

# PUMY-SP R410A Inverter Heat Pump

(12.5-15.5kW)

## Multi-Split Units

The **PUMY-SP** Inverter Heat Pump system allows up to 10 indoor units to be connected to one single fan outdoor unit. Compatibility with City Multi, Mr Slim and the stylish M Series indoor units makes this an extremely flexible, economic, and energy-efficient solution for multi-room applications. With a slimline design and operation modes relevant to built-up areas, these systems are ideal for high-end residential and smaller commercial applications in city centres, or areas with limited outdoor space.

### Key Features & Benefits

- Low height, small footprint, long pipe-runs and wall-hanging capability provides flexibility of install
- Compatible with M Series, Mr Slim and City Multi indoor units (M Series & Mr Slim units via branch box or LEV Kit)
- Choice of operation mode: 'silent mode' for noise sensitive areas or 'demand control' for maximum efficiency
- Unique fan capability provides 30 Pascals of static pressure as standard



| PUMY-SP - OUTDOOR UNITS                                          |                                  | PUMY-SP112VKM2        | PUMY-SP112YKM2        | PUMY-SP125VKM2        | PUMY-SP125YKM2        | PUMY-SP140VKM2        | PUMY-SP140YKM2        |
|------------------------------------------------------------------|----------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| NUMBER OF CONNECTABLE INDOOR UNITS                               | Branch box / Mixed <sup>*1</sup> | 8 / 10                | 8 / 10                | 8 / 10                | 8 / 10                | 8 / 10                | 8 / 10                |
| CAPACITY (kW)                                                    | Heating (nominal)                | 14.0                  | 14.0                  | 16.0                  | 16.0                  | 16.5                  | 16.5                  |
|                                                                  | Cooling (nominal)                | 12.5                  | 12.5                  | 14.0                  | 14.0                  | 15.5                  | 15.5                  |
|                                                                  | Heating (UK)                     | 14.0                  | 14.0                  | 16.0                  | 16.0                  | 16.5                  | 16.5                  |
|                                                                  | Cooling (UK)                     | 9.8                   | 9.8                   | 11.0                  | 11.0                  | 12.2                  | 12.2                  |
| COP / EER (nominal)                                              |                                  | 3.83 / 2.80           | 3.83 / 2.80           | 3.71 / 2.74           | 3.71 / 2.74           | 3.78 / 2.90           | 3.78 / 2.90           |
| MAX AIRFLOW (m³/min)                                             |                                  | 77                    | 77                    | 83                    | 83                    | 83                    | 83                    |
| SOUND PRESSURE LEVEL (dBA)                                       |                                  | 52                    | 52                    | 53                    | 53                    | 54                    | 54                    |
| SOUND POWER LEVEL (dBA)                                          | Cooling                          | 72                    | 72                    | 73                    | 73                    | 74                    | 74                    |
| DIMENSIONS (mm)                                                  | Width x Depth x Height           | 1050 x 330+40 x 981   | 1050 x 330+40 x 981   | 1050 x 330+40 x 981   | 1050 x 330+40 x 981   | 1050 x 330+40 x 981   | 1050 x 330+40 x 981   |
| WEIGHT (kg)                                                      |                                  | 93                    | 94                    | 93                    | 94                    | 93                    | 94                    |
| ELECTRICAL SUPPLY                                                |                                  | 220-240v, 50Hz        | 380-415v, 50Hz        | 220-240v, 50Hz        | 380-415v, 50Hz        | 220-240v, 50Hz        | 380-415v, 50Hz        |
| PHASE                                                            |                                  | Single                | Three                 | Single                | Three                 | Single                | Three                 |
| POWER INPUT (kW)                                                 | Heating/Cooling (nominal)        | 3.66 / 4.46           | 3.66 / 4.46           | 4.31 / 5.11           | 4.31 / 5.11           | 4.36 / 5.34           | 4.36 / 5.34           |
|                                                                  | Heating/Cooling (UK)             | 4.69 / 2.08           | 4.69 / 2.08           | 5.52 / 2.38           | 5.52 / 2.38           | 5.58 / 2.49           | 5.58 / 2.49           |
| STARTING CURRENT (A)                                             |                                  | 14                    | 7                     | 14                    | 7                     | 14                    | 7                     |
| RUNNING CURRENT (A)                                              | Heating/Cooling [MAX]            | 16.24 / 19.79 [30.5]  | 5.57 / 6.78 [13.0]    | 19.13 / 22.68 [30.5]  | 6.55 / 7.77 [13.0]    | 19.35 / 23.70 [30.5]  | 6.63 / 8.12 [13.0]    |
| FUSE RATING (BS88) - HRC (A)                                     |                                  | 1 x 32                | 1 x 16                | 1 x 32                | 1 x 16                | 1 x 32                | 1 x 16                |
| PIPE SIZE MM (in)                                                | Gas                              | 15.88 (5/8")          | 15.88 (5/8")          | 15.88 (5/8")          | 15.88 (5/8")          | 15.88 (5/8")          | 15.88 (5/8")          |
|                                                                  | Liquid                           | 9.52 (3/8")           | 9.52 (3/8")           | 9.52 (3/8")           | 9.52 (3/8")           | 9.52 (3/8")           | 9.52 (3/8")           |
| TOTAL PIPING LENGTH (M)                                          | Branch box / Mixed <sup>*1</sup> | 120                   | 120                   | 120                   | 120                   | 120                   | 120                   |
| FURTHEST PIPING LENGTH (M)                                       | (with no branch boxes)           | 80 (70)               | 80 (70)               | 80 (70)               | 80 (70)               | 80 (70)               | 80 (70)               |
| BETWEEN BRANCH BOXES AND OUTDOOR UNIT - LENGTH (m)               |                                  | 55                    | 55                    | 55                    | 55                    | 55                    | 55                    |
| BETWEEN BRANCH BOXES AND INDOOR UNIT - LENGTH (m)                |                                  | 25                    | 25                    | 25                    | 25                    | 25                    | 25                    |
| BETWEEN INDOOR AND OUTDOOR UNIT - HEIGHT (m)                     |                                  | 50m max <sup>*2</sup> | 50m max <sup>*2</sup> | 50m max <sup>*2</sup> | 50m max <sup>*2</sup> | 50m max <sup>*2</sup> | 50m max <sup>*2</sup> |
| BETWEEN INDOOR AND INDOOR UNITS - HEIGHT (m)                     |                                  | 12                    | 12                    | 12                    | 12                    | 12                    | 12                    |
| CHARGE REFRIGERANT (kg) / CO <sub>2</sub> EQUIVALENT (T)         | R410A (GWP 2088)                 | 3.5 / 7.31            | 3.5 / 7.31            | 3.5 / 7.31            | 3.5 / 7.31            | 3.5 / 7.31            | 3.5 / 7.31            |
| MAX ADDITIONAL REFRIGERANT (kg) / CO <sub>2</sub> EQUIVALENT (T) | R410A (GWP 2088)                 | 9.0 / 18.79           | 9.0 / 18.79           | 9.0 / 18.79           | 9.0 / 18.79           | 9.0 / 18.79           | 9.0 / 18.79           |

**Notes:** <sup>\*1</sup> Branch box - only using branch boxes (PAC-MK) on the system. **Mixed** - using a mix of branch boxes (PAC-MK) and City Multi indoor units on the same system. <sup>\*2</sup> 40m max if outdoor installed below. 30m if mixed system.  
SCOP / SEER available separately in the 'City Multi VRF Seasonal Efficiency' document. Based on Ecodesign Lot 6 to EN14825 standard.

| PAC-MK - BRANCH BOX                      |                                              | PAC-MK53BC                    |
|------------------------------------------|----------------------------------------------|-------------------------------|
| NUMBER OF CONNECTABLE INDOOR UNITS       |                                              | 5                             |
| COMPATIBLE INDOOR UNITS                  |                                              | M Series, Mr Slim             |
| WEIGHT (kg)                              |                                              | 7.9                           |
| DIMENSIONS (mm)                          | Width x Depth x Height                       | 450 x 280 x 170               |
| POWER SUPPLY TO BRANCH BOX <sup>*1</sup> | From outdoor unit                            | 3 core + earth                |
|                                          | Separate supply                              | 220-240v, 50Hz / Single Phase |
|                                          | Separate supply fuse rating (BS88) - HRC (A) | 6                             |
| POWER SUPPLY TO INDOOR UNITS             | From branch box                              | 3 core + earth                |

**Note:** <sup>\*1</sup> Either option is available for power supply from outdoor unit OR from a separate supply.

| PAC-LV - LEV KIT INTERFACE         |                        | PAC-LV11M                     |
|------------------------------------|------------------------|-------------------------------|
| NUMBER OF CONNECTABLE INDOOR UNITS |                        | 1                             |
| COMPATIBLE INDOOR UNITS            |                        | M Series                      |
| CAPACITY INDEX OF INDOOR UNITS     |                        | 15 to 50                      |
| WEIGHT (kg)                        |                        | 3.5                           |
| DIMENSIONS (mm)                    | Width x Depth x Height | 355 x 142 x 138               |
| ELECTRICAL SUPPLY                  |                        | 220-240v, 50Hz / Single Phase |
| FUSE RATING (BS88) - HRC (A)       |                        | 6                             |

**Note:** The indoor unit connected to the PAC-LV11 cannot be grouped with other City Multi indoor units. Group control with other M Series indoor units + PAC-LV11 is possible via ME controller or system controller only. Group control is not possible via an MA controller, IT terminal or wireless remote controller. ME control functions energy management, charge apportioning, interlock and free contact are not available.

## Accessories

### Outdoor Units

#### CMY-Y62-G-E

Branch pipe (2 branches) for PUMY

### System Control Units

#### PAR-CT01MAA-SB/PB

Touch screen wired remote controller (PB = Premium finish)

#### MAC-334IF-E

Interface for M-NET, MA remote controller (PAR-41MAA / PAR-CT01MAA), on/off input and run/fault output

#### MAC-497IF-E

Interface for MA remote controller (PAR-41MAA / PAR-CT01MAA)

#### MAC-587IF-E

Interface for connection to Wi-Fi MELCloud service

#### PAR-41MAA

Standard wired remote controller

#### MELCOBEMS MINI (A1M+)

Modbus and BACnet MSTP CN105 adaptor

#### MELCORETAIL MINI

Retail control and input / output interface

## Product Dimensions

### PUMY-SP112/125/140VKM2/YKM2

