

# Panasonic



CLOSE CONTROL RANGE:  
2025 / 2026

PANASONIC TOTAL SOLUTION

heating & cooling solutions





## Close Control and Vertical DX units

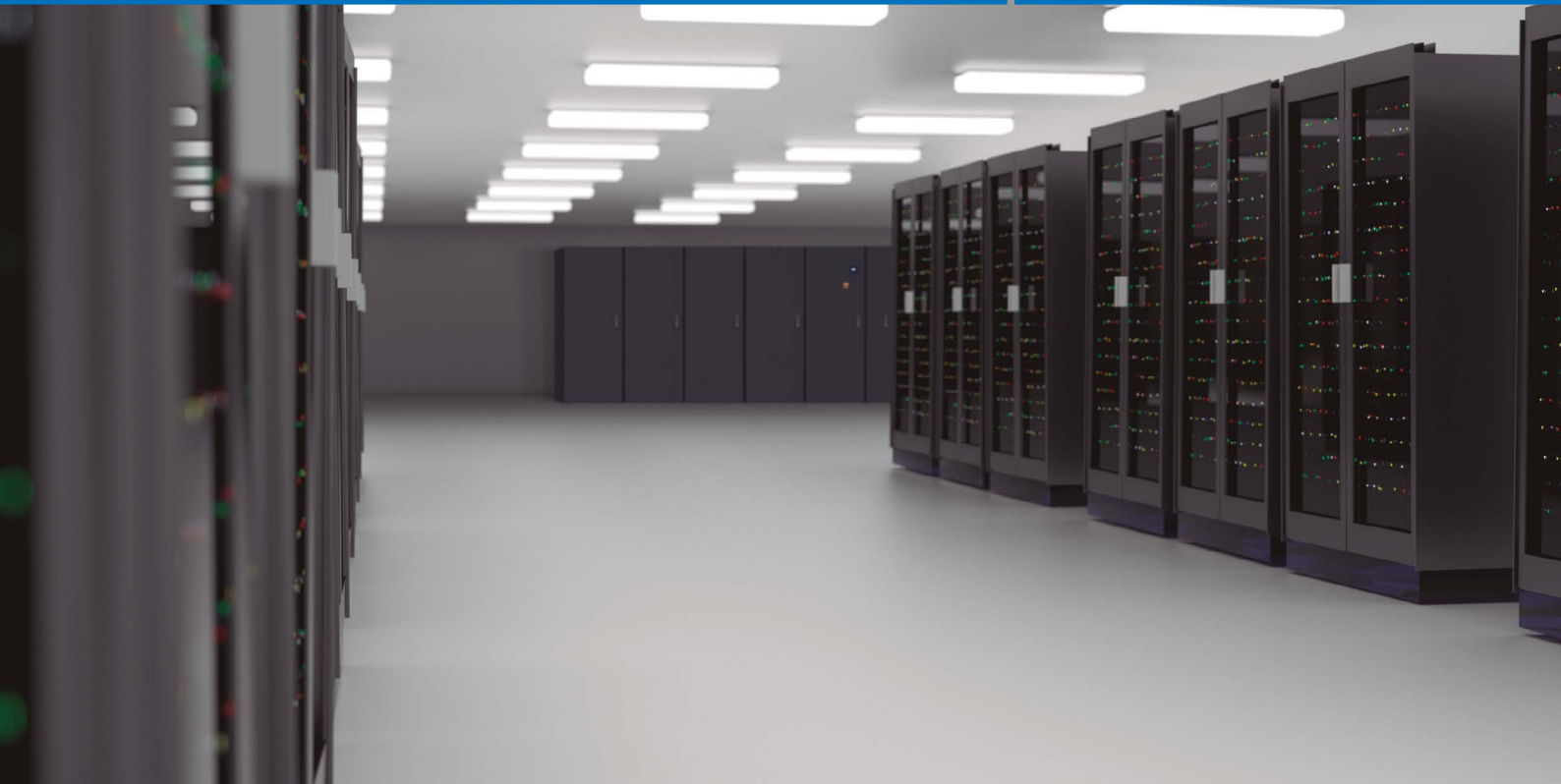
Close Control units provide a strict control of environmental conditions such as temperature, humidity in data centers, laboratories, and other applications where sensitive equipment or processes require stable and controlled conditions.

Vertical DX units can be used in industries, data centers and tertiary application thanks to their high reliability, high efficiency and low noise level.

**TECNAIR**  
A Panasonic Company



LOGICOL



[Quick selection guide - Close Control - chilled water](#) → 4

[Quick selection guide - Close Control - direct expansion](#) → 5

[Quick selection guide - Vertical DX units](#) → 6

#### Close Control - Techline

[P Series - Perimetral · R32](#) → 7

[P Series - Perimetral](#) → 8

[G Series - Great](#) → 9

[R Series - In-Row](#) → 10




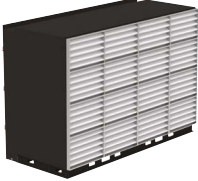
[W Series - Cold Wall](#) → 11

#### Vertical DX units

[T-XAR · R407C](#) → 12

[T-CX and T-XA0 · R407C](#) → 14

# Quick selection guide - Close Control - chilled water

Page	Size	Cooling capacity (kW)	Air flow (m <sup>3</sup> /h)	Sound pressure (dB(A))	Dimension H x W x D (mm)
<b>P. 8</b> 	<b>P Series - Perimetral</b>				
	10	9,9	2200	51	1990 x 750 x 600
	20	17,2	3200	59	1990 x 750 x 600
	30	30,0	7000	56	1990 x 860 x 880
	50	41,0	8000	60	1990 x 860 x 880
	60	52,8	12000	67	1990 x 1410 x 880
	70	63,1	12000	68	1990 x 1410 x 880
	80	65,4	16000	61	1990 x 1750 x 880
	110	80,0	18000	62	1990 x 1750 x 880
	160	110,0	24000	62	1990 x 2640 x 880
220	160,0	36000	65	1990 x 3495 x 880	
<b>P. 9</b> 	<b>G Series - Great</b>				
	70	55,5	11000	58	1990 x 1320 x 921
	150	112,6	23000	60	1990 x 1840 x 921
	150 XH	129,7	26000	62	2350 x 1840 x 1050
	230	176,6	36000	63	1990 x 2740 x 921
	230 XH	220,7	39000	65	2350 x 2740 x 1050
	300	202,8	45200	62	1990 x 4020 x 921
300 XH XS	265,5	44000	68	2350 x 3200 x 1090	
<b>P. 10</b> 	<b>R Series - In-Row</b>				
	20	24,5	5600	53	1970 x 300 x 1200
	40	37,3	9000	62	2000 x 600 x 1220
<b>P. 10</b> 	<b>W Series - Cold Wall</b>				
	2X1		—	—	1800 x 1900 x 1400
	3X1		—	—	1800 x 2850 x 1400
	4X1		—	—	1800 x 3800 x 1400
	2X2		From 112 to 500,5	—	3600 x 1900 x 1400
	3X2			—	3600 x 2850 x 1400
	4X2		—	3600 x 3800 x 1400	

**TECNAIR**  
A Panasonic Company

**First complete package solution for critical environment up to 21 kW.**






**First Panasonic and Tecnaïr synergy.**

Comprehensive solution for precise cooling in smaller critical cooling environment thanks to the combination of cutting-edge DX technology from Panasonic and Tecnaïr.

Efficient, energy-saving and flexible system powered by R32 refrigerant that allows environmental benefit thanks to its low GWP.





# Quick selection guide - Close Control - direct expansion

Page	Size	Cooling capacity (kW)	Air flow (m <sup>3</sup> /h)	Sound pressure (dB(A))	Dimension H x W x D (mm)
<b>NEW P Series - UPZ-OPZ - R32*</b>  <b>P. 7</b> 	71	7,4	2200	51	1990 x 750 x 600
	111	9,9	3200	59	1990 x 750 x 600
	121	12,5	3500	59	1990 x 750 x 600
	141	14,7	3200	59	1990 x 750 x 600
	211	20,5	7000	56	1990 x 750 x 600
	<b>P Series - Perimetral - R410A</b>  <b>P. 8</b> 	71	8,2	2200	51
111		10,7	3200	59	1990 x 750 x 600
141		14,7	3200	59	1990 x 750 x 600
211		21,0	7000	56	1990 x 860 x 880
251		27,4	7000	57	1990 x 860 x 880
301		32,0	12000	67	1990 x 1410 x 880
321		35,0	12000	67	1990 x 1410 x 880
322		34,0	12000	67	1990 x 1410 x 880
361		38,0	14000	58	1990 x 1750 x 880
461		48,0	14000	58	1990 x 1750 x 880
422		44,0	14000	58	1990 x 1750 x 880
512		58,0	14000	59	1990 x 1750 x 880
662		67,0	18000	61	1990 x 2300 x 880
852		84,0	18000	61	1990 x 2300 x 880
932		95,0	21000	61	1990 x 2640 x 880
<b>P Series - UPN-OPN - R513A</b>  <b>P. 8</b> 	71	7,8	2200	51	1990 x 750 x 600
	111	11,5	3200	59	1990 x 750 x 600
	141	13,6	3200	59	1990 x 750 x 600
	181	19,8	7000	58	1990 x 860 x 880
	211	22,2	7000	58	1990 x 860 x 880
	251	26,9	7000	58	1990 x 860 x 880
	301	33,8	12000	67	1990 x 1410 x 880
	302	30,9	12000	67	1990 x 1410 x 880
	312	40,1	12000	67	1990 x 1410 x 880
	322	46,6	12000	67	1990 x 1410 x 880
	422	46,9	14000	59	1990 x 1750 x 880
	512	55,7	14000	59	1990 x 1750 x 880
	612	59,4	18000	61	1990 x 2300 x 880
<b>G Series - Great - R410A</b>  <b>P. 9</b> 	932	102,6	18000	56	1990 x 2390 x 921
	1342	153,9	31500	61	1990 x 3120 x 921
<b>R Series - In-Row - R410A</b>  <b>P. 10</b> 	121	11,4	3200	51	1970 x 300 x 1200
	201	22,0	3600	53	1970 x 300 x 1200
	231	22,9	6000	54	2000 x 600 x 1220
	361	36,6	6000	56	2000 x 600 x 1220

\* Possible combination with PACi NX outdoor unit. Check PACi NX compatible models.

# Quick selection guide - Vertical DX units

Page	Size	Cooling capacity (kW)	Air flow (m³/h)	Sound pressure (dB(A))	Dimension LxHxW (mm)
<b>T-XAR · R407C - air cooled models</b>    P. 12	1200	12,3	2,000	51	890 x 1540 x 430
	1900	16,2	3,200	56	1000 x 1735 x 500
	2450	19,8	4,500	59	1300 x 1840 x 600
	3250	29,0	5,800	65	1530 x 1830 x 600
	4650	38,9	9,000	61	1715 x 1970 x 790
	6450	55,0	12,000	69	1980 x 1970 x 790
<b>T-CX and T-XAO · R407C - water cooled models</b>    P. 14	25	8,0	1,500	52	800 x 1280 x 407
	1200	15,0	2,000	51	890 x 1540 x 430
	1900	18,0	3,200	55	1000 x 1735 x 500
	2450	23,0	4,500	58	1300 x 1840 x 600
	3250	32,4	5,800	64	1530 x 1830 x 600
	4650	45,7	9,000	60	1715 x 1970 x 790



# P Series - Perimetral - R32

First complete package solution for critical environment up to 21 kW.

Cooling capacity - direct expansion: 7,4 to 20,5 kW.

R32  
REFRIGERANT

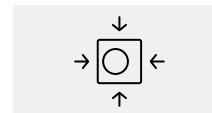
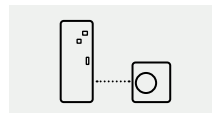


## The Range at the glance

Smart solution for precise cooling in smaller critical cooling environment by combining Panasonic PACi NX condensing unit with Tecnaïr P Series DX unit. The technical characteristics of this solution make it ideal for applications such as: museums, archives and control rooms.

## Advantages

- High efficiency
- Strict control of room temperature and humidity
- Low GWP refrigerant R32
- Flexibility



Complete package solution.

Solution for small critical environment.

Sustainable solution.

## Technical features

### NEW UPZ/OPZ - direct expansion air conditioners with air cooled or water cooled condensers - R32

Sizes		71	111	121	141	211
Cooling capacity <sup>1)</sup>	kW	7,44	9,92	12,5	14,71	20,47
Sensible cooling capacity <sup>1)</sup>	kW	6,89	8,41	10,67	12,60	20,47
EER <sup>2)</sup>		3,52	3,13	2,79	2,61	2,38
Air flow	m <sup>3</sup> /h	2200	3200	3500	3200	7000
Sound pressure <sup>3)</sup>	dB(A)	51	59	59	59	56
Dimension	Height	1990	1990	1990	1990	1990
	Width	750	750	750	750	750
	Depth	600	600	600	600	600
Overall weight	kg	150	200	205	205	205

## PACi NX outdoor combination

Outdoor unit single phase			U-71PZH4E5	U-100PZH4E5	U-125PZH4E5	U-140PZH4E5	—
Outdoor unit three phase			U-71PZH4E8	U-100PZH4E8	U-125PZH4E8	U-140PZH4E8	U-250PZH4E8
Power supply	Single phase	V	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	220 - 230 - 240	—
	Three phase	V	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415
Sound pressure	Cool / Heat (Hi)	dB(A)	48/50	52/52	55/55	56/56	59/63
Sound power	Cool / Heat (Hi)	dB(A)	65/67	69/69	73/73	74/74	78/82
Dimension	HxWxD	mm	996x980x370	996x980x370	996x980x370	996x980x370	996x1140x460
Net weight	1ph / 3ph	kg	66	84/82	86/84	86/84	109
Piping diameter	Liquid	Inch (mm)	3/8(9,52)	3/8(9,52)	3/8(9,52)	3/8(9,52)	1/2(12,70)
	Gas	Inch (mm)	5/8(15,88)	5/8(15,88)	5/8(15,88)	5/8(15,88)	7/8(22,22)
Pipe length range	Min ~ Max	m	5~60	5~100	5~100	5~100	5~100
Elevation difference (in / out)	Max	m	15/30 <sup>2)</sup>	15/30 <sup>2)</sup>	15/30 <sup>2)</sup>	15/30 <sup>2)</sup>	30
Pre-charged pipe length		m	30	30	30	30	30
Additional gas amount		g/m	30	40	40	40	80
Refrigerant (R32) / CO <sub>2</sub> Eq.		kg / T	1,95/1,32	2,70/1,82	3,00/2,03	3,00/2,03	4,80/3,24
Operating range	Cool Min ~ Max	°C	-15~+52	-20 <sup>4)</sup> ~ +52	-20 <sup>4)</sup> ~ +52	-20 <sup>4)</sup> ~ +52	-15~+52
	Heat Min ~ Max	°C	-20~+24	-20~+24	-20~+24	-20~+24	-20~+35

1) Performance refers to: intake air 24 °C-45%Rh; R410A refrigerant; condensing temperature 45 °C; water temperature 7/12 °C; external static pressure 30 Pa. The declared performance does not consider the heat generated by the fans, which must be added to the thermal load of the system. 2) EER (energy efficiency ratio) = total cooling capacity / input power of compressors + input power of fans (excluding air-cooled condensers). 3) Sound pressures at a distance of 2 m; in a free field; pursuant to UNI EN ISO 3744:2010. 4) Outdoor unit located lower / outdoor unit located higher. 5) Pipe length up to 30 m.

# P Series - Perimetral

Perimetral and compact solution.

Cooling capacity - chilled water: 9,9 to 160,0 kW.

Cooling capacity - direct expansion: 8,2 to 95,0 kW.



## The range at a glance

Although optimised for data centres, the technical characteristics of the P Series units make them ideal for various types of special applications, including: metrology labs, TV production studios, musical instrument recording and storage rooms, museums and archives, control rooms in power stations and railway junctions. Moreover, they are ideal for use in many industrial sectors: optics, electronics, electromedical devices, electrical or electronic equipment production, musical instrument production, etc.

## Advantages

- Versions with upward and downward air delivery
- Strict control of room temperature and humidity
- Very high EER (energy efficiency ratio) and low operating costs
- High usage flexibility and wide range of accessories
- Version with low GWP R513A refrigerant available

Free cooling and two sources models available.

## Technical features

UPA/OPA - direct expansion air conditioners with air-cooled or water-cooled condensers																
Sizes		71	111	141	211	251	301	321	322	361	461	422	512	662	852	932
Cooling capacity <sup>1)</sup>	kW	8,2	10,7	14,7	21,0	27,4	32,3	35,2	33,8	38,1	48,1	43,7	57,8	67,3	84,4	94,9
Sensible cooling capacity <sup>1)</sup>	kW	7,9	10,7	12,9	21,0	25,7	32,3	35,2	33,8	38,1	46,8	43,7	53,6	66,2	73,7	86,3
<b>EER <sup>2)</sup></b>		<b>3,83</b>	<b>3</b>	<b>3,40</b>	<b>3,30</b>	<b>3,14</b>	<b>3,21</b>	<b>3,13</b>	<b>3,34</b>	<b>3,57</b>	<b>3,63</b>	<b>3,47</b>	<b>3,34</b>	<b>3,26</b>	<b>3,27</b>	<b>3,64</b>
Air flow	m <sup>3</sup> /h	2200	3200	3200	7000	7000	12000	12000	12000	14000	14000	14000	14000	18000	18000	21000
Sound pressure <sup>3)</sup>	dB(A)	51	59	59	56	57	67	67	67	58	58	58	59	61	61	61
Dimension	Height	mm	1990	1990	1990	1990	1990	1990	1990	1990	1990	1990	1990	1990	1990	1990
	Width	mm	750	750	750	860	860	1410	1410	1410	1750	1750	1750	2300	2300	2640
	Depth	mm	600	600	600	880	880	880	880	880	880	880	880	880	880	880
Overall weight	kg	170	220	225	280	305	360	385	430	460	470	535	540	685	705	745
Air-cooled free cooling		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Water-cooled free cooling		○	○	○	○	○	○	●	○	○	●	○	○	●	●	○
Two sources		○	○	○	●	○	○	●	○	○	●	○	●	●	●	●

NEW UPN/OPN - direct expansion air conditioners with air cooled or water cooled condensers - R513A														
Sizes		71	111	141	181	211	251	301	302	312	322	422	512	612
Cooling capacity <sup>1)</sup>	kW	7,82	11,52	13,58	19,78	22,24	26,92	33,82	30,92	40,12	46,58	46,92	55,65	59,37
Sensible cooling capacity <sup>1)</sup>	kW	7,82	11,52	12,42	19,78	22,24	25,72	33,82	30,92	40,12	44,05	46,92	55,62	59,37
<b>EER <sup>2)</sup></b>		<b>3,49</b>	<b>3,32</b>	<b>3,41</b>	<b>3,41</b>	<b>3,29</b>	<b>3,30</b>	<b>3,61</b>	<b>3,32</b>	<b>3,36</b>	<b>3,36</b>	<b>3,43</b>	<b>3,46</b>	<b>3,47</b>
Air flow	m <sup>3</sup> /h	2200	3200	3200	7000	7000	7000	12000	12000	12000	12000	14000	14000	18000
Sound pressure <sup>3)</sup>	dB(A)	51	59	59	58	58	58	67	67	67	67	67	59	61
Dimension	Height	mm	1990	1990	1990	1990	1990	1990	1990	1990	1990	1990	1990	1990
	Width	mm	750	750	750	860	860	860	1410	1410	1410	1410	1750	2300
	Depth	mm	600	600	600	880	880	880	880	880	880	880	880	880
Overall weight	kg	225	235	235	280	295	305	360	380	365	385	535	540	685

UPU/OPU - chilled water air conditioners											
Sizes		10	20	30	50	60	70	80	110	160	220
Cooling capacity <sup>1)</sup>	kW	9,9	17,2	30,0	41,0	52,8	63,1	65,4	80,0	110,0	160,0
Sensible cooling capacity <sup>1)</sup>	kW	9,3	14,9	27,8	36,2	47,4	54,2	61,8	73,0	99,7	146,0
<b>EER <sup>2)</sup></b>		<b>38,26</b>	<b>29,13</b>	<b>30,00</b>	<b>24,54</b>	<b>22,75</b>	<b>24,17</b>	<b>24,79</b>	<b>24,17</b>	<b>29,33</b>	<b>24,17</b>
Air flow	m <sup>3</sup> /h	2200	3200	7000	8000	12000	12000	16000	18000	24.000	36000
Sound pressure <sup>3)</sup>	dB(A)	51	59	56	60	67	68	61	62	62	65
Dimension	Height	mm	1990	1990	1990	1990	1990	1990	1990	1990	1990
	Width	mm	750	750	860	860	1410	1410	1750	1750	2640
	Depth	mm	600	600	880	880	880	880	880	880	880
Overall weight	kg	125	150	245	250	270	280	375	410	690	810
Two sources		○	○	○	●	○	●	○	●	●	○

1) Performance refers to: intake air 24 °C-45%Rh; R410A refrigerant; condensing temperature 45 °C; water temperature 7/12 °C; external static pressure 30 Pa. The declared performance does not consider the heat generated by the fans, which must be added to the thermal load of the system. 2) EER (energy efficiency ratio) = total cooling capacity / input power of compressors + input power of fans (excluding air-cooled condensers). 3) Sound pressures at a distance of 2 m; in a free field; pursuant to UNI EN ISO 3744:2010.

# G Series - Great

Perimetral and high efficiency solution for large data centers.

Cooling capacity - chilled water: 55,5 to 265,5 kW.

Cooling capacity - direct expansion: 102,6 to 153,9 kW.



## The range at a glance

In designing air conditioning systems for large data centres, the need to house electrical wires and the enormous quantities of air required to cool the servers has made it necessary to increase the height of the raised floors up to the current 550/1000 millimetres. A large space was therefore created under the air conditioner in which to install the adjustable support. It was then decided to exploit this large space to house the delivery fans without increasing the machine's footprint, making the most of the available space instead.

## Advantages

- Separate air-cooling section for mounting under raised floors
- High delivered cooling capacity to footprint ratio
- Optimised air distribution in raised floor
- Reduced energy consumption of fans

**Chilled water versions available in XH (extended height) and XH XS specifically for hyperscale data centres. Free cooling and two sources models available.**

## Technical features

### UGA - direct expansion air conditioners with air-cooled or water-cooled condensers

Sizes		932	1342
Cooling capacity <sup>1)</sup>	kW	102,6	153,9
Sensible cooling capacity <sup>1)</sup>	kW	102,6	153,9
<b>EER <sup>2)</sup></b>		<b>4,16</b>	<b>4,54</b>
Air flow	m <sup>3</sup> /h	18000	31500
Sound pressure <sup>3)</sup>	dB(A)	56	61
Dimension	Height	1990	1990
	Width	2390	3120
	Depth	921	921
Overall weight	kg	910	1240

### UGU - chilled water air conditioners

Sizes		70	150	150 XH	230	230 XH	300	300 XH XS
Cooling capacity <sup>1)</sup>	kW	55,5	112,6	129,7	176,6	220,7	202,8	265,5
Sensible cooling capacity <sup>1)</sup>	kW	55,5	112,6	129,7	176,6	220,7	202,8	265,5
<b>EER <sup>2)</sup></b>		<b>31,17</b>	<b>36,32</b>	<b>36,94</b>	<b>36,65</b>	<b>38,86</b>	<b>33,97</b>	<b>39,6</b>
Air flow	m <sup>3</sup> /h	11000	23000	26000	36000	39000	45200	44000
Sound pressure <sup>3)</sup>	dB(A)	58	60	62	63	65	62	68
Dimension	Height	1990	1990	2350	1990	2350	1990	2350
	Width	1320	1840	1840	2740	2740	4020	3200
	Depth	921	921	1050	921	1050	921	1090
Overall weight	kg	540	840	865	1220	1250	1630	1550

<sup>1)</sup> Performance refers to: intake air 32 °C-30%Rh; R410A refrigerant; condensing temperature 45 °C; water temperature 12/20 °C; external static pressure 30 Pa. The declared performance does not consider the heat generated by the fans, which must be added to the thermal load of the system. <sup>2)</sup> EER (energy efficiency ratio)= total cooling capacity / input power of compressors + input power of fans (excluding air-cooled condensers). <sup>3)</sup> Sound pressures at a distance of 2 m; in a free field; pursuant to UNI EN ISO 3744:2010.

# R Series - In-Row

In-row solution.

Cooling capacity - chilled water: 24,5 to 37,3 kW.

Cooling capacity - direct expansion: 11,4 to 36,6 kW.



## The range at a glance

In air conditioning systems for large data centres, use of the following design concepts has now become a consolidated practice:

- The racks containing the servers are being increasingly positioned in accordance with the hot corridor (or hot aisle), and cold corridor (or cold aisle) layout.
- The air temperatures are left to rise up to 30 ~ 35 °C in the hot corridor, and 20 ~ 25 °C in the cold corridor, with very low humidity (never more than 30%).
- The performance of servers is continually increasing, while their size is getting smaller and smaller.

Many more servers can therefore be installed in one rack, allowing the remaining empty racks to be eliminated. At the same time, the dissipated heat rises, and more power is therefore required of the air conditioners.

## Advantages

- Air flow distribution as close as possible to servers
- Rear suction from hot aisles and front delivery to cold aisles
- Front and rear access for ease of maintenance
- Hydraulic, refrigeration and electrical connections from above or below

**Free cooling and two sources models available.**

## Technical features

### HRA - direct expansion air conditioners with air-cooled or water-cooled condensers

Sizes			121	201	231	361
Cooling capacity <sup>1)</sup>		kW	11,4	22,0	22,9	36,6
Sensible cooling capacity <sup>1)</sup>		kW	11,4	19,9	22,6	34,7
<b>EER <sup>2)</sup></b>			<b>3,70</b>	<b>3,52</b>	<b>3,66</b>	<b>3,91</b>
Air flow		m <sup>3</sup> /h	3200	3600	6000	6000
Sound pressure <sup>3)</sup>		dB(A)	51	53	54	56
Dimension	Height	mm	1970	1970	2000	2000
	Width	mm	300	300	600	600
	Depth	mm	1200	1200	1220	1220
Overall weight		kg	220	235	235	235
Water-cooled free cooling			○	○	●	○
Two sources			○	○	●	○

### HRU - chilled water air conditioners

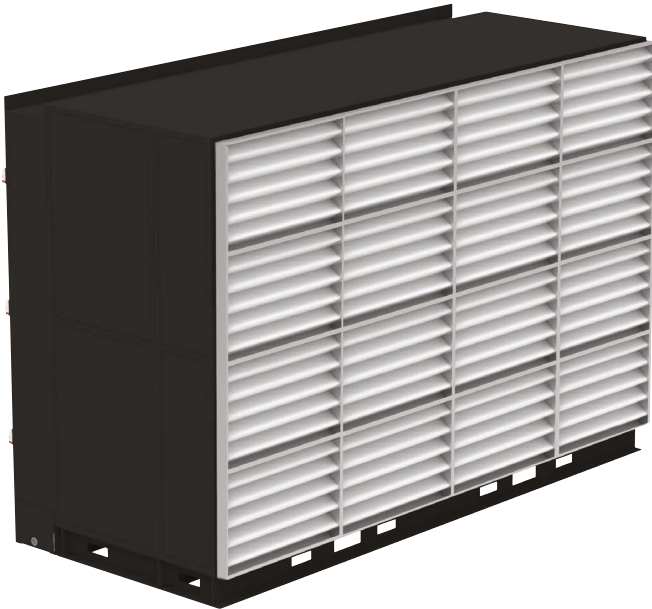
Sizes			20	40
Cooling capacity <sup>1)</sup>		kW	24,5	37,3
Sensible cooling capacity <sup>1)</sup>		kW	24,5	37,3
<b>EER <sup>2)</sup></b>			<b>23,09</b>	<b>27,82</b>
Air flow		m <sup>3</sup> /h	5600	9000
Sound pressure <sup>3)</sup>		dB(A)	53	62
Dimension	Height	mm	1970	2000
	Width	mm	300	600
	Depth	mm	1200	1220
Overall weight		kg	145	210
Two Sources			○	●

1) Performance refers to: intake air 32 °C-30%Rh; R410A refrigerant; condensing temperature 45 °C; water temperature 12/20 °C; external static pressure 30 Pa. The declared performance does not consider the heat generated by the fans, which must be added to the thermal load of the system. 2) EER (energy efficiency ratio)= total cooling capacity / input power of compressors + input power of fans (excluding air-cooled condensers). 3) Sound pressures at a distance of 2 m; in a free field; pursuant to UNI EN ISO 3744:2010.

# W Series - Cold Wall

Technical corridor solution.

Cooling capacity - chilled water: 112 to 500,5 kW.



## The range at a glance

The W Series units feature constructive and operational characteristics able to satisfy the design criteria of latest-generation large data centres in the presence of a technical service corridor. The units are designed to withdraw the warm air generated by the servers, coming from the warm corridor, and blow chilled air directly into the data hall.

This type of chilled water unit is specifically designed to be modular and customisable, with a range of possible custom configurations to suit the architecture of modern data centres. Its reduced footprint and installation in a service corridor means W Series units avoid occupying critical spaces, thus maximising the capacity of the data hall.

## Advantages

- Technical services corridor mounting
- No space occupied in the data centre
- Very high EER (energy efficiency ratio) due to optimised air flow
- Fully customisable to data centre specifications

## Technical features

### HWU - chilled water air conditioners

Sizes		2X1	3X1	4X1	2X2	3X2	4X2	
Cooling capacity <sup>1)</sup>	kW	From 112 to 500,5						
Sensible cooling capacity <sup>1)</sup>	kW	From 112 to 500,5						
Dimension	Height	mm	1800	1800	1800	3600	3600	
	Width	mm	1900	2850	3800	1900	2850	3800
	Depth	mm	1400	1400	1400	1400	1400	1400
Overall weight	kg	600	900	1200	1200	1800	2400	

<sup>1)</sup> Performance refers to: intake air 40 °C-25%Rh; R410A refrigerant; condensing temperature 45 °C; water temperature 20/30 °C; external static pressure 30 Pa. The declared performance does not consider the heat generated by the fans, which must be added to the thermal load of the system.

# T-XAR · R407C

Vertical DX units.

Cooling capacity: 12,3 to 55,0 kW.



## Operating limits

For standard unit.

T-XAR · R407C - air cooled models			
Minimum temperature	Indoor temperature	Thi	°C +13
		Tsi	°C +17
	Outdoor temperature	Tse	°C +19
Tse		°C -10 <sup>1)</sup>	
Maximum temperature	Indoor temperature	Thi	°C +22
		Tsi	°C +32
	Outdoor temperature	Tse	°C +47

1) With "All seasons kit" option.  
Thi : Wet Bulb indoor temperature.  
Tsi : Dry Bulb indoor temperature.  
Tse : Dry Bulb outdoor temperature.

## The range at a glance

- 6 sizes
- Configuration: split system. UC outdoor condensing unit available as an accessory
- Air intake: on the front grilles or on the rear with duct
- Discharge: vertical with or without duct or horizontal with a plenum
- Temperature controlled by thermostat
- 2 heating options: integrated electric or hot water coils

## Equipment

- Refrigerant circuit with an hermetic type compressor and an evaporator composed of copper tubes with aluminium fins
- Panels and intake grilles made of profiled sheet steel covered with enamel finish, baked in a high temperature oven
- Electrical and refrigerant connections on the right or left side
- Thermal and acoustic insulation of the unit
- 3-speed fan motor
- Integrated unit control
- M1 filters
- Electrical, refrigeration and thermal protection devices

## Advantages

- Robust unit with mechanical control
- Easy installation and maintenance
- Small footprint casing
- Different air intake and discharge configurations
- Heating systems available (options)

## UC - outdoor unit (accessory).



## Technical features

Size			1200	1900	2450	3250	4650	6450
<b>T-XAR - air cooled models</b>			<b>T-X1200.AR</b>	<b>T-X1900.AR</b>	<b>T-X2450.AR</b>	<b>T-X3250.AR</b>	<b>T-X4650.AR</b>	<b>T-X6450.AR</b>
Cooling capacity <sup>1)</sup>	Nominal	W	12300	16200	19800	29000	38900	55000
		BTU/hr	42000	55300	67600	99000	137000	189200
Air flow	Nominal treated air	m <sup>3</sup> /h	2000	3200	4500	5800	9000	12000
		Min / Max treated air	m <sup>3</sup> /h	1500/2500	2500/3800	3600/5400	4600/7000	7200/10800
Nominal fresh air (with accessory)		m <sup>3</sup> /h	180	285	420	500	1300	1650
Static pressure <sup>2)</sup>	Standard unit	daPa	0/13	0/21	0/20	0/25	0/23	0/29
Sound pressure - indoor unit <sup>3)</sup>	Normal speed	dB(A)	51	56	59	65	61	69
<b>Electrical data</b>								
Power supply	Voltage	V	400	400	400	400	400	400
	Phase		Three phase	Three phase	Three phase	Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50	50	50	50
Voltage range		V	360/440	360/440	360/440	360/440	360/440	360/440
Total input power <sup>1)</sup>		W	4808	8076	8900	12630	16950	24000
Input power ventilation	Min / Max - standard unit	W	260/510	380/580	500/1100	700/1800	1600/2400	3100/4600
<b>Dimensions</b>								
Dimensions	H x W x L	mm	1540	1735	1840	1830	1970	1970
		mm	430	500	600	600	790	790
		mm	890	1000	1300	1530	1715	1980

<b>UC - outdoor condensing unit (accessory)</b>			<b>UC34</b>	<b>UC54</b>	<b>UC74</b>	<b>UC104</b>
<b>Compatible with / number of necessary outdoor unit(s)</b>			<b>X1200.AR / 1</b>	<b>X1900.AR / 1</b>	<b>X2450.AR / 1 X4650.AR / 2</b>	<b>X3250.AR / 1 X6450.AR / 2</b>
Air flow		m <sup>3</sup> /h	8600	7600	8550	14000
Input power		W	530	611	611	1222
Sound pressure <sup>4)</sup>		dB(A)	52	53	56	56
<b>Dimensions</b>						
Dimensions	H x W x L	mm	840	840	840	840
		mm	825	825	885	885
		mm	885	885	1141	1546

1) International standard ISO 51.51 conditions. 27 °C/19 °C (WB) - outside air : 35 °C/24 °C (WB). Wasted water: inlet +15 °C - recycled water inlet/outlet: 30 °C/35 °C. 2) Pressure in air flow range at nominal voltage, without accessories. 3) Total sound pressure dB(A) [4 m] under nominal conditions in a room of 1000 m<sup>3</sup> (reverberation 0,83 s). 4) Total sound pressure dB(A) [4 m] under nominal conditions in free field on reflecting surface.

### Accessories and options

Air distribution duct frame  
Electric heaters  
Fresh air intake  
Front air distribution plenum  
High ventilation (provided as standard for sizes 1200 and 1900)  
Hot water coil

### Accessories and options

ON / OFF switch and room thermostat  
Pipe link 10 m - 1 circuit  
Remote fault reporting  
Set of female valves (mandatory)  
Total rear intake duct frame  
UC - outdoor condensing unit



# T-CX and T-XAO · R407C

Vertical DX units.

Cooling capacity: 8,0 to 45,7 kW.



## Operating limits

For standard unit.

T-CX and T-XAO - water cooled models			
Air temperature at evaporator inlet	WB	°C	From +15 to +23
	DB	°C	From +21 to +32
Water temperature		°C	From +10 to +34

DB : Dry Bulb.  
WB : Wet Bulb.

## The range at a glance

- 6 sizes
- Configuration: mono-bloc system
- Wasted or recycled water operation
- Air intake: on the front grilles or on the rear with duct
- Discharge: vertical with or without duct or horizontal with a plenum
- Temperature controlled by thermostat
- 2 heating options: integrated electric or hot water coils (hot water coil not available for CX25)

## Equipment

- Complete refrigerant circuit with an hermetic type compressor, an evaporator composed of copper tubes with aluminium fins, a coaxial condenser with counter flow circulation (equipped with finned copped tube in a steel cover) and a pressostatic valve
- Panels and intake grilles made of profiled and a sheet steel covered with enamel finish, baked in a high temperature oven
- Electrical, water and refrigerant connections on the right or left side
- Thermal and acoustic insulation of the unit
- 3-speed fan motor (2-speed fan motor for CX25)
- Integrated unit control
- M1 filters
- Electrical, refrigeration and thermal protection devices

## Advantages

- Robust unit with mechanical control
- Easy installation and maintenance
- Small footprint casing
- Different air intake and discharge configurations
- Heating systems available (options)

## Technical features

Size			1200	1900	2450	3250	4650
<b>T-XAO - water cooled models</b>			<b>T-X1200.AO</b>	<b>T-X1900.AO</b>	<b>T-X2450.AO</b>	<b>T-X3250.AO</b>	<b>T-X4650.AO</b>
Cooling capacity <sup>1)</sup>	Nominal	W	15005	18000	23000	32400	45700
		BTU/hr	51200	61400	78500	110550	157200
Air flow	Nominal treated air	m <sup>3</sup> /h	2000	3200	4500	5800	9000
		Min / Max treated air	m <sup>3</sup> /h	1500/2500	2500/3800	3600/5400	4600/7000
Nominal fresh air (with accessory)		m <sup>3</sup> /h	180	285	420	500	1300
Static pressure <sup>2)</sup>	Standard unit	daPa	0/13	0/21	0/20	0/25	0/23
Sound pressure <sup>3)</sup>	Normal speed	dB(A)	51	55	58	64	60
<b>Electrical data</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
Voltage range		V	360/440	360/440	360/440	360/440	360/440
Total input power <sup>1)</sup>		W	4843	6616	7100	9800	13900
Input power ventilation	Min / Max - standard unit	W	260/510	380/580	500/1100	700/1800	1600/2400
<b>Water circuit <sup>1)</sup></b>							
Wasted water - flow		L/h	914	950	1000	1700	2800
Wasted water - pressure drop		kPa	37	30	22	35	18
Recycled water - flow		L/h	3161	3050	3500	5780	8300
Recycled water - pressure drop		kPa	80	65	45	40	56
<b>Dimensions</b>							
Dimensions	H x W x L	mm	1540	1735	1840	1830	1970
		mm	430	500	600	600	790
		mm	890	1000	1300	1530	1715

<b>T-CX - water cooled models</b>			<b>CX25</b>				
Nominal cooling capacity (W 18 °C, A 19 °C Wet Bulb)		W	8000				
		BTU/hr	27300				
Air flow	Nominal treated air	m <sup>3</sup> /h	1500				
		Motor input power	W				
		W	245				
<b>Electrical data</b>							
Power supply	Voltage	V	230			400	
	Phase		Single phase			Three phase	
	Frequency	Hz	50			50	
<b>Cooling + ventilation</b>							
Input	Nominal	A	12,28			5,28	
	Max	A	14,85			6,38	
aM fuse		A	16			8	
ASE/VDE fuse		A	16			10	
<b>Electric heater + ventilation</b>							
Input	Nominal	A	26			9,6	
	Max	A	31			11,61	
aM fuse		A	32			12	
ASE/VDE fuse		A	35			16	
<b>Dimensions</b>							
Dimensions	H x W x L	mm	1280				
		mm	407				
		mm	800				

1) International standard ISO 51.51 conditions. 27 °C/19 °C (WB) - outside air : 35 °C/24 °C (WB). Wasted water: inlet +15 °C - recycled water inlet/outlet: 30 °C/35 °C. 2) Pressure in air flow range at nominal voltage, without accessories. 3) Total sound pressure dB(A) (4 m) under nominal conditions in a room of 1000 m<sup>3</sup> (reverberation 0,83 s).

## Accessories and options

Air distribution duct frame  
 Electric heaters  
 Fresh air intake  
 Front air distribution plenum  
 High ventilation (provided as standard for CX25, X1200.AO and X1900.AO)

## Accessories and options

Hot water coil  
 ON / OFF switch and room thermostat  
 Remote fault reporting  
 Sump heating resistance  
 Total rear intake duct frame



# Panasonic service

Our Panasonic Service teams are committed to ensuring your peace of mind. Best service is our aim.

Panasonic provides a team of highly trained technicians and engineers to deliver professional and responsive services that meet the highest levels of quality and safety while being efficient and cost effective.

To find out more about Panasonic Heating & Cooling Solutions, please visit [www.aircon.panasonic.eu](http://www.aircon.panasonic.eu).



## Maintenance.

To meet the requirements of the standard warranty, the product must be maintained and serviced annually by a suitably trained and qualified engineer. This way we can extend the lifetime of the product.



## Repair.

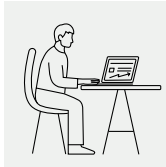
Panasonic offers a wide range of service agreements, like Panasonic Service+ for a maximised product lifetime. Leave the care of your Panasonic products to the experts. In the unlikely event that something goes wrong, trust one of our qualified and Panasonic trained experts to get things back on track.



## Warranty.

In accordance with the regulations, Panasonic guarantees its products against hidden defects. Moreover, Panasonic grants to the professional purchaser a commercial warranty, specific to the product families, subject to compliance of all the rules of installation and use of its products.

## Panasonic Heating & Cooling Solutions customer service



Use our European website [www.aircon.panasonic.eu](http://www.aircon.panasonic.eu) for contacting us. Panasonic has implemented a contact page on the Panasonic Heating & Cooling Solutions website for potential or existing Panasonic customers.



**Panasonic**

heating & cooling solutions



Due to the ongoing innovation of our products, the specifications of this catalogue are valid barring typographic errors, and may be subject to minor modifications by the manufacturer without prior warning in order to improve the product. The total or partial reproduction of this catalogue is prohibited without the express authorisation of Panasonic Marketing Europe GmbH.

# Panasonic®

To find out how Panasonic cares for you, log on to:  
[www.panasonic.co.uk/aircon](http://www.panasonic.co.uk/aircon)

**General requests UK:**  
Email: [uk-aircon@eu.panasonic.com](mailto:uk-aircon@eu.panasonic.com)

**Sales administration team:**  
Email: [uk-aircon-salesadmin@eu.panasonic.com](mailto:uk-aircon-salesadmin@eu.panasonic.com)


**Technical service team:**  
Email: [uk-aircon-tech@eu.panasonic.com](mailto:uk-aircon-tech@eu.panasonic.com)  
UK Office : +44 (0) 1707 378670

**Panasonic Heating & Ventilation Air-Conditioning UK Ltd.**  
Registered Office: Ground Floor, Building 3, Albany Place, Hyde Way,  
Welwyn Garden City, Hertfordshire AL7 3BT  
Company Registration: 02371708

**General requests Ireland**  
[ie-aircon-salesadmin@eu.panasonic.com](mailto:ie-aircon-salesadmin@eu.panasonic.com)

**Panasonic Ireland.**  
**A branch of Panasonic Marketing Europe GmbH**  
Panasonic Heating & Ventilation Air-Conditioning Europe  
Unit 1, The Courtyard, Kilcarbery Business Park  
Nangor Road, Dublin 22



 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.

