

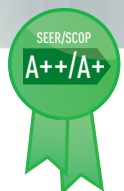
# NEW WALL MOUNTED PKEA

# Panasonic



## New Wall Mounted Professional with high efficiency even at -15 °C

High efficiency products for 24/7 applications  
 Panasonic has developed a complete range of solutions for server rooms which efficiently protect your servers, keeping them at an appropriate temperature even when the outdoor temperature is below -15°C.

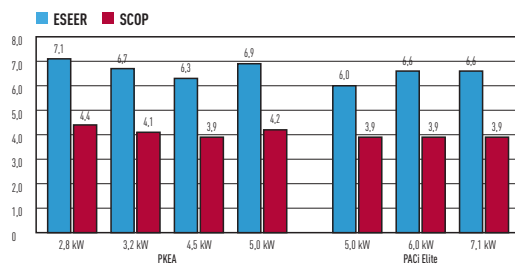


### Complete line-up with high efficiency even at -15°C

This Wall Mounted air conditioner is especially designed for professional applications such as computer rooms where cooling inside the room is necessary even when the outside temperature is low. Furthermore this air conditioner has an automatic changeover system, in order to maintain the inside temperature even when sharp outside temperature changes occur.

### High efficiency all the year

On 24/7 operation, the performance of the air conditioning is a key factor. When the efficiency is high, the return on investment of such units is quickly reached.



### High durability for 24/7 operation

#### Indoor fan. Cross-flow-fan

- High durability rolling bearings, large size (φ105mm) fan
- High efficiency blade
- Random pitch blade (low sound)

#### Compressor

- DC2P Panasonic original compressor, with high efficiency and reliability.
- High Efficiency Motor
- Improved Lubrication of High Volume Oil Pump
- Accumulator has Larger Refrigerant Capacity



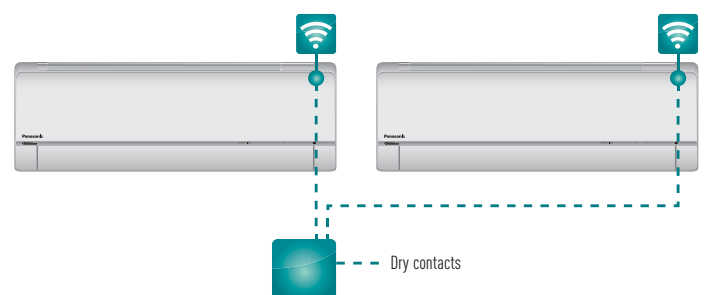
### Outdoor

- Cooling even when ambient temperature is as low as -15°C
- Electronic expansion valve (accurate sub-cooling and adjustable refrigerant flow)
- Outdoor DC fan motor to provide flexible air-flow to ensure optimum condensation pressure (works on outdoor pipe temperature sensor)

### Interface option to manage server room operation

The PAW-SERVER-PKEA server room interface manages redundancy and backup of two PKEA units with two different selectable modes:

- Plug and play by embedded redundancy and backup algorithm (no external signal needed. Further details please refer to operation manual)
  - External (third party PLC) redundancy and backup management by dry contact
- All settings are possible without the need for a computer connection.  
 A special Energy Saving Mode is selectable by deep switch (available only in plug and play mode).  
 The level of remote control input prohibition can be set when external management is by dry contact.



**WALL MOUNTED PROFESSIONAL  
INVERTER -15 °C ON COOLING MODE**

**KIT-E9-PKEA // KIT-E12-PKEA  
KIT-E15-PKEA // KIT-E18-PKEA**

**SOLUTIONS FOR SERVER ROOMS**

- New! This units can be installed on R22 pipings
- Designed for 24h/7d a week operation
- Highly efficient even at -15°C
- High durability rolling bearings
- Additional piping sensors to prevent freezing

- From 2,5 kW to 5 kW with PKEA units
- From 5 kW to 25 kW with PACi units
- Backup function
- Redundancy function
- Alternative run function
- Error information by dry contact
- Excellent performance with excellent ESEER



Included on the kit  
Timer remote controller



CU-E9PKEA  
CU-E12PKEA



CU-E15PKEA  
CU-E18PKEA

| KIT  |                          |                      | KIT-E9-PKEA                          | KIT-E12-PKEA                         | KIT-E15-PKEA                         | KIT-E18-PKEA                         |
|--|--------------------------|----------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| <b>Indoor</b>  |                          |                      | <b>CS-E9PKEA</b>                     | <b>CS-E12PKEA</b>                    | <b>CS-E15PKEA</b>                    | <b>CS-E18PKEA</b>                    |
| <b>Outdoor</b>   |                          |                      | <b>CU-E9PKEA</b>                     | <b>CU-E12PKEA</b>                    | <b>CU-E15PKEA</b>                    | <b>CU-E18PKEA</b>                    |
| Cooling capacity                                       | Nominal (Min-Max)        | kW / kCal/h          | 2,50 (0,85-3,00) / 2.150 (730-2.580) | 3,50 (0,85-4,00) / 3.010 (730-3.440) | 4,20 (0,98-5,00) / 3.610 (840-4.300) | 5,00 (0,98-6,00) / 4.300 (840-5.160) |
| Cooling capacity at -10°C                              | Nominal                  | kW                   | 2,63                                 | 3,69                                 | 5,04                                 | 6,00                                 |
| EER at -10°C   | Nominal                  | Energy Saving        | 7,19                                 | 5,96                                 | 6,01                                 | 6,00                                 |
| Cooling capacity at -15°C                              | Nominal                  | kW                   | 2,61                                 | 3,66                                 | 4,06                                 | 5,82                                 |
| EER at -15°C   | Nominal                  | Energy Saving        | 6,71                                 | 5,56                                 | 4,39                                 | 5,39                                 |
| <b>ESEER</b>   | <b>Nominal</b>           | <b>Energy Saving</b> | <b>7,1 A++</b>                       | <b>6,7 A++</b>                       | <b>6,3 A++</b>                       | <b>6,9 A++</b>                       |
| Pdesign  |                          | kW                   | 2,5                                  | 3,5                                  | 4,2                                  | 5,0                                  |
| Power input Cooling                                    | Nominal (Min-Max)        | kW                   | 0,515 (0,170-0,710)                  | 0,870 (0,170-1,120)                  | 1,200 (0,280-1,580)                  | 1,440 (0,280-1,990)                  |
| Annual electricity consumption (cooling) <sup>1)</sup> |                          | kWh/a                | 123                                  | 183                                  | 233                                  | 254                                  |
| Heating capacity                                       | Nominal (Min-Max)        | kW / kCal/h          | 3,40 (0,85-5,40) / 2.920 (730-4.640) | 4,00 (0,85-6,60) / 3.440 (730-5.680) | 5,40 (0,98-7,10) / 4.640 (840-6.110) | 5,80 (0,98-8,00) / 4.990 (840-6.880) |
| Heating capacity at -7°C                               | Nominal                  | kW                   | 3,33                                 | 4,07                                 | 4,10                                 | 4,98                                 |
| <b>SCOP</b>  | <b>Nominal</b>           | <b>Energy Saving</b> | <b>4,4 A+</b>                        | <b>4,1 A+</b>                        | <b>3,9 A</b>                         | <b>4,2 A+</b>                        |
| Pdesign at -10 °C                                      |                          | kW                   | 2,8                                  | 3,6                                  | 3,6                                  | 4,4                                  |
| Power input Heating                                    | Nominal (Min-Max)        | kW                   | 0,700 (0,165-1,310)                  | 0,920 (0,165-1,820)                  | 1,440 (0,340-2,190)                  | 1,520 (0,340-2,570)                  |
| Annual electricity consumption (heating) <sup>1)</sup> |                          | kWh/a                | 891                                  | 1.229                                | 1.292                                | 1.467                                |
| <b>Indoor Unit</b>                                     |                          |                      |                                      |                                      |                                      |                                      |
| Power source   |                          | V                    | 230                                  | 230                                  | 230                                  | 230                                  |
| Recommended Fuse                                       |                          | A                    | 16                                   | 16                                   | 16                                   | 16                                   |
| Connection indoor / outdoor                            |                          | mm                   | 4 x 1,5                              | 4 x 1,5                              | 4 x 1,5                              | 4 x 2,5                              |
| Current (Nominal)                                      | Cooling / Heating        | A                    | 2,5 / 3,3                            | 4,0 / 4,2                            | 5,4 / 6,5                            | 6,4 / 6,8                            |
| Max. Current   |                          | A                    | 7,8                                  | 8,4                                  | 9,6                                  | 11,3                                 |
| Air Volume   | Cooling / Heating        | m³/h                 | 798 / 876                            | 816 / 882                            | 846 / 900                            | 1.074 / 1.158                        |
| Moisture removal volume                                |                          | l/h                  | 1,5                                  | 2,0                                  | 2,4                                  | 2,8                                  |
| Sound pressure level <sup>1)</sup>                     | Cooling (Hi / Lo / S-Lo) | dB(A)                | 39 / 26 / 23                         | 42 / 29 / 26                         | 43 / 32 / 29                         | 44 / 37 / 34                         |
|  | Heating (Hi / Lo / S-Lo) | dB(A)                | 40 / 27 / 24                         | 42 / 33 / 29                         | 43 / 35 / 29                         | 44 / 37 / 34                         |
| Sound power level                                      | Cooling / Heating (Hi)   | dB                   | 55 / 56                              | 58 / 58                              | 59 / 59                              | 60 / 60                              |
| Dimensions / Net weight                                | H x W x D                | mm / kg              | 295 x 870 x 255 / 10                 | 295 x 870 x 255 / 10                 | 295 x 870 x 255 / 10                 | 295 x 1.070 x 255 / 13               |
| <b>Outdoor Unit</b>                                    |                          |                      |                                      |                                      |                                      |                                      |
| Air Volume   | Cooling / Heating        | m³/h                 | 1.878 / 1.782                        | 1.974 / 1.926                        | 2.052 / 1.980                        | 2.352 / 2.274                        |
| Sound pressure level <sup>1)</sup>                     | Cooling / Heating (Hi)   | dB(A)                | 46 / 47                              | 48 / 50                              | 46 / 46                              | 47 / 47                              |
| Sound power level                                      | Cooling / Heating (Hi)   | dB                   | 61 / 62                              | 63 / 65                              | 61 / 61                              | 61 / 61                              |
| Dimensions <sup>2)</sup> / Net weight                  | H x W x D                | mm / kg              | 622 x 824 x 299 / 36                 | 622 x 824 x 299 / 36                 | 695 x 875 x 320 / 45                 | 695 x 875 x 320 / 46                 |
| Piping connections                                     | Liquid pipe / Gas pipe   | inch (mm)            | 1/4" (6,35) / 3/8" (9,52)            | 1/4" (6,35) / 3/8" (9,52)            | 1/4" (6,35) / 1/2" (12,70)           | 1/4" (6,35) / 1/2" (12,70)           |
| Refrigerant loading                                    | R410A                    | kg                   | 1.100                                | 1.100                                | 1,060                                | 1,240                                |
| Elevation difference (in/out) <sup>3)</sup>            | Max                      | m                    | 5                                    | 5                                    | 15                                   | 15                                   |
| Piping length  | Min / Max                | m                    | 3-15                                 | 3-15                                 | 3-15                                 | 3-20                                 |
| Precharge length                                       | Max                      | m                    | 7,5                                  | 7,5                                  | 7,5                                  | 7,5                                  |
| Additional charge                                      |                          | g/m                  | 20                                   | 20                                   | 20                                   | 20                                   |
| Operating range  | Cooling Min / Max        | °C                   | -15 / +43                            | -15 / +43                            | -15 / +43                            | -15 / +43                            |
|  | Heating Min / Max        | °C                   | -15 / +24                            | -15 / +24                            | -15 / +24                            | -15 / +24                            |

Rating Conditions: Cooling Indoor 27°C DB / 19°C WB. Cooling Outdoor 35°C DB / 24°C WB. Heating Indoor 20°C DB. Heating Outdoor 7°C DB / 6°C WB. (DB: Dry Bulb; WB: Wet Bulb)  
Rating Conditions for cooling capacity at low temperature: Cooling Indoor 27°C DB / 19°C WB. Cooling Outdoor 0°C DB / -10°C WB.

1) The Sound pressure level of the units shows the value measured of a position 1 meter in front of the main body and 1.5 m from the ground The sound pressure is measured in accordance with Eurovent 6/C/006-97 specification. 2) Add 70 mm for piping port. 3) When installing the outdoor unit at a higher position than the indoor unit.  
Recommended fuse for the indoor 3A.  
Specifications subject to change without notice.  
For detailed information about ERP, please visit our page <http://www.ptc.panasonic.eu>

**Internet Control Ready**

The A Inverter system provides energy savings of up to 50%. Both you and nature wins!

**7,10 A++ SEER**

Exceptional Seasonal Cooling Efficiency based on the new ERP regulation. Higher SEER ratings mean greater efficiency. Save all the year while cooling!

**4,40 A+ SCOP**

Exceptional Seasonal Heating Efficiency based on the new ERP regulation. Higher SCOP ratings mean greater efficiency. Save all the year while heating!

**Down to -15°C in cooling mode**

The air conditioner works in cooling only mode with an outdoor temperature of -15°C.

**Down to -15°C in heating mode**

The air conditioner works in heat pump mode even when outdoor temperatures are as low as -15°C.

**Easy control by BMS**

The communication port is integrated into the indoor unit and provides easy connection to, and control of, your Panasonic heat pump to your home or building management system.

**Possible to use on R22 pipings**

R22 Renewal Old systems using R22 refrigerant can be easily replaced with Panasonic solution.

**R22 Renewal**

New Panasonic R2 Rotary Compressor. Designed to withstand extreme conditions, Panasonic Rotary delivers high performance, efficiency and reliable service, no matter where you are.

**5 year compressor warranty**

5 Years Warranty. We guarantee the compressors in the entire range for five years.

**Panasonic**

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

Panasonic Marketing Europe GmbH  
Panasonic Air Conditioning  
Hagenauer Strasse 43, 65203 Wiesbaden, Germany

heatingandcoolingsystems

