

# PCA-M R32 Ceiling Suspended System

## Power Inverter Heat Pump (Three Phase)



The **PCA-M Power Inverter** range is a ceiling suspended system that blends a host of outstanding features with a sophisticated streamlined design. Offering high seasonal efficiency, advanced control options and extended pipe runs, this range is an extremely flexible solution for commercial applications.

### Key Features & Benefits

- Increased comfort levels through advanced airflow and smart defrost features
- 100m pipe run, increasing application capability
- Energy monitoring & 14°C set point option as standard; ideal for applications where a specialist ambient condition is required (requires PAR-41MAA controller)
- High / Low ceiling height modes
- Flush to wall installation for concealment of service connections
- Full heating capacity down to -3°C
- 'Backup and rotate' feature to reduce load on individual units and prolong product life (requires PAR-41MAA controller)



| PCA-M - INDOOR UNITS                 |                        | PCA-M100KA2                | PCA-M125KA2                 | PCA-M140KA2                 |
|--------------------------------------|------------------------|----------------------------|-----------------------------|-----------------------------|
| CAPACITY (kW)                        | Heating (nominal)      | 11.2 (4.5-14.0)            | 14.0 (5.0-16.0)             | 16.0 (5.7-18.0)             |
|                                      | Cooling (nominal)      | 9.5 (4.9-11.4)             | 12.5 (5.5-14.0)             | 13.4 (6.2-15.0)             |
|                                      | Heating (UK)           | 9.5 (3.85-11.9)            | 11.9 (4.25-13.6)            | 13.6 (4.85-15.3)            |
|                                      | Cooling (UK)           | 9.2 (4.5-10.5)             | 11.5 (5.05-12.9)            | 12.9 (5.7-13.8)             |
| SHF (nominal)                        |                        | 0.77                       | 0.72                        | 0.72                        |
| COP / EER (nominal)                  |                        | 3.71 / 4.10                | 3.54 / 3.25                 | 3.61 / 3.40                 |
| SCOP (ηsh) / SEER (ηsc) (BS EN14825) |                        | 4.3 / 6.3                  | 4.3 (168.8%) / 6.1 (249.5%) | 4.4 (173.5%) / 6.1 (247.6%) |
| ERP ENERGY EFFICIENCY CLASS          | Heating/Cooling        | A+ / A++                   | -                           | -                           |
| AIRFLOW (l/s)                        | Lo-Mi1-Mi2-Hi          | 367-400-433-467            | 383-417-450-483             | 400-433-483-533             |
| PIPE SIZE MM (in)                    | Gas/Liquid             | 15.88 (5/8") / 9.52 (3/8") | 15.88 (5/8") / 9.52 (3/8")  | 15.88 (5/8") / 9.52 (3/8")  |
| SOUND PRESSURE LEVEL (dBA)           | Lo-Mi1-Mi2-Hi          | 37-39-41-43                | 39-41-43-45                 | 41-43-45-48                 |
| SOUND POWER LEVEL (dBA)              |                        | 63                         | 65                          | 68                          |
| DIMENSIONS (mm)                      | Width x Depth x Height | 1600 x 680 x 230           | 1600 x 680 x 230            | 1600 x 680 x 230            |
| WEIGHT (kg)                          |                        | 37                         | 38                          | 40                          |
| ELECTRICAL SUPPLY                    |                        | Fed by Outdoor Unit        | Fed by Outdoor Unit         | Fed by Outdoor Unit         |
| FUSE RATING (BS88) - HRC (A)         |                        | 6                          | 6                           | 6                           |
| INTERCONNECTING CABLE                | No. Cores              | 4                          | 4                           | 4                           |
| WIRED REMOTE CONTROLLER REFERENCE    |                        | PAR-41MAA                  | PAR-41MAA                   | PAR-41MAA                   |
| WIRELESS REMOTE CONTROLLER REFERENCE |                        | PAR-SL94B                  | PAR-SL94B                   | PAR-SL94B                   |

| PUZ-ZM - OUTDOOR UNITS                                           |                           | PUZ-ZM100YKA2 <sup>[3]</sup> | PUZ-ZM125YKA2 <sup>[3]</sup> | PUZ-ZM140YKA2 <sup>[3]</sup> |
|------------------------------------------------------------------|---------------------------|------------------------------|------------------------------|------------------------------|
| SOUND PRESSURE LEVEL (dBA)                                       | Heating/Cooling           | 51 / 49                      | 52 / 50                      | 52 / 50                      |
| SOUND POWER LEVEL (dBA)                                          | Cooling                   | 69                           | 70                           | 70                           |
| WEIGHT (kg)                                                      |                           | 111                          | 114                          | 118                          |
| DIMENSIONS (mm)                                                  | Width x Depth x Height    | 1050 x 330 + 40 x 1338       | 1050 x 330 + 40 x 1338       | 1050 x 330 + 40 x 1338       |
| ELECTRICAL SUPPLY                                                |                           | 380-415v,50Hz                | 380-415v,50Hz                | 380-415v,50Hz                |
| PHASE                                                            |                           | Three                        | Three                        | Three                        |
| SYSTEM POWER INPUT (kW)                                          | Heating/Cooling (nominal) | 3.018 / 2.317                | 3.954 / 3.846                | 4.432 / 3.941                |
|                                                                  | Heating/Cooling (UK)      | 2.41 / 1.99                  | 3.51 / 3.26                  | 3.94 / 3.35                  |
| STARTING CURRENT (A)                                             |                           | 2.6                          | 3.3                          | 3.3                          |
| SYSTEM RUNNING CURRENT (A)                                       | Heating/Cooling [MAX]     | 4.34 / 3.31 [8.7]            | 5.69 / 5.54 [10.3]           | 6.42 / 5.71 [13.9]           |
| FUSE RATING (BS88) - HRC (A)                                     |                           | 16                           | 16                           | 16                           |
| MAINS CABLE NO. CORES                                            |                           | 5                            | 5                            | 5                            |
| MAX PIPE LENGTH (m)                                              |                           | 100                          | 100                          | 100                          |
| MAX HEIGHT DIFFERENCE (m)                                        |                           | 30                           | 30                           | 30                           |
| CHARGE REFRIGERANT (kg) / CO <sub>2</sub> EQUIVALENT (t)         | R32 (GWP 675) - 40m       | 3.60 / 2.43                  | 3.60 / 2.43                  | 3.60 / 2.43                  |
| MAX ADDITIONAL REFRIGERANT (kg) / CO <sub>2</sub> EQUIVALENT (t) | R32 (GWP 675)             | 2.40 / 1.62                  | 2.40 / 1.62                  | 2.40 / 1.62                  |

<sup>[3]</sup> Three Phase

## Accessories

### Indoor Units

#### PAR-SL94B

Wireless remote controller and adaptor for PCA-M100-140KA2

### Outdoor Units

#### PAC-SH96SG

Air outlet guide for PUZ-ZM100-140YKA2

#### PAC-SJ71FM-E

30Pa outdoor fan motor for PUZ-ZM100-140YKA2

### System Control Units

#### PAC-SA89TA

Remote on/off adaptor (3 wire adaptor)

#### PAC-SA88HA

Run/fault adaptor (5 wire adaptor)

#### PAC-SE41TS-E

Remote sensor

#### PAR-CT01MAA-SB/PB

Touch screen wired remote controller (PB=Premium Finish)

#### PAR-41MAA

Standard wired remote controller

#### MAC-5871F-E

Interface for connection to Wi-Fi MELCloud service

#### MELCOBEMS MINI (A1M+)

Modbus and BACnet MSTP CN105 adaptor

#### MELCORETAIL MINI

Retail control and input / output interface

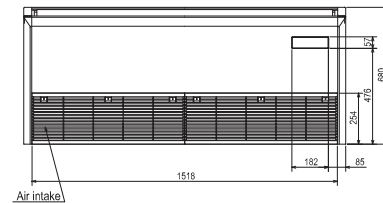
#### PAC-SJ95MA

M-NET adaptor for size 100 to 140

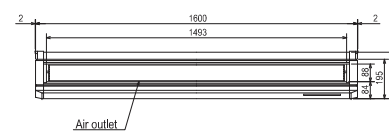
## Product Dimensions

### PCA-M100/125/140KA2

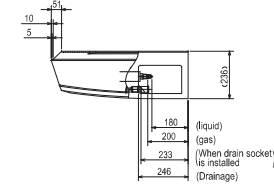
Lower View



Front View



Side View



Note: Please see page 1.3.66 for the full range of accessories.