PRODUCT INFORMATION
PUHY-P\*\*\*YNW-A2(-BS)
PUHY-EP\*\*\*YNW-A2(-BS)
For Europe Regulation

|  |  |                       |                                   |            | 1 0111111111(1)  |           |              |      |              |
|--|--|-----------------------|-----------------------------------|------------|--|-----------|--------------|------|--------------|
| Model(s): Information to id<br>Outdoor: PUHY-P2                  |  |                       |                                   |            | information relates: PEFY-M50VMA-A1×4 units  |           |              |      |              |
| Outdoor heat exchanger of  |  |                       |                                   | Γ.         | PEF Y-M30VMA-A1×4 units  |           |              |      |              |
| Indoor heat exchanger of ai                                      |  |                       |                                   | _          |  |           |              |      |              |
| Type: compressor driven va                                       |  |                       |                                   | _          |  |           |              |      |              |
| if applicable: driver of com                                     |  |                       | otor                              | _          |  |           |              |      |              |
| Item   | Symbol   | Value                 | Unit                              | _          | Item Symbol  |           | Valu         | ıe   | Unit         |
| Rated cooling capacity   | P <sub>rated,c</sub>                             | 22.40                 | kW                                |            | Seasonal space cooling $\eta_{s,c}$ energy efficiency  |           | 303.         | 0    | %            |
| Declared cooling capacity temperatures T <sub>j</sub> and indoor |  |                       |                                   |            | Declared energy efficiency ratio or auxiliary energy factor for partemperatures $T_j$                                  |           |              |      |              |
| $T_i = +35  ^{\circ}\text{C}$                                    | Pdc  | 22.40                 | $\log kW$                         |            | $T_j = +35  ^{\circ}\text{C}$ EER <sub>d</sub>   |           | 3.71         |      | <del>%</del> |
| $T_{i} = +30  {}^{\circ}\text{C}$                                | Pdc  | 16.51                 | kW                                |            | $T_i = +30  ^{\circ}\text{C}$ EER <sub>d</sub>   |           | 5.72         |      | <del>%</del> |
| $T_{i} = +25  {}^{\circ}\text{C}$                                | Pdc  | 10.61                 | kW                                |            | $T_i = +25  ^{\circ}\text{C}$ EER <sub>d</sub>   |           | 9.70         |      | <del>%</del> |
| $T_{i} = +20  {}^{\circ}\text{C}$                                | Pdc  | 7.19                  | kW                                |            | $T_i = +20  ^{\circ}\text{C}$ EER <sub>d</sub>   |           | 14.9         | 4    | <del>%</del> |
| Degradation co-efficient air conditioners**                      | $C_d$  | 0.25                  | -                                 |            |  |           |              |      |              |
| Power consumption in mod   | es other th                                      | han 'activ            | e mode'                           |            |  |           |              |      |              |
| Off mode Thermostat-off mode                                     | $\begin{array}{c} P_{OFF} \\ P_{TO} \end{array}$ | 0.069                 | kW<br>kW                          |            | $ \begin{array}{ccc} \text{Crankcase heater mode} & P_{\text{CK}} \\ \text{Standby mode} & P_{\text{SB}} \end{array} $ |           | 0.00<br>0.06 |      | kW<br>kW     |
| Other items  |  |                       |                                   |            |  |           |              |      |              |
| Capacity control   | variable   |                       |                                   |            | For air-to-air air conditioner: Nominal air flow rate, outdoor measured  | 10200     |              | m³/h |              |
| Sound power level, outdoor                                       | L <sub>WA</sub>                                  | 75                    | dB                                |            |  |           |              |      |              |
| if engine driven:<br>Emissions of nitrogen<br>oxides             |  | -                     | mg/kWh<br>fuel input<br>GCV       |            |  |           |              |      |              |
| GWP of the refrigerant   |  | 2088                  | kg CO <sub>2 ep</sub> (100 years) |            |  |           |              |      |              |
| Contact details  | Amata N<br>Muang, 0                              | akorn Ind<br>Chonburi | dustrial Esta<br>20000, Tha       | te,<br>ila |  | Roh, Am   | phur         |      |              |
| ** If C <sub>d</sub> is not determined b                         | y measure  | ement the             | en the defaul                     | t (        | degradation coefficient air condition  | ers shall | be 0.2       | 25.  |              |
| Where information relates  | to multi-s                                       | plit air co           | onditioners,                      | th         | e test result and performance data m   | ay be ob  | taine        | d 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

| Model(s): Information to id                               | -                    |              |                       |     |  |              |            |        |        |                |
|---|----------------------|--------------|-----------------------|-----|--|--------------|------------|--------|--------|----------------|
| Outdoor: PUHY-P2  |                      |              | Indoo                 | or: | PEFY-M50VMA-A1×4 u                               | nits         |            |        |        |                |
| Outdoor heat exchanger of                                 |                      |              |                       |     |  |              |            |        |        |                |
| Indoor heat exchanger of he                               |                      |              |                       | _   |  |              |            |        |        |                |
| Indication if the heater is ed                            |                      |              |                       |     |  | 1            | 11 1       |        |        |                |
| Parameters shall be declar                                | ed for the           | e average    | e heating se          | as  | son, parameters for the wa                       | armer and    | colder h   | eating | sea    | isons are      |
| optional.   | Symbol               | <b>V</b> 7-1 | T T :4                |     | T4   | C11          |            | Valı   |        | T I:4          |
| Item  | Symbol               | Value        | Unit                  | 1   | Item Seasonal space heating                      | Symbol       |            | v an   | ie –   | Unit           |
| Rated heating capacity                                    | P <sub>rated,h</sub> | 22.40        | kW                    |     | energy efficiency                                | $\eta_{s,h}$ |            | 171.   |        | %              |
| Declared heating capacit                                  | y for p              | art load     | at indoor             |     | Declared coefficient o                           |              |            |        |        |                |
| temperature 20 °C and outo                                |                      |              |                       |     | efficiency / auxiliary en                        | nergy facto  | or for p   | art lo | ad     | at given       |
|   | _                    |              | _                     |     | outdoor temperatures T <sub>j</sub>              | COD          |            |        |        |                |
| $T_j = -7$ °C   | Pdh                  | 10.11        | kW                    |     | $T_j = -7$ °C                                    | $COP_d$      |            | 2.13   |        | <del>9/0</del> |
| $T_j = +2$ °C   | Pdh                  | 6.15         | kW                    |     | $T_j = +2$ °C                                    | $COP_d$      |            | 4.63   |        | <del>9/0</del> |
| $T_j = +7$ °C   | Pdh                  | 3.96         | kW                    |     | $T_j = +7$ °C                                    | $COP_d$      |            | 5.90   |        | <del>9/0</del> |
| $T_j = +12  ^{\circ}C$                                    | Pdh                  | 6.04         | kW                    |     | $T_j = +12 ^{\circ}\text{C}$                     | $COP_d$      |            | 8.18   |        | <del>0/0</del> |
| $T_j$ = bivalent temperature                              | Pdh                  | 11.43        | kW                    |     | $T_j$ = bivalent temperature                     | $COP_d$      |            | 1.95   |        | <del>0/o</del> |
| T <sub>j</sub> = operation limit<br>For air-to-water heat | Pdh                  | 11.43        | kW                    |     | $T_j$ = operation limit<br>For water-to-air heat | $COP_d$      |            | 1.95   |        | <del>0/0</del> |
| pumps: $T_i = -15$ °C (if $T_{OL}$                        |                      |              | kW                    |     | pumps: $T_j = -15$ °C (if                        | $COP_d$      |            |        |        | <u>0/o</u>     |
| <- 20 °C)   | 1 un                 | -            | IK VV                 |     | $T_{OL} < -20 ^{\circ}\text{C}$                  | COId         |            | [      |        | <del>70</del>  |
| (-20 C)   |                      |              | 1                     |     | For water-to-air heat                            |              |            |        |        |                |
| Rivolant tamparatura                                      | $T_{biv}$            | -10.0        | l <sub>°C</sub>       |     | pumps: Operation limit                           | $T_{ol}$     |            |        |        | °C             |
| Bivalent temperature                                      | 1 biv                | -10.0        |                       |     | temperature                                      | 1 ol         |            | Ī      |        | C              |
|   |                      |              | +                     |     | lemperature                                      |              |            |        |        |                |
| Degradation co-efficient                                  |                      |              | +                     |     |  |              |            |        |        |                |
| Degradation co-efficient heat pumps**                     | $C_{dh}$             | 0.25         | -                     |     |  |              |            |        |        |                |
| ^ _   |                      |              |                       | ł   |  |              |            |        |        |                |
| Power consumption in mod                                  | es other tl          | han 'activ   | e mode'               |     | Supplementary heater                             |              |            |        |        |                |
| 0.00 1  | D                    | 0.000        | ], ,,,                |     | Electric back-up                                 | 11           |            | 0.000  |        | 1 337          |
| Off mode  | $P_{OFF}$            | 0.069        | kW                    |     | heating capacity *                               | elbu         |            | 0.000  |        | kW             |
| Thermostat-off mode                                       | $P_{TO}$             | 0.129        | kW                    |     | Type of energy input                             |              |            |        |        |                |
| Crankcase heater mode                                     | $P_{CK}$             | 0.029        | kW                    |     | Standby mode                                     | $P_{SB}$     |            | 0.146  |        | kW             |
| Other items   |                      | ·            |                       | 1   |  | 1            |            |        |        |                |
|   |                      |              |                       |     | For air-to-air heat                              |              |            |        |        |                |
| Camacity control  | variable             |              |                       |     | pumps: Nominal air                               |              | 10200      | ,      | n³/h   |                |
| Capacity control  | Variable             |              |                       |     | flow rate, outdoor                               | -            | 10200      | 1      | 11-/11 |                |
|   |                      |              |                       |     | measured   |              |            |        |        |                |
| Sound power level, indoor                                 |                      |              |                       |     | For water-/brine-to-air                          |              |            |        |        |                |
| / outdoor measured  | $L_{WA}$             | 77           | dB                    |     | heat pumps: Rated                                |              |            |        |        |                |
|   |                      |              |                       |     | brine or water flow                              | -            | -          | r      | n³/h   |                |
| Emissions of nitrogen                                     | NO                   | _            | mg/kWh                |     | rate, outdoor heat                               |              |            |        |        |                |
| oxides (if applicable)                                    | 110 <sub>X</sub>     |              | mg/k vv n             |     | exchanger  |              |            |        |        |                |
| CYVP 0.1  |                      | 2000         | kg CO <sub>2 ep</sub> |     |  |              |            |        |        |                |
| GWP of the refrigerant                                    |                      | 2088         | (100 years)           |     |  |              |            |        |        |                |
|   | MITGUE               | iciii Ei     |                       |     | JOHNED DRADHOTO (T                               | IIAII ANID   | ) CO 1     | TD     |        |                |
| C44-4:1-  | 1                    |              |                       |     | NSUMER PRODUCTS (T                               |              | -          |        |        |                |
| Contact details   | 1                    |              |                       |     | , 700/406 Moo 7, Tambon                          | Don Hua F    | con, Am    | pnur   |        |                |
| ** If C <sub>d</sub> is not determined b                  |                      |              | 20000, Tha            |     |  | hant numa    | s shall be | 0.25   |        |                |
|   |                      |              |                       |     |  |              |            |        |        |                |
| Where information relates                                 |                      |              |                       |     |  |              |            |        |        |                |
| of the performance of the o                               | utdoor un            | it, with a   | combination           | n ( | of indoor unit(s) recommer                       | nded by the  | manufa     | cturer | or iı  | nporter.       |

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

| Model(s): Information to id                             | -                    |            |                                   | e: | information relates:   |             |        |      |                |
|---|----------------------|------------|-----------------------------------|----|--|-------------|--------|------|----------------|
| Outdoor:PUHY-P2   |                      |            | Indoo                             | r: | PEFY-M63VMA-A1×4 units   |             |        |      |                |
| Outdoor heat exchanger of                               |                      |            |                                   |    |  |             |        |      |                |
| Indoor heat exchanger of ai                             |                      |            |                                   |    |  |             |        |      |                |
| Type: compressor driven va                              | •                    | •          |                                   |    |  |             |        |      |                |
| if applicable: driver of com                            |                      |            |                                   |    |  |             |        |      |                |
| Item  | Symbol               | Value      | Unit                              |    | Item Symbol  |             | Valu   | ie   | Unit           |
| Rated cooling capacity                                  | $P_{\text{rated},c}$ | 28.00      | kW                                |    | Seasonal space cooling $\eta_{s,c}$ energy efficiency  |             | 273.   | 0    | %              |
| Declared cooling capacity temperatures $T_j$ and indoor |                      |            |                                   |    | Declared energy efficiency ratio or<br>auxiliary energy factor for part<br>temperatures T <sub>i</sub> | -           |        |      | -              |
| $T_j = +35  ^{\circ}\mathrm{C}$                         | Pdc                  | 28.00      | kW                                |    | $T_j = +35 \text{ °C}$ EER <sub>d</sub>  |             | 2.91   |      | <del>%</del>   |
| $T_{i} = +30  {}^{\circ}\text{C}$                       | Pdc                  | 20.63      | kW                                |    | $T_i = +30  ^{\circ}\text{C}$ EER <sub>d</sub>   |             | 4.74   |      | 0/0            |
| $T_i = +25  ^{\circ}\text{C}$                           | Pdc                  | 13.26      | kW                                |    | $T_i = +25  ^{\circ}\text{C}$ EER <sub>d</sub>   |             | 8.78   | _    | <del>0/0</del> |
| $T_i = +20  ^{\circ}\text{C}$                           | Pdc                  | 7.24       | kW                                |    | $T_i = +20  ^{\circ}\text{C}$ EER <sub>d</sub>   |             | 14.9   |      | <del>0/0</del> |
| 1, 200  | 1 de                 | 7.27       | - "                               |    | I DER  |             | 14.7   |      | 70             |
| Degradation co-efficient air conditioners**             | $C_d$                | 0.25       | -                                 |    |  |             |        |      |                |
| Power consumption in mod                                | es other t           | han 'activ | e mode'                           |    |  |             |        |      |                |
| -   |                      |            | ,                                 |    |  |             |        | _    |                |
| Off mode  | $P_{OFF}$            | 0.069      | kW                                |    | Crankcase heater mode P <sub>CK</sub>  |             | 0.00   |      | kW             |
| Thermostat-off mode                                     | P <sub>TO</sub>      | 0.029      | kW                                |    | Standby mode P <sub>SB</sub>   |             | 0.06   | 9    | kW             |
| Other items   |                      |            |                                   |    | _  |             |        |      |                |
| Capacity control  | variable             |            |                                   |    | For air-to-air air conditioner: Nominal air flow rate, outdoor measured                                | 11100       |        | m³/h |                |
| Sound power level, outdoor                              | $L_{WA}$             | 78         | dB                                |    |  |             |        |      |                |
| if engine driven:<br>Emissions of nitrogen<br>oxides    |                      | -          | mg/kWh<br>fuel input<br>GCV       |    |  |             |        |      |                |
| GWP of the refrigerant                                  |                      | 2088       | kg CO <sub>2 ep</sub> (100 years) |    |  |             |        |      |                |
|   |                      |            |                                   |    | ISUMER PRODUCTS (THAILANI  |             |        |      |                |
| Contact details   | 1                    |            | lustrial Esta<br>20000, Tha       |    | 700/406 Moo 7, Tambon Don Hua I  | Roh, Am     | phur   |      |                |
| ** If C <sub>4</sub> is not determined b                |                      |            |                                   |    | legradation coefficient air conditions   | ers shall l | be 0.2 | 25.  |                |
| u   |                      |            |                                   |    |  |             |        |      |                |

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

| Model(s): Information to id  |                      |   |              |                                     | •.                    |   |                   |  |  |  |  |  |
|--|----------------------|---|--------------|-------------------------------------|-----------------------|---|-------------------|--|--|--|--|--|
| Outdoor: PUHY-P250YNW-A2(-BS) Indoor: PEFY-M63VMA-A1×4 units  Outdoor heat exchanger of air conditioner: air |                      |   |              |                                     |                       |   |                   |  |  |  |  |  |
|  |                      |   |              |                                     |                       |   |                   |  |  |  |  |  |
| Indoor heat exchanger of ai<br>Indication if the heater is ed  |                      |   | alamantam; l | nantari na                          |                       |   |                   |  |  |  |  |  |
|  |                      |   |              | ason, parameters for the wa         | armer and cold        | er heating                              | seasons are       |  |  |  |  |  |
| optional.  | ca for the           | average                                 | neating se   | uson, parameters for the wi         | armer and cord        | er nearing                              | seasons are       |  |  |  |  |  |
| Item   | Symbol               | Value                                   | Unit         | Item                                | Symbol                | Valu                                    | e Unit            |  |  |  |  |  |
|  |                      |   | I            | Seasonal space heating              | •                     |   |                   |  |  |  |  |  |
| Rated heating capacity   | P <sub>rated,h</sub> | 28.00                                   | kW           | energy efficiency                   | $\eta_{\mathrm{s,h}}$ | 172.                                    | 0 %               |  |  |  |  |  |
| Declared heating capacit   | y for no             | ert land                                | at indoor    | Declared coefficient o              | f performance         | or gas                                  | utilization       |  |  |  |  |  |
| temperature 20 °C and outd   |                      |   |              | efficiency / auxiliary ei           | nergy factor fo       | or part loa                             | d at given        |  |  |  |  |  |
| •  | oor tempe            | rature 1 <sub>j</sub>                   | _            | outdoor temperatures T <sub>j</sub> |                       |   |                   |  |  |  |  |  |
| $T_i = -7$ °C  | Pdh                  |   | kW           | $T_i = -7$ °C                       | $COP_d$               | 2.13                                    | <del>%</del>      |  |  |  |  |  |
| $T_i = +2  ^{\circ}C$  | Pdh                  | 7.69                                    | kW           | $T_i = +2  ^{\circ}C$               | $COP_d$               | 4.62                                    | <del> %</del>     |  |  |  |  |  |
| $T_i = +7$ °C  | Pdh                  | 4.94                                    | kW           | $T_i = +7  ^{\circ}C$               | $COP_d$               | 6.10                                    | <del> %</del>     |  |  |  |  |  |
| $T_i = +12  ^{\circ}C$   | Pdh                  | 6.07                                    | kW           | $T_i = +12 {}^{\circ}\text{C}$      | $COP_d$               | 8.18                                    | <del> %</del>     |  |  |  |  |  |
| $T_i$ = bivalent temperature   | Pdh                  | 14.28                                   | kW           | $T_j = bivalent$                    | $COP_d$               | 1.92                                    | <u>0/o</u>        |  |  |  |  |  |
| 3  |                      |   |              | temperature                         |                       |   |                   |  |  |  |  |  |
| $T_i$ = operation limit  | Pdh                  | 14.28                                   | kW           | $T_i$ = operation limit             | $COP_d$               | 1.92                                    | — <del> %</del>   |  |  |  |  |  |
| For air-to-water heat  |                      |   |              | For water-to-air heat               | COR                   |   |                   |  |  |  |  |  |
| pumps: $T_j = -15$ °C (if $T_{OL}$   | Pdh                  | -                                       | kW           | pumps: $T_j = -15$ °C (if           | $COP_d$               | -                                       | <del>%</del>      |  |  |  |  |  |
| < - 20 °C)   |                      |   | 4            | $T_{OL} < -20  ^{\circ}\text{C}$    |                       |   | _                 |  |  |  |  |  |
| D' 1   | т                    | 100                                     | 0.0          | For water-to-air heat               | T                     |   | 0.0               |  |  |  |  |  |
| Bivalent temperature   | $T_{\rm biv}$        | -10.0                                   | °C           | pumps: Operation limit              | $T_{ol}$              | -                                       | °C                |  |  |  |  |  |
|  |                      |   | _            | temperature                         |                       |   | _                 |  |  |  |  |  |
| Degradation co efficient   |                      |   | -            |                                     |                       |   |                   |  |  |  |  |  |
| Degradation co-efficient heat pumps**  | $C_{dh}$             | 0.25                                    | -            |                                     |                       |   |                   |  |  |  |  |  |
| •  |                      |   | 4.           |                                     |                       |   |                   |  |  |  |  |  |
| Power consumption in mod   | es other th          | nan 'activ                              | e mode'      | Supplementary heater                |                       |   |                   |  |  |  |  |  |
| O.CC 1   | D                    | 0.000                                   | 1.337        | Electric back-up                    | 11                    | 0.000                                   | 1.337             |  |  |  |  |  |
| Off mode   | $P_{OFF}$            | 0.069                                   | kW           | heating capacity *                  | elbu                  | 0.000                                   | kW                |  |  |  |  |  |
| Thermostat-off mode  | $P_{TO}$             | 0.129                                   | kW           | Type of energy input                |                       |   |                   |  |  |  |  |  |
| Crankcase heater mode  | $P_{CK}$             | 0.029                                   | kW           | Standby mode                        | $P_{SB}$              | 0.146                                   | kW                |  |  |  |  |  |
|  | CK                   | 0.02                                    | K * * *      | Standoy mode                        | , 3P                  | *************************************** | 1. , ,            |  |  |  |  |  |
| Other items  |                      |   |              |                                     | <del> </del>          |   |                   |  |  |  |  |  |
|  |                      |   |              | For air-to-air heat                 |                       |   |                   |  |  |  |  |  |
| Capacity control   | variable             |   |              | pumps: Nominal air                  | - 111                 | 00 n                                    | n³/h              |  |  |  |  |  |
|  |                      |   |              | flow rate, outdoor measured         |                       |   |                   |  |  |  |  |  |
|  | Т                    |   |              | For water-/brine-to-air             |                       |   |                   |  |  |  |  |  |
| Sound power level, indoor  | L <sub>WA</sub>      | 80                                      | dB           | heat pumps: Rated                   |                       |   |                   |  |  |  |  |  |
| / outdoor measured   | ZwA (                | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |              | brine or water flow                 | -  -                  | l <sub>m</sub>                          | 1 <sup>3</sup> /h |  |  |  |  |  |
| Emissions of nitrogen  | ), (a)               |   | A ****       | rate, outdoor heat                  | 1                     |   |                   |  |  |  |  |  |
| oxides (if applicable)   | $ NO_x $             | •                                       | mg/kWh       | exchanger                           |                       |   |                   |  |  |  |  |  |
|  |                      |   | kg CO2 ep    |                                     |                       |   |                   |  |  |  |  |  |
| GWP of the refrigerant   |                      | 2088                                    | (100 years)  |                                     |                       |   |                   |  |  |  |  |  |
|  | MITCHE               | ІСПІ ЕТ                                 | • /          | L L<br>DNSUMER PRODUCTS (T          |                       | ) ITD                                   |                   |  |  |  |  |  |
| Contact details  |                      |   |              |                                     | ,                     |   |                   |  |  |  |  |  |
| Contact uctans   |                      |   | 20000, Tha   | te, 700/406 Moo 7, Tambon           | Don Hua Kon,          | Ampnur                                  |                   |  |  |  |  |  |
| ** If C , is not determined b  |                      |   |              | It degradation coefficient of       | heat numns sha        | 11 be 0.25                              |                   |  |  |  |  |  |
|  |                      |   |              |                                     |                       |   |                   |  |  |  |  |  |
| Where information relates  | to multi-sp          | olit air co                             | onditioners, | the test result and performa-       | nce data may be       | e obtained                              | on the basis      |  |  |  |  |  |

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

|   |                      | 1 1/       | ODCCI                             | 11.4 | 1 0111111111111111111111111111111111111   |            |          |                   |
|---|----------------------|------------|-----------------------------------|------|---|------------|----------|-------------------|
| Model(s): Information to id                             |                      |            |                                   |      |   |            |          |                   |
| Outdoor: PUHY-P3  |                      |            |                                   | r:   | PEFY-M50VMA-A1×6 units  |            |          |                   |
| Outdoor heat exchanger of                               |                      |            |                                   |      |   |            |          |                   |
| Indoor heat exchanger of ai                             |                      |            |                                   |      |   |            |          |                   |
| Type: compressor driven va                              |                      |            | -4                                |      |   |            |          |                   |
| if applicable: driver of com                            | Symbol               |            |                                   | _    | Item Symbol   |            | Value    | T T 14            |
| Item  | Symbol               | Value      | Unit                              | 1 '  | · · · · · · · · · · · · · · · · · · ·   |            | Value    | Unit              |
| Rated cooling capacity                                  | $P_{\text{rated,c}}$ | 33.50      | kW                                |      | Seasonal space cooling $\eta_{s,c}$ energy efficiency   |            | 265.0    | %                 |
| Declared cooling capacity temperatures $T_j$ and indoor |                      |            |                                   |      | Declared energy efficiency ratio of auxiliary energy factor for patemperatures T <sub>i</sub> |            |          |                   |
| $T_i = +35$ °C  | Pdc                  | 33.50      | kW                                |      | $T_j = +35 \text{ °C}$ EER <sub>d</sub>   |            | 2.96     | <del>9/0</del>    |
| $T_{i} = +30  {}^{\circ}\text{C}$                       | Pdc                  | 24.68      | kW                                |      | $T_i = +30  ^{\circ}\text{C}$ EER <sub>d</sub>  |            | 4.59     | <del>%</del>      |
| $T_i = +25  ^{\circ}\text{C}$                           | Pdc                  | 15.87      | kW                                |      | $T_i = +25  ^{\circ}\text{C}$ EER <sub>d</sub>  |            | 8.24     | <u>%</u>          |
| $T_i = +20  ^{\circ}C$                                  | Pdc                  | 8.88       | kW                                |      | $T_i = +20  ^{\circ}\text{C}$ EER <sub>d</sub>  |            | 14.36    | —  <sub>%</sub>   |
|   |                      |            | 1                                 |      | j .   |            |          | 7                 |
| Degradation co-efficient air conditioners**             | $C_d$                | 0.25       | -                                 |      |   |            |          |                   |
| Power consumption in mod                                | es other t           | han 'activ | e mode'                           |      |   |            |          |                   |
| Off mode  | $P_{OFF}$            | 0.069      | kW                                |      | Crankcase heater mode P <sub>CK</sub>   |            | 0.000    | kW                |
| Thermostat-off mode                                     | $P_{TO}$             | 0.029      | kW                                |      | Standby mode P <sub>SB</sub>  |            | 0.069    | kW                |
| Other items   |                      |            |                                   |      |   |            |          |                   |
| Capacity control  | variable             |            |                                   |      | For air-to-air air conditioner: Nominal air flow rate, outdoor measured                       | 12000      | m        | 1 <sup>3</sup> /h |
| Sound power level, outdoor                              | $L_{WA}$             | 80         | dB                                |      |   |            |          |                   |
| if engine driven:<br>Emissions of nitrogen<br>oxides    |                      | -          | mg/kWh<br>fuel input<br>GCV       |      |   |            |          |                   |
| GWP of the refrigerant                                  |                      | 2088       | kg CO <sub>2 ep</sub> (100 years) |      |   |            |          |                   |
|   | 1                    |            |                                   |      | SUMER PRODUCTS (THAILAN   |            |          |                   |
| Contact details   | 1                    |            | dustrial Esta<br>20000, Tha       |      | , 700/406 Moo 7, Tambon Don Hua<br>and  | Roh, Am    | phur     |                   |
| ** If C <sub>d</sub> is not determined b                |                      |            |                                   |      | degradation coefficient air condition   | ners shall | be 0.25. |                   |

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

| Model(s): Information to id                |                      |             |                  |                                     | :4                |                  |                 |
|--|----------------------|-------------|------------------|-------------------------------------|-------------------|------------------|-----------------|
| Outdoor: PUHY-P3 Outdoor heat exchanger of |                      |             |                  | or:PEFY-M50VMA-A1×6 u               | ınııs             |                  |                 |
| Indoor heat exchanger of ai                |                      |             |                  |                                     |                   |                  |                 |
| Indication if the heater is ed             |                      |             | nlementary l     | heater: no                          |                   |                  |                 |
|  |                      |             |                  | ason, parameters for the w          | armer and colde   | r heating so     | easons are      |
| optional.                                  | ca for the           | average     | meaning se       | ason, parameters for the w          | armer and corac   | i neating s      | cusons are      |
| Item                                       | Symbol               | Value       | Unit             | Item                                | Symbol            | Value            | Unit            |
|  |                      |             |                  | Seasonal space heating              |                   |                  | 1               |
| Rated heating capacity                     | P <sub>rated,h</sub> | 33.50       | kW               | energy efficiency                   | $\eta_{s,h}$      | 161.0            | %               |
| D 1 1 1 1 1 1                              | C                    | . 1 1       | 1                | Declared coefficient of             | of performance    | or gas           | utilization     |
| Declared heating capacit                   | -                    |             |                  | efficiency / auxiliary e            |                   |                  |                 |
| temperature 20 °C and outo                 | ioor tempe           | erature 1   |                  | outdoor temperatures T <sub>i</sub> |                   | •                | -               |
| $T_i = -7$ °C                              | Pdh                  | 15.12       | kW               | $T_i = -7  ^{\circ}C$               | $COP_d$           | 1.95             | <del>%</del>    |
| $T_i = +2$ °C                              | Pdh                  | 9.20        | kW               | $T_i = +2  ^{\circ}C$               | $COP_d$           | 4.24             | <del>%</del>    |
| $T_i = +7$ °C                              | Pdh                  | 5.92        | kW               | $T_i = +7$ °C                       | $COP_d$           | 6.08             | %               |
| $T_{i} = + 12  {}^{\circ}\text{C}$         | Pdh                  | 6.64        | kW               | $T_{i} = +12  {}^{\circ}\text{C}$   | $COP_d$           | 8.04             | <del>%</del>    |
| $T_i$ = bivalent temperature               | Pdh                  | 17.09       | kW               | $T_j = bivalent$                    | $COP_d$           | 1.67             | <del>%</del>    |
| 1 j – bivaicht temperature                 | 1 un                 |             | J <sup>k w</sup> | temperature                         | COI d             | 1.07             | _ <del>70</del> |
| $T_i$ = operation limit                    | Pdh                  | 17.09       | kW               | $T_i$ = operation limit             | $COP_d$           | 1.67             | <del>%</del>    |
| For air-to-water heat                      |                      |             |                  | For water-to-air heat               |                   |                  |                 |
| pumps: $T_j = -15$ °C (if $T_{OL}$         | Pdh                  | -           | kW               | pumps: $T_j = -15$ °C (if           | $COP_d$           | -                | <del>%</del>    |
| < - 20 °C)                                 |                      |             | 1                | $T_{OL} < -20$ °C)                  |                   |                  | _               |
|  | _                    |             |                  | For water-to-air heat               |                   |                  |                 |
| Bivalent temperature                       | $T_{\rm biv}$        | -10.0       | °C               | pumps: Operation limit              | $T_{ol}$          | -                | °C              |
|  |                      |             | _                | temperature                         |                   |                  | _               |
|  |                      |             | 1                |                                     |                   |                  | _               |
| Degradation co-efficient                   | $C_{dh}$             | 0.25        | _                |                                     |                   |                  |                 |
| heat pumps**                               |                      |             |                  |                                     |                   |                  |                 |
| Power consumption in mod                   | es other tl          | nan 'activ  | e mode'          | Supplementary heater                |                   |                  |                 |
|  | _                    |             | 7                | Electric back-up                    |                   |                  | ٦               |
| Off mode                                   | $P_{OFF}$            | 0.069       | kW               | heating capacity *                  | elbu              | 0.000            | kW              |
| Thermostat-off mode                        | $P_{TO}$             | 0.129       | kW               | Type of energy input                |                   | <u> </u>         | -               |
|  |                      |             | 1, ,,,           |                                     | D.                | 0.146            | 1 777           |
| Crankcase heater mode                      | $P_{CK}$             | 0.029       | kW               | Standby mode                        | $P_{\mathrm{SB}}$ | 0.146            | kW              |
| Other items                                |                      |             | •                |                                     | •                 |                  |                 |
|  |                      |             |                  | For air-to-air heat                 |                   |                  |                 |
| Capacity control                           | variable             |             |                  | pumps: Nominal air                  | _   1440          | $\mathbf{m}^{3}$ | /h              |
| Capacity control                           | Variable             |             |                  | flow rate, outdoor                  | -                 |                  | 11              |
|  |                      |             |                  | measured                            |                   |                  |                 |
| Sound power level, indoor                  |                      |             |                  | For water-/brine-to-air             |                   |                  |                 |
| / outdoor measured                         | $L_{WA}$             | 84          | dB               | heat pumps: Rated                   |                   |                  | /4              |
|  |                      |             |                  | brine or water flow                 | <b>-</b>  -       | m <sup>3</sup>   | h 'h            |
| Emissions of nitrogen                      | NO <sub>v</sub>      | _           | mg/kWh           | rate, outdoor heat                  |                   |                  |                 |
| oxides (if applicable)                     |                      |             |                  | exchanger                           |                   |                  |                 |
| GWP of the refrigerant                     |                      | 2088        | kg CO2 ep        |                                     |                   |                  |                 |
| GWI of the ferrigerant                     |                      | 2000        | (100 years)      |                                     |                   |                  |                 |
|  | MITSUE               | ISHI EL     | ECTRIC CO        | ONSUMER PRODUCTS (7                 | THAILAND) CO      | ., LTD.          |                 |
| Contact details                            | Amata N              | akorn Ind   | dustrial Esta    | te, 700/406 Moo 7, Tambon           | Don Hua Roh,      | Amphur           |                 |
|  | Muang, 0             | Chonburi    | 20000, Tha       | iland                               |                   |                  |                 |
| ** If C <sub>d</sub> is not determined b   | y measure            | ement the   | en the defaul    | lt degradation coefficient of       | heat pumps shal   | 1 be 0,25.       |                 |
| Where information relates                  | to multi e           | nlit oir oc | nditioners       | the test result and performs        | nce data may be   | obtained or      | the basis       |

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

|  |                         |                       |                                   |            | 1 0101111111111111111111111111111111111  |          |             |         |               |                |
|--|-------------------------|-----------------------|-----------------------------------|------------|--|----------|-------------|---------|---------------|----------------|
| Model(s): Information to id<br>Outdoor: PUHY-P                   |                         |                       |                                   |            | information relates:<br>FY-M63VMA-A1×5 units, PEFY   | <br>Y-M: | 50VMA       | -A1×1   | unit          | t              |
| Outdoor heat exchanger of  |                         |                       |                                   | _          | ,  |          |             |         |               | ,              |
| Indoor heat exchanger of ai                                      |                         |                       |                                   | _          |  |          |             |         |               |                |
| Type: compressor driven va                                       |                         |                       |                                   |            |  |          |             |         |               |                |
| if applicable: driver of com                                     | pressor: el             | lectric m             | otor                              |            |  |          |             |         |               |                |
| Item   | Symbol                  | Value                 | Unit                              | _          | Item Symbol  |          |             | Value   | ; ]           | Unit           |
| Rated cooling capacity   | $P_{\text{rated,c}}$    | 40.00                 | kW                                |            | Seasonal space cooling $\eta_{s,c}$ energy efficiency  |          |             | 251.0   |               | %              |
| Declared cooling capacity temperatures T <sub>j</sub> and indoor |                         |                       |                                   |            | Declared energy efficiency ratio<br>auxiliary energy factor for<br>temperatures T <sub>i</sub> |          | -           |         |               | -              |
| $T_i = +35  ^{\circ}\text{C}$                                    | Pdc                     | 40.00                 | kW                                |            | $T_i = +35  ^{\circ}\text{C}$ EER <sub>d</sub>   |          |             | 2.86    | $\neg$        | <del>%</del>   |
| $T_i = +30  ^{\circ}\text{C}$                                    | Pdc                     | 29.47                 | kW                                |            | $T_i = +30  ^{\circ}\text{C}$ EER <sub>d</sub>   |          |             | 4.09    | $\overline{}$ | <del>0/0</del> |
| $T_i = +25  ^{\circ}C$   | Pdc                     | 18.95                 | kW                                |            | $T_i = +25  ^{\circ}\text{C}$ EER <sub>d</sub>   |          |             | 7.64    | _             | <del>0/0</del> |
| $T_i = +20  ^{\circ}C$   | Pdc                     | 10.11                 | kW                                |            | $T_i = +20 ^{\circ}\text{C}$ EER <sub>d</sub>  |          |             | 15.99   | _             | <del>%</del>   |
| 1-1  | *                       |                       | <b>┤</b> ```                      |            |  |          |             |         | $\dashv$      | /0             |
| Degradation co-efficient air conditioners**                      | $C_d$                   | 0.25                  | -                                 |            |  |          |             |         |               |                |
| Power consumption in mod   | es other th             | nan 'activ            | e mode'                           |            |  |          |             |         |               |                |
| Off mode   | $P_{OFF}$               | 0.095                 | $_{\mathrm{kW}}$                  |            | Crankcase heater mode P <sub>CK</sub>  |          |             | 0.000   | 1             | kW             |
| Thermostat-off mode  | $P_{TO}$                | 0.039                 | kW                                |            | Standby mode P <sub>SB</sub>   |          |             | 0.095   |               | kW             |
|  |                         |                       | † !                               |            | -  |          |             |         |               |                |
| Other items  |                         |                       |                                   |            |  |          |             |         |               |                |
| Capacity control   | variable                |                       |                                   |            | For air-to-air air conditioner: Nominal air flow rate, outdoor measured                        |          | 15000       | n       | n³/h          |                |
| Sound power level, outdoor                                       | L <sub>WA</sub>         | 80                    | dB                                |            |  | _        | <del></del> |         |               |                |
| if engine driven:<br>Emissions of nitrogen<br>oxides             |                         | <b>-</b>              | mg/kWh<br>fuel input<br>GCV       |            |  |          | <u> </u>    |         |               |                |
| GWP of the refrigerant   |                         | 2088                  | kg CO <sub>2 ep</sub> (100 years) |            |  |          | <br>        |         |               |                |
| Contact details  | Amata Na<br>Muang, C    | akorn Ind<br>Chonburi | dustrial Esta<br>20000, Tha       | te,<br>ila |  | lua R    | oh, Am      | phur    |               |                |
| ** If C <sub>d</sub> is not determined b                         | y measure               | ment the              | n the defaul                      | t (        | degradation coefficient air condit   | ioner    | rs shall l  | oe 0.25 | ,             |                |
| Where information relates  | to multi-s <sub>1</sub> | olit air co           | onditioners,                      | th         | e test result and performance dat  | a ma     | y be ob     | tained  | on t          | he basis       |

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

Model(s): Information to identify the model(s) to which the information relates: Outdoor: PUHY-P350YNW-A2 (-BS) Indoor: PEFY-M63VMA-A1×5 units, PEFY-M50VMA-A1×1 unit Outdoor heat exchanger of air conditioner: air Indoor heat exchanger of air conditioner: air Indication if the heater is equipped with a supplementary heater: no Parameters shall be declared for the average heating season, parameters for the warmer and colder heating seasons are optional. Symbol Value Item Value Unit Item Symbol Seasonal space heating  $P_{rated,h}$ 40.00 kW 170.0 % Rated heating capacity  $\eta_{s,h}$ energy efficiency Declared coefficient performance of gas or Declared heating capacity for part load at indoor efficiency / auxiliary energy factor for part load at given temperature 20 °C and outdoor temperature T<sub>i</sub> outdoor temperatures T<sub>i</sub>  $T_i = -7$  °C Pdh 18.05 kW  $T_i = -7$  °C  $COP_d$ 1.92  $T_i = +2$  °C Pdh  $T_i = +2$  °C 10.98 kW  $COP_d$ 4.41 <u>%</u>  $T_i = +7$  °C Pdh 7.06 kW  $T_i = +7$  °C  $COP_d$ 6.81 <u>%</u>  $T_i = +12 \, {}^{\circ}\text{C}$ Pdh 7.28 kW  $T_i = +12 \, {}^{\circ}\text{C}$  $COP_d$ 8.72 %  $T_i = bivalent$  $T_i$  = bivalent temperature Pdh 20.40 kW  $COP_d$ 1.85 <del>%</del> temperature 20.40  $T_i$  = operation limit Pdh kW  $T_i$  = operation limit  $COP_d$ 1.85 0/0 For water-to-air heat For air-to-water heat pumps:  $T_i = -15$  °C (if pumps:  $T_i = -15$  °C (if  $T_{OL}$  Pdh <del>%</del> kW  $COP_d$  $T_{OL} < -20$  °C)  $< -20 \, {}^{\circ}\text{C}$ For water-to-air heat Bivalent temperature  $T_{biv}$ -10.0 °C pumps: Operation limit °C temperature co-efficient Cdh Degradation 0.25 heat pumps\*\* Power consumption in modes other than 'active mode' Supplementary heater Electric back-up 0.095 0.000 Off mode Poff kW elbu kW heating capacity \*  $P_{TO}$ Thermostat-off mode 0.156 kW Type of energy input 0.039  $P_{CK}$ kW  $P_{SB}$ 0.173 kW Crankcase heater mode Standby mode Other items For air-to-air heat pumps: Nominal air 16200 m³/h Capacity control variable flow rate, measured For water-/brine-to-air Sound power level, indoor dΒ  $L_{WA}$ 84 pumps: heat outdoor measured brine or water flow m³/h Emissions of nitrogen rate, outdoor heat  $NO_x$ mg/kWh oxides (if applicable) exchanger kg CO<sub>2</sub> ep GWP of the refrigerant 2088 (100 years) MITSUBISHI ELECTRIC CONSUMER PRODUCTS (THAILAND) CO., LTD. Amata Nakorn Industrial Estate, 700/406 Moo 7, Tambon Don Hua Roh, Amphur Contact details Muang, Chonburi 20000, Thailand \*\* If  $C_d$  is not determined by measurement then the default degradation coefficient of heat pumps shall be 0,25. 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.

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

|   |                      | 1 17                   | ODCCI                             | 11.4        | 1 01011111011(1)  |             |         |       |              |
|---|----------------------|------------------------|-----------------------------------|-------------|---|-------------|---------|-------|--------------|
| Model(s): Information to id<br>Outdoor: PUHY-P          |                      |                        |                                   |             | information relates:<br>FY-M71VMA-A1×2 units, PEFY                              | -M63VM      | A-A1×   | 4 uni | ts           |
| Outdoor heat exchanger of                               |                      |                        |                                   | _           |   |             |         |       |              |
| Indoor heat exchanger of ai                             |                      |                        |                                   | _           |   |             |         |       |              |
| Type: compressor driven va                              |                      |                        |                                   | _           |   |             |         |       |              |
| if applicable: driver of com                            |                      |                        | otor                              |             |   |             |         |       |              |
| Item  | Symbol               | Value                  | Unit                              |             | Item Symbol   |             | Val     | ue    | Unit         |
| Rated cooling capacity                                  | $P_{\text{rated,c}}$ | 45.00                  | kW                                |             | Seasonal space cooling $\eta_{s,c}$ energy efficiency                           |             | 231.    | .0    | %            |
| Declared cooling capacity temperatures $T_j$ and indoor |                      |                        |                                   |             | Declared energy efficiency ratio auxiliary energy factor for temperatures $T_j$ |             |         |       |              |
| $T_i = +35$ °C  | Pdc                  | 45.00                  | kW                                |             | $T_j = +35 ^{\circ}\text{C}$ EER <sub>d</sub>                                   |             | 2.56    | 5     | <del>%</del> |
| $T_1 = +30  {}^{\circ}\text{C}$                         | Pdc                  | 33.16                  | kW                                |             | $T_i = +30  ^{\circ}\text{C}$ EER <sub>d</sub>                                  |             | 4.08    | 3     | <del>%</del> |
| $T_i = +25  ^{\circ}\text{C}$                           | Pdc                  | 21.32                  | kW                                |             | $T_i = +25  ^{\circ}\text{C}$ EER <sub>d</sub>                                  |             | 6.38    | 3     | <del>%</del> |
| $T_j = +20  ^{\circ}\text{C}$                           | Pdc                  | 11.38                  | kW                                |             | $T_j = +20  ^{\circ}\text{C}$ EER <sub>d</sub>                                  |             | 15.3    | 55    | <del>%</del> |
| Degradation co-efficient air conditioners**             | $C_d$                | 0.25                   | -                                 |             |   |             |         |       |              |
| Power consumption in mod                                | es other t           | han 'activ             | e mode'                           |             |   |             |         |       |              |
| Off mode  | $P_{OFF}$            | 0.095                  | kW                                |             | Crankcase heater mode P <sub>CK</sub>   |             | 0.00    | 0     | kW           |
| Thermostat-off mode                                     | $P_{TO}$             | 0.039                  | kW                                |             | Standby mode P <sub>SB</sub>  |             | 0.09    | 95    | kW           |
| Other items   |                      | 1                      | 1                                 | 1           |   |             |         |       |              |
| Capacity control  | variable             |                        |                                   |             | For air-to-air air conditioner: Nominal air flow rate, outdoor measured         | 16200       | )       | m³/h  | ı            |
| Sound power level, outdoor                              | $L_{WA}$             | 82                     | dB                                |             |   |             |         |       |              |
| if engine driven:<br>Emissions of nitrogen<br>oxides    |                      | -                      | mg/kWh<br>fuel input<br>GCV       |             |   |             |         |       |              |
| GWP of the refrigerant                                  |                      | 2088                   | kg CO <sub>2 ep</sub> (100 years) |             |   |             |         |       |              |
| Contact details   | Amata N<br>Muang,    | lakorn Ind<br>Chonburi | dustrial Esta<br>20000, Tha       | ite,<br>ila |   | ua Roh, A   | mphur   |       |              |
| $\Gamma^{***}$ if $C_d$ is not determined by            | y measur             | ement the              | en the defau                      | IT (        | degradation coefficient air condit  | ioners shal | ı be U. | ۷٥.   |              |

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

Where information relates to multi-split air conditioners, the test result and performance data may be obtained on the basis

Model(s): Information to identify the model(s) to which the information relates: Outdoor: PUHY-P400YNW-A2(-BS) Indoor: PEFY-M71VMA-A1×2 units, PEFY-M63VMA-A1×4 units Outdoor heat exchanger of air conditioner: air Indoor heat exchanger of air conditioner: air Indication if the heater is equipped with a supplementary heater: no Parameters shall be declared for the average heating season, parameters for the warmer and colder heating seasons are optional. Symbol Value Item Value Unit Symbol Item Seasonal space heating  $P_{rated,h}$ 45.00 kW 157.0 % Rated heating capacity  $\eta_{s,h}$ energy efficiency Declared coefficient performance of gas utilization or Declared heating capacity for part load at indoor efficiency / auxiliary energy factor for part load at given temperature 20 °C and outdoor temperature T<sub>i</sub> outdoor temperatures T<sub>i</sub>  $T_i = -7$  °C Pdh 20.30 kW  $T_i = -7$  °C 1.99  $COP_d$  $T_i = +2$  °C Pdh  $T_i = +2$  °C 3.90 12.36 kW  $COP_d$ <u>%</u>  $T_i = +7$  °C Pdh 7.94 kW  $T_i = +7$  °C  $COP_d$ 6.33 <u>%</u>  $T_i = +12 \, {}^{\circ}\text{C}$ Pdh 8.37 kW  $T_i = +12 \, {}^{\circ}\text{C}$  $COP_d$ 8.09 %  $T_i = bivalent$  $T_i$  = bivalent temperature Pdh 22.95 kW  $COP_d$ 1.69 <del>%</del> temperature 22.95  $T_i$  = operation limit Pdh kW  $T_i$  = operation limit  $COP_d$ 1.69 0/0 For air-to-water For water-to-air heat heat pumps:  $T_i = -15$  °C (if pumps:  $T_i = -15$  °C (if  $T_{OL}$  Pdh <del>%</del> kW  $COP_d$  $T_{OL} < -20$  °C)  $< -20 \, {}^{\circ}\text{C}$ For water-to-air heat Bivalent temperature  $T_{biv}$ -10.0 °C pumps: Operation limit °C temperature co-efficient Cdh Degradation 0.25 heat pumps\*\* Power consumption in modes other than 'active mode' Supplementary heater Electric back-up 0.095 0.000 Off mode Poff kW elbu kW heating capacity \* kW Thermostat-off mode  $P_{TO}$ 0.156 Type of energy input 0.039  $P_{CK}$ kW  $P_{SB}$ 0.173 kW Crankcase heater mode Standby mode Other items For air-to-air heat pumps: Nominal air 18000 m³/h Capacity control variable flow rate. measured For water-/brine-to-air Sound power level, indoor dΒ  $L_{WA}$ 86 pumps: outdoor measured brine or water flow m³/h Emissions of nitrogen rate, outdoor heat  $NO_x$ mg/kWh oxides (if applicable) exchanger kg CO<sub>2</sub> ep GWP of the refrigerant 2088 (100 years) MITSUBISHI ELECTRIC CONSUMER PRODUCTS (THAILAND) CO., LTD. Amata Nakorn Industrial Estate, 700/406 Moo 7, Tambon Don Hua Roh, Amphur Contact details Muang, Chonburi 20000, Thailand \*\* If  $C_d$  is not determined by measurement then the default degradation coefficient of heat pumps shall be 0,25. Where information relates to multi-split air conditioners, the test result and performance data may be obtained on the basis

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

|   |                      | 1 17                   | ODCCI                             | TT . |   |            |                     |                |
|---|----------------------|------------------------|-----------------------------------|------|---|------------|---------------------|----------------|
| Model(s): Information to id                             |                      |                        |                                   |      |   | 50X D 5 A  |                     |                |
|   |                      |                        |                                   | EI   | Y-M63VMA-A1×4 units, PEFY-M   | 50VMA-     | A1×4                | units          |
| Outdoor heat exchanger of                               |                      |                        | •                                 |      |   |            |                     |                |
| Indoor heat exchanger of a                              |                      |                        |                                   |      |   |            |                     |                |
| Type: compressor driven va                              |                      |                        |                                   |      |   |            |                     |                |
| if applicable: driver of com                            | ^                    |                        |                                   |      |   |            | ** 1                |                |
| Item  | Symbol               | Value                  | Unit                              | 1    | Item Symbol   |            | Valu                | e Unit         |
| Rated cooling capacity                                  | $P_{\text{rated,c}}$ | 50.00                  | kW                                |      | Seasonal space cooling $\eta_{s,c}$ energy efficiency                                   |            | 256.0               |                |
| Declared cooling capacity temperatures $T_j$ and indoor |                      |                        |                                   |      | Declared energy efficiency ratio or auxiliary energy factor for part temperatures $T_j$ |            |                     |                |
| $T_j = +35  ^{\circ}C$                                  | Pdc                  | 50.00                  | kW                                |      | $T_j = +35  ^{\circ}\text{C}$ EER <sub>d</sub>  |            | 2.65                | <del>0/0</del> |
| $T_j = +30  ^{\circ}\text{C}$                           | Pdc                  | 36.84                  | kW                                |      | $T_i = +30  ^{\circ}\text{C}$ EER <sub>d</sub>  |            | 4.32                | <u>%</u>       |
| $T_i = +25  ^{\circ}\text{C}$                           | Pdc                  | 23.68                  | kW                                |      | $T_i = +25  ^{\circ}\text{C}$ EER <sub>d</sub>  |            | 7.49                | <del>%</del>   |
| $T_{i} = +20  {}^{\circ}\text{C}$                       | Pdc                  | 12.20                  | kW                                |      | $T_i = +20  ^{\circ}C$ EER <sub>d</sub>   |            | 17.25               |                |
| -,  |                      | 12.20                  | <del> </del>                      |      | -j u  |            |                     |                |
| Degradation co-efficient air conditioners**             | $C_d$                | 0.25                   | -                                 |      |   |            |                     |                |
| Power consumption in mod                                | les other t          | han 'activ             | e mode'                           |      |   |            |                     |                |
| Off mode  | $P_{OFF}$            | 0.095                  | $\log N$                          |      | Crankcase heater mode P <sub>CK</sub>   |            | 0.000               | ) kW           |
|   | P <sub>TO</sub>      | 0.039                  | 4                                 |      | Standby mode $P_{SB}$   |            | 0.000               |                |
| Thermostat-off mode                                     | 1 TO                 | 0.039                  | kW                                |      | Standby mode 1 <sub>SB</sub>  |            | 0.093               | 5 kW           |
| Other items   |                      |                        | -                                 | Ì    |   |            |                     |                |
| Capacity control  | variable             |                        |                                   |      | For air-to-air air conditioner: Nominal air flow rate, outdoor measured                 | 17100      | :                   | m³/h           |
| Sound power level, outdoor                              | $L_{WA}$             | 84                     | dB                                |      |   |            |                     |                |
| if engine driven:<br>Emissions of nitrogen<br>oxides    | 1 1                  | -                      | mg/kWh<br>fuel input<br>GCV       |      |   |            |                     |                |
| GWP of the refrigerant                                  |                      | 2088                   | kg CO <sub>2 ep</sub> (100 years) |      |   |            |                     |                |
| Contact details   | Amata N<br>Muang,    | Vakorn Ind<br>Chonburi | dustrial Esta<br>20000, Tha       | ite. |   | Roh, Am    | phur                |                |
| ** If C <sub>d</sub> is not determined b                | y measur             | ement the              | en the defau                      | lt d | degradation coefficient air conditione  | rs shall b | be $0.\overline{2}$ | 5.             |

 $<sup>\</sup>sim$  11  $C_d$  is not determined by measurement then the default degradation coefficient air conditioners shall be 0.23

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

PRODUCT INFORMATION(1) Model(s): Information to identify the model(s) to which the information relates: Outdoor: PUHY-P450YNW-A2(-BS) Indoor: PEFY-M63VMA-A1×4 units, PEFY-M50VMA-A1×4 units Outdoor heat exchanger of air conditioner: air Indoor heat exchanger of air conditioner: air Indication if the heater is equipped with a supplementary heater: no Parameters shall be declared for the average heating season, parameters for the warmer and colder heating seasons are optional. Symbol Value Item Value Unit Symbol Unit Item Seasonal space heating  $P_{rated,h}$ 50.00 kW 169.0 % Rated heating capacity  $\eta_{s,h}$ energy efficiency performance Declared coefficient of gas utilization or Declared heating capacity for part load at indoor efficiency / auxiliary energy factor for part load at given temperature 20 °C and outdoor temperature T<sub>i</sub> outdoor temperatures T<sub>i</sub>  $T_i = -7$  °C Pdh 22.56 kW  $T_i = -7$  °C  $COP_d$ 2.05  $T_i = +2 \, ^{\circ}C$ Pdh  $T_i = +2$  °C 13.73 kW  $COP_d$ 4.36 <u>%</u>  $T_i = +7$  °C Pdh 9.03 kW  $T_i = +7$  °C  $COP_d$ 6.55 <u>%</u>  $T_i = +12 \, {}^{\circ}\text{C}$ Pdh 8.35 kW  $T_i = +12 \, {}^{\circ}\text{C}$  $COP_d$ 8.80 <u>%</u>  $T_i = bivalent$  $T_i$  = bivalent temperature Pdh 25.50 kW  $COP_d$ 1.82 <del>%</del> temperature  $T_i$  = operation limit Pdh 25.50 kW  $COP_d$ 1.82 0/0  $T_i$  = operation limit For water-to-air heat For air-to-water heat pumps:  $T_i = -15$  °C (if <del>%</del> pumps:  $T_i = -15$  °C (if  $T_{OL}$  Pdh kW  $COP_d$  $T_{OL} < -20$  °C)  $< -20 \, {}^{\circ}\text{C}$ For water-to-air heat Bivalent temperature  $T_{biv}$ -10.0 °C pumps: Operation limit °C temperature co-efficient Cdh Degradation 0.25 heat pumps\*\* Power consumption in modes other than 'active mode' Supplementary heater Electric back-up 0.095 0.000 Off mode Poff kW elbu kW heating capacity \* kW Thermostat-off mode  $P_{TO}$ 0.156 Type of energy input  $P_{CK}$ 0.039 kW  $P_{SB}$ 0.173 kW Crankcase heater mode Standby mode Other items For air-to-air heat pumps: Nominal air 18300 m³/h Capacity control variable flow rate. measured For water-/brine-to-air Sound power level, indoor dΒ  $L_{WA}$ 90 pumps: outdoor measured brine or water flow m³/h nitrogen Emissions of rate, outdoor  $NO_x$ mg/kWh oxides (if applicable) exchanger kg CO<sub>2</sub> ep GWP of the refrigerant 2088 (100 years) MITSUBISHI ELECTRIC CONSUMER PRODUCTS (THAILAND) CO., LTD. Amata Nakorn Industrial Estate, 700/406 Moo 7, Tambon Don Hua Roh, Amphur Contact details Muang, Chonburi 20000, Thailand \*\* If  $C_d$  is not determined by measurement then the default degradation coefficient of heat pumps shall be 0,25.

ΕN FN 13

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

| Model(s): Information to id                             | -                    |            |                                   | e  | information relates:   |            |        |      |                |
|---|----------------------|------------|-----------------------------------|----|--|------------|--------|------|----------------|
| Outdoor:PUHY-P5   |                      |            | Indoo                             | r: | PEFY-M63VMA-A1×8 units   |            |        |      |                |
| Outdoor heat exchanger of                               |                      |            |                                   |    |  |            |        |      |                |
| Indoor heat exchanger of ai                             |                      |            |                                   |    |  |            |        |      |                |
| Type: compressor driven va                              | •                    | •          |                                   |    |  |            |        |      |                |
| if applicable: driver of com                            |                      |            |                                   |    |  |            |        |      |                |
| Item  | Symbol               | Value      | Unit                              |    | Item Symbol  |            | Valu   | ie   | Unit           |
| Rated cooling capacity                                  | $P_{\text{rated},c}$ | 56.00      | kW                                |    | Seasonal space cooling $\eta_{s,c}$ energy efficiency  |            | 249.0  | 0    | %              |
| Declared cooling capacity temperatures $T_j$ and indoor |                      |            |                                   |    | Declared energy efficiency ratio or auxiliary energy factor for part temperatures T <sub>i</sub> | -          |        |      | -              |
| $T_j = +35  ^{\circ}\text{C}$                           | Pdc                  | 56.00      | kW                                |    | $T_j = +35  ^{\circ}\text{C}$ EER <sub>d</sub>   |            | 2.66   |      | <del>0/o</del> |
| $T_i = +30  ^{\circ}\text{C}$                           | Pdc                  | 41.26      | kW                                |    | $T_i = +30  ^{\circ}\text{C}$ EER <sub>d</sub>   |            | 4.35   |      | <del>0/o</del> |
| $T_i = +25  ^{\circ}\text{C}$                           | Pdc                  | 26.53      | kW                                |    | $T_i = +25  ^{\circ}\text{C}$ EER <sub>d</sub>   |            | 7.40   |      | <u>0/o</u>     |
| $T_{i}^{j} = +20  {}^{\circ}\text{C}$                   | Pdc                  | 13.84      | kW                                |    | $T_i = +20  ^{\circ}\text{C}$ EER <sub>d</sub>   |            | 14.5   |      | <del>0/o</del> |
| [1] · 20 · 0  | 1 44                 | 10101      |                                   |    | 20 0 ===-4   |            | - 100  |      | 70             |
| Degradation co-efficient air conditioners**             | $C_d$                | 0.25       | -<br> -                           |    |  |            |        |      |                |
| Power consumption in mod                                | es other t           | han 'activ | e mode'                           |    |  |            |        |      |                |
| -   |                      |            | ,                                 |    |  |            |        |      |                |
| Off mode  | $P_{OFF}$            | 0.095      | kW                                |    | Crankcase heater mode P <sub>CK</sub>  |            | 0.00   |      | kW             |
| Thermostat-off mode                                     | P <sub>TO</sub>      | 0.039      | kW                                |    | Standby mode P <sub>SB</sub>   |            | 0.09   | 5    | kW             |
| Other items   |                      |            |                                   |    |  |            |        |      |                |
| Capacity control  | variable             |            |                                   |    | For air-to-air air conditioner: Nominal air flow rate, outdoor measured                          | 18900      |        | m³/h |                |
| Sound power level, outdoor                              | $L_{WA}$             | 82         | dB                                |    |  |            |        |      |                |
| if engine driven:<br>Emissions of nitrogen<br>oxides    | 1 1                  | -          | mg/kWh<br>fuel input<br>GCV       |    |  |            |        |      |                |
| GWP of the refrigerant                                  |                      | 2088       | kg CO <sub>2 ep</sub> (100 years) |    |  |            |        |      |                |
|   |                      |            |                                   |    | ISUMER PRODUCTS (THAILANI  |            |        |      |                |
| Contact details   | 1                    |            | lustrial Esta<br>20000, Tha       |    | 700/406 Moo 7, Tambon Don Hua l  | Roh, Am    | phur   |      |                |
| ** If C <sub>4</sub> is not determined b                |                      |            |                                   |    | legradation coefficient air conditione   | rs shall l | be 0.2 | 5.   |                |
| u   | ,                    |            |                                   |    |  |            |        |      |                |

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

| Model(s): Information to id Outdoor: PUHY-P5 |                             |             |                                   | ne information relates:<br>or:PEFY-M63VMA-A1×8 u | ınits        |          |           |                  |
|--|-----------------------------|-------------|-----------------------------------|--|--------------|----------|-----------|------------------|
| Outdoor heat exchanger of                    |                             |             |                                   | 11.1211 11103 1111111111 0 0                     |              |          |           |                  |
| Indoor heat exchanger of ai                  |                             |             |                                   |  |              |          |           |                  |
| Indication if the heater is ed               |                             |             |                                   |  |              |          |           |                  |
|  | ed for the                  | e average   | heating se                        | ason, parameters for the w                       | armer and    | colder h | eating s  | easons are       |
| optional.                                    |                             |             |                                   |  |              |          |           |                  |
| Item   | Symbol                      | Value       | Unit                              | Item   | Symbol       |          | Value     | Unit             |
| Rated heating capacity                       | P <sub>rated,h</sub>        | 56.00       | kW                                | Seasonal space heating energy efficiency         | $\eta_{s,h}$ |          | 158.0     | %                |
| Declared heating capacit                     | y for p                     | art load    | at indoor                         | Declared coefficient of                          |              |          |           | utilization      |
| temperature 20 °C and outd                   |                             |             |                                   | efficiency / auxiliary ef                        | nergy facto  | or for p | art load  | at given         |
| _  | _                           |             | _                                 | outdoor temperatures T <sub>j</sub>              | COD          |          | 1.00      | ٦٥/              |
| $T_i = -7$ °C                                | Pdh                         | 25.26       | kW                                | $T_i = -7$ °C                                    | $COP_d$      |          | 1.98      | <del>%</del>     |
| $T_i = +2 ^{\circ}\text{C}$                  | Pdh                         | 15.38       | kW                                | $T_i = +2$ °C                                    | $COP_d$      |          | 4.02      | <del>\\</del> 0, |
| $T_i = +7 ^{\circ}\text{C}$                  | Pdh                         | 9.89        | kW                                | $T_i = +7$ °C                                    | $COP_d$      |          | 6.44      | <del>%</del>     |
| $T_{i} = + 12  {}^{\circ}\text{C}$           | Pdh                         | 9.88        | kW                                | $T_i = +12  ^{\circ}C$                           | $COP_d$      |          | 8.80      | <del>%</del>     |
|  | Pdh                         | 28.56       | kW                                | $T_j = bivalent$<br>temperature                  | $COP_d$      |          | 1.76      | <del>9/0</del>   |
| $T_i$ = operation limit                      | Pdh                         | 28.56       | kW                                | $T_i$ = operation limit                          | $COP_d$      |          | 1.76      | <del>%</del>     |
| For air-to-water heat                        |                             |             |                                   | For water-to-air heat                            |              |          |           |                  |
| pumps: $T_j = -15$ °C (if $T_{OL}$           | Pdh                         | -           | kW                                | pumps: $T_j = -15$ °C (if                        | $COP_d$      |          | -         | <del>0/o</del>   |
| < - 20 °C)                                   |                             |             |                                   | $T_{OL} < -20  ^{\circ}\text{C}$                 |              |          |           |                  |
|  |                             |             |                                   | For water-to-air heat                            |              |          |           |                  |
| Bivalent temperature                         | $T_{biv}$                   | -10.0       | °C                                | pumps: Operation limit                           | $T_{ol}$     |          | -         | °C               |
|  |                             |             |                                   | temperature                                      |              |          |           |                  |
|  |                             |             |                                   |  |              |          |           |                  |
| Degradation co-efficient                     | C "                         | 0.25        | ]_                                |  |              |          |           |                  |
| heat pumps**                                 | ℃dh                         | 0.23        |                                   |  |              |          |           |                  |
| Power consumption in mod                     | es other tl                 | han 'activ  | e mode'                           | Supplementary heater                             |              |          |           |                  |
| Off mode                                     | $\mathbf{P}_{\mathrm{OFF}}$ | 0.095       | kW                                | Electric back-up heating capacity *              | elbu         |          | 0.000     | kW               |
| Thermostat-off mode                          | $\mathbf{P}_{\mathrm{TO}}$  | 0.164       | kW                                | Type of energy input                             |              |          |           | _                |
| Crankcase heater mode                        | $P_{CK}$                    | 0.039       | kW                                | Standby mode                                     | $P_{SB}$     |          | 0.173     | kW               |
| Other items                                  |                             | -           |                                   |  |              |          |           |                  |
|  |                             |             |                                   | For air-to-air heat                              |              |          |           |                  |
| Capacity control                             | variable                    |             |                                   | pumps: Nominal air                               | <u> </u>     | 21900    | m³,       | /h               |
|  |                             |             |                                   | flow rate, outdoor                               |              |          |           |                  |
|  |                             |             |                                   | measured   |              |          |           |                  |
| Sound power level, indoor                    |                             |             |                                   | For water-/brine-to-air                          |              |          |           |                  |
| / outdoor measured                           | $L_{WA}$                    | 85          | dB                                | heat pumps: Rated                                |              |          |           |                  |
|  |                             |             |                                   | brine or water flow                              | -            | -        | m³,       | /h               |
| Emissions of nitrogen                        | NO <sub>v</sub>             | _           | mg/kWh                            | rate, outdoor heat                               |              |          |           |                  |
| oxides (if applicable)                       | Α .                         |             |                                   | exchanger  |              |          |           |                  |
| GWP of the refrigerant                       |                             | 2088        | kg CO <sub>2 ep</sub> (100 years) |  |              |          |           |                  |
|  | MITSUF                      | BISHI EL    | ECTRIC CO                         | DNSUMER PRODUCTS (T                              | HAILAND      | ) CO I   | TD.       |                  |
| Contact details                              |                             |             |                                   | te, 700/406 Moo 7, Tambon                        |              |          |           |                  |
|  |                             |             | 20000, Tha                        |  | 11000 1      | ,        | 1         |                  |
| ** If C <sub>d</sub> is not determined b     |                             |             |                                   | It degradation coefficient of                    | heat pumps   | shall be | e 0,25.   |                  |
|  |                             |             |                                   |  |              |          |           |                  |
| Where information relates                    | to multi-s                  | plit air co | onditioners,                      | the test result and performa                     | nce data ma  | ay be ob | tained or | n the basis      |

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

|   |                      | 1 17       | ODCCI                             | 11.4     |  |             |         |            |               |
|---|----------------------|------------|-----------------------------------|----------|--|-------------|---------|------------|---------------|
| Model(s): Information to id                             | •                    |            |                                   |          |  |             |         |            |               |
| Outdoor: PUHY-EF  |                      |            |                                   | <u> </u> | r:PEFY-M50VMA-A1×4 units   |             |         |            |               |
| Outdoor heat exchanger of                               |                      |            |                                   | _        |  |             |         |            |               |
| Indoor heat exchanger of ai                             |                      |            |                                   | _        |  |             |         |            |               |
| Type: compressor driven va                              |                      |            |                                   |          |  |             |         |            |               |
| if applicable: driver of com                            |                      |            |                                   | _        |  |             | ** 1    |            |               |
| Item  | Symbol               | Value      | Unit                              | 1 '      | Item Symbol  |             | Value   | ) <u>-</u> | Jnit          |
| Rated cooling capacity                                  | $P_{\text{rated,c}}$ | 22.40      | kW                                |          | Seasonal space cooling $\eta_{s,c}$ energy efficiency  |             | 307.0   |            | <b>%</b>      |
| Declared cooling capacity temperatures $T_j$ and indoor |                      |            |                                   |          | Declared energy efficiency ratio auxiliary energy factor for present temperatures T <sub>i</sub> |             |         |            |               |
| $T_i = +35$ °C  | Pdc                  | 22.40      | kW                                |          | $T_j = +35 \text{ °C}$ EER <sub>d</sub>  |             | 4.06    | <u> </u>   | <del>%</del>  |
| $T_{i} = +30  {}^{\circ}\text{C}$                       | Pdc                  | 16.51      | kW                                |          | $T_i = +30  ^{\circ}\text{C}$ EER <sub>d</sub>   |             | 5.77    | <u>_</u>   | <del>%</del>  |
| $T_i = +25  ^{\circ}\text{C}$                           | Pdc                  | 10.61      | kW                                |          | $T_i = +25  ^{\circ}\text{C}$ EER <sub>d</sub>   |             | 9.71    | _          | <del>//</del> |
| $T_i = +20  ^{\circ}\text{C}$                           | Pdc                  | 7.30       | kW                                |          | $T_i = +20  ^{\circ}\text{C}$ EER <sub>d</sub>   |             | 14.96   |            | <del>%</del>  |
| -,  |                      | 1000       | 1                                 |          |  |             | - 112   |            | , 0           |
| Degradation co-efficient air conditioners**             | $C_d$                | 0.25       | -                                 |          |  |             |         |            |               |
| Power consumption in mod                                | es other th          | han 'activ | e mode'                           |          |  |             |         |            |               |
| Off mode  | $P_{OFF}$            | 0.069      | kW                                |          | Crankcase heater mode P <sub>CK</sub>  |             | 0.000   | ) k        | ¢W            |
| Thermostat-off mode                                     | $P_{TO}$             | 0.029      | kW                                |          | Standby mode P <sub>SB</sub>   |             | 0.069   | k          | cW            |
| Other items   |                      | ļ          |                                   |          |  |             |         |            |               |
| Capacity control  | variable             |            |                                   |          | For air-to-air air conditioner: Nominal air flow rate, outdoor measured                          | 10200       | r       | m³/h       |               |
| Sound power level, outdoor                              | $L_{WA}$             | 75         | dB                                |          |  |             |         |            |               |
| if engine driven:<br>Emissions of nitrogen<br>oxides    |                      | -          | mg/kWh<br>fuel input<br>GCV       |          |  |             |         |            |               |
| GWP of the refrigerant                                  |                      | 2088       | kg CO <sub>2 ep</sub> (100 years) |          |  |             |         |            |               |
|   |                      |            |                                   |          | SUMER PRODUCTS (THAILA   |             |         |            |               |
| Contact details   |                      |            | dustrial Esta<br>20000, Tha       |          | , 700/406 Moo 7, Tambon Don Hu<br>and  | ıa Roh, Am  | phur    |            |               |
| ** If C <sub>d</sub> is not determined b                |                      |            |                                   |          | degradation coefficient air conditi  | oners shall | be 0.25 | 5.         |               |

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

| Model(s): Information to id                            |                      |            |              |                                     | •.            |          |          |               |                |
|--|----------------------|------------|--------------|-------------------------------------|---------------|----------|----------|---------------|----------------|
| Outdoor: PUHY-EF                                       |                      |            |              | oor:PEFY-M50VMA-A1×4                | units         |          |          |               |                |
| Outdoor heat exchanger of Indoor heat exchanger of air |                      |            |              |                                     |               |          |          |               |                |
| Indication if the heater is ed                         |                      |            | nlementary   | heater: no                          |               |          |          |               |                |
|  |                      |            |              | ason, parameters for the w          | armer and c   | older h  | eating   | sea           | sons are       |
| optional.  | ca for the           | average    | , meaning se | ason, parameters for the w          | armer and c   | oraer n  | caring   | 500           | BOIID GIV      |
| Item   | Symbol               | Value      | Unit         | Item                                | Symbol        |          | Valı     | ıe            | Unit           |
|  | -                    |            |              | Seasonal space heating              | •             |          | 1.51     | _             | 0./            |
| Rated heating capacity                                 | P <sub>rated,h</sub> | 22.40      | kW           | energy efficiency                   | $\eta_{s,h}$  |          | 171.     |               | %              |
| Declared heating capacit                               | tv for pa            | art load   | at indoor    | Declared coefficient of             | _             |          | _        |               |                |
| temperature 20 °C and outo                             |                      |            |              | efficiency / auxiliary ef           | nergy factor  | r for p  | art lo   | ad            | at given       |
| 1  | -                    |            | -            | outdoor temperatures T <sub>j</sub> |               |          |          |               |                |
| $T_i = -7$ °C  | Pdh                  | 10.11      | kW           | $T_i = -7$ °C                       | $COP_d$       |          | 2.13     | _             | <del>0/0</del> |
| $T_i = +2$ °C  | Pdh                  | 6.15       | kW           | $T_i = +2  ^{\circ}C$               | $COP_d$       |          | 4.62     | -             | <del>0/0</del> |
| $T_i = +7  ^{\circ}C$                                  | Pdh                  | 3.96       | kW           | $T_i = +7  ^{\circ}C$               | $COP_d$       |          | 5.97     | $\overline{}$ | <del>0/0</del> |
| $T_i = +12  ^{\circ}C$                                 | Pdh                  | 5.18       | kW           | $T_i = +12  {}^{\circ}\text{C}$     | $COP_d$       |          | 8.20     |               | <del>0/0</del> |
| $T_j$ = bivalent temperature                           | Pdh                  | 11.43      | kW           | $T_j = bivalent$                    | $COP_d$       |          | 1.95     |               | <u>0/o</u>     |
| T - operation limit                                    | Pdh                  | 11.43      | kW           | temperature $T_i$ = operation limit | COD           |          | 1.95     |               | <u>0/o</u>     |
| $T_i$ = operation limit<br>For air-to-water heat       |                      | 11.43      | -KW          | For water-to-air heat               | $COP_d$       |          | 1.93     |               | <del>70</del>  |
| pumps: $T_i = -15$ °C (if $T_{OL}$                     |                      |            | kW           | pumps: $T_i = -15$ °C (if           | $COP_d$       |          |          |               | <u>0/</u>      |
| $ < -20  ^{\circ}\text{C} $                            | 1 un                 | -          | K W          | $T_{OL} < -20  ^{\circ}\text{C}$    | COId          |          | -        |               | <del>70</del>  |
| ( - 20 °C)   |                      |            | -            | For water-to-air heat               |               |          |          |               |                |
| Divid ant tomm anotime                                 | $T_{biv}$            | -10.0      | °C           |                                     | т             |          |          |               | °C             |
| Bivalent temperature                                   | 1 biv                | -10.0      | 1.0          | pumps: Operation limit              | $T_{ol}$      |          | -        |               | -C             |
|  |                      |            | 1            | temperature                         |               |          |          |               |                |
| Degradation co-efficient                               |                      |            | 1            |                                     |               |          |          |               |                |
| Degradation co-efficient heat pumps**                  | $C_{dh}$             | 0.25       | -            |                                     |               |          |          |               |                |
|  |                      |            |              |                                     |               |          |          |               |                |
| Power consumption in mod                               | les other tl         | nan 'activ | e mode'      | Supplementary heater                |               |          |          |               |                |
| occ 1  | D                    | 0.000      | 1 337        | Electric back-up                    | 11            |          | 0.000    |               | 1 337          |
| Off mode   | $P_{OFF}$            | 0.069      | kW           | heating capacity *                  | elbu          |          | 0.000    |               | kW             |
| Thermostat-off mode                                    | $P_{TO}$             | 0.129      | kW           | Type of energy input                |               |          |          |               |                |
| Crankcase heater mode                                  | $P_{CK}$             | 0.029      | kW           | Standby mode                        | $P_{SB}$      |          | 0.146    |               | kW             |
| Other items  |                      | _          |              |                                     | 1             |          |          |               |                |
|  |                      |            |              | For air-to-air heat                 |               |          |          |               |                |
|  |                      |            |              | pumps: Nominal air                  |               | 10200    |          | 2 /1          |                |
| Capacity control                                       | variable             |            |              | flow rate, outdoor                  | <b>-</b>      | 10200    | n        | n³/h          |                |
|  |                      |            |              | measured                            |               |          |          |               |                |
| Cound marron lovel indeen                              |                      |            |              | For water-/brine-to-air             |               |          |          |               |                |
| Sound power level, indoor                              | $L_{WA}$             | 78         | dB           | heat pumps: Rated                   |               |          |          |               |                |
| outdoor measured                                       |                      |            |              | brine or water flow                 | -  -          | -        | n        | n³/h          |                |
| Emissions of nitrogen                                  | NO                   |            | mg/kWh       | rate, outdoor heat                  |               |          |          |               |                |
| oxides (if applicable)                                 | 110 <sub>x</sub>     | _          | mg/K vv n    | exchanger                           |               |          |          |               |                |
| CMD C4 C.  |                      | 2000       | kg CO2 ep    |                                     |               |          |          |               |                |
| GWP of the refrigerant                                 |                      | 2088       | (100 years)  |                                     |               |          |          |               |                |
|  | MITSUF               | ISHI EL    | ECTRIC CO    | L I<br>ONSUMER PRODUCTS (T          | HAILAND)      | CO I     | TD.      |               |                |
| Contact details  |                      |            |              | te, 700/406 Moo 7, Tambon           |               |          |          |               |                |
|  |                      |            | 20000, Tha   |                                     | 11uu 10       | , - 1111 | T        |               |                |
| ** If C <sub>d</sub> is not determined b               |                      |            |              | It degradation coefficient of       | heat pumps    | shall be | 0,25.    |               |                |
|  |                      |            |              |                                     |               |          |          |               |                |
|  |                      |            |              | the test result and performa        |               |          |          |               |                |
| of the performance of the o                            | utdoor un            | it, with a | combination  | n of indoor unit(s) recommen        | nded by the 1 | manufa   | cturer ( | or ir         | nporter.       |

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

|   |  | 1 17.                 | obcci                             | т,   |  |           |        |          |                |
|---|--|-----------------------|-----------------------------------|------|--|-----------|--------|----------|----------------|
| Model(s): Information to id                             | -  | model(s)              | to which th                       | e    | information relates:   |           |        |          |                |
| Outdoor: PUHY-EP  |  |                       |                                   | 001  | ::PEFY-M63VMA-A1×4 units   |           |        |          |                |
| Outdoor heat exchanger of                               |  |                       |                                   |      |  |           |        |          |                |
| Indoor heat exchanger of ai                             |  |                       |                                   |      |  |           |        |          |                |
| Type: compressor driven va                              | _  | _                     | otom                              |      |  |           |        |          |                |
| if applicable: driver of com                            | _  | Value                 |                                   |      | Trumb of   |           | Valu   |          | TT '4          |
| Item  | Symbol   | Value                 | Unit                              | ı    | Item Symbol  |           | v aru  | -        | Unit           |
| Rated cooling capacity                                  | $P_{\text{rated,c}}$                             | 28.00                 | kW                                |      | Seasonal space cooling $\eta_{s,c}$ energy efficiency  |           | 297.0  | )        | %              |
| Declared cooling capacity temperatures $T_j$ and indoor |  |                       |                                   |      | Declared energy efficiency ratio of auxiliary energy factor for partemperatures $T_i$                    | -         |        |          | -              |
| $T_j = +35  ^{\circ}\text{C}$                           | Pdc  | 28.00                 | $_{\rm kW}$                       |      | $T_i = +35  ^{\circ}\text{C}$ EER <sub>d</sub>   |           | 3.41   |          | <del>0/o</del> |
| $T_{i} = +30  {}^{\circ}\text{C}$                       | Pdc  | 20.63                 | kW                                |      | $T_j = +30  ^{\circ}\text{C}$ EER <sub>d</sub>   |           | 5.30   |          | <del>0/o</del> |
| $T_i = +25  ^{\circ}\text{C}$                           | Pdc  | 13.26                 | kW                                |      | $T_i = +25  ^{\circ}\text{C}$ EER <sub>d</sub>   |           | 9.55   |          | <del>9/0</del> |
| $T_i = +20  ^{\circ}\text{C}$                           | Pdc  | 7.30                  | kW                                |      | $T_i = +20  ^{\circ}\text{C}$ EER <sub>d</sub>   |           | 14.90  | <u> </u> | <del>%</del>   |
| 1 <sub>1</sub> + 20 C                                   | 1 dc   | 7.50                  | -                                 |      | I DER  |           | 14.7   | ,        | 70             |
| Degradation co-efficient air conditioners**             | $C_d$  | 0.25                  | -                                 |      |  |           |        |          |                |
| Power consumption in mod                                | es other tl                                      | han 'activ            | e mode'                           |      |  |           |        |          |                |
| Off mode<br>Thermostat-off mode                         | $\begin{array}{c} P_{OFF} \\ P_{TO} \end{array}$ | 0.069                 | kW<br>kW                          |      | $ \begin{array}{ccc} \text{Crankcase heater mode} & P_{CK} \\ \text{Standby mode} & P_{SB} \end{array} $ |           | 0.000  |          | kW<br>kW       |
| Other items   |  | •                     | •                                 |      |  |           |        |          |                |
| Capacity control  | variable   |                       |                                   |      | For air-to-air air conditioner: Nominal air flow rate, outdoor measured                                  | 11100     |        | m³/h     |                |
| Sound power level, outdoor                              | $L_{WA}$   | 78                    | dB                                |      |  |           |        |          |                |
| if engine driven:<br>Emissions of nitrogen<br>oxides    | NO <sub>x</sub>                                  | -                     | mg/kWh<br>fuel input<br>GCV       |      |  |           |        |          |                |
| Emissions of nitrogen oxides (if applicable)            | NO <sub>x</sub>                                  | -                     | mg/kWh                            |      |  |           |        |          |                |
| GWP of the refrigerant                                  |  | 2088                  | kg CO <sub>2 ep</sub> (100 years) |      |  |           |        |          |                |
| Contact details   | Amata N<br>Muang, 0                              | akorn Ind<br>Chonburi | dustrial Esta<br>20000, Tha       | te.  |  | Roh, Am   | phur   |          |                |
| ** If C <sub>d</sub> is not determined b                | y measure  | ement the             | en the defaul                     | lt ( | degradation coefficient air condition  | ers shall | be 0.2 | 5.       |                |

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

| Model(s): Information to id<br>Outdoor:PUHY-EP |                      |              |                                   | ie information relates:<br>oor:PEFY-M63VMA-A1×4 | unite                                    |              |  |
|--|----------------------|--------------|-----------------------------------|---|--|--------------|--|
| Outdoor heat exchanger of                      |                      |              |                                   | 001.FEF1-W03VWA-A1^4                            | units                                    |              |  |
| Indoor heat exchanger of ai                    |                      |              |                                   |   |  |              |  |
| Indication if the heater is ed                 |                      |              | plementary l                      | heater: no                                      |  |              |  |
| Parameters shall be declar                     |                      |              |                                   |   | armer and colo                           | der heating  | seasons are  |
| optional.                                      |                      | _            |                                   | •   |  |              |  |
| Item   | Symbol               | Value        | Unit                              | Item  | Symbol                                   | Valı         | ıe Unit  |
| Rated heating capacity                         | P <sub>rated,h</sub> | 28.00        | kW                                | Seasonal space heating                          | $\eta_{s,h}$                             | 173.         | .0 %   |
| - Kated heating capacity                       | - rated,n            | 20.00        | K VV                              | energy efficiency                               |  |              |  |
| Declared heating capacit                       | y for p              | art load     | at indoor                         | Declared coefficient of                         |  |              |  |
| temperature 20 °C and outd                     |                      |              |                                   | efficiency / auxiliary ef                       | nergy factor f                           | or part lo   | ad at given  |
| T 7.0C   | D 11                 | 12.62        | 71.557                            | outdoor temperatures T <sub>j</sub>             | COD                                      | 2.12         |  |
| $T_i = -7$ °C                                  | Pdh                  | 12.63        | kW                                | $T_i = -7$ °C                                   | $COP_d$                                  | 2.12         | <u>%</u>   |
| $T_i = +2 \text{ °C}$<br>$T_i = +7 \text{ °C}$ | Pdh<br>Pdh           | 7.69<br>4.95 | kW<br>kW                          | $T_i = +2 \text{ °C}$<br>$T_i = +7 \text{ °C}$  | $COP_d$                                  | 4.60<br>6.21 | <del>%</del>                                       |
| $T_i = +7$ °C<br>$T_i = +12$ °C                | Pdh                  | 5.22         | kW                                | $T_i = +12 ^{\circ}\text{C}$                    | $COP_d$ $COP_d$                          | 8.20         | — <del>                                     </del> |
| ·  |                      | 3.22         | -  K W                            | $T_i = \text{bivalent}$                         |  | 0.20         | ─ <del> </del>                                     |
| $T_j$ = bivalent temperature                   | Pdh                  | 14.28        | kW                                | temperature                                     | $COP_d$                                  | 1.91         | <del>%</del>                                       |
| $T_i$ = operation limit                        | Pdh                  | 14.28        | kW                                | $T_i$ = operation limit                         | $COP_d$                                  | 1.91         | <u>%</u>   |
| For air-to-water heat                          |                      |              | 1                                 | For water-to-air heat                           | u  |              | <b>—</b> /~  |
| pumps: $T_i = -15$ °C (if $T_{OL}$             |                      | _            | kW                                | pumps: $T_i = -15$ °C (if                       | $COP_d$                                  | _            | <del>%</del>                                       |
| < - 20 °C)                                     |                      |              |                                   | $T_{OL} < -20$ °C)                              | u  |              |  |
| ,  |                      |              | 1                                 | For water-to-air heat                           |  |              |  |
| Bivalent temperature                           | $T_{\rm biv}$        | -10.0        | °C                                | pumps: Operation limit                          | $T_{ol}$                                 | -            | °C   |
| _  |                      |              |                                   | temperature                                     |  |              |  |
|  |                      |              |                                   |   |  |              |  |
| Degradation co-efficient                       | Car                  | 0.25         | _                                 |   |  |              |  |
| heat pumps**                                   | Can                  | 0.23         |                                   |   |  |              |  |
| Power consumption in mod                       | es other t           | han 'activ   | e mode'                           | Supplementary heater                            |  |              |  |
|  | _                    |              | 1                                 | Electric back-up                                |  |              | $\neg$   |
| Off mode                                       | $P_{OFF}$            | 0.069        | kW                                | heating capacity *                              | elbu                                     | 0.000        | kW   |
| Thermostat-off mode                            | $P_{TO}$             | 0.129        | kW                                | Type of energy input                            |  |              |  |
| Crankcase heater mode                          | $P_{CK}$             | 0.029        | kW                                | Standby mode                                    | $P_{SB}$                                 | 0.146        | kW   |
| Other items                                    |                      | _            | •                                 |   | •  |              |  |
|  |                      |              |                                   | For air-to-air heat                             |  |              |  |
| Capacity control                               | variable             |              |                                   | pumps: Nominal air                              |  | 100 r        | n³/h   |
| Cupacity control                               | , ar ias ic          |              |                                   | flow rate, outdoor                              |  |              |  |
|  |                      |              | ı                                 | measured  |  |              |  |
| Sound power level, indoor                      | _                    | 00           | 100                               | For water-/brine-to-air                         |  |              |  |
| / outdoor measured                             | $L_{WA}$             | 80           | dB                                | heat pumps: Rated brine or water flow           |  |              | n³/h   |
| Emissions of nitrogen                          |                      |              |                                   | rate, outdoor heat                              |  | 1.           | 11 /11   |
| Emissions of nitrogen oxides (if applicable)   | NO <sub>x</sub>      | -            | mg/kWh                            | exchanger                                       |  |              |  |
| oxides (if applicable)                         |                      |              | 1 00                              | CACHAIIger                                      |  |              |  |
| GWP of the refrigerant                         |                      | 2088         | kg CO <sub>2 ep</sub> (100 years) |   |  |              |  |
|  |                      |              |                                   |   |  | 0. 1.55      |  |
| C + 1 + 1                                      |                      |              |                                   | ONSUMER PRODUCTS (T                             |  |              |  |
| Contact details                                |                      |              |                                   | te, 700/406 Moo 7, Tambon                       | Don Hua Roh                              | , Amphur     |  |
| ** If C is not dot                             |                      |              | 20000, Tha                        |   | hoot =================================== | all ba 0.25  |  |
| $1 \cdot 11 \cdot C_d$ is not determined b     | y measur             | ement the    | in the defaul                     | It degradation coefficient of                   | neat pumps sh                            | an be 0,23.  |  |
| Where information relates                      | to multi-s           | plit air co  | onditioners,                      | the test result and performa                    | nce data may b                           | e obtained   | on the basis                                       |

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

|   |                      | 1 1/       | ODCCI                             | 11.4 | 1 01011111011(1)  |           |                |                 |
|---|----------------------|------------|-----------------------------------|------|---|-----------|----------------|-----------------|
| Model(s): Information to id                             | •                    |            |                                   |      |   |           |                |                 |
| Outdoor: PUHY-EF  |                      |            |                                   | )01  | r:PEFY-M50VMA-A1×6 units  |           |                |                 |
| Outdoor heat exchanger of                               |                      |            | •                                 | _    |   |           |                |                 |
| Indoor heat exchanger of ai                             |                      |            |                                   | _    |   |           |                |                 |
| Type: compressor driven va                              |                      |            |                                   |      |   |           |                |                 |
| if applicable: driver of com                            |                      |            |                                   |      | v   |           | X7 1           | ** .            |
| Item  | Symbol               | Value      | Unit                              | 1    | Item Symbol   |           | Value          | Unit            |
| Rated cooling capacity                                  | $P_{\text{rated,c}}$ | 33.50      | kW                                |      | Seasonal space cooling $\eta_{s,c}$ energy efficiency                                 |           | 287.0          | %               |
| Declared cooling capacity temperatures $T_j$ and indoor |                      |            |                                   |      | Declared energy efficiency ratio of auxiliary energy factor for partemperatures $T_i$ |           |                |                 |
| $T_i = +35$ °C  | Pdc                  | 33.50      | kW                                |      | $T_j = +35  ^{\circ}\text{C}$ EER <sub>d</sub>  |           | 3.46           | <del>%</del>    |
| $T_{i} = +30  {}^{\circ}\text{C}$                       | Pdc                  | 24.68      | kW                                |      | $T_i = +30  ^{\circ}\text{C}$ EER <sub>d</sub>  |           | 5.12           | — <del>%</del>  |
| $T_i = +25  ^{\circ}\text{C}$                           | Pdc                  | 15.87      | kW                                |      | $T_i = +25  ^{\circ}\text{C}$ EER <sub>d</sub>  |           | 8.85           | <u>%</u>        |
| $T_i = +20  ^{\circ}\text{C}$                           | Pdc                  | 9.30       | kW                                |      | $T_i = +20  ^{\circ}\text{C}$ EER <sub>d</sub>  |           | 14.53          |                 |
| -,  |                      |            | 1                                 |      | -j  |           |                | <b>⊣</b> ′°     |
| Degradation co-efficient air conditioners**             | $C_d$                | 0.25       | <u> </u> -                        |      |   |           |                |                 |
| Power consumption in mod                                | les other t          | han 'activ | e mode'                           |      |   |           |                |                 |
| Off mode  | $P_{OFF}$            | 0.069      | $\rceil_{\mathrm{kW}}$            |      | Crankcase heater mode P <sub>CK</sub>   |           | 0.000          | kW              |
| Thermostat-off mode                                     | $P_{TO}$             | 0.029      | kW                                |      | Standby mode P <sub>SB</sub>  |           | 0.069          | kW              |
| Othoritoma  |                      |            |                                   |      |   |           |                |                 |
| Other items   | 1                    |            |                                   | H    | For air-to-air air  | 1         |                |                 |
| Capacity control  | variable             |            |                                   |      | conditioner: Nominal air flow rate, outdoor measured                                  | 12000     | m <sup>3</sup> | <sup>3</sup> /h |
| Sound power level, outdoor                              | $L_{WA}$             | 80         | dB                                |      |   |           |                |                 |
| if engine driven:<br>Emissions of nitrogen<br>oxides    |                      | -          | mg/kWh<br>fuel input<br>GCV       |      |   |           |                |                 |
| GWP of the refrigerant                                  |                      | 2088       | kg CO <sub>2 ep</sub> (100 years) |      |   |           |                |                 |
|   | 1                    |            |                                   |      | SUMER PRODUCTS (THAILAN   |           |                | <u></u>         |
| Contact details   | 1                    |            | dustrial Esta<br>20000, Tha       |      | , 700/406 Moo 7, Tambon Don Hua   | Roh, Am   | phur           |                 |
| ** If C <sub>d</sub> is not determined b                |                      |            |                                   |      | degradation coefficient air condition   | ers shall | be 0.25.       |                 |

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

| Model(s): Information to id Outdoor: PUHY-EP                 |                      |               |                       |          | information relates:<br>r:PEFY-M50VMA-A1×6     | units        |          |                |                                 |
|--|----------------------|---------------|-----------------------|----------|--|--------------|----------|----------------|---------------------------------|
| Outdoor heat exchanger of                                    |                      |               |                       |          | THE T WISOVIMITATION                           | units        |          |                |                                 |
| Indoor heat exchanger of ai                                  |                      |               |                       | _        |  |              |          |                |                                 |
| Indication if the heater is ed                               |                      |               | plementary            | he       | ater: no                                       |              |          |                |                                 |
| Parameters shall be declar                                   | ed for the           | e average     | heating se            | as       | on, parameters for the wa                      | armer and    | colder h | eating s       | seasons are                     |
| optional.  |                      |               |                       |          |  |              |          |                |                                 |
| Item   | Symbol               | Value         | Unit                  | _        | Item   | Symbol       |          | Value          | Unit                            |
| Rated heating capacity                                       | P <sub>rated,h</sub> | 33.50         | kW                    |          | Seasonal space heating                         | $\eta_{s,h}$ |          | 161.0          | %                               |
|  | Tateu,ii             |               | 10,11                 | ↓ !      | energy efficiency                              |              |          |                |                                 |
| Declared heating capacit                                     | y for p              | art load      | at indoor             |          | Declared coefficient o                         | _            |          | -              |                                 |
| temperature 20 °C and outd                                   |                      |               |                       |          | efficiency / auxiliary er                      | nergy facto  | or for p | art loac       | at given                        |
| T = 7.0C   | D 41.                | 15.12         | 71.337                |          | outdoor temperatures T <sub>j</sub>            | COD          |          | 1.05           | ٦,,                             |
| $T_i = -7  ^{\circ}\text{C}$<br>$T_i = +2  ^{\circ}\text{C}$ | Pdh<br>Pdh           | 15.12<br>9.20 | kW                    |          | $T_i = -7$ °C                                  | $COP_d$      |          | 1.95<br>4.24   | -\frac{9/6}{0/}                 |
| $T_i = +7$ °C  | Pdh                  | 5.92          | kW<br>kW              |          | $T_i = +2  ^{\circ}C$<br>$T_i = +7  ^{\circ}C$ | $COP_d$      |          | 6.09           | —  <del>%</del><br><del>%</del> |
| $T_i = +7$ C<br>$T_i = +12$ °C                               | Pdh                  |               | <b>⊣</b>              |          | $T_i = + 12 ^{\circ}\text{C}$                  | $COP_d$      |          |                |                                 |
| 11 <sub>1</sub> -+12 C                                       | ruii                 | 7.05          | kW                    |          | $T_i = + 12 C$<br>$T_i = bivalent$             | $COP_d$      |          | 8.05           |                                 |
| $T_j$ = bivalent temperature                                 | Pdh                  | 17.09         | kW                    |          | temperature                                    | $COP_d$      |          | 1.66           | <del>%</del>                    |
| $T_i$ = operation limit                                      | Pdh                  | 17.09         | kW                    |          | $T_i$ = operation limit                        | $COP_d$      |          | 1.66           | <del>%</del>                    |
| For air-to-water heat  |                      |               | 1                     |          | For water-to-air heat                          |              |          |                |                                 |
| pumps: $T_j = -15$ °C (if $T_{OL}$                           | Pdh                  | -             | kW                    |          | pumps: $T_j = -15$ °C (if                      | $COP_d$      |          | -              | <del>%</del>                    |
| < - 20 °C)   |                      |               |                       |          | $T_{OL} < -20  ^{\circ}\text{C}$               |              |          |                |                                 |
|  |                      |               |                       |          | For water-to-air heat                          |              |          |                |                                 |
| Bivalent temperature   | $T_{\rm biv}$        | -10.0         | °C                    |          | pumps: Operation limit                         | $T_{ol}$     |          | -              | °C                              |
|  |                      |               | 4                     |          | temperature                                    |              |          |                |                                 |
| Decredation as officient                                     |                      |               | -                     |          |  |              |          |                |                                 |
| Degradation co-efficient heat pumps**                        | $C_{dh}$             | 0.25          | -                     |          |  |              |          |                |                                 |
| •  |                      |               |                       |          |  |              |          |                |                                 |
| Power consumption in mod                                     | es other tl          | han 'activ    | e mode'               |          | Supplementary heater                           |              |          |                |                                 |
| Off mode   | $P_{OFF}$            | 0.069         | $_{\rm kW}$           |          | Electric back-up                               | elbu         |          | 0.000          | kW                              |
|  | P <sub>TO</sub>      | 0.129         | kW                    |          | heating capacity * Type of energy input        |              |          |                |                                 |
| Crankcase heater mode  | P <sub>CK</sub>      | 0.029         | kW                    |          | Standby mode                                   | $P_{SB}$     |          | 0.146          | kW                              |
|  | 1 CK                 | 0.029         | K vv                  |          | Standoy mode                                   | r SB         |          | 0.140          | K VV                            |
| Other items  | ī                    |               |                       | Ц        | T : 1 : 1 :                                    | 1            | ı        |                |                                 |
|  |                      |               |                       |          | For air-to-air heat                            |              |          |                |                                 |
| Capacity control   | variable             |               |                       |          | pumps: Nominal air                             | -            | 14400    | m <sup>3</sup> | 3/h                             |
|  |                      |               |                       |          | flow rate, outdoor measured                    |              |          |                |                                 |
|  |                      |               |                       | H        | For water-/brine-to-air                        |              |          |                |                                 |
| Sound power level, indoor                                    | $L_{WA}$             | 84            | dB                    |          | heat pumps: Rated                              |              |          |                |                                 |
| / outdoor measured   | -wA                  | •             |                       |          | brine or water flow                            | _            | _        | m <sup>3</sup> | 3/h                             |
| Emissions of nitrogen  | NO                   |               | /1.3371               | Ħ        | rate, outdoor heat                             |              |          |                |                                 |
| oxides (if applicable)                                       | $NO_x$               | -             | mg/kWh                |          | exchanger                                      |              |          |                |                                 |
|  |                      |               | kg CO2 ep             | П        |  |              |          |                |                                 |
| GWP of the refrigerant                                       |                      | 2088          | (100 years)           |          |  |              |          |                |                                 |
|  | MITSUE               | RISHI FL      | <u> </u><br>FCTRIC CO | $\Gamma$ | I<br>ISUMER PRODUCTS (T                        | HAILAND      | ) CO 1   | TD             |                                 |
| Contact details  | 1                    |               |                       |          | 700/406 Moo 7, Tambon                          |              | -        |                |                                 |
| Common de unito  | 1                    |               | 20000, Tha            |          |  | _ on mud r   | , 1 1111 | F 1101         |                                 |
| ** If C <sub>d</sub> is not determined b                     |                      |               |                       |          |  | heat pumps   | shall be | 0,25.          |                                 |
|  |                      |               |                       |          |  |              |          |                |                                 |
| Where information relates                                    | to multi-s           | plit air co   | onditioners,          | th       | e test result and performai                    | nce data ma  | ay be ob | tained o       | n the basis                     |

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

|   |                      | 1 17       | ODCCI                             | 11.4 |   |           |           |              |
|---|----------------------|------------|-----------------------------------|------|---|-----------|-----------|--------------|
| Model(s): Information to id                             |                      |            |                                   |      | information relates:<br>EFY-M63VMA-A1×5 units, PEFY-M                                       | 503/MA    | . A 1×1 : | unit         |
| Outdoor heat exchanger of                               |                      |            |                                   |      | Er 1-MO3 V MA-A1^3 units, 1 Er 1-M.   | 30 V IVI  | 1-A1^1    | umi          |
| Indoor heat exchanger of ai                             |                      |            |                                   |      |   |           |           |              |
| Type: compressor driven va                              |                      |            |                                   | _    |   |           |           |              |
| if applicable: driver of com                            |                      |            |                                   | _    |   |           |           |              |
| Item  | Symbol               | Value      | Unit                              | _    | Item Symbol   |           | Value     | Unit         |
| Rated cooling capacity                                  | P <sub>rated,c</sub> | 40.00      | kW                                |      | Seasonal space cooling $\eta_{s,c}$ energy efficiency                                       |           | 278.0     | %            |
| Declared cooling capacity temperatures $T_j$ and indoor | _                    | _          |                                   |      | Declared energy efficiency ratio or $g$ auxiliary energy factor for part temperatures $T_i$ |           |           |              |
| $T_i = +35$ °C  | Pdc                  | 40.00      | kW                                |      | $T_i = +35  ^{\circ}\text{C}$ EER <sub>d</sub>  |           | 3.22      | <del>%</del> |
| $T_{i} = +30  {}^{\circ}\text{C}$                       | Pdc                  | 29.47      | kW                                |      | $T_i = +30  ^{\circ}\text{C}$ EER <sub>d</sub>  |           | 4.76      | <del>%</del> |
| $T_i = +25  ^{\circ}C$                                  | Pdc                  | 18.95      | kW                                |      | $T_i = +25  ^{\circ}\text{C}$ EER <sub>d</sub>  |           | 8.50      | <del>%</del> |
| $T_i = +20  ^{\circ}C$                                  | Pdc                  | 9.90       | kW                                |      | $T_i = +20  ^{\circ}\text{C}$ EER <sub>d</sub>  |           | 16.02     |              |
| J   |                      |            | 1                                 |      | j   |           |           | 7            |
| Degradation co-efficient air conditioners**             | $C_d$                | 0.25       | ]-                                |      |   |           |           |              |
| Power consumption in mod                                | es other t           | han 'activ | e mode'                           |      |   |           |           |              |
| Off mode  | $P_{OFF}$            | 0.095      | $\log k$                          |      | Crankcase heater mode P <sub>CK</sub>   |           | 0.000     | kW           |
| Thermostat-off mode                                     | $P_{TO}$             | 0.039      | kW                                |      | Standby mode P <sub>SB</sub>  |           | 0.095     | kW           |
| Other items   |                      |            | 1                                 |      |   |           |           |              |
| Capacity control  | variable             |            |                                   |      | For air-to-air air conditioner: Nominal air flow rate, outdoor measured                     | 15000     | m³        | /h           |
| Sound power level, outdoor                              | $L_{WA}$             | 80         | dB                                |      |   |           |           |              |
| if engine driven:<br>Emissions of nitrogen<br>oxides    | 1                    | -          | mg/kWh<br>fuel input<br>GCV       |      |   |           |           |              |
| GWP of the refrigerant                                  |                      | 2088       | kg CO <sub>2 ep</sub> (100 years) |      |   |           |           |              |
|   |                      |            |                                   |      | NSUMER PRODUCTS (THAILAND)  |           |           |              |
| Contact details   |                      |            | dustrial Esta<br>20000, Tha       |      | , 700/406 Moo 7, Tambon Don Hua R<br>and  | oh, Am    | phur      |              |
| ** If C <sub>d</sub> is not determined b                |                      |            |                                   |      | degradation coefficient air conditioner   | s shall t | oe 0.25.  |              |

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

Model(s): Information to identify the model(s) to which the information relates: Outdoor: PUHY-EP350YNW-A2 (-BS) Indoor: PEFY-M63VMA-A1×5 units, PEFY-M50VMA-A1×1 unit Outdoor heat exchanger of air conditioner: air Indoor heat exchanger of air conditioner: air Indication if the heater is equipped with a supplementary heater: no Parameters shall be declared for the average heating season, parameters for the warmer and colder heating seasons are optional. Symbol Value Item Value Unit Symbol Unit Item Seasonal space heating  $P_{rated,h}$ 40.00 kW 171.0 % Rated heating capacity  $\eta_{s,h}$ energy efficiency performance Declared coefficient of gas utilization or Declared heating capacity for part load at indoor efficiency / auxiliary energy factor for part load at given temperature 20 °C and outdoor temperature T<sub>i</sub> outdoor temperatures T<sub>i</sub>  $T_i = -7$  °C Pdh 18.05 kW  $T_i = -7$  °C  $COP_d$ 1.93  $T_i = +2$  °C  $T_i = +2$  °C Pdh 10.98 kW  $COP_d$ 4.42 <u>%</u>  $T_i = +7$  °C Pdh 7.06 kW  $T_i = +7$  °C  $COP_d$ 6.88 <u>%</u>  $T_i = +12 \, {}^{\circ}\text{C}$ Pdh 7.30 kW  $T_i = +12 \, {}^{\circ}\text{C}$  $COP_d$ 8.76 <u>%</u>  $T_i = bivalent$  $T_i$  = bivalent temperature Pdh 20.40 kW  $COP_d$ 1.86 <del>%</del> temperature  $T_i$  = operation limit Pdh 20.40 kW  $T_i$  = operation limit  $COP_d$ 1.86 0/0 For water-to-air heat For air-to-water heat pumps:  $T_i = -15$  °C (if <del>%</del> pumps:  $T_i = -15$  °C (if  $T_{OL}$  Pdh kW  $COP_d$  $T_{OL} < -20$  °C)  $< -20 \, {}^{\circ}\text{C}$ For water-to-air heat Bivalent temperature  $T_{biv}$ -10.0 °C pumps: Operation limit °C temperature co-efficient C<sub>dh</sub> Degradation 0.25 heat pumps\*\* Power consumption in modes other than 'active mode' Supplementary heater Electric back-up 0.095 0.000 Off mode Poff kW elbu kW heating capacity \* Thermostat-off mode  $P_{TO}$ 0.156 kW Type of energy input 0.039  $P_{CK}$ kW  $P_{SB}$ 0.173 kW Crankcase heater mode Standby mode Other items For air-to-air heat pumps: Nominal air 16200 m³/h Capacity control variable flow rate, measured For water-/brine-to-air Sound power level, indoor dΒ  $L_{WA}$ 83 pumps: outdoor measured brine or water flow m³/h Emissions of nitrogen rate, outdoor  $NO_x$ mg/kWh oxides (if applicable) exchanger kg CO<sub>2</sub> ep GWP of the refrigerant 2088 (100 years) MITSUBISHI ELECTRIC CONSUMER PRODUCTS (THAILAND) CO., LTD. Amata Nakorn Industrial Estate, 700/406 Moo 7, Tambon Don Hua Roh, Amphur Contact details Muang, Chonburi 20000, Thailand \*\* If  $C_d$  is not determined by measurement then the default degradation coefficient of heat pumps shall be 0,25. Where information relates to multi-split air conditioners, the test result and performance data may be obtained on the basis

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

|   |                      | 1 1/       | ODCCI                             | 11.4 |   |             |                |              |
|---|----------------------|------------|-----------------------------------|------|---|-------------|----------------|--------------|
| Model(s): Information to id   |                      |            |                                   |      | information relates:<br>FY-M71VMA-A1×2 units, PEFY-M6                                       | S3VMA       | - A 1×4 11     | nits         |
| Outdoor heat exchanger of   |                      |            |                                   |      | 1 1-W1/1 V W1/X-/X1/2 UIIIG, 1 E1 1-W1  | )J V 1V17 1 | -711 · - · · · | iiits        |
| Indoor heat exchanger of ai   |                      |            |                                   |      |   |             |                |              |
| Type: compressor driven va  |                      |            |                                   | _    |   |             |                |              |
| if applicable: driver of com  |                      |            |                                   | _    |   |             |                |              |
| Item  | Symbol               | Value      | Unit                              |      | Item Symbol   |             | Value          | Unit         |
| Rated cooling capacity  | $P_{\text{rated,c}}$ | 45.00      | kW                                |      | Seasonal space cooling $\eta_{s,c}$ energy efficiency                                       |             | 270.0          | %            |
| Declared cooling capacity for part load at given outdoor temperatures T <sub>j</sub> and indoor 27°/19°C (dry/wet bulb) |                      |            |                                   |      | Declared energy efficiency ratio or $g$ auxiliary energy factor for part temperatures $T_i$ |             |                |              |
| $T_i = +35$ °C  | Pdc                  | 45.00      | kW                                |      | $T_i = +35  ^{\circ}\text{C}$ EER <sub>d</sub>  |             | 3.07           | <del>%</del> |
| $T_{i} = +30  {}^{\circ}\text{C}$   | Pdc                  | 33.16      | kW                                |      | $T_i = +30  ^{\circ}\text{C}$ EER <sub>d</sub>  |             | 4.74           | <del>%</del> |
| $T_i = +25  ^{\circ}C$  | Pdc                  | 21.32      | kW                                |      | $T_i = +25  ^{\circ}\text{C}$ EER <sub>d</sub>  |             | 7.91           | <del>%</del> |
| $T_i = +20  ^{\circ}C$  | Pdc                  | 12.10      | kW                                |      | $T_i = +20  ^{\circ}C$ EER <sub>d</sub>   |             | 16.26          | <del>%</del> |
|   |                      |            | 1                                 |      | j   |             |                | 7            |
| Degradation co-efficient air conditioners**   | $C_d$                | 0.25       | <u></u>                           |      |   |             |                |              |
| Power consumption in mod  | es other t           | han 'activ | re mode'                          |      |   |             |                |              |
| Off mode  | $P_{\mathrm{OFF}}$   | 0.095      | kW                                |      | Crankcase heater mode P <sub>CK</sub>   |             | 0.000          | kW           |
| Thermostat-off mode   | $P_{TO}$             | 0.039      | kW                                |      | Standby mode $P_{SB}$   |             | 0.095          | kW           |
| Other items   |                      | l          | 1                                 | † !  |   |             |                |              |
| Capacity control  | variable             |            |                                   |      | For air-to-air air conditioner: Nominal air flow rate, outdoor measured                     | 16200       | m³,            | /h           |
| Sound power level, outdoor  | $L_{WA}$             | 82         | dB                                |      |   |             |                |              |
| if engine driven:<br>Emissions of nitrogen<br>oxides  | 1 1                  | -          | mg/kWh<br>fuel input<br>GCV       |      |   |             |                |              |
| GWP of the refrigerant  |                      | 2088       | kg CO <sub>2 ep</sub> (100 years) |      |   |             |                |              |
|   | 1                    |            |                                   |      | SUMER PRODUCTS (THAILAND)   |             |                |              |
| Contact details   | 1                    |            | dustrial Esta<br>20000, Tha       |      | , 700/406 Moo 7, Tambon Don Hua R<br>and  | oh, Am      | phur           |              |
| ** If C <sub>d</sub> is not determined b  |                      |            |                                   |      | degradation coefficient air conditioner   | s shall t   | pe 0.25.       |              |

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

Model(s): Information to identify the model(s) to which the information relates: Outdoor: PUHY-EP400YNW-A2(-BS) Indoor: PEFY-M71VMA-A1×2 units, PEFY-M63VMA-A1×4 units Outdoor heat exchanger of air conditioner: air Indoor heat exchanger of air conditioner: air Indication if the heater is equipped with a supplementary heater: no Parameters shall be declared for the average heating season, parameters for the warmer and colder heating seasons are optional. Symbol Value Item Value Unit Item Symbol Seasonal space heating  $P_{\text{rated},h}$ 45.00 kW 167.0 % Rated heating capacity  $\eta_{s,h}$ energy efficiency Declared coefficient performance of gas or Declared heating capacity for part load at indoor efficiency / auxiliary energy factor for part load at given temperature 20 °C and outdoor temperature T<sub>i</sub> outdoor temperatures T<sub>i</sub>  $T_i = -7$  °C Pdh 20.30 kW  $T_i = -7$  °C  $COP_d$ 2.10  $T_i = +2$  °C Pdh  $T_i = +2$  °C 12.36 kW  $COP_d$ 4.19 <u>%</u>  $T_i = +7$  °C Pdh 7.94 kW  $T_i = +7$  °C  $COP_d$ 6.55 <u>%</u>  $T_i = +12 \, {}^{\circ}\text{C}$ Pdh 8.79 kW  $T_i = +12 \, {}^{\circ}\text{C}$  $COP_d$ 8.73 %  $T_i = bivalent$  $T_i$  = bivalent temperature Pdh 22.95 kW  $COP_d$ 1.87 <del>%</del> temperature 22.95  $T_i$  = operation limit Pdh kW  $T_i$  = operation limit  $COP_d$ 1.87 0/0 For air-to-water For water-to-air heat heat pumps:  $T_i = -15$  °C (if pumps:  $T_i = -15$  °C (if  $T_{OL}$  Pdh % kW  $COP_d$  $T_{OL} < -20$  °C)  $< -20 \, {}^{\circ}\text{C}$ For water-to-air heat Bivalent temperature  $T_{biv}$ -10.0 °C pumps: Operation limit °C temperature co-efficient C<sub>dh</sub> Degradation 0.25 heat pumps\*\* Power consumption in modes other than 'active mode' Supplementary heater Electric back-up 0.095 0.000 Off mode Poff kW elbu kW heating capacity \*  $P_{TO}$ kW Thermostat-off mode 0.156 Type of energy input 0.039  $P_{CK}$ kW  $P_{SB}$ 0.173 kW Crankcase heater mode Standby mode Other items For air-to-air heat pumps: Nominal air 16200 m³/h Capacity control variable flow rate. measured For water-/brine-to-air Sound power level, indoor dΒ  $L_{WA}$ 85 pumps: outdoor measured brine or water flow m³/h Emissions of nitrogen rate, outdoor heat  $NO_x$ mg/kWh oxides (if applicable) exchanger kg CO<sub>2</sub> ep GWP of the refrigerant 2088 (100 years) MITSUBISHI ELECTRIC CONSUMER PRODUCTS (THAILAND) CO., LTD. Amata Nakorn Industrial Estate, 700/406 Moo 7, Tambon Don Hua Roh, Amphur Contact details Muang, Chonburi 20000, Thailand \*\* If  $C_d$  is not determined by measurement then the default degradation coefficient of heat pumps shall be 0,25. Where information relates to multi-split air conditioners, the test result and performance data may be obtained on the basis

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

| Model(s): Information to id                             |                      |            |                                   |      |   | (50X/N/A   | A 1 v   | 4:4      | _             |
|---|----------------------|------------|-----------------------------------|------|---|------------|---------|----------|---------------|
| Outdoor heat exchanger of                               |                      |            |                                   | 'E   | FY-M63VMA-A1×4 units, PEFY-M  | 130 V IVIA | -A1×4   | 4 unit   | S             |
| Indoor heat exchanger of a                              |                      |            |                                   |      |   |            |         |          |               |
| Type: compressor driven va                              |                      |            |                                   |      |   |            |         |          |               |
| if applicable: driver of com                            |                      |            | otor                              |      |   |            |         |          |               |
| Item  | Symbol               | Value      | Unit                              |      | Item Symbol   |            | Valu    | e I      | Jnit          |
| Rated cooling capacity                                  | P <sub>rated,c</sub> | 50.00      | kW                                |      | Seasonal space cooling $\eta_{s,c}$ energy efficiency                                   |            | 274.0   |          |               |
| Declared cooling capacity temperatures $T_j$ and indoor |                      |            |                                   |      | Declared energy efficiency ratio or auxiliary energy factor for part temperatures $T_j$ | -          |         |          | -             |
| $T_j = +35  ^{\circ}\text{C}$                           | Pdc                  | 50.00      | kW                                |      | $T_j = +35 \text{ °C}$ EER <sub>d</sub>   |            | 2.82    | 9        | <del>/o</del> |
| $T_{i} = +30  {}^{\circ}\text{C}$                       | Pdc                  | 36.84      | kW                                |      | $T_i = +30  ^{\circ}\text{C}$ EER <sub>d</sub>  |            | 4.83    | 9        | <b>√₀</b>     |
| $T_i = +25  ^{\circ}\text{C}$                           | Pdc                  | 23.68      | kW                                |      | $T_i = +25 ^{\circ}\text{C}$ EER <sub>d</sub>   |            | 8.01    | <u>o</u> | <del>/o</del> |
| $T_i = +20  ^{\circ}C$                                  | Pdc                  | 12.10      | kW                                |      | $T_i = +20  ^{\circ}\text{C}$ EER <sub>d</sub>  |            | 17.34   | _        | <del>/o</del> |
| [1] · 20 · 0  | 1 44                 | 12.10      | - I'' ''                          |      |   |            | 17.0    | · — ′    | •             |
| Degradation co-efficient air conditioners**             | $C_d$                | 0.25       | -<br> -                           |      |   |            |         |          |               |
| Power consumption in mod                                | es other t           | han 'activ | e mode'                           |      |   |            |         |          |               |
| Off mode  | P <sub>OFF</sub>     | 0.095      | ] <sub>kW</sub>                   |      | Crankcase heater mode P <sub>CK</sub>   |            | 0.000   | ) k      | :W            |
| Thermostat-off mode                                     | $P_{TO}$             | 0.039      | kW                                |      | Standby mode $P_{SB}$   |            | 0.095   | 5 k      | W             |
| Other items   |                      |            |                                   |      |   |            |         |          |               |
| Other items   | 1                    |            |                                   | H    | For air-to-air air  | 1          | - 1     |          |               |
| Capacity control  | variable             |            |                                   |      | conditioner: Nominal air<br>flow rate, outdoor<br>measured                              | 17100      | 1       | m³/h     |               |
| Sound power level, outdoor                              | $L_{WA}$             | 84         | dB                                |      |   |            |         |          |               |
| if engine driven:<br>Emissions of nitrogen<br>oxides    |                      | -          | mg/kWh<br>fuel input<br>GCV       |      |   |            |         |          |               |
| GWP of the refrigerant                                  |                      | 2088       | kg CO <sub>2 ep</sub> (100 years) |      |   |            |         |          |               |
| Contact details   | Amata N              | lakorn Ind | lustrial Esta                     | te,  | SSUMER PRODUCTS (THAILANI<br>700/406 Moo 7, Tambon Don Hua l                            |            |         |          |               |
| ** If C is not determined b                             |                      |            | 20000, Tha                        |      | nd<br>legradation coefficient air conditions  | re chall l | ha () 2 | 5        |               |
| 11 Cd is not determined to                              | y measur             | cincin the | ii iiie uetau                     | ıı ( | regradation coefficient an conditions   | 15 SHall ( | UC U.Z. | J.       |               |

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

Model(s): Information to identify the model(s) to which the information relates: Outdoor: PUHY-EP450YNW-A2(-BS) Indoor: PEFY-M63VMA-A1×4 units, PEFY-M50VMA-A1×4 units Outdoor heat exchanger of air conditioner: air Indoor heat exchanger of air conditioner: air Indication if the heater is equipped with a supplementary heater: no Parameters shall be declared for the average heating season, parameters for the warmer and colder heating seasons are optional. Symbol Value Item Value Unit Symbol Item Seasonal space heating  $P_{rated,h}$ 50.00 kW 169.0 % Rated heating capacity  $\eta_{s,h}$ energy efficiency Declared coefficient performance of gas utilization or Declared heating capacity for part load at indoor efficiency / auxiliary energy factor for part load at given temperature 20 °C and outdoor temperature T<sub>i</sub> outdoor temperatures T<sub>i</sub>  $T_i = -7$  °C Pdh 22.56 kW  $T_i = -7$  °C  $COP_d$ 2.05  $T_i = +2$  °C Pdh  $T_i = +2$  °C 13.73 kW  $COP_d$ 4.35 <u>%</u>  $T_i = +7$  °C Pdh 8.83 kW  $T_i = +7$  °C  $COP_d$ 6.55 <u>%</u>  $T_i = +12 \, {}^{\circ}\text{C}$ Pdh 8.90 kW  $T_i = +12 \, {}^{\circ}\text{C}$  $COP_d$ 8.80 <u>%</u>  $T_i = bivalent$  $T_i$  = bivalent temperature Pdh 25.50 kW  $COP_d$ 1.83 <del>%</del> temperature  $T_i$  = operation limit Pdh 25.50 kW  $T_i$  = operation limit  $COP_d$ 1.83 0/0 For air-to-water For water-to-air heat heat pumps:  $T_i = -15$  °C (if <del>%</del> pumps:  $T_i = -15$  °C (if  $T_{OL}$  Pdh kW  $COP_d$  $T_{OL} < -20$  °C)  $< -20 \, {}^{\circ}\text{C}$ For water-to-air heat Bivalent temperature  $T_{biv}$ -10.0 °C pumps: Operation limit °C temperature co-efficient Cdh Degradation 0.25 heat pumps\*\* Power consumption in modes other than 'active mode' Supplementary heater Electric back-up 0.095 0.000 Off mode Poff kW elbu kW heating capacity \* Thermostat-off mode  $P_{TO}$ 0.156 kW Type of energy input 0.039  $P_{CK}$ kW  $P_{SB}$ 0.173 kW Crankcase heater mode Standby mode Other items For air-to-air heat pumps: Nominal air 18300 m³/h Capacity control variable flow rate. measured For water-/brine-to-air Sound power level, indoor dΒ  $L_{WA}$ 90 pumps: heat outdoor measured brine or water flow m³/h Emissions of nitrogen rate, outdoor heat  $NO_x$ mg/kWh oxides (if applicable) exchanger kg CO<sub>2</sub> ep GWP of the refrigerant 2088 (100 years) MITSUBISHI ELECTRIC CONSUMER PRODUCTS (THAILAND) CO., LTD. Amata Nakorn Industrial Estate, 700/406 Moo 7, Tambon Don Hua Roh, Amphur Contact details Muang, Chonburi 20000, Thailand \*\* If  $C_d$  is not determined by measurement then the default degradation coefficient of heat pumps shall be 0,25. 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.

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

|   |                      | 1 17       | ODCCI                             | TT 4 | 1 0101111111111111111111111111111111111   |            |         |                 |
|---|----------------------|------------|-----------------------------------|------|---|------------|---------|-----------------|
| Model(s): Information to id                             | •                    | ` '        |                                   |      |   |            |         |                 |
| Outdoor: PUHY-EF  |                      |            |                                   | )01  | r:PEFY-M63VMA-A1×8 units  |            |         |                 |
| Outdoor heat exchanger of                               |                      |            |                                   |      |   |            |         |                 |
| Indoor heat exchanger of ai                             |                      |            |                                   | _    |   |            |         |                 |
| Type: compressor driven va                              |                      |            |                                   |      |   |            |         |                 |
| if applicable: driver of com                            |                      |            |                                   |      | v. 0 1 1  |            | 37.1    | ** *.           |
| Item  | Symbol               | Value      | Unit                              | 1 1  | Item Symbol   |            | Value   | Unit            |
| Rated cooling capacity                                  | $P_{\text{rated},c}$ | 56.00      | kW                                |      | Seasonal space cooling $\eta_{s,c}$ energy efficiency   |            | 259.0   | %               |
| Declared cooling capacity temperatures $T_j$ and indoor |                      |            |                                   |      | Declared energy efficiency ratio of auxiliary energy factor for patemperatures T <sub>i</sub> |            |         |                 |
| $T_i = +35$ °C  | Pdc                  | 56.00      | kW                                |      | $T_j = +35  ^{\circ}\text{C}$ EER <sub>d</sub>  |            | 2.73    | <del>%</del>    |
| $T_{i} = +30  {}^{\circ}\text{C}$                       | Pdc                  | 41.26      | kW                                |      | $T_i = +30  ^{\circ}\text{C}$ EER <sub>d</sub>  |            | 4.42    | <del>%</del>    |
| $T_i = +25  ^{\circ}\text{C}$                           | Pdc                  | 26.53      | kW                                |      | $T_i = +25  ^{\circ}\text{C}$ EER <sub>d</sub>  |            | 7.94    | <u>%</u>        |
| $T_i = +20  ^{\circ}C$                                  | Pdc                  | 13.30      | kW                                |      | $T_i = +20  ^{\circ}C$ EER <sub>d</sub>   |            | 14.60   | —  <sub>%</sub> |
| J   |                      |            | †                                 |      | j   |            |         | <b>—</b>        |
| Degradation co-efficient air conditioners**             | $C_d$                | 0.25       | -                                 |      |   |            |         |                 |
| Power consumption in mod                                | es other t           | han 'activ | e mode'                           |      |   |            |         |                 |
| Off mode  | $P_{OFF}$            | 0.095      | kW                                |      | Crankcase heater mode P <sub>CK</sub>   |            | 0.000   | kW              |
| Thermostat-off mode                                     | $P_{TO}$             | 0.039      | kW                                |      | Standby mode P <sub>SB</sub>  |            | 0.095   | kW              |
| Other items   |                      | _!         |                                   |      |   |            |         |                 |
| Capacity control  | variable             |            |                                   |      | For air-to-air air conditioner: Nominal air flow rate, outdoor measured                       | 18900      | m       | n³/h            |
| Sound power level, outdoor                              | $L_{WA}$             | 82         | dB                                |      |   |            |         |                 |
| if engine driven:<br>Emissions of nitrogen<br>oxides    |                      | -          | mg/kWh<br>fuel input<br>GCV       |      |   |            |         |                 |
| GWP of the refrigerant                                  |                      | 2088       | kg CO <sub>2 ep</sub> (100 years) |      |   |            |         |                 |
|   | 1                    |            |                                   |      | SUMER PRODUCTS (THAILAN   |            |         |                 |
| Contact details   | 1                    |            | dustrial Esta<br>20000, Tha       |      | , 700/406 Moo 7, Tambon Don Hua<br>and  | Roh, Am    | phur    |                 |
| ** If C <sub>d</sub> is not determined b                |                      |            |                                   |      | degradation coefficient air condition   | ners shall | be 0.25 |                 |

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

| Model(s): Information to id<br>Outdoor:PUHY-EP         |                      |             |                                   |      | information relates:<br>::PEFY-M63VMA-A1×8 | units        |          |                |                |
|--|----------------------|-------------|-----------------------------------|------|--|--------------|----------|----------------|----------------|
| Outdoor heat exchanger of                              |                      |             |                                   | 001  | TET T WIOS VIVIL TITLE                     | umts         |          |                |                |
| Indoor heat exchanger of ai                            |                      |             |                                   |      |  |              |          |                |                |
| Indication if the heater is ed                         |                      |             | plementary                        | he   | ater: no                                   |              |          |                |                |
| Parameters shall be declar                             |                      |             |                                   |      |  | armer and    | colder h | eating s       | easons are     |
| optional.  |                      |             |                                   |      | •  |              |          | C              |                |
| Item   | Symbol               | Value       | Unit                              |      | Item                                       | Symbol       |          | Value          | Unit           |
|  | D                    | 56.00       | 1 777                             | 1    | Seasonal space heating                     |              |          | 161.0          |                |
| Rated heating capacity                                 | P <sub>rated,h</sub> | 56.00       | kW                                |      | energy efficiency                          | $\eta_{s,h}$ |          | 161.0          | %              |
| Doolard hosting aspecit                                | y for n              | art load    | at indoor                         | 1    | Declared coefficient of                    | f perform    | ance of  | r gas          | utilization    |
| Declared heating capacit temperature 20 °C and outdoor |                      |             |                                   |      | efficiency / auxiliary er                  | nergy facto  | r for p  | art load       | at given       |
|  | ioor tempe           | ciature 1   |                                   |      | outdoor temperatures T <sub>j</sub>        |              |          |                |                |
| $T_i = -7$ °C  | Pdh                  | 25.28       | kW                                |      | $T_i = -7$ °C                              | $COP_d$      |          | 1.97           | <del>%</del>   |
| $T_i = +2  ^{\circ}C$                                  | Pdh                  | 15.41       | kW                                |      | $T_i = +2  ^{\circ}C$                      | $COP_d$      |          | 4.02           | <del>%</del>   |
| $T_i = +7  ^{\circ}C$                                  | Pdh                  | 9.89        | kW                                |      | $T_i = +7  ^{\circ}C$                      | $COP_d$      |          | 6.44           | <del>%</del>   |
| $T_{i} = +12  {}^{\circ}\text{C}$                      | Pdh                  | 9.93        | kW                                |      | $T_i = +12  {}^{\circ}\text{C}$            | $COP_d$      |          | 8.70           | <del>%</del>   |
| $T_i = bivalent temperature$                           | Pdh                  | 28.56       | kW                                |      | $T_j = bivalent$                           | $COP_d$      |          | 1.85           | <del>9/0</del> |
| $T_i = $ operation limit                               | Pdh                  | 28.56       | kW                                |      | temperature $T_i$ = operation limit        | $COP_d$      |          | 1.85           | <u>%</u>       |
| For air-to-water heat                                  |                      | 20.30       | -  K * V                          |      | For water-to-air heat                      | COId         |          | 1.03           | - <del> </del> |
| pumps: $T_i = -15$ °C (if $T_{OL}$                     |                      |             | kW                                |      | pumps: $T_i = -15$ °C (if                  | $COP_d$      |          |                | <u>%</u>       |
| ·  | 1 UII                | -           | IK W                              |      | $T_{OL} < -20  ^{\circ}\text{C}$           | COId         |          | -              | 70             |
| < - 20 °C)   |                      |             | +                                 |      | For water-to-air heat                      |              |          |                |                |
| Bivalent temperature                                   | $T_{\rm biv}$        | -10.0       | l°C                               |      | pumps: Operation limit                     | $T_{ol}$     |          | _              | °C             |
| Divalent temperature                                   | * biV                | 10.0        |                                   |      | temperature                                | 1 ol         |          |                |                |
|  |                      |             | 1                                 |      | temperature                                |              |          |                |                |
| Degradation co-efficient                               | C <sub>11</sub>      | 0.25        | 1_                                |      |  |              |          |                | 1              |
| heat pumps**   | odn                  | 0.23        |                                   | ]    |  |              |          |                |                |
| Power consumption in mod                               | es other th          | nan 'activ  | e mode'                           |      | Supplementary heater                       |              |          |                |                |
| Off mode   | $P_{OFF}$            | 0.095       | $_{\mathrm{kW}}$                  |      | Electric back-up                           | elbu         |          | 0.000          | kW             |
|  |                      |             | 1                                 |      | heating capacity *                         | Clou         |          | 0.000          | IK VV          |
| Thermostat-off mode                                    | $P_{TO}$             | 0.164       | kW                                |      | Type of energy input                       |              |          |                |                |
| Crankcase heater mode                                  | $P_{CK}$             | 0.039       | kW                                |      | Standby mode                               | $P_{SB}$     |          | 0.173          | kW             |
| Other items  |                      |             |                                   |      |  | •            |          |                |                |
|  |                      |             |                                   |      | For air-to-air heat                        |              |          |                |                |
| Capacity control                                       | variable             |             |                                   |      | pumps: Nominal air                         |              | 21900    | m <sup>3</sup> | /h             |
| Capacity control                                       | Variable             |             |                                   |      | flow rate, outdoor                         | _            | 21700    | 111            | 11             |
|  |                      |             |                                   | Ш    | measured                                   |              |          |                |                |
| Sound power level, indoor                              |                      |             |                                   |      | For water-/brine-to-air                    |              |          |                |                |
| / outdoor measured                                     | $ L_{WA} $           | 85          | dB                                |      | heat pumps: Rated                          |              |          |                |                |
|  |                      |             |                                   | Ш    | brine or water flow                        | -            | -        | m <sup>3</sup> | /h             |
| Emissions of nitrogen                                  | NO <sub>v</sub>      | _           | mg/kWh                            |      | rate, outdoor heat                         |              |          |                |                |
| oxides (if applicable)                                 | ^                    |             |                                   | H    | exchanger                                  |              |          |                |                |
| GWP of the refrigerant                                 |                      | 2088        | kg CO <sub>2 ep</sub> (100 years) |      |  |              |          |                |                |
|  |                      |             | ` '                               | Ц    |  |              |          |                |                |
|  |                      |             |                                   |      | ISUMER PRODUCTS (T                         |              |          |                |                |
| Contact details  |                      |             |                                   |      | 700/406 Moo 7, Tambon                      | Don Hua R    | Roh, Amj | phur           |                |
| shale TCC  |                      |             | 20000, Tha                        |      |  |              | 1 11 1   | 0.05           |                |
| ** If C <sub>d</sub> is not determined b               | y measure            | ement the   | n the defau                       | it c | degradation coefficient of                 | neat pumps   | shall be | 0,25.          |                |
| Where information relates                              | to multi-ci          | nlit air co | onditioners                       | th   | e test result and performa                 | nce data mo  | w he oh  | tained o       | n the basis    |

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

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