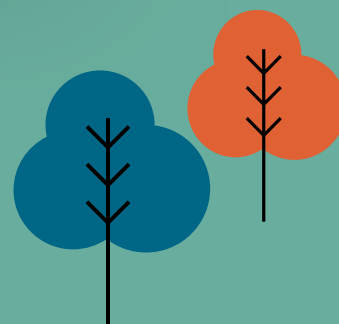


# New heat pumps and cooling only chillers

2020 — 2021

The world of heating and cooling  
is changing with Panasonic



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**Quality Management System Certificate**



**Certified to ISO 9001: 2008**  
Panasonic Appliances Air-Conditioning  
Malaysia. Sdn.Bhd.  
Cert. No.: MY-AR 1010



**Certified to ISO 9001: 2008**  
Panasonic Appliances Air-Conditioning  
(GuangZhou) Co., Ltd.  
Registration Number: 01209Q20645RSL

**Environmental Management System Certificate**



**Certified to ISO 14001: 2004**  
Panasonic Appliances Air-Conditioning  
Malaysia Sdn.Bhd.  
Cert. No.: MY-ER0112



**Certified to ISO 14001: 2004**  
Panasonic Appliances Air-Conditioning  
(GuangZhou) Co., Ltd.  
Registration Number: 02110E10562R4L

## ECOi-W, the solution for hotels, offices and industry.

High seasonal efficiency with the line-up from 20 kW to 210 kW.

Fully customisable design gives high flexibility for commercial applications.



## Quiet operation in full range.

The full range provides very low noise operation thanks to the compressor phonic insulation. The level of quiet operation is outstanding in the market.

## BMS integration.

Modbus RTU is included as standard across the range and additional optional BMS protocols are available for both BACnet and Modbus.



## Panasonic introduces a new heat pump and chiller series named ECOi-W.

Fan coil applications with ECOi-W Chiller system.

## Simple user friendly control.

A control panel with intuitive design is equipped on all ECOi-W systems as standard.



# A desire to create things of value

**"Recognising our responsibilities as industrialists, we will devote ourselves to the progress and development of society and the well-being of people through our business activities, thereby enhancing the quality of life throughout the world."**

Panasonic Corporation's Basic Management Objective, formulated in 1929 by the company's founder, Konosuke Matsushita.



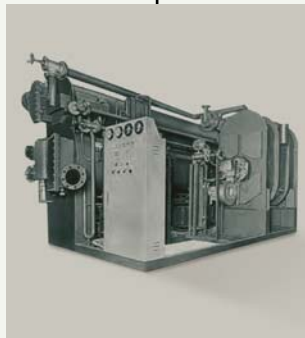
Panasonic becomes one of the first Japanese air conditioner manufacturers in Europe.



Introduces world's first simultaneous 3-Pipe heating/cooling VRF System.



Starts production of absorption chillers.



1958

1971

1973

1975

1985

1989



Panasonic launches the first highly efficient air-to-water heat pump in Japan.



First room air conditioner launched for domestic installation.



Introduces first GHP (gas heat pump) VRF air conditioner.



New Aquarea. Panasonic introduces Aquarea, an innovative new, low-energy system in Europe.



The first Hybrid System with VRF and GHP in Europe.



World's first air conditioner equipped with nanoe™



CO<sub>2</sub> condensing units in Europe. The ideal solution for supermarkets, shops and gas stations.



2008

2010

2012

2015

2016

2018

Looking ahead



Etherea new concept: high efficiency and high performances with a great design.



New VRF Systems ECOi EX with extraordinary energy-saving performance.

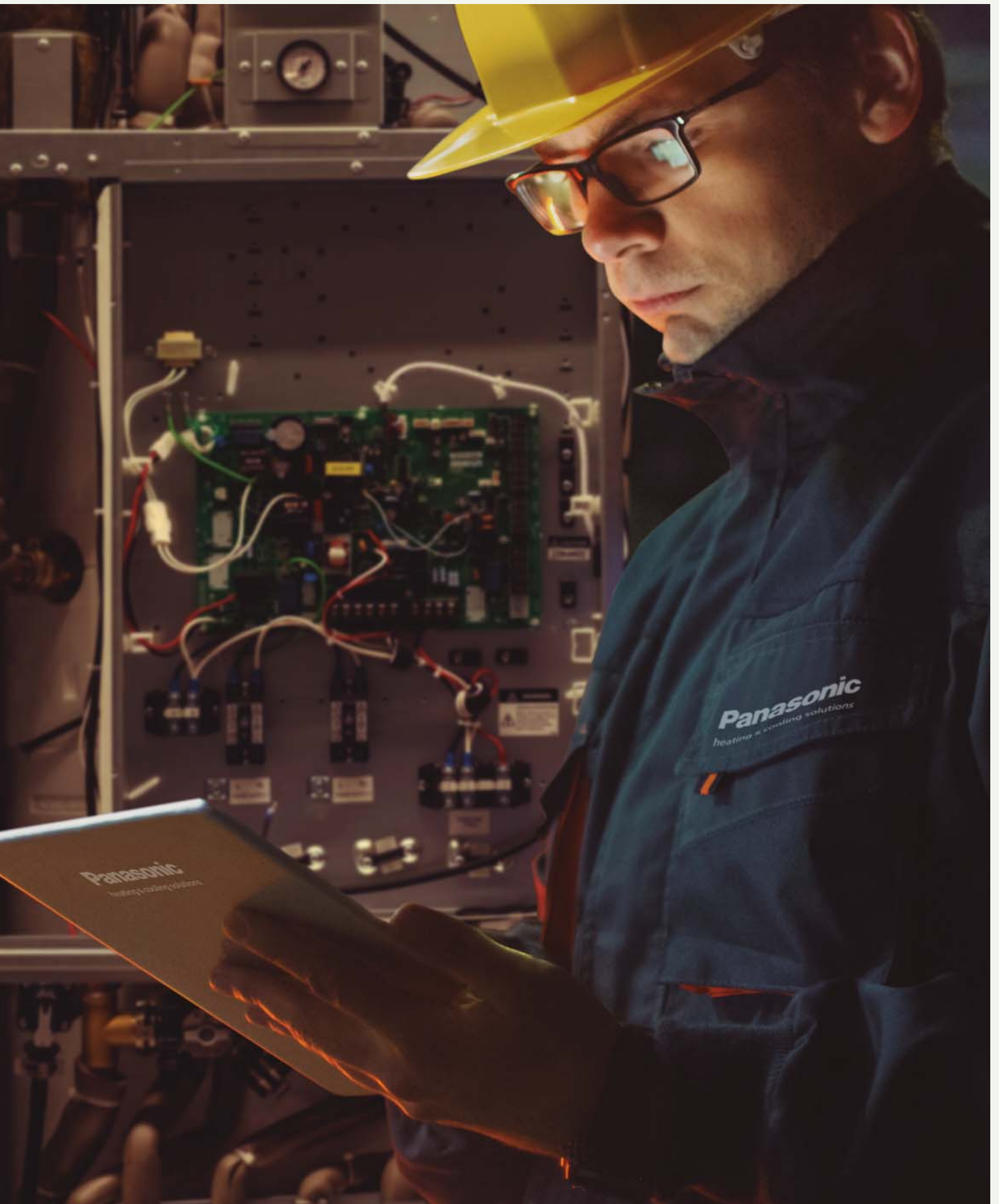


New Panasonic GHP units. The gas-driven VRF Systems are ideal for projects where power restrictions apply.



Panasonic introduces a new wide range of chiller series, named as ECOi-W.

# A Globally Trusted Air Conditioning Brand



**Panasonic – leading the way in Heating and Cooling.**  
 With more than 50 years of experience, selling to more than 120 countries around the world, Panasonic is one of the leaders in the heating and cooling sector.

With a diverse network of production and R&D facilities, Panasonic delivers innovative products incorporating cutting-edge technologies that set the standard for air conditioners worldwide.

Expanding globally, Panasonic provides superior international products transcending borders.



#### 100 % Panasonic: we control the process

The company is also a world leader in innovation as it has filed more than 91539 patents to improve its customers' lives. Moreover, Panasonic is determined to remain at the forefront of its market. In all, the company has produced more than 200 million compressors and its products are manufactured in 294 plants which are located all over the world. You can be assured of the extremely high quality of Panasonic's heat pumps.

This wish to excel has made Panasonic a leading company in heating and turn-key air conditioning solutions. These offer maximum effectiveness, comply with all environmental standards and meet the most avant-garde construction requirements of our time.

#### Constantly Improving

At Panasonic, we know that the best is always yet to come. This is why our air conditioning and heat pump solutions are constantly upgraded. Panasonic is committed to offering our customers innovative products in the heating and cooling market across Europe, and has the ambition to not only meet but also exceed their requirements. Our Technology & Design teams anticipate the needs of tomorrow. We look to produce smaller, quieter, efficient solutions - with better technological features - that can reduce energy consumption while providing suitable temperature conditions for the user.

#### 40 years of experienced organization in Europe

##### The partner for all Europe.

- Full European coverage and integrated organization
- One voice for European Agreements
- Availability and delivery anywhere in Europe
- Specification team to support project design throughout Europe
- European Service Network

##### Trained professionals.

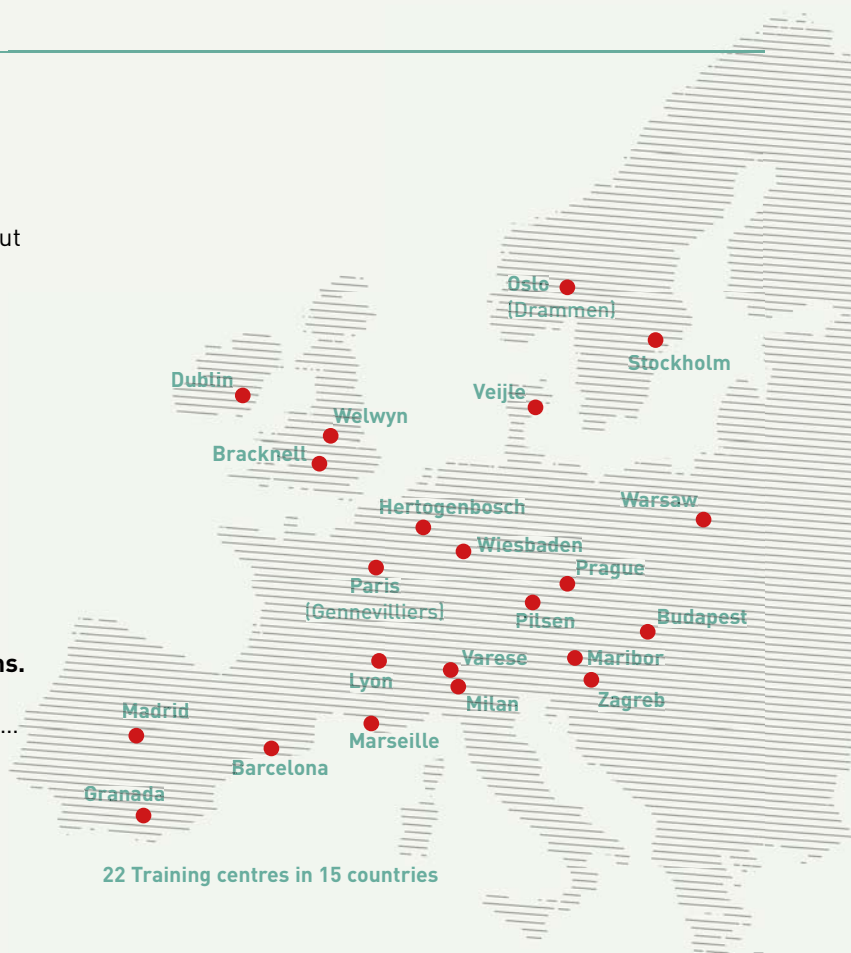
- 22 Training centres in 15 countries
- More than 5000 professionals trained every year. Innovation and manufacture in Europe

##### R&D Department designs solutions for different European needs.

- New factory set up in Czech Republic
- Design software made in Europe for Europe

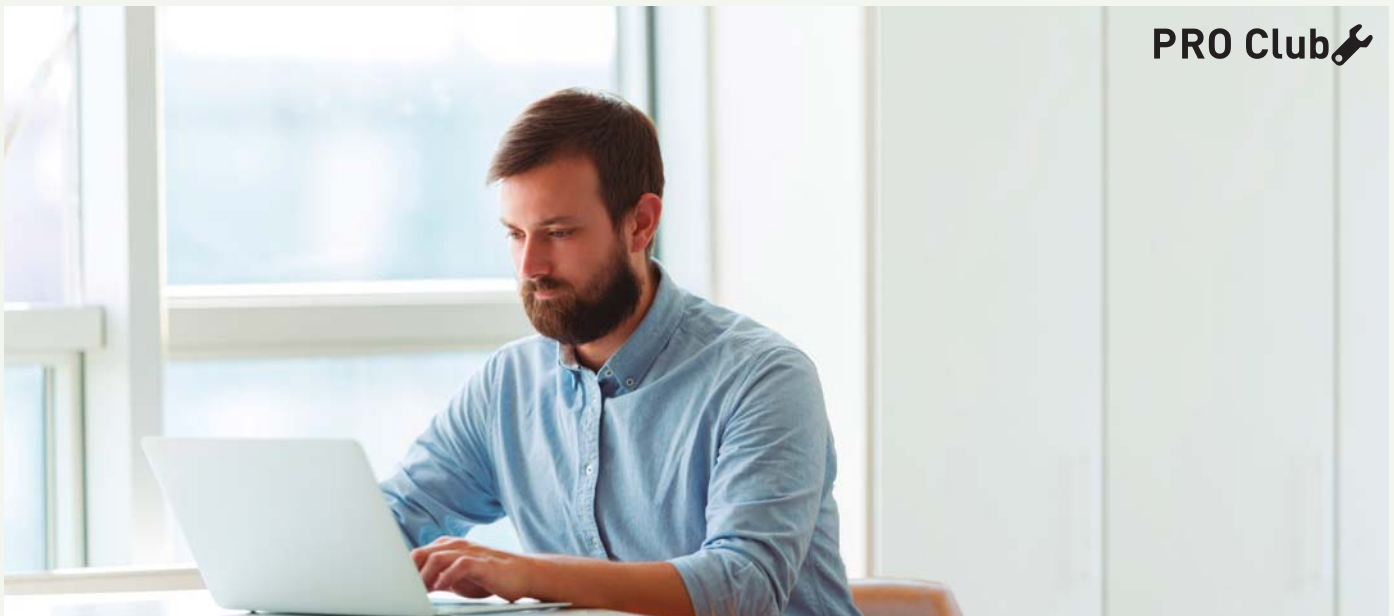
##### More than Cooling, Heating and Refrigeration Solutions.

- Security, communication solutions, advanced digital signage technology, access control solutions, displays...





# PRO Club. The professional website of Panasonic



Panasonic PRO Club ([www.panasonicproclub.com](http://www.panasonicproclub.com)) is the online tool which makes your life easier! You just have to register and a lot of functionalities are freely available to you, where ever you are, from your computer or smartphone!

- Print catalogues with your logo and your address
- Download the latest Aquarea designer to define your system and select the good Aquarea Heat pump.
- Calculate the specs of the fan coil based on the parameters of your system
- Get Documents of conformity and all other documents you may need
- Download all the service manuals, end user manuals and installation manuals
- Know what to do with error codes
- Find out about the latest news first
- Register for training

### Highlighted Features.

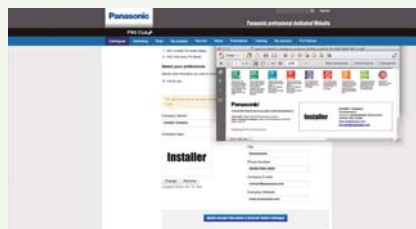
- Extensive library of resources
- Tools & Apps for end users. Check availability in your country:
  - My Home: sizing wizard for domestic and Air to Water range
  - My Project: Contact form to Panasonic team
  - iFinder: Lists of installers displayed by postcode

- Special offers & promotions
- Training PRO Academy
- Catalogues (Commercial documentation)
- Marketing (Images in high resolution, advertisements, dECO Guidelines)
- Tools (Professional software, sizing tools...)
- Installers customize leaflets in PDF format with their logo & contact details
- Energy label generator. Download energy labels of any device in PDF format
- Heating calculator
- Noise calculator for outdoor unit
- Aquarea Radiator calculator
- Error Code Search by error code or unit ref. Compatible with smartphone and tablet computer
- Revit / CAD Images / Spec texts
- Access to Pananet, online library of technical documentation
- Download Documents of Conformity and other Certifications
- Commissioning online

Panasonic PRO Club is fully compatible with tablet computer and smartphone.



Easy download Panasonic service documentation and brochures



Customise leaflets with your logo & contact details. Save and print the PDF



Energy label generator. Download Energy Labels of any device in PDF format

Panasonic has an impressive range of support services for designers, specifiers, engineers and distributors working in the heating and cooling markets.



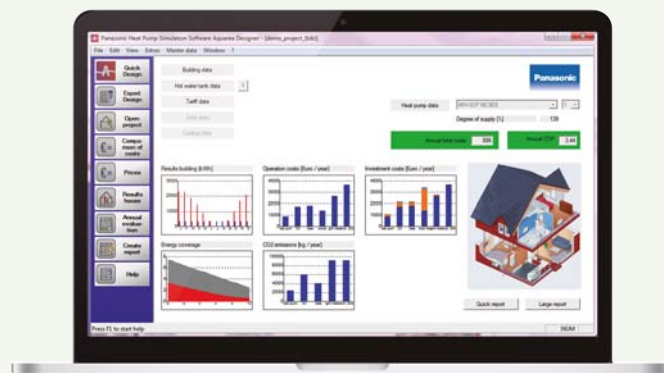
### Aquarea Designer

This program allows HVAC designers, installers and distributors to identify the correct heat pump for a particular application from Panasonic's Aquarea range, calculate the savings compared to other heat sources and very quickly calculate CO<sub>2</sub> emissions.

Using Panasonic's Aquarea Designer, projects can be developed simply and easily, by either using the Quick Design or Expert Design options. Each allows the user to build up the project data in a simple step-by-step process and choose to output reports (in either Quick or Large formats) as HTML files or as print-outs. To create these useful reports, project data is input, including:

- Heated area
- Heating requirement
- Heating flow and return temperatures
- Climate data (from a simple drop-down menu) including outdoor temperature
- Type of hot water tank, storage capacity and hot water target temperature

**Panasonic provides bespoke software helping system designers, installers and dealers to very quickly design and size systems, create wiring diagrams and issue bills of quantities at the push of a button.**



### Aquarea Designer also means saving

Aquarea Designer will calculate the project's energy costs in terms of hot water, heating and pumping. It will show the equipment running times and calculate the COP (coefficient of performance). It then allows the designer to show clients a comparison with other equipment options such as heating by conventional gas-fired boilers, oil systems, wood, standard electric heating and electric night storage heaters. This compares running costs, initial investment costs and maintenance costs. The comparison can also be made for CO<sub>2</sub> emissions and savings.

### The Panasonic PRO Academy

Panasonic takes its responsibility to its distributors, specifiers and installers seriously and has developed a comprehensive Training Programme. The Panasonic Pro-Academy encompasses the traditional hands-on approach to teaching.

New training courses cover three levels. Design, installation, and commissioning & trouble-shooting.

#### Training courses include:

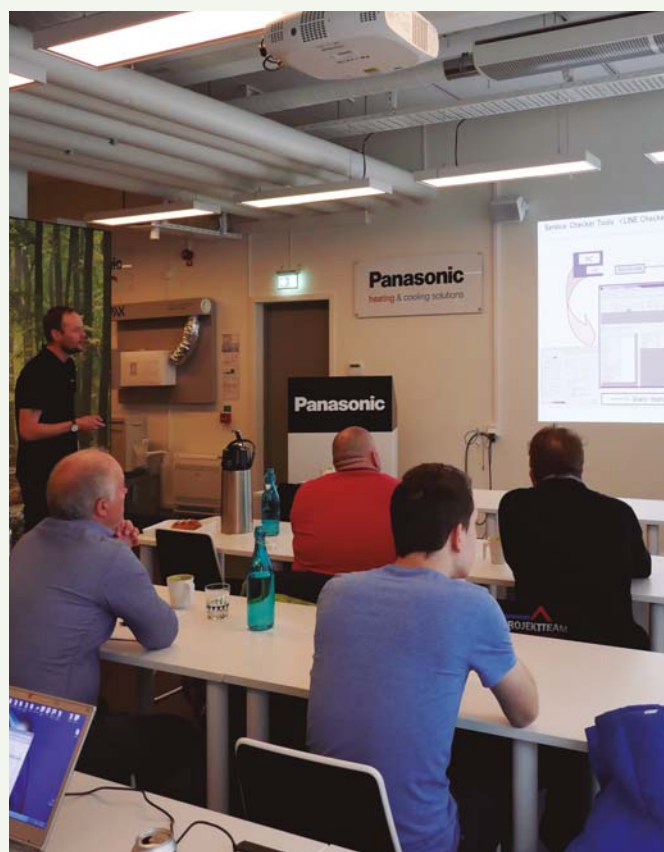
- Domestic applications Air to Air
- Aquarea air source heat pumps
- PACi, ECOi

The courses are offered on site at Panasonic's premises across Europe. The Training Centres display Panasonic's latest product range and give delegates an opportunity to get a hands-on experience with the latest controllers, indoor and outdoor units from the PACi, ECOi, Etherea, GHP and Aquarea ranges.

#### Chiller training coming soon!



Download on [www.panasonicproclub.com](http://www.panasonicproclub.com) or connect simply with your smartphone to the PRO Club using this QR









## Discover a new era of ECOi, the ECOi-W. Heat pumps and cooling only chillers

Panasonic introduces the new ECOi-W heat pumps and cooling only 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



Unrivalled 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.

**Panasonic does not compromise on product quality, always strives for 100 % quality.**

ECOi-W series offers smart technology meeting your needs at home and business.

## Energy saving

**HIGH SEER**

4,59

**High seasonal efficiency in cooling mode.**

SEER follows COMMISSION REGULATION (EU) No 2016/2281.

**HIGH SCOP**

3,43

**High seasonal efficiency in heating mode.**

SCOP follows COMMISSION REGULATION (EU) No 813/2013.

## 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.



**HEATING MODE**

**Down to -17 °C in heating mode.**

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



**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.

## 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.**

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/>



**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>



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





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

- 1 High energy saving and comfort**
- High SEER/SCOP
  - Quiet operation
  - Integration with ECOi VRF systems via BMS control

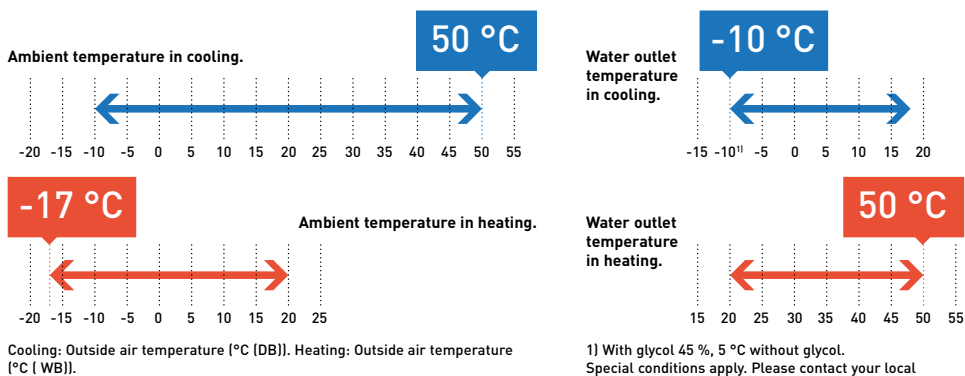
- 2 High flexibility**
- Capacity range from 20 kW to 210 kW
  - Customisable design
  - Operating range: -17 °C (heating) to 50 °C (cooling)
  - Wide range of hydraulic options
  - Wide range of communication protocols

- 3 High quality**
- Defrost limiting coil design (140 to 210)
  - Optimized design for service and maintenance
  - Compact footprint

**Operating conditions**

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

Water outlet temperature in cooling: A uniqueness of ECOi-W, is the water outlet temperature down to -10 °C in cooling. It can ensure the operation temperature of the process equipment in factories.



**ECOi-W line-up**

ECOi-W size	20	25	30	35	40	45	55	65	75	90	105	125	140	150	170	190	210	
<b>Heat pump range</b>	<b>Cooling capacities (kW)</b>																	
<b>Heating capacities (kW)</b>																		
SEER	3,91	3,87	3,88	3,68	3,91	3,70	3,86	4,04	3,99	3,89	3,88	3,89	3,87	3,87	3,91	3,69	3,68	
SCOP	3,37	3,27	3,27	3,36	3,40	3,23	3,27	3,43	3,40	3,26	3,31	3,35	3,32	3,36	3,31	3,29	3,23	
Energy efficiency class (heating) <sup>1)</sup>	A+	A+	A+	A+	A+	A+	A+	A+										
<b>Cooling only range</b>	<b>ECOi-W size</b>																	
	<b>Cooling capacities (kW)</b>																	
	SEER	4,59	4,45	4,23	4,42	4,21	4,12	4,12	4,41	4,32	4,23	4,12	4,24	4,35	4,31	4,40	4,23	4,22
Energy efficiency class (SEER) <sup>2)</sup>	A+	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	
<b>Dimensions (H x W x D) <sup>3)</sup></b>																		
		1983x1000x1000	1983x1000x1000	1986x2180x1160	1986x2180x1160	2286x2180x1160	2286x2180x1160	2295x2856x2210	2321x2856x2210									

1) According to Eurovent and COMMISSION REGULATION (EU) No 813/2013 for low-temperature heat pumps. 2) According to Eurovent and COMMISSION REGULATION (EU) No 2016/2281 for comfort application chillers <400 kW. 3) Without buffer tanks.

# Panasonic Certified Quality



### Class A pump

An efficient pump is equipped as a standard\*. A wide range of single and double pump, plus pump drive option is available.

\* Heat pump models 20 - 40.

### Axial AC/EC fan

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

### SWEP BP heat exchanger

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



Model type supplied may vary.

### Simple user friendly control

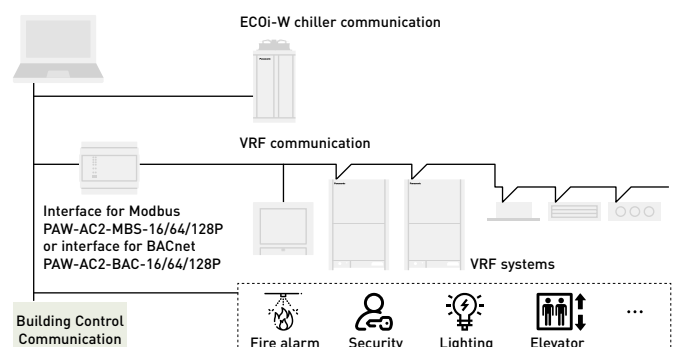
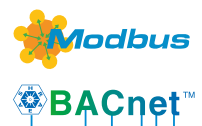
In addition to basic control functions...

- 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.

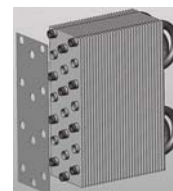


Panasonic does not compromise on product quality, safety or durability, in order to provide the ultimate comfort when you need it most.



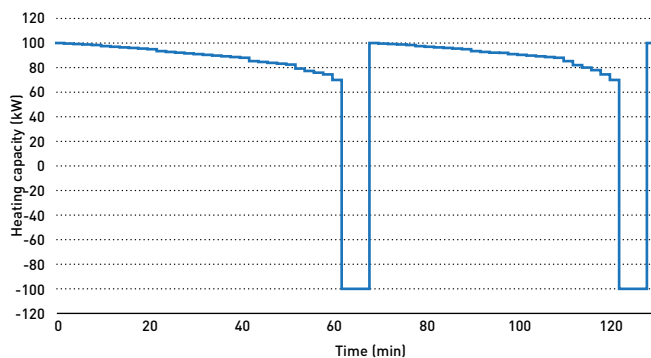
### Defrost limiting coil design

- 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

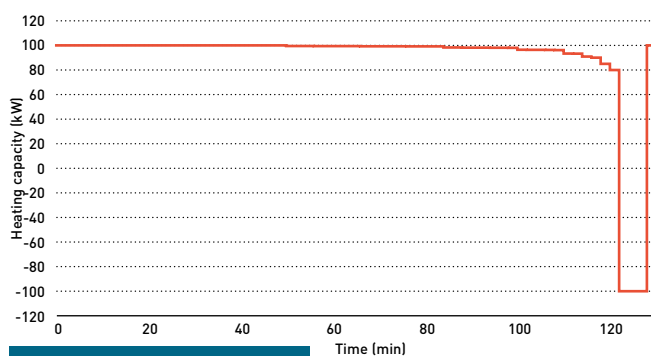


\* Available in heat pump range size 140-210.

#### 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. Optimized design to reduce installation effects, including noise and vibration attenuation.



Model type supplied may vary.

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

### Bluefin for more durability

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

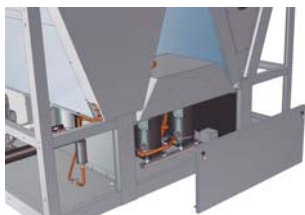


\* Available in heat pump range.

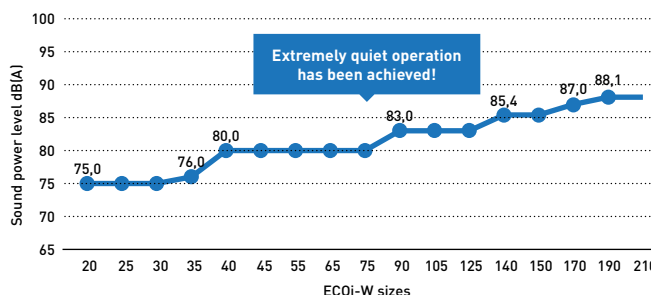
### Low noise

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 heat pump outdoor units

Page	Outdoor units	20 kW	25 kW	30 kW	35 kW	40 kW	45 kW	55 kW	65 kW	75 kW
P. 20	ECOi-W 20 to 40									
		U-020CWNB U-020CWBS	U-025CWNB U-025CWBS	U-030CWNB U-030CWBS	U-035CWNB U-035CWBS	U-040CWNB U-040CWBS				
P. 22	ECOi-W 45 to 75									
							U-045CWNB U-045CWBM	U-055CWNB U-055CWBM	U-065CWNB U-065CWBM	U-075CWNB U-075CWBM
P. 24	ECOi-W 90 to 125									
P. 26	ECOi-W 140 to 210									



90 kW

105 kW

125 kW

140 kW

150 kW

170 kW

190 kW

210 kW



U-090CWNB  
U-090CWBM

U-105CWNB  
U-105CWBM

U-125CWNB  
U-125CWBM



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 CW

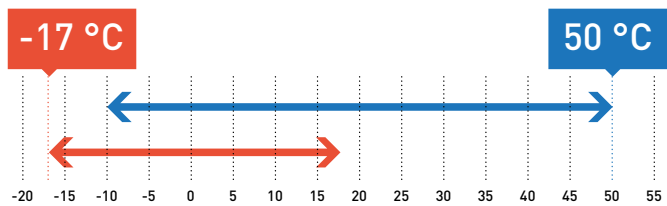
Cooling capacity: 19,4 to 37,4 kW  
 Heating capacity: 19,5 to 41,6 kW



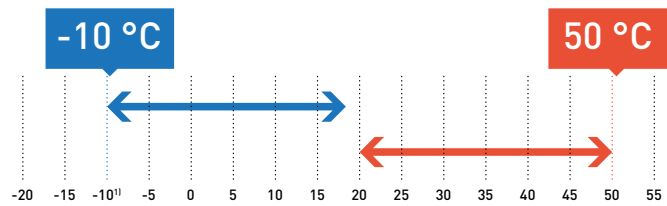
20 - 25 - 30

35 - 40

Ambient temperature.



Water outlet temperature.



Cooling: Outside air temperature (°C (DB)). Heating: Outside air temperature (°C (WB)).  
 1) With glycol 45 % maximum, 5 °C without glycol.

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 operation 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
- Optimized design for service and maintenance
- Simple user friendly control as standard
- Modbus RTU as standard

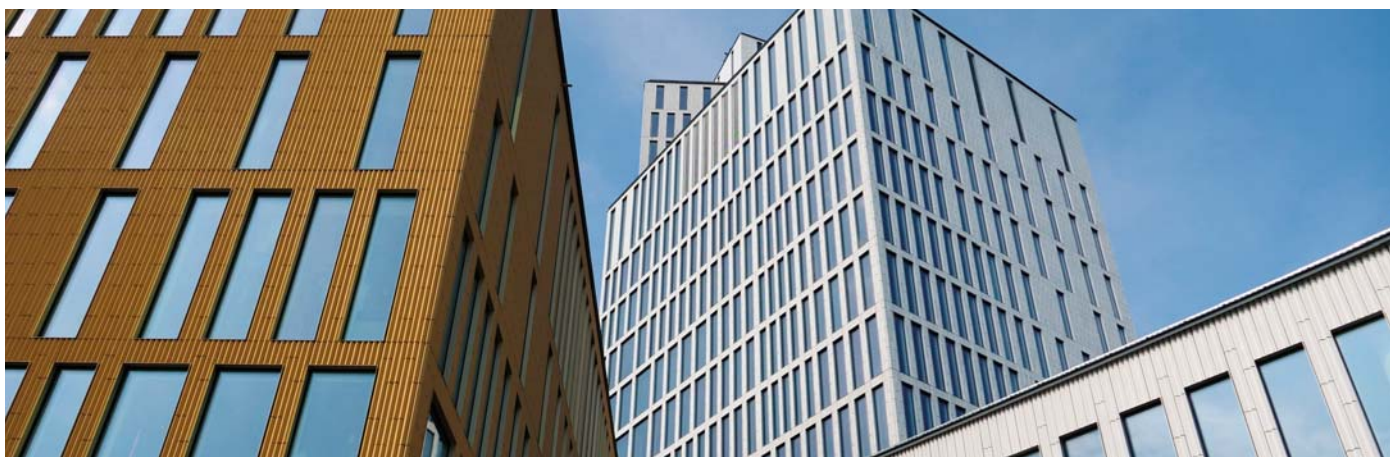
### Technical focus

- Chiller type: heat pump
- Compressor type (number of compressors): Scroll compressors (2)
- Refrigeration type: R410A
- Refrigerant circuit: 1
- Fan type (number of fans): 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
- Optional hydraulic kit
- Optional finned coil treatment
- Optional Modbus TCP/IP, BACnet IP and BACnet MSTP
- Optional remote LAN connection

### Available options

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

\* Available on models 25 - 40.  
 See more details on page 28.



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

Model			20	25	30	35	40
<b>Standard without buffer tank</b>			<b>U-020CWNB</b>	<b>U-025CWNB</b>	<b>U-030CWNB</b>	<b>U-035CWNB</b>	<b>U-040CWNB</b>
<b>With buffer tank</b>			<b>U-020CWBS</b>	<b>U-025CWBS</b>	<b>U-030CWBS</b>	<b>U-035CWBS</b>	<b>U-040CWBS</b>
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 <sup>1)</sup>		kW	19,4	25,3	26,9	35,8	37,4
Input power cooling <sup>1)</sup>		kW	6,10	8,61	9,34	13,51	13,64
Total EER 100 % <sup>1)</sup>			3,18	2,94	2,88	2,65	2,74
<b>SEER <sup>2)</sup></b>			<b>3,91</b>	<b>3,87</b>	<b>3,88</b>	<b>3,68</b>	<b>3,91</b>
$\eta_{sc}$ <sup>2)</sup>		%	153	152	152	144	153
Heating capacity <sup>3)</sup>		kW	19,5	26,9	29,7	37,3	41,6
Input power heating <sup>3)</sup>		kW	6,11	9,28	9,93	13,23	13,51
<b>SCOP <sup>4)</sup></b>			<b>3,37</b>	<b>3,27</b>	<b>3,27</b>	<b>3,36</b>	<b>3,40</b>
$\eta_{sh}$ <sup>4)</sup>		%	132	128	128	132	133
Energy efficiency class (Scale A+++ to D) <sup>5)</sup>			A+	A+	A+	A+	A+
Startup type			Direct	Direct	Direct	Direct	Direct
Maximum operating current		A	17,71	22,21	24,29	31,84	33,84
Startup current w/o softstarter / w softstarter		A	52,71/28,11	63,71/35,21	77,29/48,79	118,34/52,99	119,34/53,99
Sound power level (w standard fans)		dB(A)	75,0	75,0	75,0	76,0	76,0
Sound pressure level (w standard fans) <sup>6)</sup>		dB(A)	42,8	42,8	42,8	43,8	43,8
Dimensions (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
Dimensions (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	330
Weight (w 1 pump) w buffer tank		kg	345	355	385	395	395
Refrigerant (R410A)		kg	6,5	8,4	8,4	9,1	9,2
Number of refrigerant circuit			1	1	1	1	1
<b>Compressors</b>							
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	2x40	2x40	2x49	2x49	2x49
<b>Evaporator</b>							
Number			1	1	1	1	1
Type			Plate	Plate	Plate	Plate	Plate
Nominal water flow (cooling)		m <sup>3</sup> /h	3,35	4,36	4,64	6,16	6,44
Water pressure drop (cooling)		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
<b>Coils</b>							
Number			1	1	1	1	1
Frontal surface		m <sup>2</sup>	2,4	2,4	2,4	2,8	2,8
Number of rows			2	2	2	2	2
<b>Fans standard</b>							
Number			1	1	1	1	1
Airflow		m <sup>3</sup> /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
<b>Water connections</b>							
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

**Accessories**

PAW-SYSREMKIT Remote control

**Accessories**

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

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) Data refers to 45 °C leaving warm water temperature and 7 °C ambient coil air temperature with 87 % R.H., according EN14511 standard. 4) Following COMMISSION REGULATION (EU) No 813/2013 for low-temperature heat pumps. 5) Following COMMISSION REGULATION (EU) No 811/2013 for low-temperature heat pumps. Scale from A+++ to D, as of 26th September 2019. 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.





## U - 045/055/065/075 CW

Cooling capacity: 46,8 to 71,6 kW  
 Heating capacity: 48,5 to 75,9 kW



45 - 55

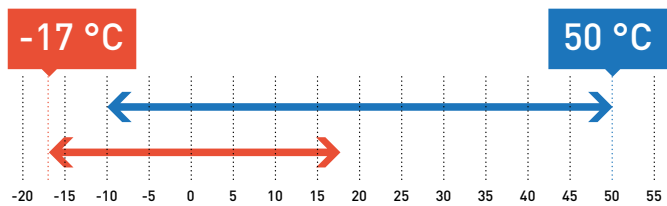
65 - 75



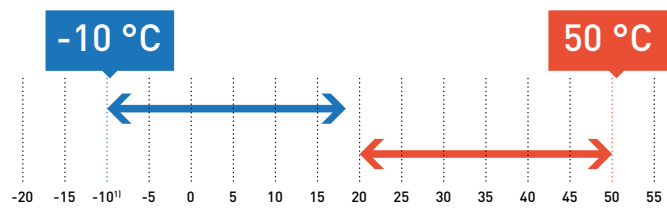
High seasonal efficiency in cooling, maximum SEER 4,04 in this range. ECOi-W Series offers a variety of options to meet your needs.

- High seasonal efficiency in cooling and heating
- Eurovent certified
- Ambient temperature operation 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
- Optimized design for service and maintenance
- Simple user friendly control as standard
- Modbus RTU as standard

### Ambient temperature.



### Water outlet temperature.



Cooling: Outside air temperature [°C (DB)]. Heating: Outside air temperature [°C (WB)].  
 1) With glycol 45 % maximum, 5 °C without glycol.

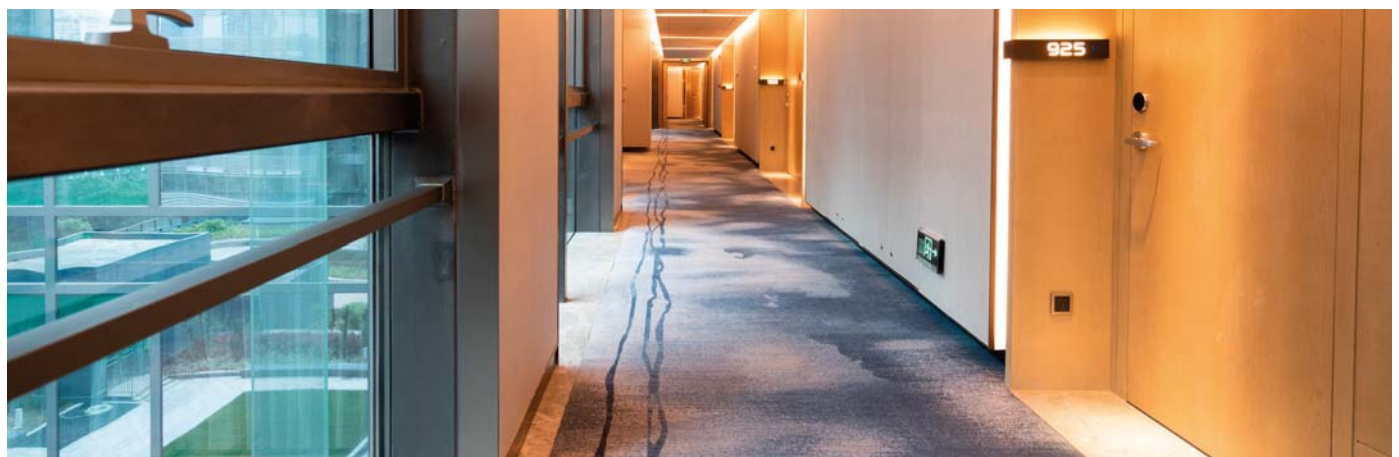
### Technical focus

- Chiller type: heat pump
- Compressor type (number of compressors): Scroll compressors (2)
- Refrigeration type: R410A
- Refrigerant circuit: 1
- Fan type (number of fans): 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
- Optional hydraulic kit
- Optional finned coil treatment
- Optional Modbus TCP/IP, BACnet IP and BACnet MSTP
- Optional remote LAN connection

### Available options

Options	Pump drive	Hydraulic options	Ambient options	Miscellaneous options
<b>Pump</b>				
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
	Variable capacity		Rubber pads	Modbus TCP/IP
	Constant outlet pressure		Spring damper	BACnet MSTP
	Constant differential pressure		All seasons fan control	BACnet IP
			Extra-low noise kit	Remote LAN connection
			High pressure fan	Container transport
				Refrigerant gauge

See more details on page 28.





**PAW-SYSREMKIT**  
Optional remote control.



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

Model			45	55	65	75
<b>Standard without buffer tank</b>			<b>U-045CWNB</b>	<b>U-055CWNB</b>	<b>U-065CWNB</b>	<b>U-075CWNB</b>
<b>With buffer tank</b>			<b>U-045CWBM</b>	<b>U-055CWBM</b>	<b>U-065CWBM</b>	<b>U-075CWBM</b>
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 <sup>1)</sup>		kW	46,8	53,3	65,8	71,6
Input power cooling <sup>1)</sup>		kW	16,90	19,67	22,10	24,26
Total EER 100 % <sup>1)</sup>			2,77	2,71	2,98	2,95
<b>SEER <sup>2)</sup></b>			<b>3,70</b>	<b>3,86</b>	<b>4,04</b>	<b>3,99</b>
$\eta_{sc}$ <sup>2)</sup>		%	145	151	159	157
Heating capacity <sup>3)</sup>		kW	48,5	58,2	67,2	75,9
Input power heating <sup>3)</sup>		kW	17,32	20,35	22,47	24,33
<b>SCOP <sup>4)</sup></b>			<b>3,23</b>	<b>3,27</b>	<b>3,43</b>	<b>3,40</b>
$\eta_{sh}$ <sup>4)</sup>		%	126	128	134	133
Energy efficiency class (Scale A+++ to D) <sup>5)</sup>			A+	A+	A+	—
Startup type			Direct	Direct	Direct	Direct
Maximum operating current		A	40,20	44,20	59,43	64,43
Startup current w/o softstarter / w softstarter		A	133,20/65,80	140,20/72,80	201,43/101,03	206,43/106,03
Sound power level (w standard fans)		dB(A)	80,0	80,0	80,0	80,0
Sound pressure level (w standard fans) <sup>6)</sup>		dB(A)	47,8	47,8	47,8	47,8
Dimensions (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
Dimensions (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	540	610	610
Weight (w 1 pump) w buffer tank		kg	700	700	770	770
Refrigerant (R410A)		kg	14,0	14,3	18,9	19,3
Number of refrigerant circuit			1	1	1	1
<b>Compressors</b>						
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	2x66	2x66	2x66	2x66
<b>Evaporator</b>						
Number			1	1	1	1
Type			Plate	Plate	Plate	Plate
Nominal water flow (cooling)		m <sup>3</sup> /h	8,06	9,18	11,30	12,31
Water pressure drop (cooling)		kPa	30	35	28	37
Water volume		l	4,10	4,10	6,10	6,10
Antifreeze heater		W	30	30	2x30	2x30
<b>Coils</b>						
Number			1	1	2	2
Frontal surface		m <sup>2</sup>	4,20	4,20	5,55	5,55
Number of rows			2	2	2	2
<b>Fans standard</b>						
Number			1	1	2	2
Airflow		m <sup>3</sup> /h	22500	22500	15000	15000
Rotation speed		r.p.m.	790	790	650	650
Power input (each fan)		W	1650	1650	930	930
<b>Water connections</b>						
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

**Accessories**

**PAW-SYSREMKIT** Remote control

**Accessories**

**PAW-SYSSOV2** Shut off valves kit for model 45 - 75

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) Data refers to 45 °C leaving warm water temperature and 7 °C ambient coil air temperature with 87 % R.H., according EN14511 standard. 4) Following COMMISSION REGULATION (EU) No 813/2013 for low-temperature heat pumps. 5) Following COMMISSION REGULATION (EU) No 811/2013 for low-temperature heat pumps. Scale from A+++ to D, as of 26th September 2019. 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.





## U - 090/105/125 CW

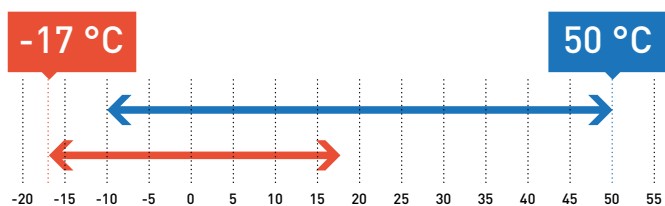
Cooling capacity: 91,4 to 121,9 kW  
Heating capacity: 88,1 to 119,1 kW



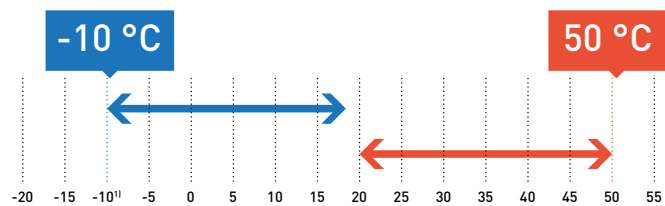
Customizable design gives high flexibility.  
Wide range of communication protocols fulfill the requirements in hotels, offices, industry applications.

- High seasonal efficiency in cooling and heating
- Eurovent certified
- Ambient temperature operation 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
- Optimized design for service and maintenance
- Simple user friendly control as standard
- Modbus RTU as standard

Ambient temperature.



Water outlet temperature.



Cooling: Outside air temperature (°C (DB)). Heating: Outside air temperature (°C (WB)).  
1) With glycol 45 % maximum, 5 °C without glycol.

### Technical focus

- Chiller type: heat pump
- Compressor type (number of compressors): Scroll compressors (2)
- Refrigeration type: R410A
- Refrigerant circuit: 1
- Fan type (number of fans): 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
- Optional hydraulic kit
- Optional finned coil treatment
- Optional Modbus TCP/IP, BACnet IP and BACnet MSTP
- Optional remote LAN connection

### Available options

Options	Pump drive	Hydraulic options	Ambient options	Miscellaneous options
<b>Pump</b>				
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
	Variable capacity		Rubber pads	Modbus TCP/IP
	Constant outlet pressure		Spring damper	BACnet MSTP
	Constant differential pressure		All seasons fan control	BACnet IP
			Extra-low noise kit	Remote LAN connection
			High pressure fan	Container transport
				Refrigerant gauge

See more details on page 28.







**PAW-SYSREMKIT**  
Optional remote control.



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

Model			90	105	125
Standard without buffer tank			<b>U-090CWNB</b>	<b>U-105CWNB</b>	<b>U-125CWNB</b>
With buffer tank			<b>U-090CWBM</b>	<b>U-105CWBM</b>	<b>U-125CWBM</b>
Power supply	Voltage	V	400	400	400
	Phase		Three Phase	Three Phase	Three Phase
	Frequency	Hz	50	50	50
Cooling capacity <sup>1)</sup>		kW	91,4	106,2	121,9
Input power cooling <sup>1)</sup>		kW	34,36	38,06	46,35
Total EER 100 % <sup>1)</sup>			2,66	2,79	2,63
<b>SEER <sup>2)</sup></b>			<b>3,89</b>	<b>3,88</b>	<b>3,89</b>
$\eta_{sc}$ <sup>2)</sup>		%	153	152	153
Heating capacity <sup>3)</sup>		kW	88,1	101,0	119,1
Input power heating <sup>3)</sup>		kW	33,75	38,40	45,46
<b>SCOP <sup>4)</sup></b>			<b>3,26</b>	<b>3,31</b>	<b>3,35</b>
$\eta_{sh}$ <sup>4)</sup>		%	128	129	131
Startup type			Direct	Direct	Direct
Maximum operating current		A	77,90	85,96	101,96
Startup current w/o softstarter / w softstarter		A	264,90/127,30	311,96/145,76	349,96/182,56
Sound power level (w standard fans)		dB(A)	83,0	83,0	83,0
Sound pressure level (w standard fans) <sup>5)</sup>		dB(A)	50,8	50,8	50,8
Dimensions (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
Dimensions (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	32,3	33,0
Number of refrigerant circuit			1	1	1
<b>Compressors</b>					
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
<b>Evaporator</b>					
Number			1	1	1
Type			Plate	Plate	Plate
Nominal water flow (cooling)		m <sup>3</sup> /h	15,73	18,25	20,95
Water pressure drop (cooling)		kPa	26	34	45
Water volume		l	10,80	10,80	10,80
Antifreeze heater		W	2x30	2x30	2x30
<b>Coils</b>					
Number			2	2	2
Frontal surface		m <sup>2</sup>	6,4	6,4	6,4
Number of rows			2	3	3
<b>Fans standard</b>					
Number			2	2	2
Airflow		m <sup>3</sup> /h	21000	21000	21000
Rotation speed		r.p.m.	790	790	790
Power input (each fan)		W	1650	1650	1650
<b>Water connections</b>					
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

#### Accessories

**PAW-SYSREMKIT** Remote control

#### Accessories

**PAW-SYSSOV3** Shut off valves kit for model 90 - 125

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) Data refers to 45 °C leaving warm water temperature and 7 °C ambient coil air temperature with 87 % R.H., according EN14511 standard. 4) Following COMMISSION REGULATION (EU) No 813/2013 for low-temperature heat pumps. 5) Sound pressure levels calculated at 10 meters. Sound pressure levels refer to ISO standard 3744 with parallel piped shape.

\* w: with, w/o: without.





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

Cooling capacity: 125,4 to 195,4 kW  
 Heating capacity: 143,7 to 217,6 kW



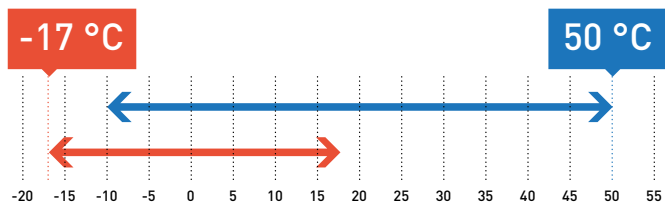
Heat pump chiller series with powerful operation by 4 scroll compressors. Maximum water outlet temperature in heating is up to 55 °C<sup>1)</sup>. Defrost limiting design ensures to provide stable hot water even at low ambient conditions.

- Smart defrost:  
 Defrost limiting design to ensure a constant water outlet temperature even at very low temperatures

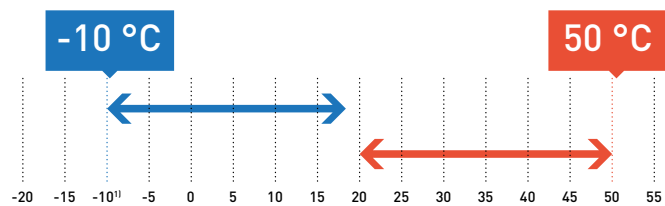
**1 DEFROST CYCLE EVERY 130 MINUTES.**

**Heating Capacity: +22 %  
 Integrated COP: +15 %  
 Improved SCOP Class**

Ambient temperature.



Water outlet temperature.



Cooling: Outside air temperature [°C (DB)]. Heating: Outside air temperature [°C (WB)].  
 1) With glycol 45 % maximum, 5 °C without glycol.

- High seasonal efficiency in cooling and heating
- Eurovent certified
- Ambient temperature operation range: -10 to +50 °C in cooling, -17 to +20 °C in heating
- Water outlet temperature range: -10 to +18 °C in cooling, +20 - +50 °C<sup>1)</sup> in heating
- Super quiet operation
- Victaulic water connections
- Optimized 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 of compressors): Scroll compressors (4)
- Refrigeration type: R410A
- Refrigerant circuit: 2
- Fan type (number of fans): 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
- Optional hydraulic kit
- Optional finned coil treatment
- Optional gauges hydraulic and refrigerant
- Optional BACnet
- Remote LAN connection as standard

1) Special condition apply. Please contact an authorized Panasonic dealer in the case of condition >50 °C.

### 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	Refrigerant gauge
			Nordic pack	
			High pressure fan	

See more details on page 28.

PAW-SYSREMKIT  
Optional remote control.

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 <sup>1)</sup>		kW	125,4	137,6	150,9	175,8	195,4
Input power cooling <sup>1)</sup>		kW	43,55	47,77	52,73	64,83	72,54
Total EER 100 % <sup>1)</sup>			2,88	2,88	2,86	2,71	2,69
<b>SEER <sup>2)</sup></b>			<b>3,87</b>	<b>3,87</b>	<b>3,91</b>	<b>3,69</b>	<b>3,68</b>
$\eta_{sc}$ <sup>2)</sup>		%	152	152	153	145	144
Heating capacity <sup>3)</sup>		kW	143,7	153,7	170,1	194,9	217,6
Input power heating <sup>3)</sup>		kW	45,80	50,20	55,40	67,50	78,30
<b>SCOP <sup>4)</sup></b>			<b>3,32</b>	<b>3,36</b>	<b>3,31</b>	<b>3,29</b>	<b>3,23</b>
$\eta_{sh}$ <sup>4)</sup>		%	130	132	129	129	126
Startup type			Direct	Direct	Direct	Direct	Direct
Maximum operating current		A	108,00	119,00	136,00	153,00	170,00
Startup current w/o softstarter / w softstarter		A	251,00/130,00	262,00/141,00	324,00/161,00	341,00/178,00	396,00/201,00
Sound power level (w standard fans)		dB(A)	85,4	85,4	87,0	88,1	88,1
Sound pressure level (w standard fans) <sup>5)</sup>		dB(A)	53,4	53,4	55,0	56,1	56,1
Dimensions (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
Dimensions (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	1512	1515	1605	1677	1937
Weight (w 1 low Pa pump) w buffer tank		kg	1644	1647	1737	1809	2069
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
<b>Compressors</b>							
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
<b>Evaporator</b>							
Number			1	1	1	1	1
Type			Plate	Plate	Plate	Plate	Plate
Nominal water flow (cooling)		m <sup>3</sup> /h	21,56	23,65	25,95	30,24	33,62
Water pressure drop (cooling)		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
<b>Coils</b>							
Number			4	4	4	4	4
Frontal surface		m <sup>2</sup>	11,88	11,88	11,88	11,88	11,88
Number of rows			2+2	2+2	2+3	3+3	3+3
<b>Fans standard</b>							
Number			4	4	4	4	4
Airflow		m <sup>3</sup> /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
<b>Water connections</b>							
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

**Accessories**

PAW-SYSREMKIT Remote control

**Accessories**

PAW-SYSVICTH Victaulic connection kit for model 140 - 210

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) Data refers to 45 °C leaving warm water temperature and 7 °C ambient coil air temperature with 87 % R.H., according EN14511 standard. 4) Following COMMISSION REGULATION (EU) No 813/2013 for low-temperature heat pumps. 5) Sound pressure levels calculated at 10 meters. Sound pressure levels refer to ISO standard 3744 with parallel piped shape.

\* w: with, w/o: without.





# Options for heat pump outdoor units

**Options table 20 - 125**

Option	Type	Ref.	Description	Model															
				20	25	30	35	40	45	55	65	75	90	105	125				
1	Capacity																		
2	Refrigerant & compressor type	W	R410A fixed speed	•	•	•	•	•	•	•	•	•	•	•	•	•	•		
		NB	No buffer	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std		
		BS	Buffer tank (small)	•	•	•	•	•											
3	Buffer tank option	BM	Buffer tank (medium )						•	•	•	•	•	•	•	•	•		
			No pump	•	•	•	•	•	Std	Std	Std	Std	Std	Std	Std	Std	Std		
			Single pump	Std	Std	Std	Std	Std	•	•	•	•	•	•	•	•	•	•	
4	Pump option		Double pump						•	•	•	•	•	•	•	•	•		
			Pump drive - fixed speed <sup>1)</sup>	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std		
			Pump drive - variable twin speed (single pump)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
5	Pump drive option		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) <sup>2)</sup>	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	
6	Hydraulic options		No hydraulic option	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std		
			Low water pressure sensor	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
			Water isolation valves	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
			Electric heater - low power						•	•	•	•	•	•	•	•	•	•	
			Electric heater - high power						•	•	•	•	•	•	•	•	•	•	
7	Ambient options		No ambient options	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std		
			Finned coil treatment - epoxy	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
			Outdoor coil protection grid	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
			Rubber pads	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
			Spring damper	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
			Fan speed control (FSC)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
			Nordic pack <sup>3)</sup>	•	•	•	•	•											
			Low noise	Std	Std	Std	Std	Std	•	•	•	•	•	•	•	•	•	•	
			High pressure fan <sup>4)</sup>		•	•	•	•	•	•	•	•	•	•	•	•	•	•	
8	Miscellaneous options		No miscellaneous options	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std		
			Soft starter	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
			Power supply w/o neutral <sup>5)</sup>	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	SO	
			Standard BMS option (Modbus RTU)	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	
			Modbus TCP/IP	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
			BACnet MSTP	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
			BACnet IP	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
			Remote LAN connection	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
			Container transport						•	•	•	•	•	•	•	•	•	•	
	Refrigerant gauge						•	•	•	•	•	•	•	•	•	•			

1) Fixed speed pump drive is standard when selecting a pump. Please select an alternative pump drive if required.  
 2) Constant differential pump drive option is only available on a special order and requires additional production time. Please contact your local sales representative.  
 3) The Nordic pack is not required on models 45 - 125 due to model design.  
 4) High pressure fan is not available on model 20 due to body design.  
 5) Power supply without neutral is only available on a special order and requires additional production time. Please contact your local sales representative.





**Options table 140 - 210**

Option	Type	Ref.	Description	Model				
				140	150	170	190	210
1	Capacity			140	150	170	190	210
2	Refrigerant & compressor type	W	R410A fixed speed	•	•	•	•	•
3	Buffer tank option	NB	No buffer	Std	Std	Std	Std	Std
		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 <sup>1)</sup>	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) <sup>2)</sup>	S0	S0	S0	S0	S0
6	Hydraulic options		No hydraulic option	Std	Std	Std	Std	Std
			Low water pressure sensor	•	•	•	•	•
			Water isolation valves	•	•	•	•	•
			Hydraulic gauges	•	•	•	•	•
7	Ambient options		No ambient options	Std	Std	Std	Std	Std
			Finned coil treatment - epoxy	•	•	•	•	•
			Outdoor coil protection grid <sup>3)</sup>	•	•	•	•	•
			Rubber pads	•	•	•	•	•
			Spring damper	•	•	•	•	•
			Fan speed control (FSC)	•	•	•	•	•
			Nordic pack	•	•	•	•	•
			Low noise	Std	Std	Std	Std	Std
8	Miscellaneous options		High pressure fan	•	•	•	•	•
			No miscellaneous options	Std	Std	Std	Std	Std
			Soft starter	•	•	•	•	•
			Power supply w/o neutral	•	•	•	•	•
			Standard BMS Option (Modbus RTU)	Std	Std	Std	Std	Std
			Modbus TCP/IP	•	•	•	•	•
			BACnet IP	•	•	•	•	•
			Remote LAN connection	Std	Std	Std	Std	Std
	Refrigerant gauge	•	•	•	•	•		

1) Fixed speed pump drive is standard when selecting a pump. Please select an alternative pump drive if required.

2) Constant differential pump drive options are only available on a special order and requires additional production time. Please contact your local sales representative.

3) Not available when using Nordic pack.



## Range of ECOi-W cooling only outdoor units

Page	Outdoor units	20 kW	25 kW	30 kW	35 kW	40 kW	45 kW	55 kW	65 kW	75 kW
------	---------------	-------	-------	-------	-------	-------	-------	-------	-------	-------

**P. 32** ECOi-W 20 to 40



U-020CVNB  
U-020CVBS

U-025CVNB  
U-025CVBS

U-030CVNB  
U-030CVBS

U-035CVNB  
U-035CVBS

U-040CVNB  
U-040CVBS

**P. 34** ECOi-W 45 to 75



U-045CVNB  
U-045CVBM

U-055CVNB  
U-055CVBM

U-065CVNB  
U-065CVBM

U-075CVNB  
U-075CVBM

**P. 36** ECOi-W 90 to 125

**P. 38** ECOi-W 140 to 210



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-140CVNB  
U-140CVBL

U-150CVNB  
U-150CVBL

U-170CVNB  
U-170CVBL

U-190CVNB  
U-190CVBL

U-210CVNB  
U-210CVBL



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

Cooling capacity: 19,3 to 40,9 kW

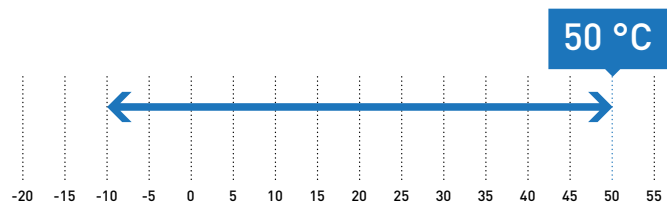
Compact and highly efficient chiller series, with SEER up to 4,59.



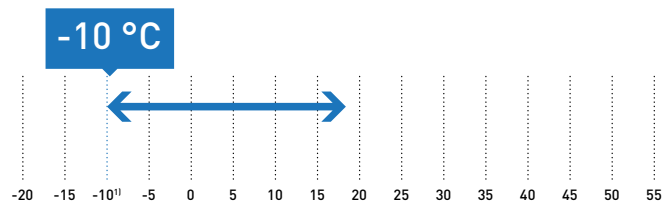
20 - 25 - 30

35 - 40

Ambient temperature.



Water outlet temperature.



Cooling: Outside air temperature [°C (DB)].  
1) With glycol 45 % maximum, 5 °C without glycol.

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

### Technical focus

- Chiller type: cooling only
- Compressor type (number of compressors): Scroll compressors (2)
- Refrigeration type: R410A
- Refrigerant circuit: 1
- Fan type (number of fans): 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
- Optional hydraulic kit
- Optional finned coil treatment
- Optional Modbus TCP/IP, BACnet IP and BACnet MSTP
- Optional remote LAN connection

### Available options

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

\* Available on models 25 - 40.  
See more details on page 40.





**PAW-SYSREMKIT**  
Optional remote control.**PAW-SYSSOV1**  
Optional Shut off valves kit for model 20 - 40.

Model			20	25	30	35	40
<b>Standard without buffer tank</b>			<b>U-020CVNB</b>	<b>U-025CVNB</b>	<b>U-030CVNB</b>	<b>U-035CVNB</b>	<b>U-040CVNB</b>
<b>With buffer tank</b>			<b>U-020CVBS</b>	<b>U-025CVBS</b>	<b>U-030CVBS</b>	<b>U-035CVBS</b>	<b>U-040CVBS</b>
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 <sup>1)</sup>		kW	19,3	24,7	27,1	38,2	40,9
Input power cooling <sup>1)</sup>		kW	6,10	7,69	9,00	12,20	13,40
Total EER 100 % <sup>1)</sup>			3,16	3,21	3,01	3,13	3,05
<b>SEER <sup>2)</sup></b>			<b>4,59</b>	<b>4,45</b>	<b>4,23</b>	<b>4,42</b>	<b>4,21</b>
$\eta_{sc}$ <sup>2)</sup>		%	181	175	166	174	166
Energy efficiency class (Scale A+++ to D) <sup>3)</sup>			A+	A	A	A	A
Startup type			Direct	Direct	Direct	Direct	Direct
Maximum operating current		A	17,71	22,21	24,29	31,84	33,84
Startup current w/o softstarter / w softstarter		A	52,71 / 28,11	63,71 / 35,21	77,29 / 48,79	118,34 / 52,99	119,34 / 53,99
Sound power level (w standard fans)		dB(A)	75,0	75,0	75,0	76,0	76,0
Sound pressure level (w standard fans) <sup>4)</sup>		dB(A)	42,8	42,8	42,8	43,8	43,8
Dimensions (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
Dimensions (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	330
Weight (w 1 pump) w buffer tank		kg	345	355	385	395	395
Refrigerant (R410A)		kg	6,5	8,4	8,4	9,1	9,2
Number of refrigerant circuit			1	1	1	1	1
<b>Compressors</b>							
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
<b>Evaporator</b>							
Number			1	1	1	1	1
Type			Plate	Plate	Plate	Plate	Plate
Nominal water flow (cooling)		m <sup>3</sup> /h	3,35	4,36	4,64	6,16	6,44
Water pressure drop (cooling)		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
<b>Coils</b>							
Number			1	1	1	1	1
Frontal surface		m <sup>2</sup>	2,4	2,4	2,4	2,8	2,8
Number of rows			2	2	2	2	2
<b>Fans standard</b>							
Number			1	1	1	1	1
Airflow		m <sup>3</sup> /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
<b>Water connections</b>							
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

**Accessories****PAW-SYSREMKIT** Remote control**Accessories****PAW-SYSSOV1** Shut off valves kit for model 20 - 40

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) Following COMMISSION REGULATION (EU) No 811/2013 for low-temperature heat pumps. Scale from A+++ to D, as of 26th September 2019. 4) Sound pressure levels calculated at 10 meters. Sound pressure levels refer to ISO standard 3744 with parallel piped shape.

\* w: with, w/o: without.





## U - 045/055/065/075 CV

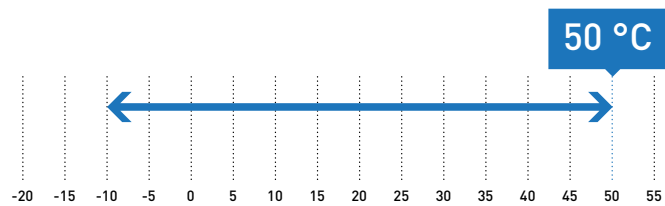
Cooling capacity: 49,8 to 75,8 kW



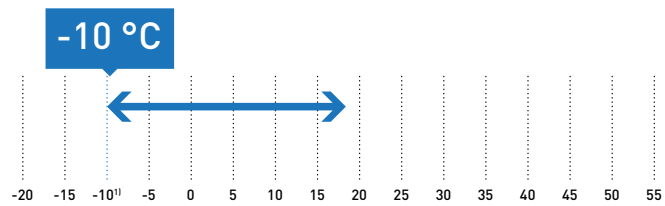
45 - 55

65 - 75

Ambient temperature.



Water outlet temperature.



Cooling: Outside air temperature [°C (DB)].  
 1) With glycol 45 % maximum, 5 °C without glycol.

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

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

### Technical focus

- Chiller type: cooling only
- Compressor type (number of compressors): Scroll compressors (2)
- Refrigeration type: R410A
- Refrigerant circuit: 1
- Fan type (number of fans): 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
- Optional hydraulic kit
- Optional finned coil treatment
- Optional Modbus TCP/IP, BACnet IP and BACnet MSTP
- Optional remote LAN connection

### Available options

Options	Pump drive	Hydraulic options	Ambient options	Miscellaneous options
Pump				
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
	Variable capacity		Rubber pads	Modbus TCP/IP
	Constant outlet pressure		Spring damper	BACnet MSTP
	Constant differential pressure		All seasons fan control	BACnet IP
			Extra-low noise kit	Remote LAN connection
			High pressure fan	Container transport
				Refrigerant gauge

See more details on page 40.



**PAW-SYSREMKIT**  
Optional remote control.**PAW-SYSSOV2**  
Optional Shut off valves kit for model 45 - 75.

Model			45	55	65	75
<b>Standard without buffer tank</b>			<b>U-045CVNB</b>	<b>U-055CVNB</b>	<b>U-065CVNB</b>	<b>U-075CVNB</b>
<b>With buffer tank</b>			<b>U-045CVBM</b>	<b>U-055CVBM</b>	<b>U-065CVBM</b>	<b>U-075CVBM</b>
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 <sup>1)</sup>		kW	49,8	56,9	69,7	75,8
Input power cooling <sup>1)</sup>		kW	16,70	18,80	22,10	22,10
Total EER 100 % <sup>1)</sup>			2,98	3,03	3,15	3,13
<b>SEER <sup>2)</sup></b>			<b>4,12</b>	<b>4,12</b>	<b>4,41</b>	<b>4,32</b>
$\eta_{sc}$ <sup>2)</sup>		%	162	162	174	170
Energy efficiency class (Scale A+++ to D) <sup>3)</sup>			A	A	A	A
Startup type			Direct	Direct	Direct	Direct
Maximum operating current		A	40,20	44,20	59,43	64,43
Startup current w/o softstarter / w softstarter		A	133,20/65,80	140,20/72,80	201,43/101,03	206,43/106,03
Sound power level (w standard fans)		dB(A)	80,0	80,0	80,0	80,0
Sound pressure level (w standard fans) <sup>4)</sup>		dB(A)	47,8	47,8	47,8	47,8
Dimensions (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
Dimensions (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	540	610	610
Weight (w 1 pump) w buffer tank		kg	700	700	770	770
Refrigerant (R410A)		kg	14,0	14,3	18,9	19,3
Number of refrigerant circuit			1	1	1	1
<b>Compressors</b>						
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
<b>Evaporator</b>						
Number			1	1	1	1
Type			Plate	Plate	Plate	Plate
Nominal water flow (cooling)		m <sup>3</sup> /h	8,06	9,18	11,30	12,31
Water pressure drop (cooling)		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
<b>Coils</b>						
Number			1	1	2	2
Frontal surface		m <sup>2</sup>	4,20	4,20	5,55	5,55
Number of rows			2	2	2	2
<b>Fans standard</b>						
Number			1	1	2	2
Airflow		m <sup>3</sup> /h	22500	22500	15000	15000
Rotation speed		r.p.m.	790	790	650	650
Power input (each fan)		W	1650	1650	930	930
<b>Water connections</b>						
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

**Accessories****PAW-SYSREMKIT** Remote control**Accessories****PAW-SYSSOV2** Shut off valves kit for model 45 - 75

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) Following COMMISSION REGULATION (EU) No 811/2013 for low-temperature heat pumps. Scale from A+++ to D, as of 26th September 2019. 4) Sound pressure levels calculated at 10 meters. Sound pressure levels refer to ISO standard 3744 with parallel piped shape.

\* w: with, w/o: without.





## U - 090/105/125 CV

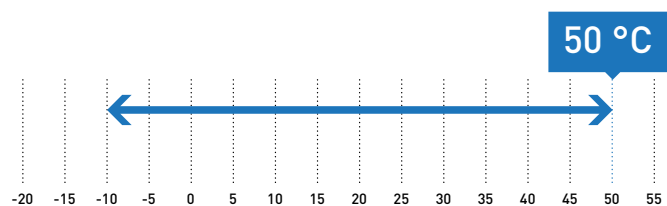
Cooling capacity: 97,0 to 129,8 kW



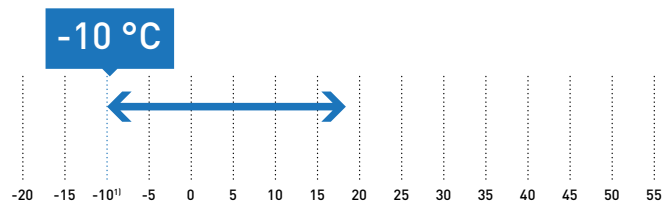
Customizable design gives high flexibility. Wide range of communication protocols fulfill the requirements in hotels, offices, industry applications.

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

Ambient temperature.



Water outlet temperature.



Cooling: Outside air temperature [°C (DB)].  
 1) With glycol 45 % maximum, 5 °C without glycol.

### Technical focus

- Chiller type: cooling only
- Compressor type (number of compressors): Scroll compressors (2)
- Refrigeration type: R410A
- Refrigerant circuit: 1
- Fan type (number of fans): 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
- Optional hydraulic kit
- Optional finned coil treatment
- Optional Modbus TCP/IP, BACnet IP and BACnet MSTP
- Optional remote LAN connection

### Available options

Options	Pump drive	Hydraulic options	Ambient options	Miscellaneous options
Pump				
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
	Variable capacity		Rubber pads	Modbus TCP/IP
	Constant outlet pressure		Spring damper	BACnet MSTP
	Constant differential pressure		All seasons fan control	BACnet IP
			Extra-low noise kit	Remote LAN connection
			High pressure fan	Container transport
				Refrigerant gauge

See more details on page 40.





**PAW-SYSREMKIT**  
Optional remote control.**PAW-SYSSOV3**  
Optional Shut off valves kit for model 90 - 125.

Model			90	105	125
<b>Standard without buffer tank</b>			<b>U-090CVNB</b>	<b>U-105CVNB</b>	<b>U-125CVNB</b>
<b>With buffer tank</b>			<b>U-090CVBM</b>	<b>U-105CVBM</b>	<b>U-125CVBM</b>
Power supply	Voltage	V	400	400	400
	Phase		Three Phase	Three Phase	Three Phase
	Frequency	Hz	50	50	50
Cooling capacity <sup>1)</sup>		kW	97,0	112,7	129,8
Input power cooling <sup>1)</sup>		kW	24,20	32,50	38,60
Total EER 100 % <sup>1)</sup>			2,98	2,92	2,93
<b>SEER <sup>2)</sup></b>			<b>4,23</b>	<b>4,12</b>	<b>4,24</b>
$\eta_{sc}$ <sup>2)</sup>		%	166	162	167
Energy efficiency class (Scale A+++ to D) <sup>3)</sup>			A	A	A
Startup type			Direct	Direct	Direct
Maximum operating current		A	77,90	86,00	102,00
Startup current w/o softstarter / w softstarter		A	264,90/127,30	311,96/145,76	349,96/182,56
Sound power level (w standard fans)		dB(A)	83,0	83,0	83,0
Sound pressure level (w standard fans) <sup>4)</sup>		dB(A)	50,8	50,8	50,8
Dimensions (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
Dimensions (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	32,3	33,0
Number of refrigerant circuit			1	1	1
<b>Compressors</b>					
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
<b>Evaporator</b>					
Number			1	1	1
Type			Plate	Plate	Plate
Nominal water flow (cooling)		m <sup>3</sup> /h	15,73	18,25	20,95
Water pressure drop (cooling)		kPa	26	34	45
Water volume		l	10,80	10,80	10,80
Antifreeze heater		W	2x30	2x30	2x30
<b>Coils</b>					
Number			2	2	2
Frontal surface		m <sup>2</sup>	6,4	6,4	6,4
Number of rows			2	3	3
<b>Fans standard</b>					
Number			2	2	2
Airflow		m <sup>3</sup> /h	21000	21000	21000
Rotation speed		r.p.m.	790	790	790
Power input (each fan)		W	1650	1650	1650
<b>Water connections</b>					
Type			Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228	Male gas threaded BSPP ISO 228
Inlet - diameter		Inch	21/2	21/2	21/2
Outlet - diameter		Inch	21/2	21/2	21/2

**Accessories****PAW-SYSREMKIT** Remote control**Accessories****PAW-SYSSOV3** Shut off valves kit for model 90 - 125

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) Following COMMISSION REGULATION (EU) No 811/2013 for low-temperature heat pumps. Scale from A+++ to D, as of 26th September 2019. 4) Sound pressure levels calculated at 10 meters. Sound pressure levels refer to ISO standard 3744 with parallel piped shape.

\* w: with, w/o: without.





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

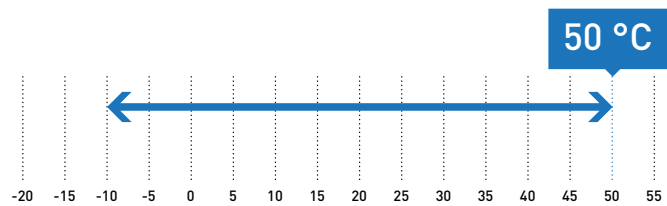
Cooling capacity: 134,0 to 208,8 kW



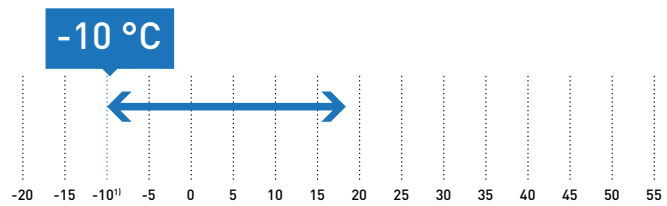
Powerful and efficient operation with 4 scroll compressors and superior flexibility with plug and play hydraulic options.

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

Ambient temperature.



Water outlet temperature.



Cooling: Outside air temperature [°C (DB)].  
 1) With glycol 45 % maximum, 5 °C without glycol.

### Technical focus

- Chiller type: cooling only
- Compressor type (number of compressors): Scroll compressors (4)
- Refrigeration type: R410A
- Refrigerant circuit: 2
- Fan type (number of fans): 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
- Optional hydraulic kit
- Optional finned coil treatment
- Optional gauges hydraulic and refrigerant
- Optional BACnet
- Remote LAN connection as standard

### Available options

Options	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	Refrigerant gauge
			High pressure fan	

See more details on page 40.





**PAW-SYSREMKIT**  
Optional remote control.

Model			140	150	170	190	210
<b>Standard without buffer tank</b>			<b>U-140CVNB</b>	<b>U-150CVNB</b>	<b>U-170CVNB</b>	<b>U-190CVNB</b>	<b>U-210CVNB</b>
<b>With buffer tank</b>			<b>U-140CVBL</b>	<b>U-150CVBL</b>	<b>U-170CVBL</b>	<b>U-190CVBL</b>	<b>U-210CVBL</b>
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 <sup>1)</sup>		kW	134,0	147,0	161,2	187,8	208,8
Input power cooling <sup>1)</sup>		kW	44,15	49,00	53,70	64,50	72,30
Total EER 100 % <sup>1)</sup>			3,03	3,00	3,00	2,91	2,89
<b>SEER <sup>2)</sup></b>			<b>4,35</b>	<b>4,31</b>	<b>4,40</b>	<b>4,23</b>	<b>4,22</b>
$\eta_{sc}$ <sup>2)</sup>		%	171	169	173	166	166
Energy efficiency class (Scale A+++ to D) <sup>3)</sup>			A	A	A	A	A
Startup type			Direct	Direct	Direct	Direct	Direct
Maximum operating current		A	108,00	119,00	136,00	153,00	170,00
Startup current w/o softstarter / w softstarter		A	251,00/130,00	262,00/141,00	324,00/161,00	341,00/178,00	396,00/201,00
Sound power level (w standard fans)		dB(A)	85,4	85,4	87,0	88,1	88,1
Sound pressure level (w standard fans) <sup>4)</sup>		dB(A)	53,4	53,4	55,0	56,1	56,1
Dimensions (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
Dimensions (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	1512	1515	1605	1677	1937
Weight (w 1 low Pa pump) w buffer tank		kg	1644	1647	1737	1809	2069
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
<b>Compressors</b>							
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
<b>Evaporator</b>							
Number			1	1	1	1	1
Type			Plate	Plate	Plate	Plate	Plate
Nominal water flow (cooling)		m <sup>3</sup> /h	21,56	23,65	25,95	30,24	33,62
Water pressure drop (cooling)		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
<b>Coils</b>							
Number			4	4	4	4	4
Frontal surface		m <sup>2</sup>	11,88	11,88	11,88	11,88	11,88
Number of rows			2+2	2+2	2+3	3+3	3+3
<b>Fans standard</b>							
Number			4	4	4	4	4
Airflow		m <sup>3</sup> /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
<b>Water connections</b>							
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

**Accessories**

**PAW-SYSREMKIT** Remote control

**Accessories**

**PAW-SYSVICTH** Victaulic connection kit for model 140 - 210

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) Following COMMISSION REGULATION (EU) No 811/2013 for low-temperature heat pumps. Scale from A+++ to D, as of 26th September 2019. 4) Sound pressure levels calculated at 10 meters. Sound pressure levels refer to ISO standard 3744 with parallel piped shape.

\* w: with, w/o: without.





# Options for cooling only outdoor units

Options table 20 - 125

Option	Type	Ref.	Model												
			20	25	30	35	40	45	55	65	75	90	105	125	
1	Capacity		20	25	30	35	40	45	55	65	75	90	105	125	
2	Refrigerant & compressor type	W R410A fixed speed	•	•	•	•	•	•	•	•	•	•	•	•	
		NB No buffer	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	
		BS Buffer tank (small)	•	•	•	•	•								
3	Buffer tank option	BM Buffer tank (medium )						•	•	•	•	•	•	•	
		No pump <sup>1)</sup>	•	•	•	•	•	Std	Std	Std	Std	Std	Std	Std	
		Single pump	Std	Std	Std	Std	Std	•	•	•	•	•	•	•	
4	Pump option	Double pump						•	•	•	•	•	•	•	
		Pump drive - fixed speed <sup>2)</sup>	•	•	•	•	•	•	•	•	•	•	•	•	
		Pump drive - variable twin speed (single pump)	Std	Std	Std	Std	Std	•	•	•	•	•	•	•	
5	Pump drive option	Pump drive - variable twin speed (double pump)						•	•	•	•	•	•	•	
		Pump drive - variable capacity (single pump)	•	•	•	•	•	•	•	•	•	•	•	•	
		Pump drive - variable capacity (double pump)						•	•	•	•	•	•	•	
6	Hydraulic options	Pump drive - constant outlet pressure (single pump)	•	•	•	•	•	•	•	•	•	•	•	•	
		Pump drive - constant outlet pressure (double pump)						•	•	•	•	•	•	•	
		Pump drive - constant differential pressure (single pump) <sup>3)</sup>	S0	S0	S0	S0	S0	S0	S0	S0	S0	S0	S0	S0	
7	Ambient options	No hydraulic option	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	
		Low water pressure sensor	•	•	•	•	•	•	•	•	•	•	•	•	
		Water isolation valves	•	•	•	•	•	•	•	•	•	•	•	•	
8	Miscellaneous options	No ambient options	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	
		Finned coil treatment - epoxy	•	•	•	•	•	•	•	•	•	•	•	•	
		Outdoor coil protection grid	•	•	•	•	•	•	•	•	•	•	•	•	
9	Miscellaneous options	Rubber pads	•	•	•	•	•	•	•	•	•	•	•	•	
		Spring damper	•	•	•	•	•	•	•	•	•	•	•	•	
		Fan speed control (FSC)	•	•	•	•	•	•	•	•	•	•	•	•	
10	Miscellaneous options	Low noise	Std	Std	Std	Std	Std	•	•	•	•	•	•	•	
		High pressure fan <sup>4)</sup>			•	•	•	•	•	•	•	•	•	•	
		No miscellaneous options	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	
11	Miscellaneous options	Soft starter	•	•	•	•	•	•	•	•	•	•	•	•	
		Power supply w/o neutral <sup>5)</sup>	S0	S0	S0	S0	S0	S0	S0	S0	S0	S0	S0	S0	
		Standard BMS option (Modbus RTU)	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	Std	
12	Miscellaneous options	Modbus TCP/IP	•	•	•	•	•	•	•	•	•	•	•	•	
		BACnet MSTP	•	•	•	•	•	•	•	•	•	•	•	•	
		BACnet IP	•	•	•	•	•	•	•	•	•	•	•	•	
13	Miscellaneous options	Remote LAN connection	•	•	•	•	•	•	•	•	•	•	•	•	
		Container transport							•	•	•	•	•	•	
		Refrigerant gauge								•	•	•	•	•	

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 installation outside if the EU due to ErP compliance.

3) Constant differential pump drive option is only available on a special order and requires additional production time. Please contact your local sales representative.

4) High pressure fan is not available on model 20 due to body design.

5) Power supply without neutral is only available on a special order and requires additional production time. Please contact your local sales representative.





**Options table 140 - 210**

Option	Type	Ref.	Description	Model				
				140	150	170	190	210
1	Capacity							
2	Refrigerant & compressor type	W	R410A fixed speed	•	•	•	•	•
3	Buffer tank option	NB	No buffer	Std	Std	Std	Std	Std
		BL	Buffer tank (large)	•	•	•	•	•
4	Pump option		No pump <sup>1)</sup>	Std	Std	Std	Std	Std
			Single pump low pressure	•	•	•	•	•
			Single pump high pressure	•	•	•	•	•
			Double pump low pressure	•	•	•	•	•
			Double pump high pressure	•	•	•	•	•
			Pump drive - fixed speed <sup>2)</sup>	Std	Std	Std	Std	Std
			Pump drive - variable twin speed (single pump)	•	•	•	•	•
			Pump drive - variable twin speed (double pump)	•	•	•	•	•
5	Pump drive option		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) <sup>3)</sup>	S0	S0	S0	S0	S0
			Pump drive - constant differential pressure (double pump) <sup>3)</sup>	S0	S0	S0	S0	S0
			No hydraulic option	Std	Std	Std	Std	Std
			Low water pressure sensor	•	•	•	•	•
6	Hydraulic options		Water isolation valves	•	•	•	•	•
			Hydraulic gauges	•	•	•	•	•
			No ambient options	Std	Std	Std	Std	Std
			Finned coil treatment - epoxy	•	•	•	•	•
7	Ambient options		Outdoor coil protection grid	•	•	•	•	•
			Rubber pads	•	•	•	•	•
			Spring damper	•	•	•	•	•
			Fan speed control (FSC)	•	•	•	•	•
			Low noise	Std	Std	Std	Std	Std
			High pressure fan	•	•	•	•	•
			No miscellaneous options	Std	Std	Std	Std	Std
			Soft starter	•	•	•	•	•
8	Miscellaneous options		Power supply w/o neutral	•	•	•	•	•
			Standard BMS Option (Modbus RTU)	Std	Std	Std	Std	Std
			Modbus TCP/IP	•	•	•	•	•
			BACnet IP	•	•	•	•	•
			Remote LAN connection	Std	Std	Std	Std	Std
			Refrigerant gauge	•	•	•	•	•

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 installation outside if the EU due to ErP compliance.

3) Constant differential pump drive option is only available on a special order and requires additional production time. Please contact your local sales representative.

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





Panasonic introduces the new range of fan coils.  
The key to this range is to provide performance and comfort  
and the ability to fit seamlessly within your environment.





## Fan coils highlighted features





Fan coils: Designed with user in mind, perfectly designed to adapt to any installation. Providing comfort to hotels, shops, restaurants, offices or residential applications.



## 1 Innovation for an optimum comfort

Range of fan coil 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.

## 3 Quality and efficient coil

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

## 2 Energy efficient and low noise fan

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

## 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, presented 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 requirement. Consisting of both AC and EC fans, it is possible to achieve both powerful performance, but with sustainability in mind.

**Wide range of controllers with sophisticated designs, provide a user friendly interface while enabling an easy and low cost integration to building management systems.**



**PAW-FC-RC1**  
Optional wired remote controller for AC fan, 2-pipe and 4-pipe application.



**PAW-FC-TC903**  
Optional wired remote controller for AC fan 2-pipe application.

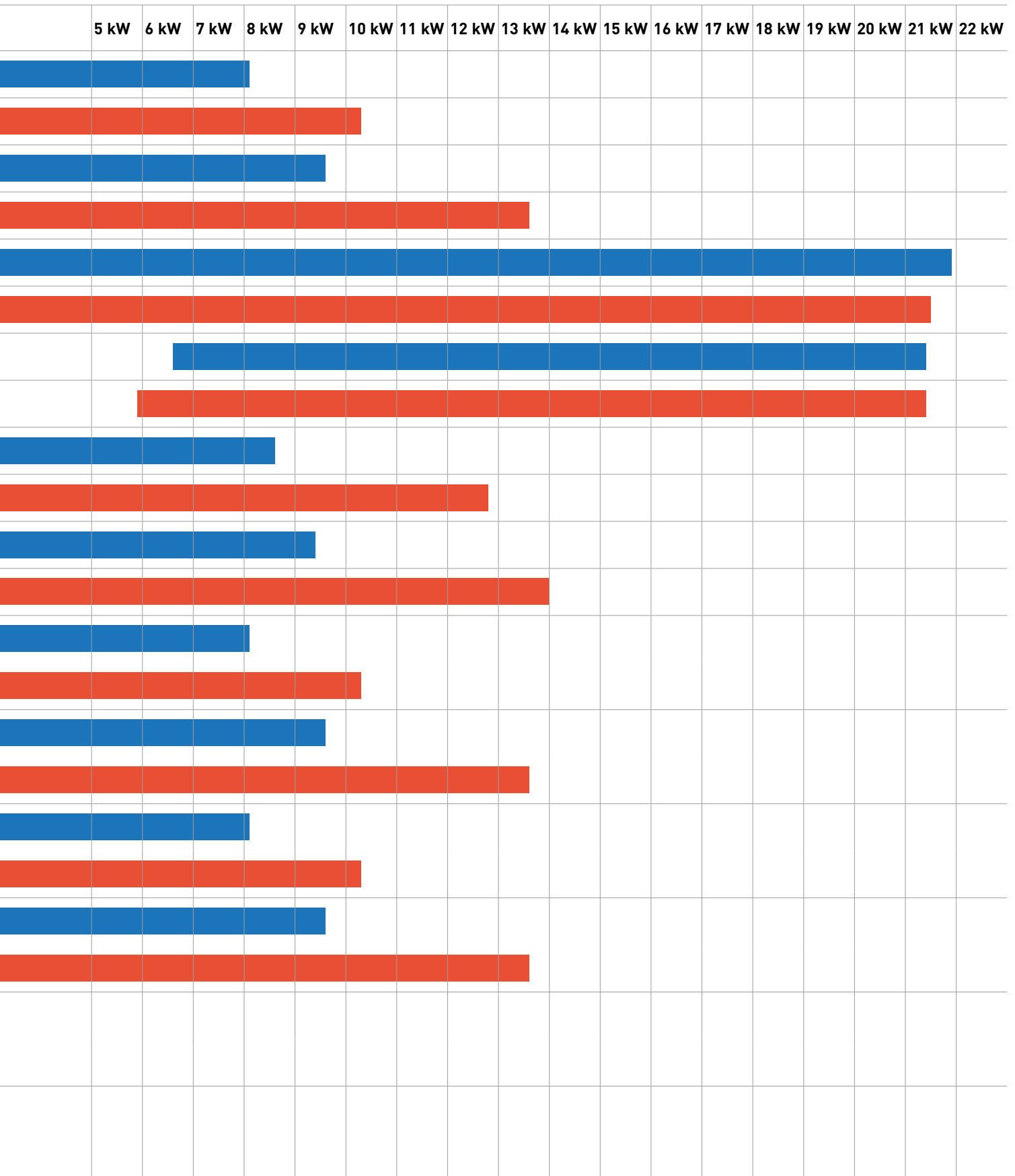


**PAW-FC-907TC**  
Optional wired remote controller for EC fan, 2-pipe and 4-pipe application.

# Range of fan coils

Page	Fan Type	Operation	Capacity range	0 kW	1 kW	2 kW	3 kW	4 kW	
P. 48	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. 50	High static 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. 52	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. 54	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. 56	Floor standing	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	Wall Mounted	AC	Cooling	1,0 to 3,9 kW		■			
			Heating	1,4 to 4,1 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.



## Fan coils - Ducted (AC)



**PAW-FC-903TC**  
Optional Controller.  
Wired remote controller.



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

### 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

PAW-			FC-D11-1(-R)	FC-D15-1(-R)	FC-D24-1(-R)	FC-D28-1(-R)	FC-D40-1(-R)	FC-D55-1(-R)	FC-D65-1(-R)	FC-D90-1(-R)
<b>2-pipe</b>	<b>Left connection (PAW-)*</b>		<b>FC2A-D010L</b>	<b>FC2A-D020L</b>	<b>FC2A-D030L</b>	<b>FC2A-D040L</b>	<b>FC2A-D050L</b>	<b>FC2A-D060L</b>	<b>FC2A-D070L</b>	<b>FC2A-D080L</b>
	<b>Right connection (PAW-)*</b>		<b>FC2A-D010R</b>	<b>FC2A-D020R</b>	<b>FC2A-D030R</b>	<b>FC2A-D040R</b>	<b>FC2A-D050R</b>	<b>FC2A-D060R</b>	<b>FC2A-D070R</b>	<b>FC2A-D080R</b>
Total cooling capacity <sup>1)</sup>	Med / S-Hi	kW	1,0/1,5	1,2/1,7	2,0/2,5	2,4/3,2	3,2/4,6	4,6/5,8	6,1/7,3	6,1/8,1
Sensible capacity <sup>1)</sup>	Med / S-Hi	kW	0,8/1,1	0,9/1,3	1,5/1,9	1,8/2,3	2,2/3,3	3,3/4,5	4,3/5,1	4,6/6,3
Water flow	Med / S-Hi	l/h	172/250	213/289	341/430	413/547	544/798	784/1003	1058/1252	1048/1400
Water pressure drop	Med / S-Hi	kPa	19,5/39,2	3,9/6,3	19,3/28,8	17,1/28,0	22,8/46,9	37,4/60,2	15,4/21,5	19,3/32,5
Heating capacity <sup>2)</sup>	Med / S-Hi	kW	1,4/2,0	1,5/2,2	2,4/3,1	2,9/4,0	4,1/5,7	5,3/7,1	7,9/9,3	8,1/11,6
<b>4-pipe</b>	<b>Left connection (PAW-)</b>		<b>FC4A-D010L</b>	<b>FC4A-D020L</b>	<b>FC4A-D030L</b>	<b>FC4A-D040L</b>	<b>FC4A-D050L</b>	<b>FC4A-D060L</b>	<b>FC4A-D070L</b>	<b>FC4A-D080L</b>
	<b>Right connection (PAW-)</b>		<b>FC4A-D010R</b>	<b>FC4A-D020R</b>	<b>FC4A-D030R</b>	<b>FC4A-D040R</b>	<b>FC4A-D050R</b>	<b>FC4A-D060R</b>	<b>FC4A-D070R</b>	<b>FC4A-D080R</b>
Total cooling capacity <sup>1)</sup>	Med / S-Hi	kW	0,9/1,3	1,1/1,6	1,9/2,4	2,3/3,0	3,0/4,3	4,4/5,6	5,9/6,9	5,9/8,0
Sensible capacity <sup>1)</sup>	Med / S-Hi	kW	0,7/1,0	0,8/1,2	1,5/1,8	1,7/2,2	2,2/3,1	3,2/4,3	4,2/4,9	4,4/6,2
Water flow	Med / S-Hi	l/h	159/225	192/268	327/414	388/517	522/748	756/967	1019/1193	1020/1380
Water pressure drop	Med / S-Hi	kPa	15,2/29,0	3,4/5,6	9,5/14,4	22,3/36,8	12,8/25,1	27,7/44,5	17,9/24,4	31,1/53,6
Heating capacity <sup>2)</sup>	Med / S-Hi	kW	0,7/1,0	0,9/1,1	1,4/1,6	1,6/2,1	2,3/2,6	2,9/3,3	3,6/4,0	5,6/6,1
Water flow	Med / S-Hi	l/h	127/178	146/190	232/274	273/354	401/443	505/560	626/682	963/1052
Water pressure drop	Med / S-Hi	kPa	3,5/5,6	3,2/5,3	9,0/11,9	26,5/42,7	24,6/29,5	43,9/52,9	117,9/137,8	63,7/75
<b>Sound levels</b>										
Global sound power level	S-Lo / Med / S-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 level <sup>3)</sup>	S-Lo / Med / S-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
<b>Fan</b>										
Number			1	1	1	2	2	2	2	3
Air flow 2-pipe	Med / S-Hi	m <sup>3</sup> /h	190/283	179/265	274/390	357/499	486/716	640/933	893/1064	936/1397
Air flow 4-pipe	Med / S-Hi	m <sup>3</sup> /h	168/253	161/241	263/369	335/467	466/542	614/723	859/944	905/1042
Maximum external pressure		Pa	55	55	65	85	85	115	125	70
Filter			G2	G2	G2	G2	G2	G2	G2	G2
<b>Electrical data</b>										
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	Med / S-Hi	W	24/36	18/29	37/45	37/56	55/72	75/105	100/147	112/188
Power consumption 4-pipe	Med / S-Hi	W	24/36	18/28	37/44	37/55	54/70	74/104	99/145	112/188
<b>Water connections</b>										
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
<b>Dimensions and weight</b>										
Dimensions	H x W x D	mm	430 x 220 x 570	430 x 220 x 570	430 x 220 x 730	430 x 220 x 938	430 x 220 x 1122	430 x 220 x 1307	530 x 220 x 1121	530 x 220 x 1316
Weight	2 / 4-pipes	kg	13/14	13/14	15/16	20/22	22/24	26/28	27/29	38/40

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

Values indicated are for 0 Pa external static pressure, for additional pressure characteristics, please refer the technical data manual.

\* Fan coil references valid from October 2020.



## Fan coils - Ducted (EC)



**PAW-FC-907TC**  
Optional Controller.  
Wired remote  
controller for EC fans.

### 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
- 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

### Operating limits

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

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

2-pipe	Left connection (PAW-)		FC2E-D010L	FC2E-D020L	FC2E-D030L	FC2E-D040L	FC2E-D050L	FC2E-D060L	FC2E-D070L	FC2E-D080L	FC2E-F040L
	Right connection (PAW-)		FC2E-D010R	FC2E-D020R	FC2E-D030R	FC2E-D040R	FC2E-D050R	FC2E-D060R	FC2E-D070R	FC2E-D080R	FC2E-F040R
Total cooling capacity <sup>1)</sup>	Med / S-Hi	kW	1,2/2,1	1,4/2,4	2,1/3,1	2,9/4,2	4,0/5,0	4,5/5,2	5,9/6,9	6,5/8,8	6,6/9,2
Sensible capacity <sup>1)</sup>	Med / S-Hi	kW	1,1/1,9	1,1/1,9	1,6/2,4	2,1/3,0	3,0/3,7	3,5/4,0	4,3/5,2	4,8/6,6	6,1/9,1
Water flow	Med / S-Hi	l/h	210/356	237/406	354/532	506/722	685/743	767/800	1008/1098	1111/1254	1284/1935
Water pressure drop	Med / S-Hi	kPa	28,2/76,9	4,6/11,0	20,5/42,1	24,4/46,3	35,1/41,0	35,8/38,8	14,0/16,6	21,4/26,6	51,2/93,8
Heating capacity <sup>2)</sup>	Med / S-Hi	kW	1,6/2,9	1,9/3,3	2,2/3,4	3,0/5,3	5,2/5,5	5,9/6,1	7,3/8,2	8,0/9,3	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
	Right connection (PAW-)		FC4E-D010R	FC4E-D020R	FC4E-D030R	FC4E-D040R	FC4E-D050R	FC4E-D060R	FC4E-D070R	FC4E-D080R	FC4E-F040R
Total cooling capacity <sup>1)</sup>	Med / S-Hi	kW	1,1/1,9	1,2/2,2	1,9/2,9	2,7/4,0	3,6/4,6	4,1/4,9	5,1/6,4	6,2/9,6	6,4/8,8
Sensible capacity <sup>1)</sup>	Med / S-Hi	kW	0,9/1,7	1,0/1,8	1,5/2,2	1,9/2,8	2,8/3,5	3,2/3,8	3,8/4,8	4,6/7,2	5,6/8,0
Water flow	Med / S-Hi	l/h	185/327	206/375	321/493	457/681	625/686	707/749	886/977	1070/1242	1093/1511
Water pressure drop	Med / S-Hi	kPa	20,1/59,2	3,7/9,7	9,2/19,7	29,6/60,1	17,9/21,3	24,3/27,2	13,6/16,5	33,9/44,3	47,2/86,7
Heating capacity <sup>2)</sup>	Med / S-Hi	kW	0,8/1,4	0,9/1,5	1,4/1,8	2,0/2,8	2,4/2,5	2,9/3,1	3,4/3,6	5,9/6,9	4,5/6,2
Water flow	Med / S-Hi	l/h	140/235	161/255	243/304	350/483	416/438	503/531	583/614	1011/1194	783/1065
Water pressure drop	Med / S-Hi	kPa	4,0/8,4	3,8/9,4	9,7/14,1	41,8/76,3	26,3/28,9	43,6/48,1	103,8/113,9	69,7/95,1	107,6/214,8
Sound levels											
Global sound power level	S-Lo / Med / S-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 <sup>3)</sup>
Global sound pressure level <sup>4)</sup>	S-Lo / Med / S-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	Med / S-Hi	m <sup>3</sup> /h	228/417	234/413	380/585	412/678	645/702	737/779	850/950	927/1093	1284/1935
Air flow 4-pipe	Med / S-Hi	m <sup>3</sup> /h	199/379	200/380	342/540	369/627	587/646	668/716	798/894	884/1079	1222/1864
Maximum external pressure		Pa	75	75	75	105	70	105	115	115	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	Med / S-Hi	W	11/41	13/41	16/42	13/43	24/46	30/54	44/77	42/108	62/197
Power consumption 4-pipe	Med / S-Hi	W	11/39	13/40	15/40	12/42	23/44	28/52	43/75	41/116	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
Dimensions and weight											
Dimensions	H x W x D	mm	430 x 220 x 570	430 x 220 x 570	430 x 220 x 730	430 x 220 x 938	430 x 220 x 1122	430 x 220 x 1307	530 x 220 x 1121	530 x 220 x 1316	223 x 653 x 1233
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 m<sup>3</sup> with reverberation of 0,5 seconds. Values indicated are for 0 Pa external static pressure, for additional pressure characteristics, please refer the technical data manual.





# Fan coils - High Static Pressure Ducted (AC)



**PAW-FC-903TC**  
Optional Controller.  
Wired remote controller.



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

## 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 & 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

2-pipe	Left connection		PAW-FC2A-E070L	PAW-FC2A-E150L	PAW-FC2A-E180L	PAW-FC2A-E210L	PAW-FC2A-E240L*	PAW-FC2A-E270L*
	Right connection		PAW-FC2A-E070R	PAW-FC2A-E150R	PAW-FC2A-E180R	PAW-FC2A-E210R	PAW-FC2A-E240R*	PAW-FC2A-E270R*
Total cooling capacity <sup>1)</sup>	Med / S-Hi	kW	5,5/6,4	11,5/14,2	11,5/15,0	13,7/18,6	19,8/23,3	23,0/27,5
Sensible capacity <sup>1)</sup>	Med / S-Hi	kW	4,2/5,1	9,2/12,2	9,5/13,1	9,9/13,7	14,9/17,8	16,3/19,7
Water flow	Med / S-Hi	l/h	951/1095	1979/2437	1979/2589	2357/3201	3410/4015	3951/4740
Water pressure drop	Med / S-Hi	kPa	42,5/56,2	19,9/29,3	19,6/32,0	28,8/51,5	25,2/34,2	25,2/35,3
Heating capacity <sup>2)</sup>	Med / S-Hi	kW	8,6/12,7	14,2/20,0	16,3/23,2	16,5/23,4	26,3/32,6	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*
	Right connection		PAW-FC4A-E070R	PAW-FC4A-E150R	PAW-FC4A-E180R	PAW-FC4A-E210R	PAW-FC4A-E240R*	PAW-FC4A-E270R*
Total cooling capacity <sup>1)</sup>	Med / S-Hi	kW	5,4/6,0	10,1/11,9	11,2/13,6	14,4/18,8	17,7/20,5	19,9/23,4
Sensible capacity <sup>1)</sup>	Med / S-Hi	kW	4,1/4,7	8,4/10,9	9,1/12,0	10,6/14,5	13,9/16,3	14,9/17,8
Water flow	Med / S-Hi	l/h	924/1035	1739/2044	1928/2335	2478/3241	3053/3526	3427/4032
Water pressure drop	Med / S-Hi	kPa	52,1/64,4	13,5/18,4	17,4/25,0	35,2/59,1	25,0/33,0	23,3/31,5
Heating capacity <sup>2)</sup>	Med / S-Hi	kW	6,0/7,4	11,8/15,9	11,9/15,9	11,9/16,0	11,1/13,5	11,1/13,5
Water flow	Med / S-Hi	l/h	1029/1266	2038/2746	2045/2745	2051/2747	1910/2329	1910/2329
Water pressure drop	Med / S-Hi	kPa	30,7/43,6	167,6/293,0	100,8/174,3	101,4/174,6	87,8/120,3	53,3/72,5
Sound levels								
Sound power return + radiated	S-Lo / Med / S-Hi	dB(A)	54/60/63	52/66/72	54/66/74	52/66/72	65/73/75	65/73/75
Sound power discharge	S-Lo / Med / S-Hi	dB(A)	53/59/62	52/64/71	52/64/71	52/64/71	64/72/75	64/72/75
Sound pressure <sup>3)</sup>	S-Lo / Med / S-Hi	dB(A)	33/39/42	31/45/51	31/45/51	31/45/51	44/52/54	44/52/54
Fan								
Number			1					
Air flow 2-pipe	Med / S-Hi	m <sup>3</sup> /h	1091/1562	2110/3197	2110/3197	2110/3197	3130/3923	3130/3923
Air flow 4-pipe	Med / S-Hi	m <sup>3</sup> /h	1132/1496	2110/3197	2110/3197	2110/3197	3130/3923	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	Med / S-Hi	W	182/222	421/675	421/675	421/675	530/673	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 1/4	1 1/4	1 1/4	1 1/4
4-pipe	Cooling	Inch	1/2	1	1	1	1 1/4	1 1/4
	Heating	Inch	1/2	3/4	3/4	3/4	3/4	3/4
Dimensions and weight								
Dimensions	H x W x D	mm	250x698x1200	375x798x1380	375x798x1380	375x798x1380	450x798x1500	450x798x1500
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 technical data manual.

\* High fan speed used for capacity, water flow, sound and airflow values.



## Fan coils - High Static Pressure Ducted (EC)



**PAW-FC-907TC**  
Optional Controller.  
Wired remote  
controller for EC fans.

### 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 & 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

2-pipe	Left connection		PAW-FC2E-E150L	PAW-FC2E-E180L	PAW-FC2E-E210L	PAW-FC2E-E240L	PAW-FC2E-E270L
	Right connection		PAW-FC2E-E150R	PAW-FC2E-E180R	PAW-FC2E-E210R	PAW-FC2E-E240R	PAW-FC2E-E270R
Total cooling capacity <sup>1)</sup>	Med / S-Hi	kW	11,3/14,5	13,1/17,3	14,2/19,0	16,1/20,3	18,1/23,1
Sensible capacity <sup>1)</sup>	Med / S-Hi	kW	9,1/12,1	10,3/14,1	10,9/15,0	12,4/16,2	13,6/17,8
Water flow	Med / S-Hi	l/h	1945/2498	2259/2979	2451/3275	2766/3498	3120/3972
Water pressure drop	Med / S-Hi	kPa	19,3/30,7	24,9/41,5	31,0/53,8	37,1/64,4	43,2/75,4
Heating capacity <sup>2)</sup>	Med / S-Hi	kW	15,8/20,7	17,9/24,3	19,4/26,8	20,8/27,5	22,8/30,4
4-pipe	Left connection		PAW-FC4E-E150L	PAW-FC4E-E180L	PAW-FC4E-E210L	PAW-FC4E-E240L	PAW-FC4E-E270L
	Right connection		PAW-FC4E-E150R	PAW-FC4E-E180R	PAW-FC4E-E210R	PAW-FC4E-E240R	PAW-FC4E-E270R
Total cooling capacity <sup>1)</sup>	Med / S-Hi	kW	9,1/11,6	10,2/13,0	12,6/16,4	14,0/17,5	15,3/19,5
Sensible capacity <sup>1)</sup>	Med / S-Hi	kW	7,6/10,1	8,4/11,2	9,9/13,4	11,0/14,2	11,8/15,5
Water flow	Med / S-Hi	l/h	1567/2005	1764/2243	2175/2826	2409/3020	2641/3359
Water pressure drop	Med / S-Hi	kPa	11,1/17,7	14,7/23,2	27,5/45,4	31,9/52,4	36,3/62,4
Heating capacity <sup>2)</sup>	Med / S-Hi	kW	5,8/7,3	10,0/12,8	10,1/12,9	8,3/10,3	8,2/10,5
Water flow	Med / S-Hi	l/h	991/1264	1729/2211	1734/2227	1421/1780	1407/1804
Water pressure drop	Med / S-Hi	kPa	45,6/70,1	74,1/116,4	74,5/118,0	55,9/78,7	33,9/48,9
Sound levels							
Sound power return + radiated	S-Lo / Med / S-Hi	dB(A)	56/67/74	56/67/74	56/67/74	58/69/76	58/69/76
Sound power discharge	S-Lo / Med / S-Hi	dB(A)	56/65/74	56/65/74	56/65/74	58/67/76	58/67/76
Sound pressure <sup>3)</sup>	S-Lo / Med / S-Hi	dB(A)	35/46/52	35/46/52	35/46/52	37/48/54	37/48/54
Fan							
Number	1						
Air flow 2-pipe	Med / S-Hi	m <sup>3</sup> /h	2418/3583	2418/3583	2418/3583	2700/3829	2700/3829
Air flow 4-pipe	Med / S-Hi	m <sup>3</sup> /h	2418/3583	2418/3583	2418/3583	2700/3829	2700/3829
Maximum external pressure		Pa	300	300	300	300	300
Electrical data							
	Voltage	V					
Power supply	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	Med / S-Hi	W	172/246	172/246	172/246	237/364	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 1/4	1 1/4	1 1/4	1 1/4
4-pipe	Cooling	Inch	1	1	1	1 1/4	1 1/4
	Heating	Inch	3/4	3/4	3/4	3/4	3/4
Dimensions and weight							
Dimensions	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

<sup>1)</sup> According to Eurovent standard. Air: 27 °C DB / 19 °C WB. Water in/ out: 7 °C / 12 °C. <sup>2)</sup> Air: 20 °C. Water in/out: 50 °C / 45 °C. <sup>3)</sup> 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 technical data manual.



## Fan coils - 4 Way Cassette (AC)



**PAW-FC-903TC**  
Optional Controller.  
Wired remote  
controller.



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

### 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.

2-pipe			PAW-FC2A-U020	PAW-FC2A-U030	PAW-FC2A-U040	PAW-FC2A-U050	PAW-FC2A-U060	PAW-FC2A-U070
Total cooling capacity <sup>1)</sup>	Med / Hi	kW	1,8/2,4	2,7/4,0	3,5/4,7	4,4/6,1	5,4/7,2	6,5/8,6
Sensible capacity <sup>1)</sup>	Med / Hi	kW	1,5/2,0	2,2/3,0	2,6/3,6	3,4/4,8	4,0/5,4	4,8/6,4
Water flow	Med / Hi	l/h	303/404	493/683	597/801	762/1042	937/1233	1111/1476
Water pressure drop	Med / Hi	kPa	6,8/10,9	8,5/14,4	11,2/18,3	13/21,9	7,5/11,5	13/20,5
Heating capacity <sup>2)</sup>	Med / Hi	kW	2,5/3,25	3,7/4,5	4,6/6,2	6,0/8,1	7,4/10,0	9,2/12,0
4-pipe			PAW-FC4A-U020	PAW-FC4A-U030	PAW-FC4A-U040	—	PAW-FC4A-U060	PAW-FC4A-U070
Total cooling capacity <sup>1)</sup>	Med / Hi	kW	1,5/2,0	2,7/3,4	3,3/4,0	—	4,9/6,6	6,0/7,5
Sensible capacity <sup>1)</sup>	Med / Hi	kW	1,4/1,8	2,1/2,6	2,6/3,2	—	3,8/5,1	4,6/5,9
Water flow	Med / Hi	l/h	258/359	465/576	563/683	—	851/1137	1030/1294
Water pressure drop	Med / Hi	kPa	8,9/13,6	8,3/11,6	11,2/15,3	—	13,9/22,2	18,9/27,5
Heating capacity <sup>2)</sup>	Med / Hi	kW	0,9/1,2	3,1/3,8	3,5/4,1	—	5,5/7,0	7,1/8,9
Water flow	Med / Hi	l/h	153/201	530/658	603/699	—	939/1210	1214/1540
Water pressure drop	Med / Hi	kPa	33,4/53,6	24,2/35	30,9/39,8	—	13,8/20,7	20,8/30,9
Sound levels								
Global sound power level 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 level 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 level 2-pipe <sup>3)</sup>	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 level 4-pipe <sup>3)</sup>	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	Med / Hi	m <sup>3</sup> /h	450/659	504/734	626/900	720/979	824/1159	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	Med / Hi	W	35/58	34/58	58/99	41/66	61/88	92/125
Power consumption 4-pipe	Med / Hi	W	35/58	34/58	58/99	—	61/88	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
	Cooling	Inch	3/4	3/4	3/4	—	1	1
4-pipe	Heating	Inch	1/2	1/2	1/2	—	3/4	3/4
Dimensions and weight								
Dimensions 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

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).



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

## Fan coils - 4 Way Cassette (EC)



**PAW-FC-907TC**  
Optional Controller.  
Wired remote  
controller for EC fans.

### 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.

2-pipe			PAW-FC2E-U020	PAW-FC2E-U030	PAW-FC2E-U040	PAW-FC2E-U050	PAW-FC2E-U060	PAW-FC2E-U070
Total cooling capacity <sup>1)</sup>	Med / Hi	kW	1,8/2,4	2,9/4,0	3,5/4,7	4,4/6,1	5,5/7,2	6,5/9,6
Sensible capacity <sup>1)</sup>	Med / Hi	kW	1,5/2,0	2,2/3,1	2,7/3,6	3,5/4,7	4,1/5,4	4,9/7,2
Water flow	Med / Hi	l/h	306/409	497/688	604/808	765/1050	944/1243	1119/1649
Water pressure drop	Med / Hi	kPa	6,9/11,2	8,6/14,6	11,4/18,6	13,1/22,2	7,6/11,7	13,1/24,6
Heating capacity <sup>2)</sup>	Med / Hi	kW	2,5/3,2	3,7/4,5	4,6/6,2	6,0/8,1	7,4/10,0	9,2/13,0
4-pipe			PAW-FC4E-U020	PAW-FC4E-U030	PAW-FC4E-U040	—	PAW-FC4E-U060	PAW-FC4E-U070
Total cooling capacity <sup>1)</sup>	Med / Hi	kW	1,5/2,0	2,7/3,4	3,2/4,0	—	5,0/6,6	6,1/7,9
Sensible capacity <sup>1)</sup>	Med / Hi	kW	1,4/1,9	2,1/2,6	2,6/3,3	—	3,8/5,1	4,7/6,3
Water flow	Med / Hi	l/h	262/344	464/581	556/690	—	858/1144	1041/1366
Water pressure drop	Med / Hi	kPa	9,1/14,0	8,2/11,7	10,9/15,5	—	14,1/22,4	19,2/30,1
Heating capacity <sup>2)</sup>	Med / Hi	kW	0,9/1,2	3,1/3,8	3,5/4,1	—	5,5/7,0	7,1/9,8
Water flow	Med / Hi	l/h	153/201	530/658	603/699	—	939/1210	1214/1686
Water pressure drop	Med / Hi	kPa	33,4/53,6	24,2/35	30,9/39,8	—	13,8/20,7	20,8/36
Sound levels								
Global sound power level 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 level 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 level 2-pipe <sup>3)</sup>	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 level 4-pipe <sup>3)</sup>	Lo / Med / Hi	dB(A)	27/31/40	26/35/44	33/39/48	—	29/37/45	31/43/50
Fan								
Number			1					
Air flow	Med / Hi	m <sup>3</sup> /h	450/659	504/734	626/900	720/979	824/1159	1080/1598
Filter			G1					
Electrical data								
Power supply	Voltage	V	230					
	Phase		Single Phase	Single Phase	Single Phase	Single Phase	Single Phase	Single Phase
	Frequency	Hz	50					
Power consumption 2-pipe	Med / Hi	W	13/29	14/32	22/57	12/25	23/25	40/115
Power consumption 4-pipe	Med / Hi	W	13/29	14/32	22/57	—	23/46	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
	Cooling	Inch	3/4	3/4	3/4	—	1	1
4-pipe	Heating	Inch	1/2	1/2	1/2	—	3/4	3/4
Dimensions and weight								
Dimensions including panel	H x W x D	mm	334x720x720	334x720x720	334x720x720	339x960x960	339x960x960	339x960x960
Weight		kg	14,8	16,5	16,5	37,1	37,1	39,6

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 a hypothetical sound attenuation of the room and installation of -9 dB(A).



## Fan coils - Ceiling chassis (AC)



**PAW-FC-903TC**  
Optional Controller.  
Wired remote controller.



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

### 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

2-pipe	Left connection (PAW-)		FC2A-T010L	FC2A-T020L	FC2A-T030L	FC2A-T040L	FC2A-T050L	FC2A-T060L	FC2A-T070L	FC2A-T080L
	Right connection (PAW-)		FC2A-T010R	FC2A-T020R	FC2A-T030R	FC2A-T040R	FC2A-T050R	FC2A-T060R	FC2A-T070R	FC2A-T080R
Total cooling capacity <sup>1)</sup>	Med / S-Hi	kW	1,0/1,5	1,2/1,7	2,0/2,5	2,4/3,2	3,2/4,6	4,6/5,8	6,1/7,3	6,1/8,1
Sensible capacity <sup>1)</sup>	Med / S-Hi	kW	0,8/1,1	0,9/1,3	1,5/1,9	1,8/2,3	2,2/3,3	3,3/4,5	4,3/5,1	4,6/6,3
Water flow	Med / S-Hi	l/h	172/250	213/289	341/430	413/547	544/798	784/1003	1058/1252	1048/1400
Water pressure drop	Med / S-Hi	kPa	19,5/39,2	3,9/6,3	19,3/28,8	17,1/28,0	22,8/46,9	37,4/60,2	15,4/21,5	19,3/32,5
Heating capacity <sup>2)</sup>	Med / S-Hi	kW	1,4/2,0	1,5/2,2	2,4/3,1	2,9/4,0	4,1/5,7	5,3/7,1	7,9/9,3	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
	Right connection (PAW-)		FC4A-T010R	FC4A-T020R	FC4A-T030R	FC4A-T040R	FC4A-T050R	FC4A-T060R	FC4A-T070R	FC4A-T080R
Total cooling capacity <sup>1)</sup>	Med / S-Hi	kW	0,9/1,3	1,1/1,6	1,9/2,4	2,3/3,0	3,0/4,3	4,4/5,6	5,9/6,9	5,9/8,0
Sensible capacity <sup>1)</sup>	Med / S-Hi	kW	0,7/1,0	0,8/1,2	1,5/1,8	1,7/2,2	2,2/3,1	3,2/4,3	4,2/4,9	4,4/6,2
Water flow	Med / S-Hi	l/h	159/225	192/268	327/414	388/517	522/748	756/967	1019/1193	1020/1380
Water pressure drop	Med / S-Hi	kPa	15,2/29,0	3,4/5,6	9,5/14,4	22,3/36,8	12,8/25,1	27,7/44,5	17,9/24,4	31,1/53,6
Heating capacity <sup>2)</sup>	Med / S-Hi	kW	0,7/1,0	0,9/1,1	1,4/1,6	1,6/2,1	2,3/2,6	2,9/3,3	3,6/4,0	5,6/6,1
Water flow	Med / S-Hi	l/h	127/178	146/190	232/274	273/354	401/443	505/560	626/682	963/1052
Water pressure drop	Med / S-Hi	kPa	3,5/5,6	3,2/5,3	9,0/11,9	26,5/42,7	24,6/29,5	43,9/52,9	117,9/137,8	63,7/75
Sound levels										
Global sound power level	S-Lo / Med / S-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 level <sup>3)</sup>	S-Lo / Med / S-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	Med / S-Hi	m <sup>3</sup> /h	190/283	179/265	274/390	357/499	486/716	640/933	893/1064	936/1397
Air flow 4-pipe	Med / S-Hi	m <sup>3</sup> /h	168/253	161/241	263/369	335/467	466/542	614/723	859/944	905/1042
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	Med / S-Hi	W	24/36	18/29	37/45	37/56	55/72	75/105	100/147	112/188
Power consumption 4-pipe	Med / S-Hi	W	24/36	18/28	37/44	37/55	54/70	74/104	99/145	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
Dimensions and weight										
Dimensions	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 m<sup>3</sup> with reverberation of 0,5 seconds.





## Fan coils - Ceiling chassis (EC)



**PAW-FC-907TC**  
Optional Controller.  
Wired remote  
controller for EC fans.

### 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

2-pipe	Left connection (PAW-)		FC2E-T010L	FC2E-T020L	FC2E-T030L	FC2E-T040L	FC2E-T050L	FC2E-T060L	FC2E-T070L	FC2E-T080L
	Right connection (PAW-)		FC2E-T010R	FC2E-T020R	FC2E-T030R	FC2E-T040R	FC2E-T050R	FC2E-T060R	FC2E-T070R	FC2E-T080R
Total cooling capacity <sup>1)</sup>	Med / S-Hi	kW	1,2/2,1	1,4/2,4	2,1/3,1	2,9/4,2	4,0/5,0	4,5/5,2	5,9/6,9	6,5/8,8
Sensible capacity <sup>1)</sup>	Med / S-Hi	kW	1,1/1,9	1,1/1,9	1,6/2,4	2,1/3,0	3,0/3,7	3,5/4,0	4,3/5,2	4,8/6,6
Water flow	Med / S-Hi	l/h	210/356	237/406	354/532	506/722	685/743	767/800	1008/1098	1111/1254
Water pressure drop	Med / S-Hi	kPa	28,2/76,9	4,6/11,0	20,5/42,1	24,4/46,3	35,1/41,0	35,8/38,8	14,0/16,6	21,4/26,6
Heating capacity <sup>2)</sup>	Med / S-Hi	kW	1,6/2,9	1,9/3,3	2,2/3,4	3,0/5,3	5,2/5,5	5,9/6,1	7,3/8,2	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
	Right connection (PAW-)		FC4E-T010R	FC4E-T020R	FC4E-T030R	FC4E-T040R	FC4E-T050R	FC4E-T060R	FC4E-T070R	FC4E-T080R
Total cooling capacity <sup>1)</sup>	Med / S-Hi	kW	1,1/1,9	1,2/2,2	1,9/2,9	2,7/4,0	3,6/4,6	4,1/4,9	5,1/6,4	6,2/9,6
Sensible capacity <sup>1)</sup>	Med / S-Hi	kW	0,9/1,7	1,0/1,8	1,5/2,2	1,9/2,8	2,8/3,5	3,2/3,8	3,8/4,8	4,6/7,2
Water flow	Med / S-Hi	l/h	185/327	206/375	321/493	457/681	625/686	707/749	886/977	1070/1242
Water pressure drop	Med / S-Hi	kPa	20,1/59,2	3,7/9,7	9,2/19,7	29,6/60,1	17,9/21,3	24,3/27,2	13,6/16,5	33,9/44,3
Heating capacity <sup>2)</sup>	Med / S-Hi	kW	0,8/1,4	0,9/1,5	1,4/1,8	2,0/2,8	2,4/2,5	2,9/3,1	3,4/3,6	5,9/6,9
Water flow	Med / S-Hi	l/h	140/235	161/255	243/304	350/483	416/438	503/531	583/614	1011/1194
Water pressure drop	Med / S-Hi	kPa	4,0/8,4	3,8/9,4	9,7/14,1	41,8/76,3	26,3/28,9	43,6/48,1	103,8/113,9	69,7/95,1
Sound levels										
Global sound power level	S-Lo / Med / S-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 level <sup>3)</sup>	S-Lo / Med / S-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	Med / S-Hi	m <sup>3</sup> /h	228/417	234/413	380/585	412/678	645/702	737/779	850/950	927/1093
Air flow 4-pipe	Med / S-Hi	m <sup>3</sup> /h	199/379	200/380	342/540	369/627	587/646	668/716	798/894	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	Med / S-Hi	W	11/41	13/41	16/42	13/43	24/46	30/54	44/77	42/108
Power consumption 4-pipe	Med / S-Hi	W	11/39	13/40	15/40	12/42	23/44	28/52	43/75	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
Dimensions and weight										
Dimensions	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 m<sup>3</sup> with reverberation of 0,5 seconds.



# Fan coils - Floor Standing chassis (AC)



**PAW-FC-RCFS**  
Optional Controller.  
Integrated controller  
for Floor Standing fan  
coil (AC).



**PAW-FC-903TC**  
Optional Controller.  
Wired remote  
controller.



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

## 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-FSF feet for floor standing units

## Operating limits

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

2-pipe	Left connection (PAW-)		FC2A-P010L	FC2A-P020L	FC2A-P030L	FC2A-P040L	FC2A-P050L	FC2A-P060L	FC2A-P070L	FC2A-P080L
	Right connection (PAW-)		FC2A-P010R	FC2A-P020R	FC2A-P030R	FC2A-P040R	FC2A-P050R	FC2A-P060R	FC2A-P070R	FC2A-P080R
Total cooling capacity <sup>1)</sup>	Med / S-Hi	kW	1,0/1,5	1,2/1,7	2,0/2,5	2,4/3,2	3,2/4,6	4,6/5,8	6,1/7,3	6,1/8,1
Sensible capacity <sup>1)</sup>	Med / S-Hi	kW	0,8/1,1	0,9/1,3	1,5/1,9	1,8/2,3	2,2/3,3	3,3/4,5	4,3/5,1	4,6/6,3
Water flow	Med / S-Hi	l/h	172/250	213/289	341/430	413/547	544/798	784/1003	1058/1252	1048/1400
Water pressure drop	Med / S-Hi	kPa	19,5/39,2	3,9/6,3	19,3/28,8	17,1/28,0	22,8/46,9	37,4/60,2	15,4/21,5	19,3/32,5
Heating capacity <sup>2)</sup>	Med / S-Hi	kW	1,4/2,0	1,5/2,2	2,4/3,1	2,9/4,0	4,1/5,7	5,3/7,1	7,9/9,3	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
	Right connection (PAW-)		FC4A-P010R	FC4A-P020R	FC4A-P030R	FC4A-P040R	FC4A-P050R	FC4A-P060R	FC4A-P070R	FC4A-P080R
Total cooling capacity <sup>1)</sup>	Med / S-Hi	kW	0,9/1,3	1,1/1,6	1,9/2,4	2,3/3,0	3,0/4,3	4,4/5,6	5,9/6,9	5,9/8,0
Sensible capacity <sup>1)</sup>	Med / S-Hi	kW	0,7/1,0	0,8/1,2	1,5/1,8	1,7/2,2	2,2/3,1	3,2/4,3	4,2/4,9	4,4/6,2
Water flow	Med / S-Hi	l/h	159/225	192/268	327/414	388/517	522/748	756/967	1019/1193	1020/1380
Water pressure drop	Med / S-Hi	kPa	15,2/29,0	3,4/5,6	9,5/14,4	22,3/36,8	12,8/25,1	27,7/44,5	17,9/24,4	31,1/53,6
Heating capacity <sup>2)</sup>	Med / S-Hi	kW	0,7/1,0	0,9/1,1	1,4/1,6	1,6/2,1	2,3/2,6	2,9/3,3	3,6/4,0	5,6/6,1
Water flow	Med / S-Hi	l/h	127/178	146/190	232/274	273/354	401/443	505/560	626/682	963/1052
Water pressure drop	Med / S-Hi	kPa	3,5/5,6	3,2/5,3	9,0/11,9	26,5/42,7	24,6/29,5	43,9/52,9	117,9/137,8	63,7/75
Sound levels										
Global sound power level	S-Lo / Med / S-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 level <sup>3)</sup>	S-Lo / Med / S-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	Med / S-Hi	m <sup>3</sup> /h	190/283	179/265	274/390	357/499	486/716	640/933	893/1064	936/1397
Air flow 4-pipe	Med / S-Hi	m <sup>3</sup> /h	168/253	161/241	263/369	335/467	466/542	614/723	859/944	905/1042
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	Med / S-Hi	W	24/36	18/29	37/45	37/56	55/72	75/105	100/147	112/188
Power consumption 4-pipe	Med / S-Hi	W	24/36	18/28	37/44	37/55	54/70	74/104	99/145	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
	Cooling	Inch	1/2	1/2	1/2	1/2	1/2	1/2	3/4	3/4
4-pipe		Inch	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
	Heating	Inch	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Dimensions and weight										
Dimensions	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 m<sup>3</sup> with reverberation of 0,5 seconds.



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

## Fan coils - Floor Standing chassis (EC)



**PAW-FC-907TC**  
Optional Controller.  
Wired remote  
controller for EC fans.

### 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-FSF feet for floor standing units

### Operating limits

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

2-pipe	Left connection (PAW-)		FC2E-P010L	FC2E-P020L	FC2E-P030L	FC2E-P040L	FC2E-P050L	FC2E-P060L	FC2E-P070L	FC2E-P080L
	Right connection (PAW-)		FC2E-P010R	FC2E-P020R	FC2E-P030R	FC2E-P040R	FC2E-P050R	FC2E-P060R	FC2E-P070R	FC2E-P080R
Total cooling capacity <sup>1)</sup>	Med / S-Hi	kW	1,2/2,1	1,4/2,4	2,1/3,1	2,9/4,2	4,0/5,0	4,5/5,2	5,9/6,9	6,5/8,8
Sensible capacity <sup>1)</sup>	Med / S-Hi	kW	1,1/1,9	1,1/1,9	1,6/2,4	2,1/3,0	3,0/3,7	3,5/4,0	4,3/5,2	4,8/6,6
Water flow	Med / S-Hi	l/h	210/356	237/406	354/532	506/722	685/743	767/800	1008/1098	1111/1254
Water pressure drop	Med / S-Hi	kPa	28,2/76,9	4,6/11,0	20,5/42,1	24,4/46,3	35,1/41,0	35,8/38,8	14,0/16,6	21,4/26,6
Heating capacity <sup>2)</sup>	Med / S-Hi	kW	1,6/2,9	1,9/3,3	2,2/3,4	3,0/5,3	5,2/5,5	5,9/6,1	7,3/8,2	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
	Right connection (PAW-)		FC4E-P010R	FC4E-P020R	FC4E-P030R	FC4E-P040R	FC4E-P050R	FC4E-P060R	FC4E-P070R	FC4E-P080R
Total cooling capacity <sup>1)</sup>	Med / S-Hi	kW	1,1/1,9	1,2/2,2	1,9/2,9	2,7/4,0	3,6/4,6	4,1/4,9	5,1/6,4	6,2/9,6
Sensible capacity <sup>1)</sup>	Med / S-Hi	kW	0,9/1,7	1,0/1,8	1,5/2,2	1,9/2,8	2,8/3,5	3,2/3,8	3,8/4,8	4,6/7,2
Water flow	Med / S-Hi	l/h	185/327	206/375	321/493	457/681	625/686	707/749	886/977	1070/1242
Water pressure drop	Med / S-Hi	kPa	20,1/59,2	3,7/9,7	9,2/19,7	29,6/60,1	17,9/21,3	24,3/27,2	13,6/16,5	33,9/44,3
Heating capacity <sup>2)</sup>	Med / S-Hi	kW	0,8/1,4	0,9/1,5	1,4/1,8	2,0/2,8	2,4/2,5	2,9/3,1	3,4/3,6	5,9/6,9
Water flow	Med / S-Hi	l/h	140/235	161/255	243/304	350/483	416/438	503/531	583/614	1011/1194
Water pressure drop	Med / S-Hi	kPa	4,0/8,4	3,8/9,4	9,7/14,1	41,8/76,3	26,3/28,9	43,6/48,1	103,8/113,9	69,7/95,1
Sound levels										
Global sound power level	S-Lo / Med / S-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 level <sup>3)</sup>	S-Lo / Med / S-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	Med / S-Hi	m <sup>3</sup> /h	228/417	234/413	380/585	412/678	645/702	737/779	850/950	927/1093
Air flow 4-pipe	Med / S-Hi	m <sup>3</sup> /h	199/379	200/380	342/540	369/627	587/646	668/716	798/894	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	Med / S-Hi	W	11/41	13/41	16/42	13/43	24/46	30/54	44/77	42/108
Power consumption 4-pipe	Med / S-Hi	W	11/39	13/40	15/40	12/42	23/44	28/52	43/75	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
Dimensions and weight										
Dimensions	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

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



## Fan coils - Wall Mounted (AC)



**IR Controller**  
Infrared remote supplied with IR versions.



**PAW-FC-903TC**  
Optional Controller. Wired remote controller.



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

### 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

2-pipe			PAW-FC2A-K007	PAW-FC2A-K009	PAW-FC2A-K018	PAW-FC2A-K022
			PAW-FC2A-K007IR	PAW-FC2A-K009IR	PAW-FC2A-K018IR	PAW-FC2A-K022IR
Total cooling capacity <sup>1)</sup>	Med / Hi	kW	1,3/1,7	1,7/2,4	3,0/3,5	3,1/3,9
Sensible capacity <sup>1)</sup>	Med / Hi	kW	1,0/1,2	1,3/1,9	2,3/2,7	2,5/3,1
Water flow	Med / Hi	l/h	231/287	291/418	508/609	535/669
Water pressure drop	Med / Hi	kPa	24,9/30,9	27,0/40,0	41,3/55,6	33,7/45,2
Heating capacity <sup>2)</sup>	Med / Hi	kW	1,7/2,0	2,0/2,7	3,2/4,0	3,7/4,4
<b>Sound levels</b>						
Sound power level	Lo / Med / Hi	dB(A)	45/49/51	47/52/57	49/53/56	53/57/63
Sound pressure level <sup>3)</sup>	Lo / Med / Hi	dB(A)	30/33/35	32/36/40	39/41/43	39/43/48
<b>Fan</b>						
Number			1	1	1	1
Air flow	Med / Hi	m <sup>3</sup> /h	321/360	413/551	592/680	709/850
Filter			G1	G1	G1	G1
<b>Electrical data</b>						
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	Med / Hi	W	42/62	47/59	50/55	55/70
<b>Water connections</b>						
Type			Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded
Connections		Inch	1/2	1/2	1/2	1/2
<b>Dimensions and weight</b>						
Dimensions	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 m<sup>3</sup>, a reverberation time of 0,5 seconds and a distance of 1 m.



# Fan coil valve accessories

## General information

- Variety of optional valve configuration
- Suitable for 2-pipe and 4-pipe fan coil units
- 2-way and 3-way valve arrangements

Fan coil type	Fan coil pipe configuration	Model Reference	Description	Model compatibility
Ceiling, Floor Standing and Ducted	2-pipe	PAW-FC-2WY-11/55-1	2 way valve + drain pan	2-pipe Ceiling, Floor Standing and Ducted models D11-D55 and 010-060
		PAW-FC-2WY-65/90-1		2-pipe Ceiling, Floor Standing and Ducted models D65-D90 and 070-080
		PAW-FC-2WY-F040		2-pipe Ducted model F040
		PAW-FC-3WY-11/55-1	3 way valve + drain pan	2-pipe Ceiling, Floor Standing and Ducted models D11-D55 and 010-060
		PAW-FC-3WY-65/90-1		2-pipe Ceiling, Floor Standing and Ducted models D65-D90 and 070-080
		PAW-FC-3WY-F040		2-pipe Ducted model F040
	4-pipe	PAW-FC4-2WY-010	2 way valve + drain pan	4-pipe Ceiling, Floor Standing and Ducted models 010-060
		PAW-FC4-2WY-070		4-pipe Ceiling, Floor Standing and Ducted models 070-080
		PAW-FC4-2WY-F040		4-pipe Ducted model F040
		PAW-FC4-3WY-010	3 way valve + drain pan	4-pipe Ducted, Ceiling and floor standing model 010
		PAW-FC4-3WY-020		4-pipe Ceiling, Floor Standing and Ducted models 020-060
		PAW-FC4-3WY-070		4-pipe Ceiling, Floor Standing and Ducted models 070-080
PAW-FC4-3WY-F040	4-pipe Ducted model F040			
High Static Ducted	2-pipe	PAW-FC2-2WY-E070	2 way valve + drain pan	2-pipe High Static Ducted models E070
		PAW-FC-2WY-150		2-pipe High Static Ducted models E150-E180
		PAW-FC2-2WY-E210		2-pipe High Static Ducted models E210-E240
		PAW-FC2-3WY-E070	3 way valve + drain pan	2-pipe High Static Ducted models E070
		PAW-FC-3WY-150		2-pipe High Static Ducted models E150-E180
		PAW-FC2-3WY-E210		2-pipe High Static Ducted models E210-E240
	4-pipe	PAW-FC4-2WY-E070	2 way valve + drain pan	4-pipe High Static Ducted model E070
		PAW-FC4-2WY-E150		4-pipe High Static Ducted models E150-E180
		PAW-FC4-3WY-E210		4-pipe High Static Ducted models E210-E240
		PAW-FC4-3WY-E070	3 way valve + drain pan	4-pipe High Static Ducted model E070
		PAW-FC4-3WY-E150		4-pipe High Static Ducted models E150-E180
		PAW-FC4-3WY-E210		4-pipe High Static Ducted models E210-E240
Cassette	2-pipe	PAW-FC2-2WY-U020	2 way valve + drain pan	2-pipe Cassette models U020-U040
		PAW-FC2-2WY-U050		2-pipe Cassette models U050-U070
		PAW-FC2-3WY-U020	3 way valve + drain pan	2-pipe Cassette models U020-040
		PAW-FC2-3WY-U050		2-pipe Cassette models U050-070
	4-pipe	PAW-FC4-2WY-U020	2 way valve + drain pan	3-pipe Cassette models U020-U040
		PAW-FC4-2WY-U050		3-pipe Cassette models U050-U070
		PAW-FC4-3WY-U020	3 way valve + drain pan	3-pipe Cassette models U020-U040
		PAW-FC4-3WY-U050		3-pipe Cassette models U050-U070
Wall Mounted	2-pipe	PAW-FC2-2WY-K007	2 way valve + drain pan	2-pipe Wall Mounted K007-K022
		PAW-FC2-3WY-K007	3 way valve + drain pan	2-pipe Wall Mounted K007-K022



# Controls



## 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)

## 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 (EC)



#### PAW-FC-907TC

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 EC fan coils, the user can take advantage of the improved performance, higher levels of efficiency and thus improved energy savings

#### Features:

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

### Wired remote controller (AC)



#### PAW-FC-903TC

Feature rich and perfectly adapted to control AC fan coils, the PAW-FC-903TC is the ideal 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.

#### Features:

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

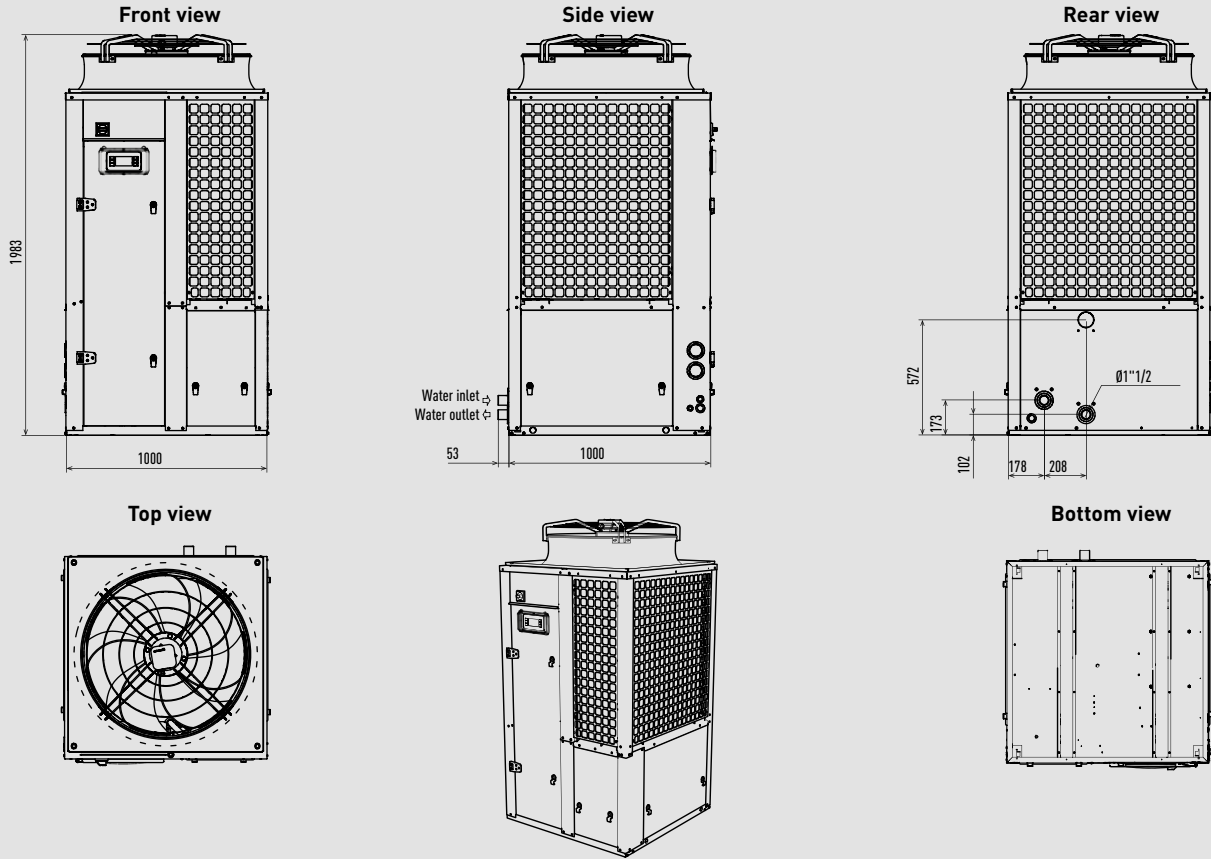
### Built-in controller for Floor Standing (AC)



#### PAW-FC-RCFS

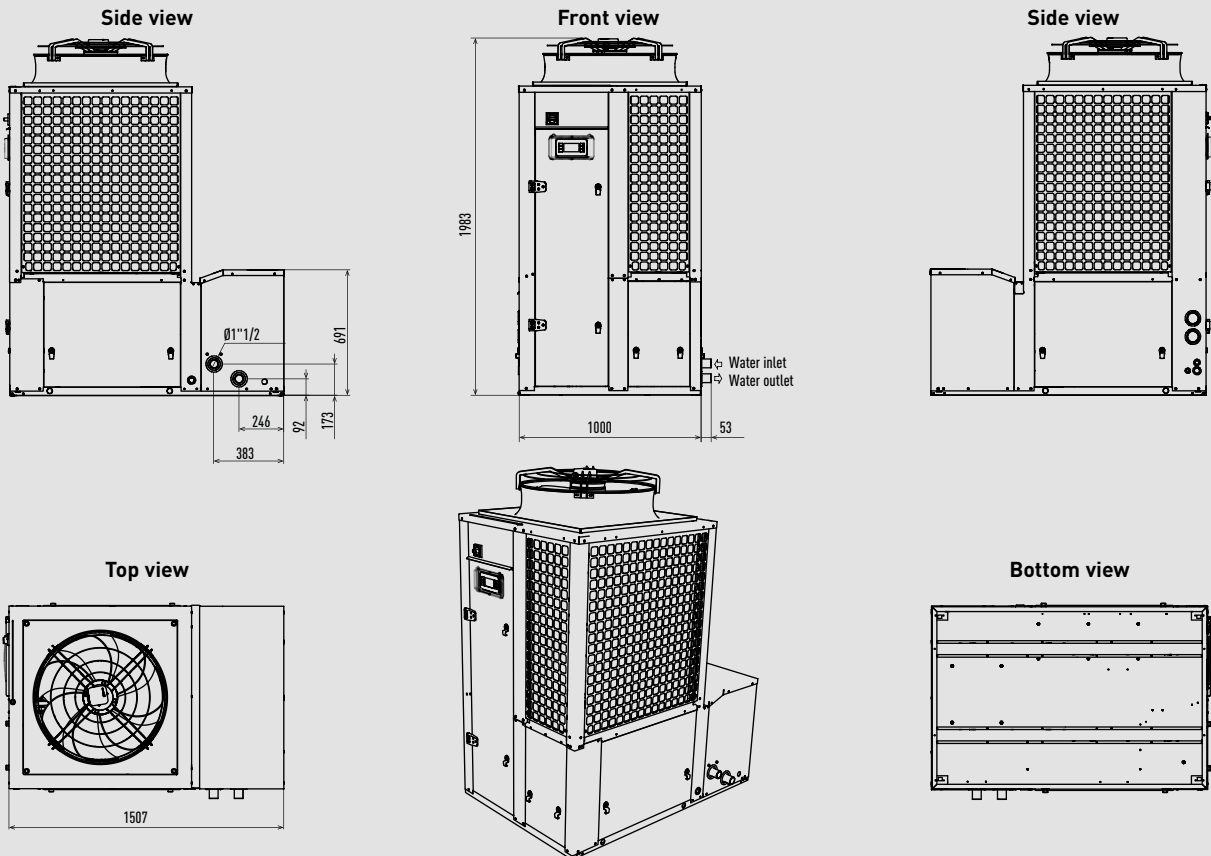
Built-in basic controller fan floor standing units , for 2-pipe and 4-pipe, AC fan.

ECOi-W 20 to 40 with condenser fans Standard



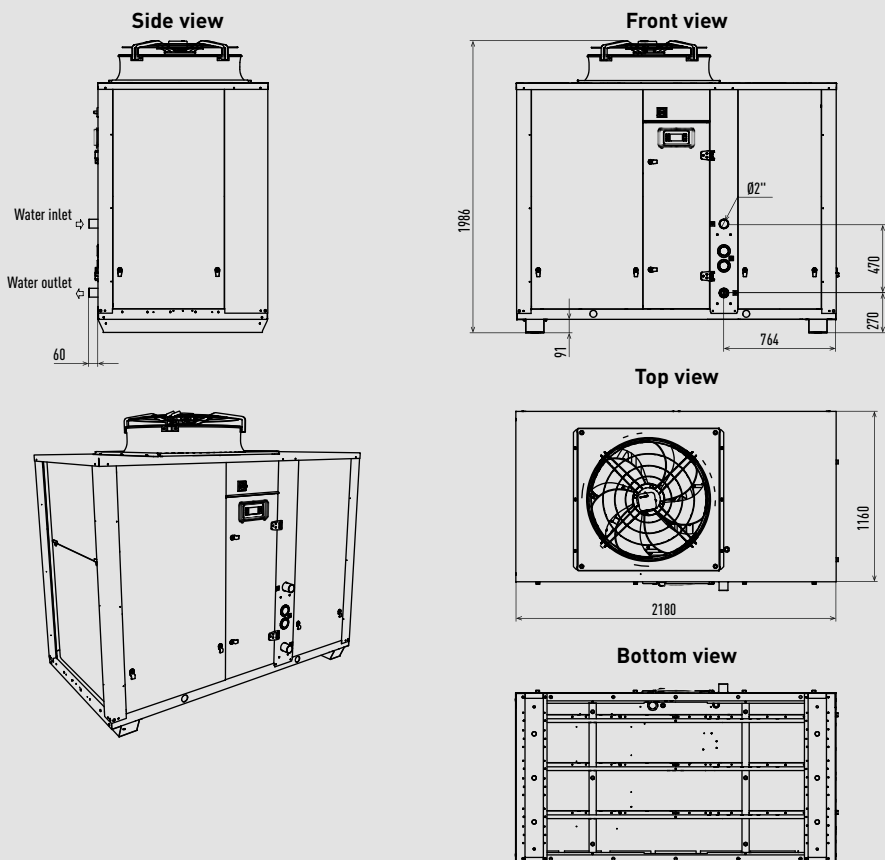
Unit: mm

ECOi-W 20 to 40 with condenser fans Standard and buffer tank



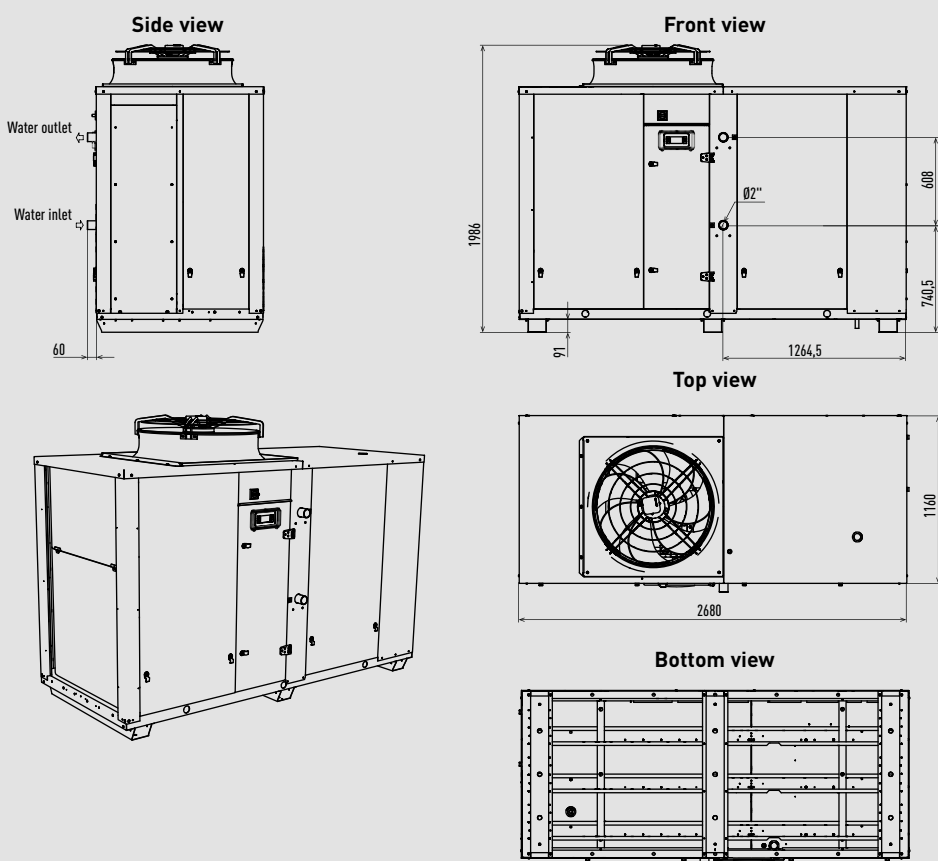
Unit: mm

ECOi-W 45 to 55 with condenser fans Standard



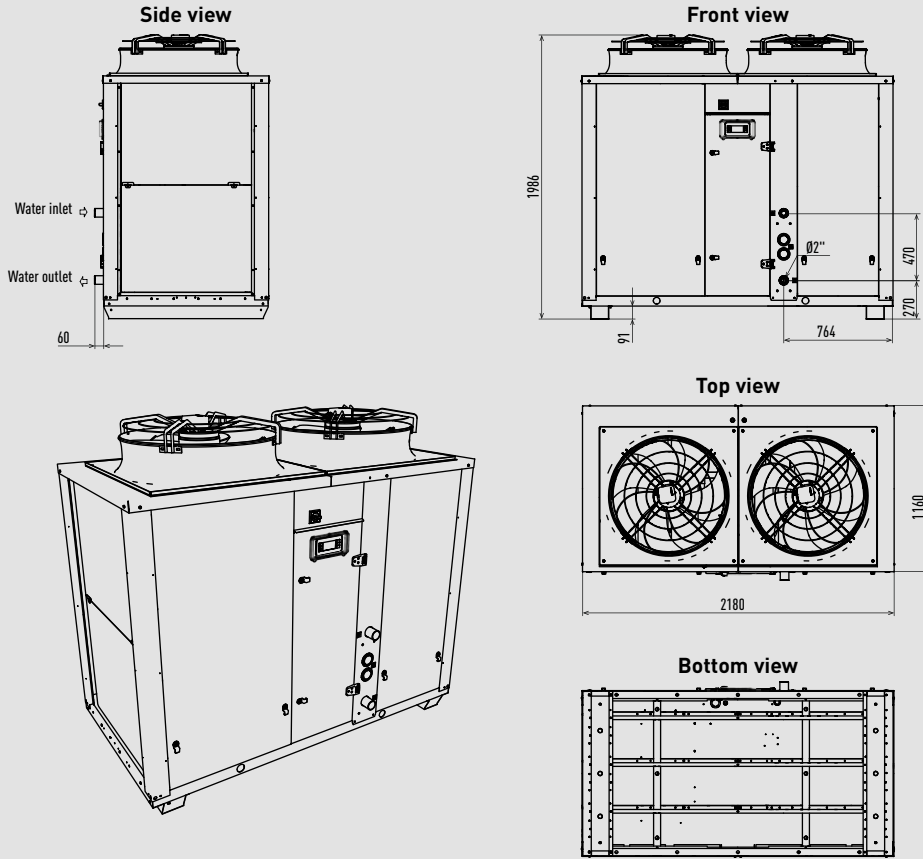
Unit: mm

ECOi-W 45 to 55 with condenser fans Standard and buffer tank



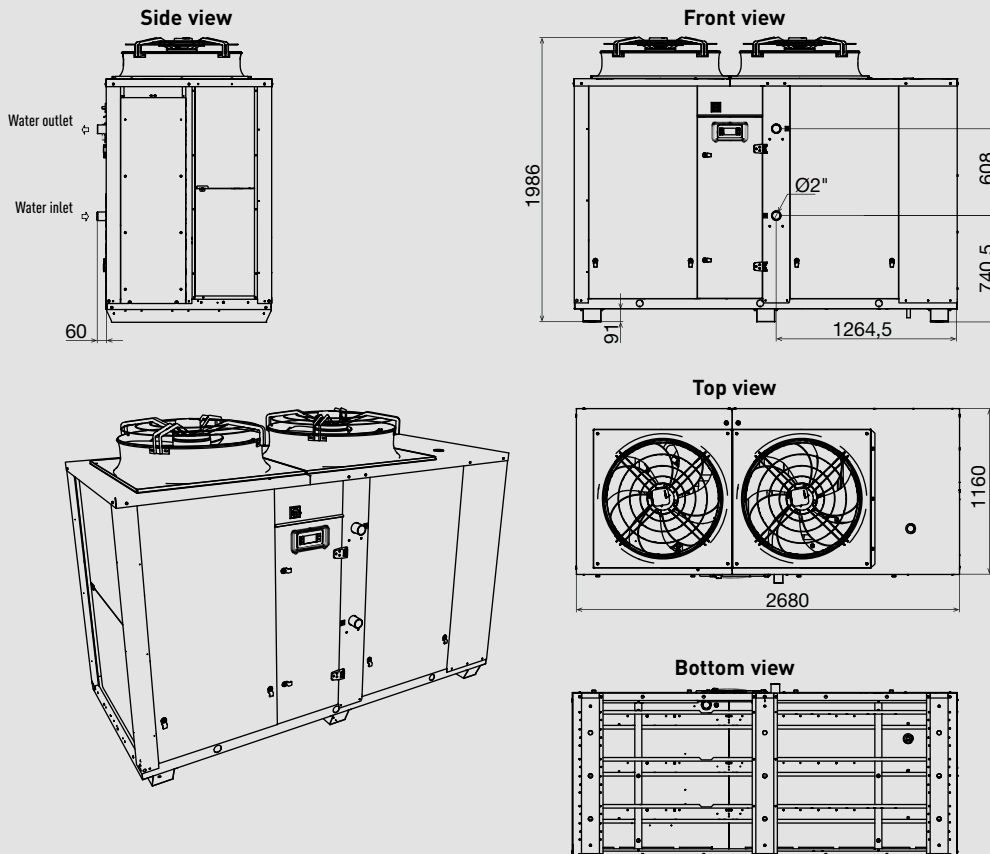
Unit: mm

ECOi-W 65 to 75 with condenser fans Standard



Unit: mm

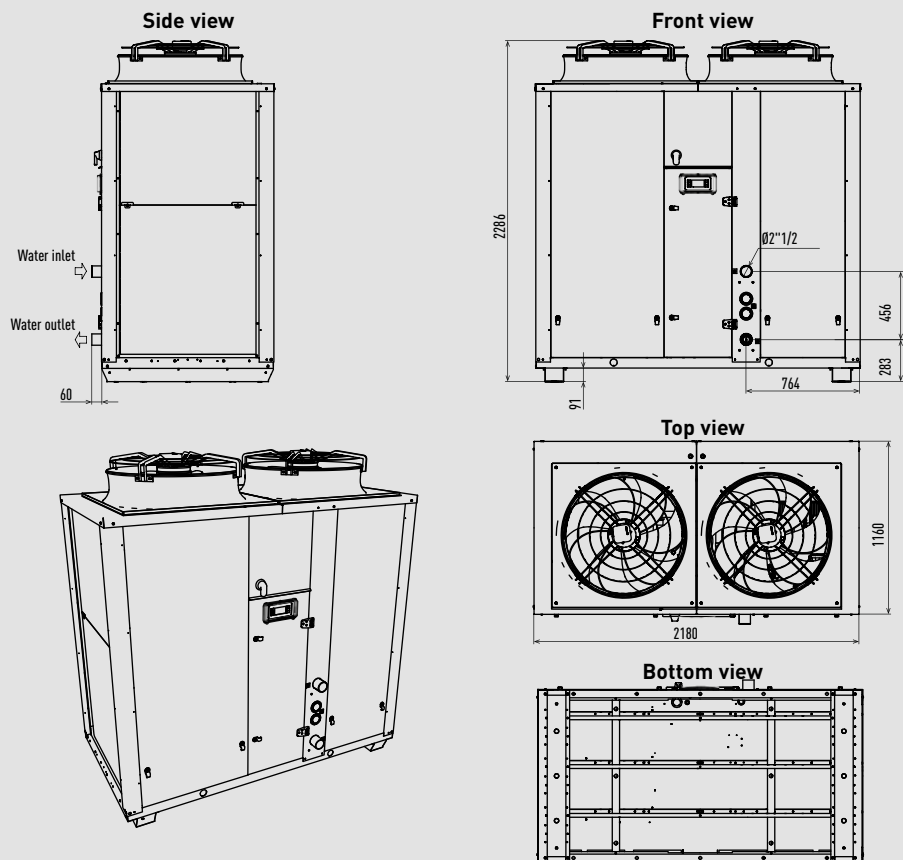
ECOi-W 65 to 75 with condenser fans Standard and buffer tank



Unit: mm

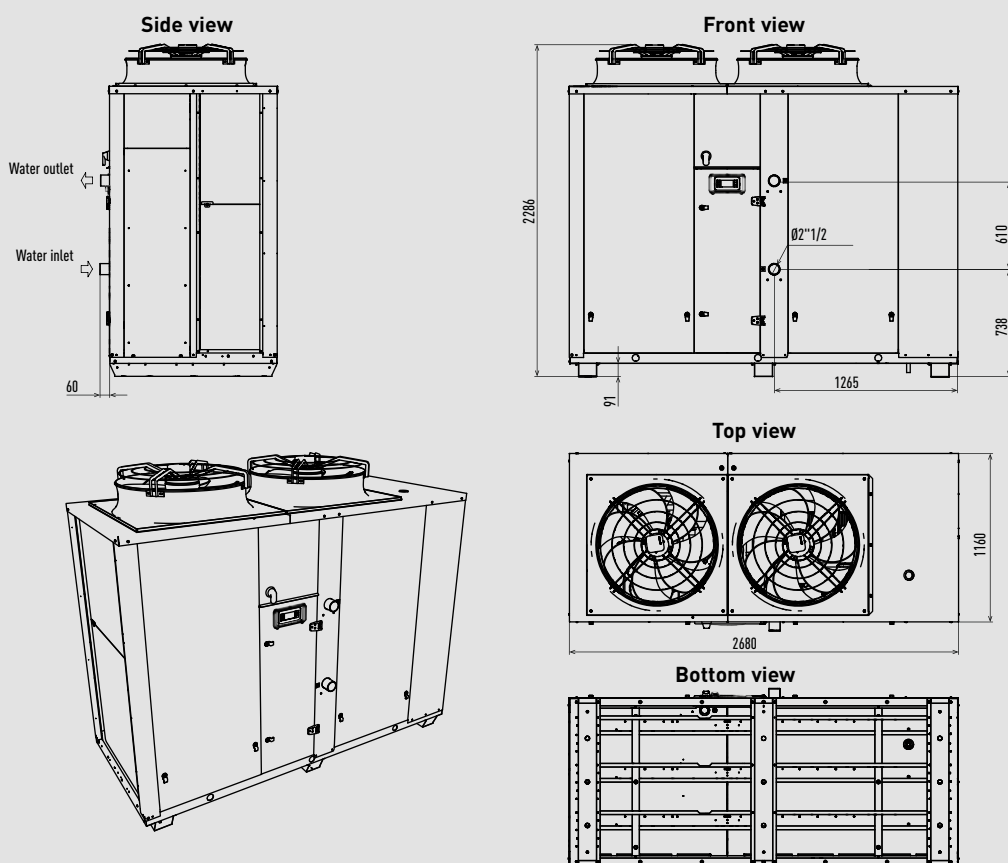


ECOi-W 90 to 125 with condenser fans Standard



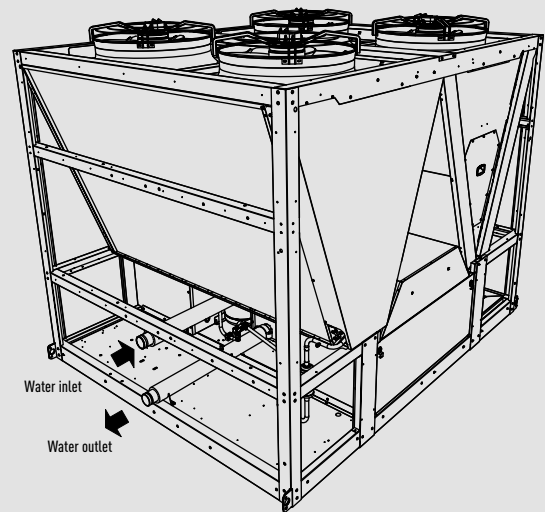
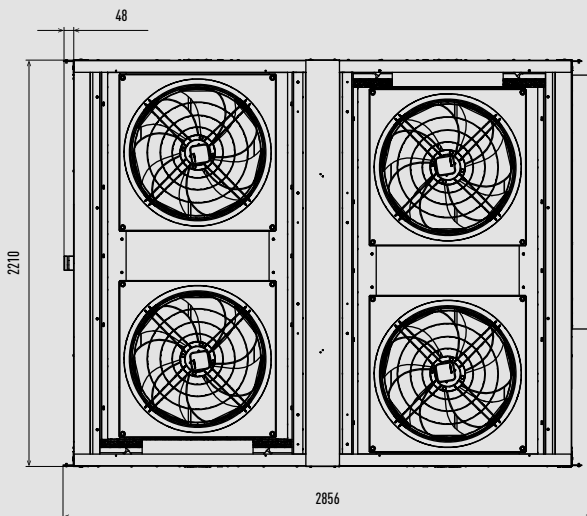
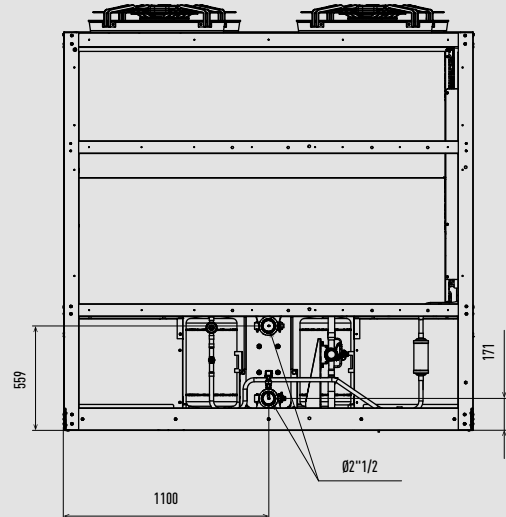
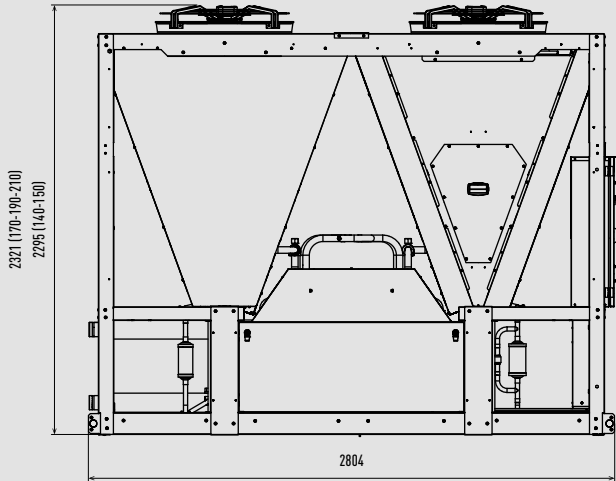
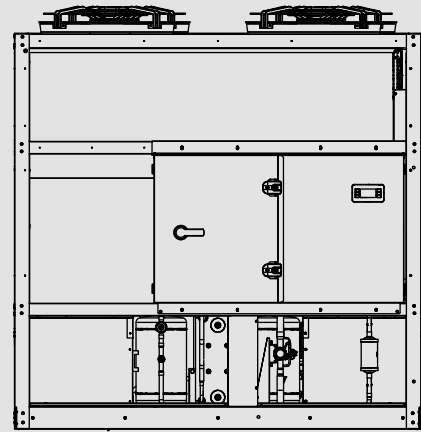
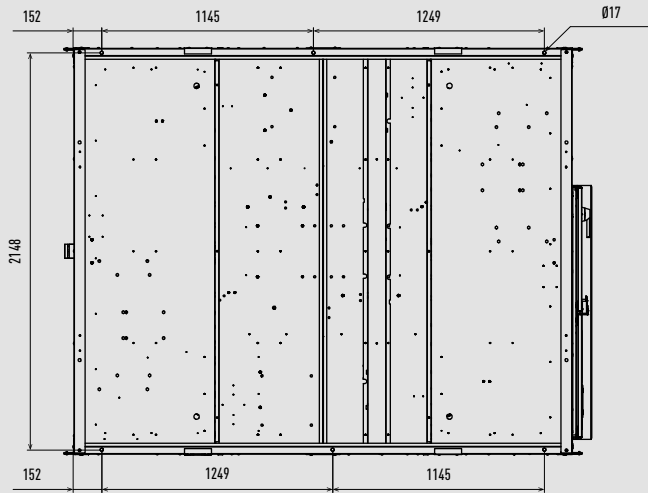
Unit: mm

ECOi-W 90 to 125 with condenser fans Standard and buffer tank

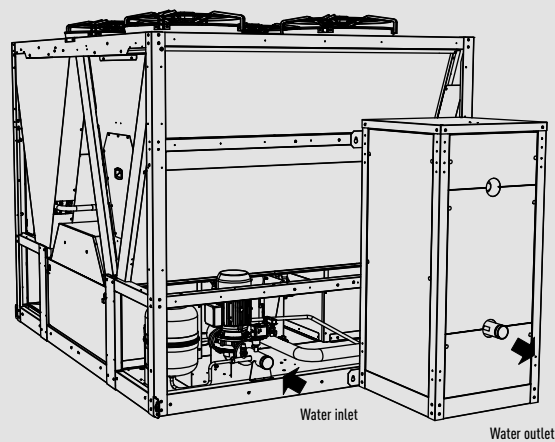
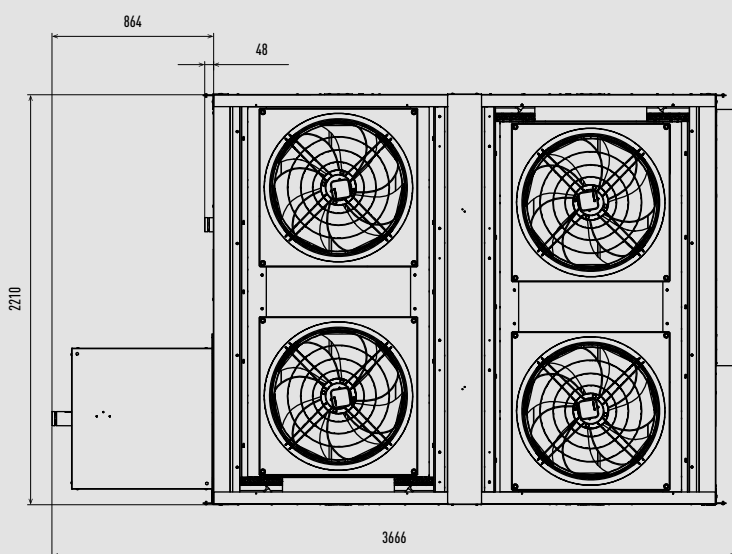
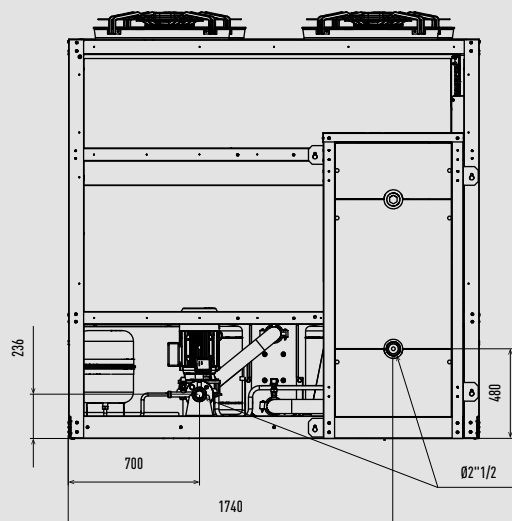
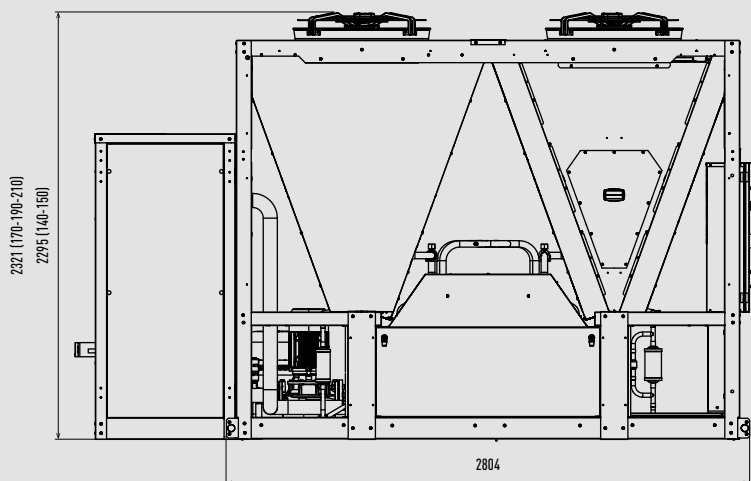
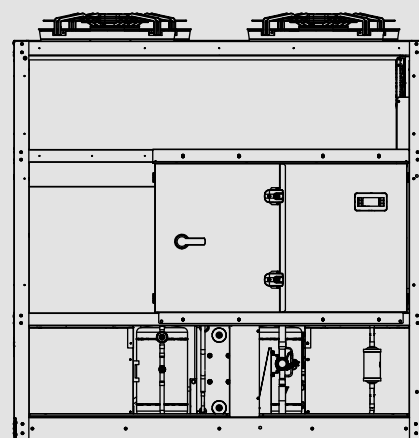
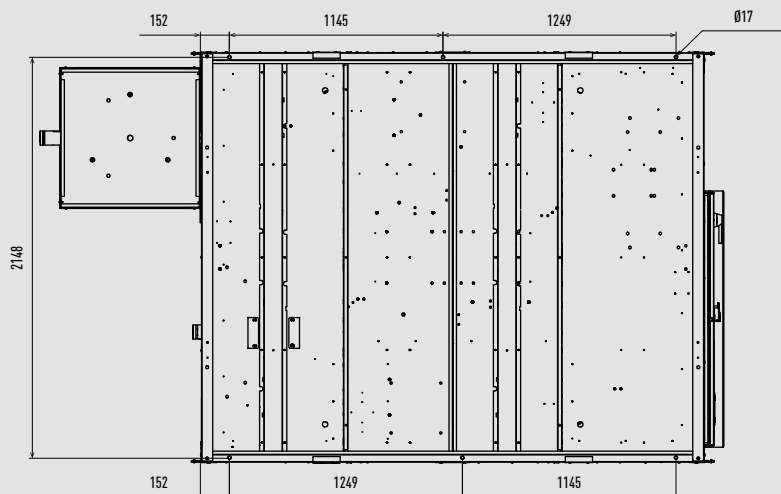


Unit: mm

ECOi-W 140 to 210 without pump



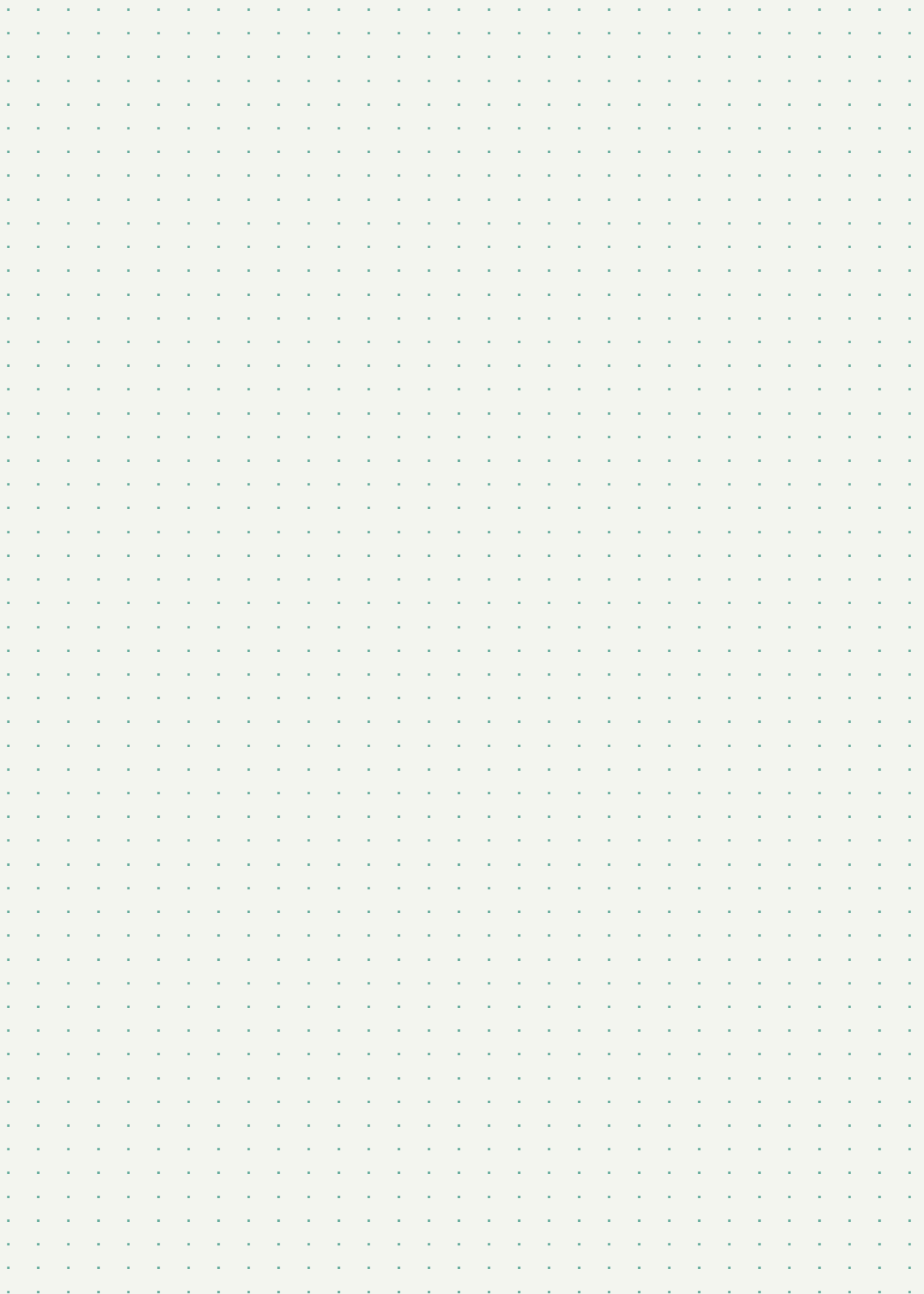
ECOi-W 140 to 210 with 1 pump and buffer tank



# Notes

A large grid of small dots for taking notes, arranged in approximately 25 columns and 45 rows, covering the majority of the page below the 'Notes' header.

# Notes









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heating & cooling solutions

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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.

