

# Y Series Twin Fan

## (12.5-33.5kW)

Mini VRF Heat Pump Outdoor Unit

**CITY MULTI**

VRF technology and efficiency can now be delivered in both small and large capacities, offering a cost-effective solution to connect up to 30 indoor units to one small, powerful, mini VRF unit.

Delivering VRF efficiency, quality and functionality, with the additional flexibility of being free-standing or wall-hung, this side-blow unit makes the most of even the smallest plant spaces. Ideal for high specification residential and retail spaces in city centres.



### Key Features & Benefits:

- Small footprint, long pipe-runs and wall-hanging capability provides flexibility of install.
- Broad compatibility across M Series, Mr Slim\* and City Multi indoor units, providing design choice.
- 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, allowing extra sound attenuation or the ability to duct discharge air away from the unit.
- Available in both single and three phase options.\*\*

\*Mr Slim units available for use with PUMY-P112 - P200 units only.

\*\*Three Phase only for PUMY-P200-300 units.



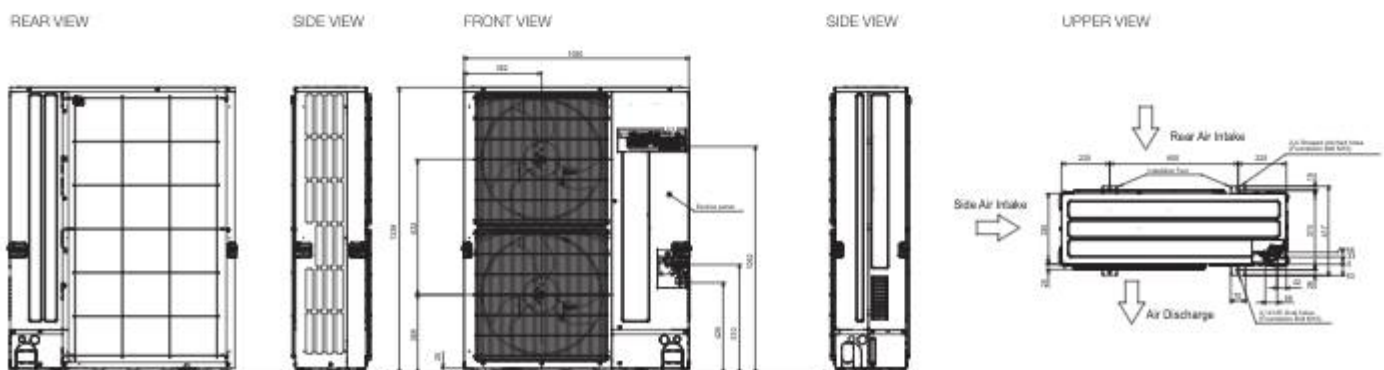


| OUTDOOR UNITS   |                   | PUMY-P112VKM5        | PUMY-P112YKM4 <sup>[1]</sup> | PUMY-P125VKM5        | PUMY-P125YKM4 <sup>[1]</sup> | PUMY-P140VKM5        | PUMY-P140YKM4 <sup>[1]</sup> | PUMY-P200YKM2 <sup>[1,2]</sup> |
|---|-------------------|----------------------|------------------------------|----------------------|------------------------------|----------------------|------------------------------|--------------------------------|
| CAPACITY (kW)   | Heating (nominal) | 14                   | 14                           | 16                   | 16                           | 18                   | 18                           | 25                             |
|   | Cooling (nominal) | 12.5                 | 12.5                         | 14                   | 14                           | 15.5                 | 15.5                         | 22.4                           |
| POWER INPUT (kW)  | Heating (UK)      | 13.9                 | 13.9                         | 15.8                 | 15.8                         | 17.8                 | 17.8                         | 24.8                           |
|   | Cooling (UK)      | 10.0                 | 10.0                         | 11.2                 | 11.2                         | 12.4                 | 12.4                         | 17.9                           |
| CDP / EER (nominal)   | Heating (nominal) | 3.04                 | 3.04                         | 3.74                 | 3.74                         | 4.47                 | 4.47                         | 5.84                           |
|   | Cooling (nominal) | 2.79                 | 2.79                         | 3.46                 | 3.46                         | 4.52                 | 4.52                         | 6.05                           |
|   | Heating (UK)      | 4.0                  | 4.0                          | 4.9                  | 4.9                          | 5.9                  | 5.9                          | 7.7                            |
| SCOP (η <sub>sh</sub> ) / SEER (η <sub>sh</sub> ) (BS EN14825) <sup>1</sup>       | Cooling (UK)      | 1.6                  | 1.6                          | 1.9                  | 1.9                          | 2.5                  | 2.5                          | 3.4                            |
|   | Heating (nominal) | 4.61 / 4.48          | 4.61 / 4.48                  | 4.28 / 4.05          | 4.28 / 4.05                  | 4.03 / 3.43          | 4.03 / 3.43                  | 4.28 / 3.70                    |
| MAX NO. OF CONNECTABLE INDOOR UNITS   | Cooling (nominal) | 4.84 / 6.55          | 4.84 / 6.55                  | 4.63 / 6.6           | 4.63 / 6.6                   | 4.14 / 6.25          | 4.14 / 6.25                  | 4.14 / 6.26                    |
|   | Heating (UK)      | 9                    | 9                            | 10                   | 10                           | 12                   | 12                           | 12                             |
| MAX CONNECTABLE CAPACITY  | Heating (UK)      | 50-130% O/U Capacity | 50-130% O/U Capacity         | 50-130% O/U Capacity | 50-130% O/U Capacity         | 50-130% O/U Capacity | 50-130% O/U Capacity         | 50-130% O/U Capacity           |
|   | Cooling (UK)      | 110                  | 110                          | 110                  | 110                          | 110                  | 110                          | 139                            |
| AIRFLOW (m <sup>3</sup> /min)   | Heating (UK)      | 15.88 (5/8")         | 15.88 (5/8")                 | 15.88 (5/8")         | 15.88 (5/8")                 | 15.88 (5/8")         | 15.88 (5/8")                 | 19.05 (3/4")                   |
|   | Cooling (UK)      | 9.52 (3/8")          | 9.52 (3/8")                  | 9.52 (3/8")          | 9.52 (3/8")                  | 9.52 (3/8")          | 9.52 (3/8")                  | 9.52 (3/8") <sup>2</sup>       |
| PIPE SIZE mm (in)   | Heating (UK)      | 49                   | 49                           | 50                   | 50                           | 51                   | 51                           | 56                             |
|   | Cooling (UK)      | 69                   | 69                           | 70                   | 70                           | 71                   | 71                           | 75                             |
| SOUND PRESSURE LEVEL (dBA)  | Heating (UK)      | 122                  | 125                          | 122                  | 125                          | 122                  | 125                          | 141                            |
|   | Cooling (UK)      | 1050                 | 1050                         | 1050                 | 1050                         | 1050                 | 1050                         | 1050                           |
| DIMENSIONS (mm)   | Depth             | 330+40               | 330+40                       | 330+40               | 330+40                       | 330+40               | 330+40                       | 330+40                         |
|   | Height            | 1338                 | 1338                         | 1338                 | 1338                         | 1338                 | 1338                         | 1338                           |
|   | Weight            | 1338                 | 1338                         | 1338                 | 1338                         | 1338                 | 1338                         | 1338                           |
| ELECTRICAL SUPPLY   | Heating (UK)      | 220-240v, 50Hz       | 380-415v, 50Hz               | 220-240v, 50Hz       | 380-415v, 50Hz               | 220-240v, 50Hz       | 380-415v, 50Hz               | 380-415v, 50Hz                 |
|   | Cooling (UK)      | Single               | Three                        | Single               | Three                        | Single               | Three                        | Three                          |
| STARTING CURRENT (A)  | Heating (UK)      | 14                   | 7                            | 14                   | 7                            | 14                   | 7                            | 7                              |
|   | Cooling (UK)      | 13.42 / 12.32 [29.5] | 5.16 / 4.74 [13.0]           | 16.51 / 15.27 [29.5] | 6.00 / 5.55 [13.0]           | 19.73 / 19.95 [29.5] | 6.79 / 6.87 [13.0]           | 8.74 / 9.05 [19.0]             |
| GUARANTEED OPERATING RANGE (°C)   | Heating (UK)      | -20-15 / -5-46       | -20-15 / -5-46               | -20-15 / -5-46       | -20-15 / -5-46               | -20-15 / -5-46       | -20-15 / -5-46               | -20-15 / -5-46                 |
|   | Cooling (UK)      | 1 x 32               | 1 x 16                       | 1 x 32               | 1 x 16                       | 1 x 32               | 1 x 16                       | 1 x 20                         |
| FUSE RATING (BS88) - HRC (A)  | Heating (UK)      | 3                    | 4 + earth                    | 3                    | 4 + earth                    | 3                    | 4 + earth                    | 4 + earth                      |
|   | Cooling (UK)      | 4.8 / 10.0           | 4.8 / 10.0                   | 4.8 / 10.0           | 4.8 / 10.0                   | 4.8 / 10.0           | 4.8 / 10.0                   | 7.3 / 15.2                     |
| MAX.ADDITIONAL REFRIGERANT (KG) / CO <sub>2</sub> EQUIVALENT (T) R410A (GWP 2088) | Heating (UK)      | 13.7 / 28.6          | 13.7 / 28.6                  | 13.7 / 28.6          | 13.7 / 28.6                  | 13.7 / 28.6          | 13.7 / 28.6                  | 13.5 / 28.2                    |
|   | Cooling (UK)      |                      |                              |                      |                              |                      |                              |                                |

<sup>1</sup> Three Phase **Notes:** <sup>1</sup> SEER/SCOP available separately in the 'City Multi VRF Seasonal Efficiency' document. Based on Ecodesign Lot 21/6 to EN14825 standard. <sup>2</sup> 12.7mm (1/2") if furthest length ≥ 60m.

| PIPING RESTRICTIONS                       | PUMY-P112-140VKM/YKM4                        | PUMY-P200YKM2                                |
|---|--|--|
| TOTAL PIPING LENGTH                       | 300m max                                     | 150m max                                     |
| FURTHEST PIPING LENGTH                    | 150m max                                     | 80m max                                      |
| FURTHEST PIPING LENGTH AFTER 1st BRANCH   | 30m max                                      | 30m max                                      |
| BETWEEN INDOOR AND OUTDOOR UNITS - HEIGHT | 50m max (40m max if outdoor installed below) | 50m max (40m max if outdoor installed below) |
| BETWEEN INDOOR AND INDOOR UNITS - HEIGHT  | 15m max                                      | 15m max                                      |

### PUMY-P112/125/140/200VKM5/YKM(4)(2) DIMENSIONS





| OUTDOOR UNITS   |                   | PUMY-P250YBM                                 | PUMY-P300YBM          |
|---|-------------------|--|-----------------------|
| CAPACITY (kW)   | Heating (nominal) | 31.5   | 37.5                  |
|   | Cooling (nominal) | 28   | 33.5                  |
|   | Heating (UK)      | 27.9   | 33.2                  |
|   | Cooling (UK)      | 21.6   | 25.8                  |
|   |                   |  |                       |
| POWER INPUT (kW)  | Heating (nominal) | 7.41   | 9.12                  |
|   | Cooling (nominal) | 6.21   | 10.12                 |
|   | Heating (UK)      | 9.8  | 12.0                  |
|   | Cooling (UK)      | 3.9  | 4.9                   |
|   |                   |  |                       |
| COP / EER (nominal)   |                   | 4.25 / 3.41                                  | 4.11 / 3.31           |
| SCOP (η <sub>slh</sub> ) / SEER (η <sub>slh</sub> ) (BS EN14825)*1                |                   | 4.22 / 6.51                                  | 4.35 / 6.76           |
| MAX NO. OF CONNECTABLE INDOOR UNITS   |                   | 30   | 30                    |
| MAX CONNECTABLE CAPACITY  |                   | 50-130% OU Capacity                          | 50-130% OU Capacity   |
| AIRFLOW (m <sup>3</sup> /min)   |                   | 183  | 183                   |
| PIPE SIZE mm (in)   | Gas               | 22.4 (7/8")                                  | 25.4 (1")             |
|   | Liquid            | 9.52 (3/8")                                  | 12.7 (1/2")           |
| SOUND PRESSURE LEVEL (dBA)  |                   | 55   | 57                    |
| SOUND POWER LEVEL (dBA)   |                   | 73   | 75                    |
| WEIGHT (kg)   |                   | 196  | 196                   |
| DIMENSIONS (mm)   | Width             | 1050   | 1050                  |
|   | Depth             | 480+45                                       | 480+45                |
|   | Height            | 1662   | 1662                  |
| ELECTRICAL SUPPLY   |                   | 380-415v, 50Hz                               | 380-415v, 50Hz        |
| PHASE   |                   | Three  | Three                 |
| STARTING CURRENT (A)  |                   | 7  | 7                     |
| NOMINAL SYSTEM RUNNING CURRENT (A)  |                   | Heating / Cooling (MAX) 11.51 / 12.68 (28.4) | 14.01 / 15.54 (31.74) |
| GUARANTEED OPERATING RANGE (°C)   |                   | Heating / Cooling -20~-15 / -5~-52           | -20~-15 / -5~-52      |
| FUSE RATING (BS88) - HRC (A)  |                   | 1 x 30                                       | 1 x 32                |
| MAINS CABLE No. Cores   |                   | 4 + earth                                    | 4 + earth             |
| CHARGE REFRIGERANT (kg) / CO <sub>2</sub> EQUIVALENT (T) R410A (GWP 2088)         |                   | 9.3 / 19.4                                   | 9.3 / 19.4            |
| MAX.ADDITIONAL REFRIGERANT (KG) / CO <sub>2</sub> EQUIVALENT (T) R410A (GWP 2088) |                   | 22.4 / 46.8                                  | 22.4 / 46.8           |

③ Three Phase **Notes:** \*1 SEER/SCOP available separately in the 'City Multi VRF Seasonal Efficiency' document. Based on Ecodesign Lot 21/6 to EN14825 standard.

| PIPING RESTRICTIONS                       | PUMY-P250-300YBM |
|---|------------------|
| TOTAL PIPING LENGTH                       | 310m             |
| FURTHEST PIPING LENGTH                    | 150m             |
| FURTHEST PIPING LENGTH AFTER 1st BRANCH   | 30m              |
| BETWEEN INDOOR AND OUTDOOR UNITS - HEIGHT | 50m / 40m        |
| BETWEEN INDOOR AND INDOOR UNITS - HEIGHT  | 15m              |

**PUMY-P250-300YBM DIMENSIONS**

