

## Electric air curtain with DX coil

Designed to improve energy efficiency, minimise heat loss from a building, and allow retailers to keep doors open to encourage customers, our air curtains are suitable for connection to both PACi NX and VRF Systems.



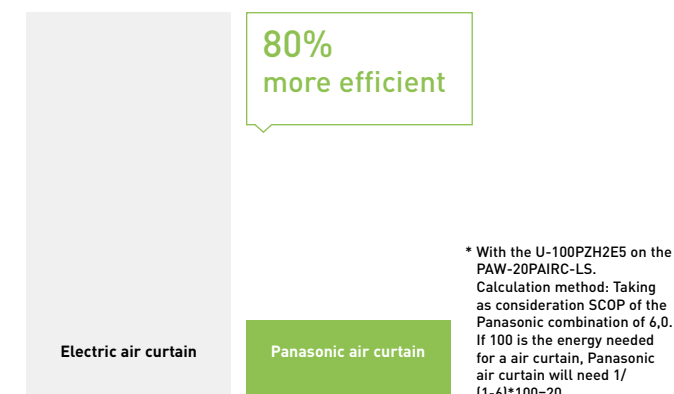
### Highly efficient heating effect

The combined air stream, which has a desirable low air current induction factor (mixing factor), can carry the selected initial temperature effect over long distances, and will reach the floor area while still at room temperature. This is necessary to avoid cooling down the interior spaces.

Available in different lengths to suit requirements between 1 and 2,5 m, both air curtains have outlet grilles that can be adjusted to five different positions. The HS model can be installed up to a height of 3,0 m with the LS model up to 2,7 m. The outlet grilles can be easily adjusted into five positions to suit different installation requirements and the air filter can be accessed without the need for specialist tools.

- High performance with EC fan motor (40% lower running costs compared to a standard AC fan motor)
- Easy Cleaning and Servicing
- Can be connected to either Panasonic VRF or PACi NX systems
- Drain pump for cooling operation optional
- HS and LS models can be controlled via Panasonic's range of remote internet controls

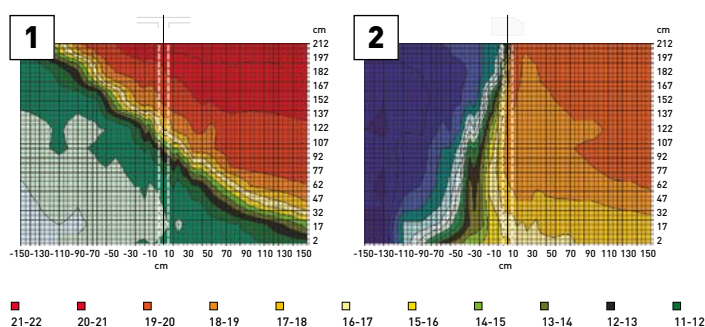
### Heating capacity comparison: Electrical air curtain / Panasonic air curtain.



The HS and LS models are ideal for connection to a ECOi or PACi NX system. With simple "Plug & Play" installation, both are fitted with an EC fan motor for a smooth operation and efficient performance. This fan guarantees 40% lower running cost than with a standard AC fan motor. Air curtains run approximately 12 hours per day at shops, and efficient performance contributes to energy savings.

### Optimised air flow velocity

- 1 | Energy losses, no air curtain installed
- 2 | Too low velocity air curtain – air curtain not efficient



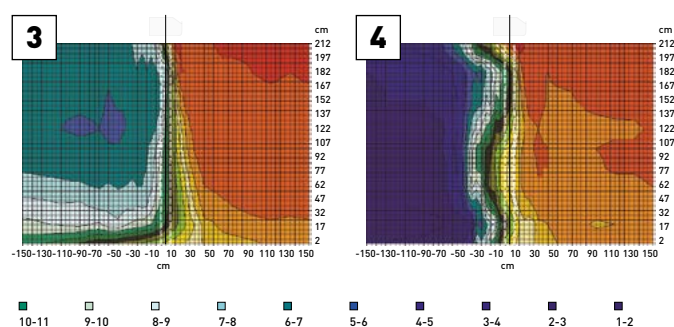
#### Opening without air curtain.

In an unprotected opening the cold air flows out and the cold storage room becomes much too warm.

#### Opening with air curtain, wrong angle.

If the angle is too small the hot air is blown into the cold storage room.

- 3 | Too high velocity air curtain – considerable turbulence, energy lost to the outside, air curtain not efficient
- 4 | Optimum results with the Frico air curtain connected to Panasonic VRF



#### Opening with air curtain, too high speed.

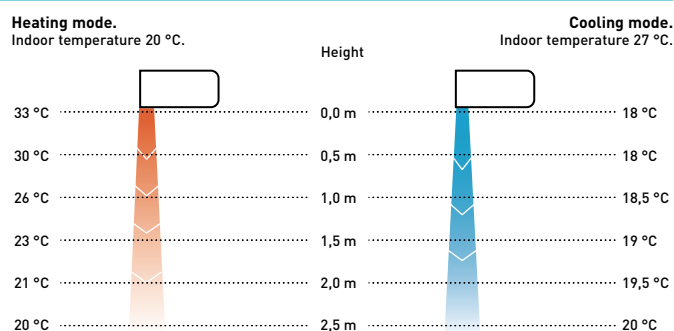
Excessive speed creates turbulence, which causes energy loss and increases the cold storage temperature.

#### Opening with correctly adjusted air curtain.

With a correctly set air curtain unit there is a sharp separation between the different temperature zones.

### Intelligent operation

Our air curtains combine air flow and heating / cooling technology to ensure optimum comfort and energy efficiency whilst also creating an effective barrier between indoor and outdoor environments. Design and installation is key to achieving the correct height / temperature settings to achieve optimum performance. Our air curtains are designed to answer the demands of the retail, commercial and industrial markets.



## Air curtain with DX coil, connected to VRF systems

**Comfort:** Easy redirection of air flow by means of manual deflector.

**Ease of use:** Speed selector (high and low) on the unit itself.

**Easy installation and maintenance:** Easy installation / Compact dimensions improve installation and positioning / Easy cleaning of grid without opening of the unit.



Outdoor unit capacity			4 HP	4 HP	5 HP	8 HP
Air outlet height 2,7 m			PAW-10EAIRC-LS	PAW-15EAIRC-LS	PAW-20EAIRC-LS	PAW-25EAIRC-LS
Cooling capacity <sup>1)</sup>	Max	kW	6,1	9,7	13,0	17,0
Heating capacity <sup>2)</sup>	Max	kW	7,9	12,0	15,0	19,0
Air flow	High	m <sup>3</sup> /h	1800	2700	3600	4500
Heat Exchanger	Volume	L	1,67	2,85	3,94	5,03
Electric consumption fan	230 V / 50 Hz	kW	0,30	0,50	0,60	0,80
Current	230 V / 50 Hz	A	2,10	3,10	4,10	5,10
Sound pressure <sup>3)</sup>	Max	dB(A)	65	66	67	69
Air outlet height 3,0 m			PAW-10EAIRC-HS	PAW-15EAIRC-HS	PAW-20EAIRC-HS	PAW-25EAIRC-HS
Cooling capacity <sup>1)</sup>	Max	kW	9,1	13,0	19,5	23,7
Heating capacity <sup>2)</sup>	Max	kW	11,8	15,8	23,6	27,6
Air flow	High	m <sup>3</sup> /h	2700	3600	5400	6300
Heat Exchanger	Volume	L	1,67	2,85	3,94	5,12
Electric consumption fan	230 V / 50 Hz	kW	0,75	1,00	1,50	1,75
Current	230 V / 50 Hz	A	4,10	5,50	8,20	9,60
Sound pressure <sup>3)</sup>	Max	dB(A)	66	67	68	68
Common data						
Dimension <sup>4)</sup>	H x W x D	mm	260 (+140) x 1000 x 460	260 (+140) x 1500 x 460	260 (+140) x 2000 x 460	260 (+140) x 2500 x 460
Net weight	Air outlet height 2,7 m	kg	50	65	80	95
	Air outlet height 3,0 m	kg	55	65	85	110
Fan type			EC	EC	EC	EC
Piping diameter	Liquid / Gas	Inch (mm)	3/8 (9,52) / 5/8 (15,88)	3/8 (9,52) / 3/4 (19,05)	3/8 (9,52) / 7/8 (22,22)	3/8 (9,52) / 7/8 (22,22)
Door width		m	1,0	1,5	2,0	2,5
Refrigerant			R32 / R410A	R32 / R410A	R32 / R410A	R32 / R410A

### LS / VRF outdoor combination

Operation until	40 °C	35 °C	30 °C
PAW-1EAIRC-LS	U-4	U-4	U-4
PAW-15EAIRC-LS	U-6	U-5	U-4
PAW-20EAIRC-LS	U-8	U-6	U-4
PAW-25EAIRC-LS	U-8	U-8	U-5

### HS / VRF outdoor combination

Operation until	40 °C	35 °C	30 °C
PAW-10EAIRC-HS	U-6	U-5	U-4
PAW-15EAIRC-HS	U-8	U-6	U-4
PAW-20EAIRC-HS	U-8	U-8	U-8
PAW-25EAIRC-HS	U-12	U-10	U-8

1) Cooling capacity DX coil, air temperature in / out +27 / +18 °C, R32 and R410. 2) Heating capacity condenser, air temperature in / out +20 / +33 °C, R32 and R410. In the case of lower outdoor temperatures, an outdoor model with higher capacity may be necessary. 3) Measured in distance up to 5,0 m, direction factor 2, absorbing surfaces 200 m<sup>2</sup>, Min / Max air flow. 4) 140 mm is the height of an electrical box if it is installed on the top. \* Also compatible with ECO G Series (GE3 and GF3) and Hybrid Serie.

## Technical focus

- Compatible with R32 and R410A refrigerant
- Save up to 40% energy costs by use of the integrated EC fan technology (higher efficiency than conventional AC fan, soft start and longer motor duration)
- 4 length of air curtain LS and HS are available 1,0, 1,5, 2,0 and 2,5 m
- Installation height up to 3,0 m
- Outlet grilles can be adjusted in five positions, to suite different indoor and installation requirements
- Control with Panasonic remote control systems (optional)
- Direct integration to BMS via optional Panasonic interfaces
- Drip tray included in all DX air curtains
- Drain pump optional

## Internet control

An app added to your tablet or smartphone or via the Internet allows you to control and manage the system remotely. There is also the option to integrate into existing BMS systems by using other Panasonic interfaces.

