

## PRODUCT INFORMATION<sup>(1)</sup>

Model(s): Information to identify the model(s) to which the information relates:

Outdoor: PUHZ-ZRP140VKA3

Indoor: PEAD-M140JA2

Outdoor side heat exchanger of air conditioner: air

Indoor side heat exchanger of air conditioner: air

Type: compressor driven vapour compression

If applicable: driver of compressor: electric motor

| Item                                                                                                            | Symbol               | Value | Unit | Item                                                                               | Symbol              | Value | Unit |
|-----------------------------------------------------------------------------------------------------------------|----------------------|-------|------|------------------------------------------------------------------------------------|---------------------|-------|------|
| Rated cooling capacity                                                                                          | $P_{\text{rated,c}}$ | 13,40 | kW   | Seasonal space cooling energy efficiency                                           | $\eta_{\text{s,c}}$ | 217,3 | %    |
| Declared cooling capacity for part load at given outdoor temperatures $T_j$ and indoor 27°/19 °C (dry/wet bulb) |                      |       |      | Declared energy efficiency ratio for part load at given outdoor temperatures $T_j$ |                     |       |      |
| $T_j = + 35 \text{ °C}$                                                                                         | $P_{\text{dc}}$      | 13,40 | kW   | $T_j = + 35 \text{ °C}$                                                            | $EER_d$             | 3,10  | –    |
| $T_j = + 30 \text{ °C}$                                                                                         | $P_{\text{dc}}$      | 10,00 | kW   | $T_j = + 30 \text{ °C}$                                                            | $EER_d$             | 4,80  | –    |
| $T_j = + 25 \text{ °C}$                                                                                         | $P_{\text{dc}}$      | 6,40  | kW   | $T_j = + 25 \text{ °C}$                                                            | $EER_d$             | 6,60  | –    |
| $T_j = + 20 \text{ °C}$                                                                                         | $P_{\text{dc}}$      | 4,30  | kW   | $T_j = + 20 \text{ °C}$                                                            | $EER_d$             | 7,20  | –    |
| Degradation co-efficient for air conditioners(*)                                                                | $C_{\text{dc}}$      | 0,25  | –    |                                                                                    |                     |       |      |

### Power consumption in modes other than 'active mode'

|                     |                  |       |    |                       |                 |       |    |
|---------------------|------------------|-------|----|-----------------------|-----------------|-------|----|
| Off mode            | $P_{\text{OFF}}$ | 0,015 | kW | Crankcase heater mode | $P_{\text{CK}}$ | 0,000 | kW |
| Thermostat-off mode | $P_{\text{TO}}$  | 0,026 | kW | Standby mode          | $P_{\text{SB}}$ | 0,015 | kW |

### Other items

|                                                |                                                                                                    |             |                                          |                                                                 |   |      |                       |
|------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------|------------------------------------------|-----------------------------------------------------------------|---|------|-----------------------|
| Capacity control                               | variable                                                                                           |             |                                          | For air-to-air air conditioner: air flow rate, outdoor measured | – | 7200 | $\text{m}^3/\text{h}$ |
| Sound power level, indoor/outdoor              | $L_{\text{WA}}$                                                                                    | 66,0 / 70,0 | dB                                       |                                                                 |   |      |                       |
| If engine driven: Emissions of nitrogen oxides | $\text{NO}_x(**)$                                                                                  | –           | mg/kWh fuel input GCV                    |                                                                 |   |      |                       |
| GWP of the refrigerant                         |                                                                                                    | 2088        | kg $\text{CO}_2_{\text{eq}}$ (100 years) |                                                                 |   |      |                       |
| Contact details                                | MITSUBISHI ELECTRIC CORPORATION SHIZUOKA WORKS 3-18-1, Oshika, Suruga-ku, Shizuoka 422-8528, Japan |             |                                          |                                                                 |   |      |                       |

(\*) If  $C_{\text{dc}}$  is not determined by measurement then the default degradation coefficient air conditioners shall be 0,25.

(\*\*) From 26 September 2018.

Where information relates to multi-split air conditioners, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.

(1) This information is based on COMMISSION REGULATION (EU) 2016/2281

### Recycle

Your MITSUBISHI ELECTRIC product is designed and manufactured with high quality materials and components which can be recycled and reused.

Electrical and electronic equipment, at their end-of-life, should be disposed of separately from your household waste.

Please, dispose of this equipment at your local community waste collection/recycling center.

In the European Union there are separate collection systems for used electrical and electronic product.

Please, help us to conserve the environment we live in!

## PRODUCT INFORMATION<sup>(1)</sup>

Information to identify the model(s) to which the information relates:

Outdoor: PUHZ-ZRP140VKA3

Indoor: PEAD-M140JA2

Outdoor side heat exchanger of heat pump: air

Indoor side heat exchanger of heat pump: air

Indication if the heater is equipped with a supplementary heater: no

If applicable: driver of compressor: electric motor

Parameters shall be declared for the average heating season, parameters for the warmer and colder heating seasons are optional.

| Item                                                                                              | Symbol                                                                                             | Value       | Unit                              |  | Item                                                                                           | Symbol       | Value | Unit              |
|---------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------|-----------------------------------|--|------------------------------------------------------------------------------------------------|--------------|-------|-------------------|
| Rated heating capacity                                                                            | $P_{rated,h}$                                                                                      | 16,00       | kW                                |  | Seasonal space heating energy efficiency                                                       | $\eta_{s,h}$ | 156,3 | %                 |
| Declared heating capacity for part load at indoor temperature 20 °C and outdoor temperature $T_j$ |                                                                                                    |             |                                   |  | Declared coefficient of performance for part load at given outdoor temperatures $T_j$          |              |       |                   |
| $T_j = -7\text{ °C}$                                                                              | $P_{dh}$                                                                                           | 9,40        | kW                                |  | $T_j = -7\text{ °C}$                                                                           | $COP_d$      | 2,90  | –                 |
| $T_j = +2\text{ °C}$                                                                              | $P_{dh}$                                                                                           | 6,00        | kW                                |  | $T_j = +2\text{ °C}$                                                                           | $COP_d$      | 4,20  | –                 |
| $T_j = +7\text{ °C}$                                                                              | $P_{dh}$                                                                                           | 3,70        | kW                                |  | $T_j = +7\text{ °C}$                                                                           | $COP_d$      | 4,40  | –                 |
| $T_j = +12\text{ °C}$                                                                             | $P_{dh}$                                                                                           | 4,00        | kW                                |  | $T_j = +12\text{ °C}$                                                                          | $COP_d$      | 5,20  | –                 |
| $T_{biv}$ = bivalent temperature                                                                  | $P_{dh}$                                                                                           | 10,60       | kW                                |  | $T_{biv}$ = bivalent temperature                                                               | $COP_d$      | 2,30  | –                 |
| $T_{OL}$ = operation limit                                                                        | $P_{dh}$                                                                                           | 7,90        | kW                                |  | $T_{OL}$ = operation limit                                                                     | $COP_d$      | 1,80  | –                 |
| For air-to-water heat pumps: $T_j = -15\text{ °C}$ (if $T_{OL} < -20\text{ °C}$ )                 | $P_{dh}$                                                                                           | –           | kW                                |  | For water-to-air heat pumps: $T_j = -15\text{ °C}$ (if $T_{OL} < -20\text{ °C}$ )              | $COP_d$      | –     | –                 |
| Bivalent temperature                                                                              | $T_{biv}$                                                                                          | -10         | °C                                |  | For water-to-air heat pumps: Operation limit temperature                                       | $T_{oi}$     | –     | °C                |
|                                                                                                   |                                                                                                    |             |                                   |  |                                                                                                |              |       |                   |
| Degradation co-efficient heat pumps(**)                                                           | $C_{dh}$                                                                                           | 0,25        | –                                 |  |                                                                                                |              |       |                   |
| Power consumption in modes other than 'active mode'                                               |                                                                                                    |             |                                   |  | Supplementary heater                                                                           |              |       |                   |
| Off mode                                                                                          | $P_{OFF}$                                                                                          | 0,015       | kW                                |  | Back-up heating capacity (*)                                                                   | elbu         | 0,000 | kW                |
| Thermostat-off mode                                                                               | $P_{TO}$                                                                                           | 0,041       | kW                                |  | Type of energy input                                                                           |              |       |                   |
| Crankcase heater mode                                                                             | $P_{CK}$                                                                                           | 0,000       | kW                                |  | Standby mode                                                                                   | $P_{SB}$     | 0,015 | kW                |
| Other items                                                                                       |                                                                                                    |             |                                   |  |                                                                                                |              |       |                   |
| Capacity control                                                                                  | variable                                                                                           |             |                                   |  | For air-to-air heat pumps: air flow rate, outdoor measured                                     | –            | 7200  | m <sup>3</sup> /h |
| Sound power level, indoor/outdoor                                                                 | $L_{WA}$                                                                                           | 66,0 / 72,0 | dB                                |  | For water/brine-to-air heat pumps: Rated brine or water flow rate, outdoor side heat exchanger | –            | –     | m <sup>3</sup> /h |
| Emissions of nitrogen oxides (if applicable)                                                      | $NO_x$ (***)                                                                                       | –           | mg/kWh fuel input GCV             |  |                                                                                                |              |       |                   |
| GWP of the refrigerant                                                                            |                                                                                                    | 2088        | kg CO <sub>2</sub> eq (100 years) |  |                                                                                                |              |       |                   |
| Contact details                                                                                   | MITSUBISHI ELECTRIC CORPORATION SHIZUOKA WORKS 3-18-1, Oshika, Suruga-ku, Shizuoka 422-8528, Japan |             |                                   |  |                                                                                                |              |       |                   |

(\*)

(\*\*) If  $C_{dh}$  is not determined by measurement then the default degradation coefficient of heat pumps shall be 0,25.

(\*\*\*) From 26 September 2018.

Where information relates to multi-split heat pumps, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.

(1) This information is based on COMMISSION REGULATION (EU) 2016/2281