,0/5,3	1,7/5,2/5,5	2,3/5,9/6,1	3,8/7,3/8,2	6,2/8,0/9,3
4-pipe - Left connection (PAW-)			**FC4E-P010L**	**FC4E-P020L**	**FC4E-P030L**	**FC4E-P040L**	**FC4E-P050L**	**FC4E-P060L**	**FC4E-P070L**	**FC4E-P080L**
4-pipe - Right connection (PAW-)			**FC4E-P010R**	**FC4E-P020R**	**FC4E-P030R**	**FC4E-P040R**	**FC4E-P050R**	**FC4E-P060R**	**FC4E-P070R**	**FC4E-P080R**
Total cooling capacity [1]	Lo/Med/Hi	kW	0,5/1,1/1,9	0,6/1,2/2,2	0,8/1,9/2,9	1,2/2,7/4,0	1,2/3,6/4,6	1,8/4,1/4,9	2,6/5,1/6,4	5,0/6,2/9,6
Sensible cooling capacity [1]	Lo/Med/Hi	kW	0,4/0,9/1,7	0,4/1,0/1,8	0,6/1,5/2,2	0,9/1,9/2,8	1,0/2,8/3,5	1,2/3,2/3,8	1,9/3,8/4,8	3,6/4,6/7,2
Water flow	Lo/Med/Hi	l/h	92/185/327	97/206/375	129/321/493	205/457/681	212/625/686	306/707/749	443/886/977	855/1070/1242
Water pressure drop	Lo/Med/Hi	kPa	5,8/20,1/59,2	1,3/3,7/9,7	4,0/9,2/19,7	6,3/29,6/60,1	2,5/17,9/21,3	5,1/24,3/27,2	3,5/13,6/16,5	22,9/33,9/44,3
Heating capacity [2]	Lo/Med/Hi	kW	0,4/0,8/1,4	0,6/0,9/1,5	1,0/1,4/1,8	1,2/2,0/2,8	1,6/2,4/2,5	1,4/2,9/3,1	2,5/3,4/3,6	4,5/5,9/6,9
Water flow	Lo/Med/Hi	l/h	76/140/235	95/161/255	166/243/304	204/350/483	267/416/438	233/503/531	434/583/614	767/1011/1194
Water pressure drop	Lo/Med/Hi	kPa	1,8/4,0/8,4	1,4/3,8/9,4	5,3/9,7/14,1	15,6/41,8/76,3	11,9/26,3/28,9	11,5/43,6/48,1	61,5/103,8/113,9	42,1/69,7/95,1
Sound levels										
Global sound power	Lo/Med/Hi	dB(A)	34/47/60	34/47/60	31/50/59	29/44/52	30/51/57	32/54/58	40/54/59	51/56/64
Global sound pressure [3]	Lo/Med/Hi	dB(A)	25/38/51	25/38/51	22/41/50	20/35/43	21/42/48	23/45/49	31/45/50	42/47/55
Fan										
Number			1	1	1	2	2	2	2	3
Air flow 2-pipe	Lo/Med/Hi	m³/h	108/228/417	98/234/413	145/380/585	170/412/678	203/645/816	245/737/912	350/850/1050	685/927/1398
Air flow 4-pipe	Lo/Med/Hi	m³/h	91/199/379	84/200/380	123/342/540	148/369/627	185/587/646	205/668/716	329/798/894	660/884/1079
Filter			G2	G2	G2	G2	G2	G2	G2	G2
Electrical data										
Power supply	Voltage	V	230	230	230	230	230	230	230	230
	Phase		Single phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase	Single phase
	Frequency	Hz	50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
Power consumption 2-pipe	Lo/Med/Hi	W	5/11/41	5/13/41	4/16/42	2/13/43	4/24/46	2/30/54	11/44/77	23/42/108
Power consumption 4-pipe	Lo/Med/Hi	W	5/11/39	5/13/40	6/15/40	2/12/42	2/23/44	2/28/52	11/43/75	22/41/116
Water connections										
Type			Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded
2-pipe		Inch	1/2	1/2	1/2	1/2	1/2	1/2	3/4	3/4
4-pipe	Cooling	Inch	1/2	1/2	1/2	1/2	1/2	1/2	3/4	3/4
	Heating	Inch	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Dimension and weight										
Dimension [4]	H x W x D	mm	477 x 225 x 766	766 x 225 x 477	477 x 225 x 951	477 x 225 x 1136	477 x 225 x 1321	477 x 225 x 1506	575 x 225 x 1319	575 x 225 x 1506
Weight	2 / 4-pipes	kg	19/20	19/20	22/23	27/29	30/32	35/37	35/37	47/49

1) According to Eurovent standard. Air: 27 °C DB / 19 °C WB. Water in / out: 7 °C / 12 °C. 2) Air: 20 °C. Water in / out: 50 °C / 45 °C. 3) The sound pressure levels are based on (NR) characteristics of a room having volume of 100 m³ with reverberation of 0,5 seconds. 4) Without support feet.

Technical focus

- Cooling capacity from 0,5 to 9,6 kW
- Heating capacity from 0,6 to 13,6 kW
- Low energy consumption EC fan(s)

Main features and accessories

- 2 and 4-pipe configurations
- Left or right hand arrangements
- Ease of installation
- Very low acoustic levels
- 2 way or 3 way ON / OFF valves
- Auxiliary drain pan
- Air intake with removable grid
- G2 filter
- PAW-FC-FSF feet for floor-standing units

Operating limits	
Entering water temperature	From 5 to 90 °C
Indoor air temperature	From 5 to 32 °C

ErP

EC MOTOR GREEN VENTILATION

ERP 2018: compliant following COMMISSION REGULATION (EU) No2016/2281.

Fan coils - wall-mounted (AC)

Optional controller. Advanced wired remote controller.
PAW-FC-RC1

Optional controller. Wired remote controller with touch control.
PAW-FC-907AC

Optional controller. Wired remote controller.
PAW-FC-903AC

Infrared remote supplied with IR versions.
IR Controller

2-pipe			PAW-FC2A-K007 PAW-FC2A-K007IR	PAW-FC2A-K009 PAW-FC2A-K009IR	PAW-FC2A-K018 PAW-FC2A-K018IR	PAW-FC2A-K022 PAW-FC2A-K022IR
Total cooling capacity [1]	Lo/Med/Hi	kW	1,0/1,3/1,7	1,6/1,7/2,4	2,8/3,0/3,5	2,9/3,1/3,9
Sensible cooling capacity [1]	Lo/Med/Hi	kW	0,7/1,0/1,2	1,2/1,3/1,9	2,1/2,3/2,7	2,3/2,5/3,1
Water flow	Lo/Med/Hi	l/h	172/231/287	270/291/418	483/508/609	502/535/669
Water pressure drop	Lo/Med/Hi	kPa	18,6/24,9/30,9	18,5/27,0/40,0	34,6/41,3/55,6	37,2/33,7/45,2
Heating capacity [2]	Lo/Med/Hi	kW	1,4/1,7/2,0	1,7/2,0/2,7	2,9/3,2/4,0	3,1/3,7/4,4
Sound levels						
Sound power	Lo/Med/Hi	dB(A)	45/49/51	47/52/57	49/53/59	56/59/63
Sound pressure [3]	Lo/Med/Hi	dB(A)	32/36/38	34/39/44	40/43/46	43/46/50
Fan						
Number			1	1	1	1
Air flow	Lo/Med/Hi	m³/h	282/321/360	367/413/551	532/592/680	617/709/850
Filter			G1	G1	G1	G1
Electrical data						
Power supply	Voltage	V	230	230	230	230
	Phase		Single phase	Single phase	Single phase	Single phase
	Frequency	Hz	50	50	50	50
Fuse rating		A	3	3	3	3
Power consumption	Lo/Med/Hi	W	39/42/62	30/47/59	44/50/55	50/55/70
Water connections						
Type			Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded
Water connections		Inch	1/2	1/2	1/2	1/2
Dimension and weight						
Dimension	H x W x D	mm	275 x 180 x 845	275 x 180 x 845	298 x 200 x 940	298 x 200 x 940
Weight		kg	11	11	13	13

1) According to Eurovent standard. Air: 27 °C DB / 19 °C WB. Water in / out: 7 °C / 12 °C. 2) According to Eurovent standard. Air: 20 °C. Water in / out: 45 °C / 40 °C. 3) Sound pressure considering a local of 100 m³ a reverberation time of 0,5 seconds and a distance of 1 m.

Technical focus

- 4 sizes
- Cooling capacity from 1,0 to 3,9 kW
- Heating capacity from 1,4 to 4,1 kW
- Version: 2-pipes, AC fan

Main features and accessories

- 2 way or 3 way valve ON / OFF
- 3-speed AC fan motor
- Silent unit for optimum customer comfort
- Aesthetic design suitable for residential and hotel applications
- Compatible with IR controller (supplied with IR versions)
- Coil with hydrophilic fins to improve the condensate flow

Operating limits	
Entering water temperature	From 5 to 60 °C
Indoor air temperature	From 6 to 40 °C

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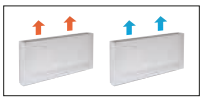
ERP 2018: compliant following COMMISSION REGULATION (EU) No2016/2281.

Smart fan coils



Built-in advanced thermostat.

			PAW-AAIR-200-2	PAW-AAIR-700-2	PAW-AAIR-900-2
Total cooling capacity	Lo/Med/Hi	kW	0,2/0,3/0,6	0,8/1,0/1,2	1,2/1,5/1,7
Sensible cooling capacity	Lo/Med/Hi	kW	0,2/0,3/0,5	0,6/0,9/1,1	1,1/1,4/1,6
Water flow	Lo/Med/Hi	kg/h	40,0/59,0/95,0	129,0/178,0/207,0	198,0/261,0/300,0
Water pressure drop	Lo/Med/Hi	kPa	0,4/2,0/2,9	1,0/2,0/2,0	6,0/9,0/12,0
Inlet water temperature		°C	10	10	10
Outlet water temperature		°C	15	15	15
Inlet air temperature		°C	27,0	27,0	27,0
Outlet air temperature	Lo/Med/Hi	°C	15,0/17,0/18,0	14,0/16,0/17,0	16,0/17,0/18,0
Relative humidity of inlet air		%	47	47	47
Total heating capacity	Lo/Med/Hi	kW	0,2/0,5/0,6	0,7/1,0/1,2	0,9/1,4/1,7
Water flow	Lo/Med/Hi	kg/h	37,3/80,8/98,0	121,8/177,5/204,3	152,4/244,2/292,9
Water pressure drop	Lo/Med/Hi	kPa	0,4/2,0/2,9	0,3/0,8/1,0	0,5/1,6/2,2
Inlet water temperature		°C	35	35	35
Outlet water temperature		°C	30	30	30
Inlet air temperature		°C	19,0	19,0	19,0
Outlet air temperature	Lo/Med/Hi	°C	38,9/32,0/30,0	33,3/31,8/30,6	30,2/31,1/30,6
Air flow	Lo/Med/Hi	m³/min	0,9/1,9/2,7	2,6/4,2/5,3	4,1/6,1/7,7
Maximum input power	Lo/Med/Hi	W	7,0/9,0/13,0	14,0/18,0/22,0	16,0/20,0/24,0
Sound pressure	Lo/Med/Hi	dB(A)	23/33/40	24/36/42	25/36/44
Dimension (H x W x D)		mm	735 x 579 x 129	935 x 579 x 129	1135 x 579 x 129
Net weight		kg	17	20	23
3 Ways valve included			Yes	Yes	Yes
Touch screen thermostat			Yes	Yes	Yes

* Smart fan coils is produced by Innova.

Accessories	
PAW-AAIR-LEGS-1	Kits of 2 legs to protect the water pipings

Accessories	
PAW-AAIR-RHCABLE	Motor connection cable for units with hydraulic connections on the right

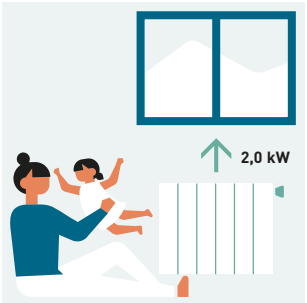
Stylish floor-standing fan coils with advanced controller

The slimline of Smart fan coils delivers high efficiency climate control.

With a depth of just under 130 mm they are at the cutting edge of the market. Blending easily into the home, Smart fan coil's elegant design and product refinements are clear to see in every detail.

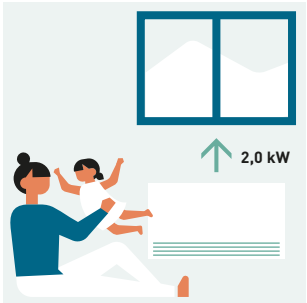
Exceptional ventilation efficiency means the motor uses considerably less energy (low wattage). The fan speed is continuously modulated by the temperature controller with proportional integral logic, with undoubted advantages for regulating the temperature and humidity in summer mode.

With standard cast radiators.



Water at 65 °C needed.

With Smart fan coil.



Water at 35 °C needed.

Technical focus

- 4 operation modes (auto, silent, night-time and maximum ventilation speed)
- Exclusive design
- Extremely compact (only 129 mm deep)
- Cooling and dehumidification functions possible (drain is needed)
- 3-way valve included (no overflow valve needed on the installation if more than 3 units installed)
- Touch screen thermostat

All temperature curves and capacity are available on www.panasonicproclub.com

PRO Club

Control and connectivity

Simple user friendly control for outdoor units

A control panel with intuitive design is equipped on all ECOi-W systems as standard. The microprocessor based control has a new IHM logic and implements a smart handling for your demand.

Basic operation.
· ON / OFF setting
· Cooling / Heating mode setting

Energy Saving.
· Intelligent logic control for inlet water temperature
· Night setback operation to reduce electrical consumption and noise
· Part load operating mode
· Maximum discharge temperature control

Service / Maintenance.
· Automatic test operation at the push of a button
· Alarm notice with the latest 10 alarms
· Counter for operating hours of compressor and pump
· Compressor operating limits saved in a flash memory

Others.
· BMS compatible (RS485 ModBus RTU or BACnet MSTP protocol)

Remote control kit

PAW-SYSREMKIT for R410A models
PAW-SYSREMKIT1 for R32 models
Simple remote control for the need to be installed remotely from the units.

Features:
· 8 lines of display with selectable blue and white back light
· Push-and-roll knob for easy operation
· Schedule function
· Alarm button with LED indicator
· Firmware can be upgraded via USB interface

New remote monitoring service ECOi-W Cloud

PAW-CM000SP041
Remote access in real time to optimise the service and maintenance work.
Alarm notification via e-mail.
Reporting and graph visualization with 300 varieties.
Various LED signals on the hardware to check the status on site.

Technical focus:
· Maximum 10 outdoor units connectable
· Modbus RTU is required
· History of data interval up to 5 minutes
· 4G SIM card fitted
· IP65 casing
· Optional antenna is available in the case that 4G signal is not good enough

Wired controllers for AC and EC fan coils

Advanced wired remote controller (AC)

PAW-FC-RC1
This advanced controller provides a higher level of comfort in heating. The sensor can be used as a water flow sensor, stopping the fan when the water temperature is low, avoiding cold drafts in winter.

Features:
· For 2-pipe and 4-pipe, AC fan
· Change Over function (cold draft prevention)
· Room thermostat
· 3 outputs, 230 V relays for fan control
· 2 outputs, 230 V relays for heating / cooling control
· Connection to BMS - Modbus RTU slave
· 1 DI for presence detection (key card switch)
· 1 AI for sensor

Wired remote controller (AC/EC)

Stylish and sophisticated design with backlit LCD display, is suitable for installation within a wide variety of locations such as office, hotel and residential applications. By connecting the controller to the range of AC/EC fan coils, the user can take advantage of the improved performance, higher levels of efficiency and thus improved energy savings.

PAW-FC-907AC

Features:
· For 2-pipe, AC fan
· Back lit LCD screen with touch control
· 3 speed control relay, for fan
· Economizer

PAW-FC-907EC

Features:
· For 2-pipe and 4-pipe, EC fan
· Back lit LCD screen with touch control
· Adjustable range EC fan control
· Economizer
· Connection to BMS via Modbus
· 1 DI for presence detection (key card switch)

Wired remote controller (AC/EC)

Feature rich and perfectly adapted to control AC/EC fan coils, the PAW-FC-903AC/EC is the addition for any fan coil. With intuitive user interface provided by the push button control and large LCD display, it will fit seamlessly with almost any location.

PAW-FC-903AC

Features:
· For 2-pipe, AC fan
· Back lit LCD screen
· 3 speed control relay, for fan
· Economizer

PAW-FC-903EC

Features:
· For 2-pipe and 4-pipe, EC fan
· Back lit LCD screen
· Adjustable range EC fan control
· Economizer
· Connection to BMS via Modbus
· 1 DI for presence detection (key card switch)

Accessories and control

Wired remote controller for outdoor units

Remote control for the need to be installed remotely from the units.

————

PAW-SYSREMKIT

Remote monitoring service ECOi-W Cloud

Cloudgate plug and play IP65 box mobile 4G Europe.

————

PAW-CM000SP041

Extension kit and cable glande for mobile (2/4G) antenna (3 m).

————

PAW-CM000K0001

Tservice wireless fee for 1 year. Periodic prepaid subscriptions identified by software "tokens" loaded in customer's private portal.

————

PAW-00SRTS011

Shut off valves

Shut off valves kit for model 20 - 40.

————

PAW-SYSSOV1

Shut off valves kit for model 45 - 75.

————

PAW-SYSSOV2

Shut off valves kit for model 90 - 125.

————

PAW-SYSSOV3

Victaulic connection kit

Victaulic connection kit for model 140 - 210.

————

PAW-SYSVICTH

Wired remote controller for fan coil

Advanced wired remote controller for fan coil.

————

PAW-FC-RC1

Wired remote controller with touch control for 2-pipe and 4-pipe, EC fan coil (control + Modbus).

————

PAW-FC-907EC

Wired remote controller for 2-pipe and 4-pipe, EC fan coil (control + Modbus).

————

PAW-FC-903EC

Wired remote controller with touch control for 2-pipe, AC fan coil (control only).

————

PAW-FC-907AC

Wired remote controller for 2-pipe, AC fan coil (control only).

————

PAW-FC-903AC

Fan coil ceiling, floor-standing and ducted valve accessories

2 way valve + drain pan for 2-pipe ceiling, floor-standing and ducted models 010-060. ———— PAW-FC-2WY-11/55-1	**2 way valve + drain pan for 2-pipe ceiling, floor-standing and ducted models 070-080.** ———— PAW-FC-2WY-65/90-1	**2 way valve + drain pan for 2-pipe ducted model F040.** ———— PAW-FC-2WY-F040
3 way valve + drain pan for 2-pipe ceiling, floor-standing and ducted models 010-060. ———— PAW-FC-3WY-11/55-1	**3 way valve + drain pan for 2-pipe ceiling, floor-standing and ducted models 070-080.** ———— PAW-FC-3WY-65/90-1	**3 way valve + drain pan for 2-pipe ducted model F040.** ———— PAW-FC-3WY-F040
2 way valve + drain pan for 4-pipe ceiling, floor-standing and ducted models 010-060. ———— PAW-FC4-2WY-010	**2 way valve + drain pan for 4-pipe ceiling, floor-standing and ducted models 070-080.** ———— PAW-FC4-2WY-070	**2 way valve + drain pan for 4-pipe ducted model F040.** ———— PAW-FC4-2WY-F040

3 way valve + drain pan for 4-pipe ceiling, floor-standing and ducted model 010. ———— PAW-FC4-3WY-010	**3 way valve + drain pan for 4-pipe ceiling, floor-standing and ducted models 020-060.** ———— PAW-FC4-3WY-020	**3 way valve + drain pan for 4-pipe ceiling, floor-standing and ducted models 070-080.** ———— PAW-FC4-3WY-070
3 way valve + drain pan for 4-pipe ducted model F040. ———— PAW-FC4-3WY-F040		

Fan coil high static ducted valve accessories

2 way valve + drain pan for 2-pipe high static ducted model E070. ———— PAW-FC2-2WY-E070	**2 way valve + drain pan for 2-pipe high static ducted models E150-E180.** ———— PAW-FC-2WY-150	**2 way valve + drain pan for 2-pipe high static ducted models E210-E240.** ———— PAW-FC2-2WY-E210
3 way valve + drain pan for 2-pipe high static ducted model E070. ———— PAW-FC2-3WY-E070	**3 way valve + drain pan for 2-pipe high static ducted models E150-E180.** ———— PAW-FC-3WY-150	**3 way valve + drain pan for 2-pipe high static ducted models E210-E240.** ———— PAW-FC2-3WY-E210
2 way valve + drain pan for 4-pipe high static ducted model E070. ———— PAW-FC4-2WY-E070	**2 way valve + drain pan for 4-pipe high static ducted models E150-E180.** ———— PAW-FC4-2WY-E150	**2 way valve + drain pan for 4-pipe high static ducted models E210-E240.** ———— PAW-FC4-2WY-E210
3 way valve + drain pan for 4-pipe high static ducted model E070. ———— PAW-FC4-3WY-E070	**3 way valve + drain pan for 4-pipe high static ducted models E150-E180.** ———— PAW-FC4-3WY-E150	**3 way valve + drain pan for 4-pipe high static ducted models E210-E240.** ———— PAW-FC4-3WY-E210

Fan coil cassette valve accessories

2 way valve + drain pan for 2-pipe cassette models U020-U040. ———— PAW-FC2-2WY-U020	**2 way valve + drain pan for 2-pipe cassette models U050-U070.** ———— PAW-FC2-2WY-U050	**3 way valve + drain pan for 2-pipe cassette models U020-040.** ———— PAW-FC2-3WY-U020	**3 way valve + drain pan for 2-pipe cassette models U050-070.** ———— PAW-FC2-3WY-U050
2 way valve + drain pan for 4-pipe cassette models U020-U040. ———— PAW-FC4-2WY-U020	**2 way valve + drain pan for 4-pipe cassette models U050-U070.** ———— PAW-FC4-2WY-U050	**3 way valve + drain pan for 4-pipe cassette models U020-U040.** ———— PAW-FC4-3WY-U020	**3 way valve + drain pan for 4-pipe cassette models U050-U070.** ———— PAW-FC4-3WY-U050

Fan coil wall-mounted valve accessories

2 way valve for 2-pipe wall-mounted K007-K022. ———— PAW-FC2-2WY-K007	**3 way valve for 2-pipe wall-mounted k007-K022.** ———— PAW-FC2-3WY-K007

Smart fan coil accessories

Kits of 2 legs to protect the water pipings. ———— PAW-AAIR-LEGS-1	**Motor connection cable for units with hydraulic connections on the right.** ———— PAW-AAIR-RHCABLE

Do not add or replace refrigerant other than the specified type. Manufacturer is not responsible for the damage and deterioration in safety due to usage of the other refrigerant.
The outdoor units in this catalogue contains fluorinated greenhouse gases with a GWP higher than 150.

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