

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

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

Outdoor: PUZ-ZM140VKA

Indoor: PLA-ZM71EAx2 units

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   | $\eta_{\text{s,c}}$ | 320,8 | %    |
| 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   |  | $T_j = + 35 \text{ °C}$  | $EER_d$             | 3,69  | –    |
| $T_j = + 30 \text{ °C}$   | $P_{\text{dc}}$      | 9,90  | kW   |  | $T_j = + 30 \text{ °C}$  | $EER_d$             | 6,00  | –    |
| $T_j = + 25 \text{ °C}$   | $P_{\text{dc}}$      | 6,40  | kW   |  | $T_j = + 25 \text{ °C}$  | $EER_d$             | 9,20  | –    |
| $T_j = + 20 \text{ °C}$   | $P_{\text{dc}}$      | 4,50  | kW   |  | $T_j = + 20 \text{ °C}$  | $EER_d$             | 16,60 | –    |
| 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 | $P_{\text{TO}}$  | 0,003 | 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              | $L_{\text{WA}}$  | – / 70,0 | dB                                    |  |   |   |      |                       |
| If engine driven: Emissions of nitrogen oxides | $\text{NO}_x(\text{**})$   | –        | mg/kWh fuel input GCV                 |  |   |   |      |                       |
| GWP of the refrigerant                         |  | 675      | 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: PUZ-ZM140VKA

Indoor: PLA-ZM71EAx2 units

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   | $\eta_{s,h}$ | 198,5 | %                 |
| 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 $T_j$          |              |       |                   |
| $T_j = -7\text{ °C}$  | $P_{dh}$   | 9,30     | kW                                | $T_j = -7\text{ °C}$   | $COP_d$      | 2,80  | –                 |
| $T_j = +2\text{ °C}$  | $P_{dh}$   | 5,70     | kW                                | $T_j = +2\text{ °C}$   | $COP_d$      | 5,00  | –                 |
| $T_j = +7\text{ °C}$  | $P_{dh}$   | 4,00     | kW                                | $T_j = +7\text{ °C}$   | $COP_d$      | 7,00  | –                 |
| $T_j = +12\text{ °C}$   | $P_{dh}$   | 3,90     | kW                                | $T_j = +12\text{ °C}$  | $COP_d$      | 8,80  | –                 |
| $T_{biv}$ = bivalent temperature  | $P_{dh}$   | 10,60    | kW                                | $T_{biv}$ = bivalent temperature   | $COP_d$      | 2,60  | –                 |
| $T_{OL}$ = operation limit  | $P_{dh}$   | 7,90     | kW                                | $T_{OL}$ = operation limit   | $COP_d$      | 1,70  | –                 |
| 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                                       | $T_{ol}$     | –     | °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 (*)   | $e_{bu}$     | 0,000 | kW                |
| Thermostat-off mode   | $P_{TO}$   | 0,015    | 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   | $L_{WA}$   | – / 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  |  | 675      | 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.

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