

## Subtype FDCW140VNX-A

|                     |                                                     |
|---------------------|-----------------------------------------------------|
| Certificate Holder  | Mitsubishi Heavy Industries Air Conditioning Europe |
| Address             | 5 The Square                                        |
| ZIP                 | UB11 1ET                                            |
| City                | Uxbridge, Middlesex                                 |
| Country             | GB                                                  |
| Certification Body  | RISE CERT                                           |
| Subtype title       | FDCW140VNX-A                                        |
| Registration number | 012-SC0827-18                                       |
| Heat Pump Type      | Outdoor Air/Water                                   |
| Refrigerant         | R410A                                               |
| Mass of Refrigerant | 4 kg                                                |

## Model FDCW140VNX-A + HSB140

|                                     |                       |
|-------------------------------------|-----------------------|
| Model name                          | FDCW140VNX-A + HSB140 |
| Application                         | Heating (medium temp) |
| Units                               | Indoor, Outdoor       |
| Climate zone (for heating)          | n/a                   |
| Cooling mode application (optional) | n/a                   |
| Any additional heat sources         | n/a                   |

## General data

|                  |             |
|------------------|-------------|
| Power supply     | 1x230V 50Hz |
| Off-peak product | n/a         |

## Outdoor Air/Water

### EN 14511-4 | Heating

|                                            |        |
|--------------------------------------------|--------|
| Shutting off the heat transfer medium flow | passed |
| Complete power supply failure              | passed |
| Defrost test                               | passed |

### EN 14511-2 | Heating

|             | Low temperature | Medium temperature |
|-------------|-----------------|--------------------|
| Heat output | 7.03 kW         | 6.38 kW            |
| El input    | 1.45 kW         | 2.04 kW            |
| COP         | 4.85            | 3.13               |

### EN 12102-1 | Average Climate

|                           | Low temperature | Medium temperature |
|---------------------------|-----------------|--------------------|
| Sound power level indoor  | 35 dB(A)        | 35 dB(A)           |
| Sound power level outdoor | 62 dB(A)        | 62 dB(A)           |

### EN 14825 | Average Climate

|               | Low temperature | Medium temperature |
|---------------|-----------------|--------------------|
| $\eta_s$      | 176 %           | 134 %              |
| Prated        | 14.50 kW        | 14.00 kW           |
| SCOP          | 4.47            | 3.42               |
| Tbiv          | -8 °C           | -8 °C              |
| TOL           | -10 °C          | -10 °C             |
| Pdh Tj = -7°C | 12.90 kW        | 12.50 kW           |
| COP Tj = -7°C | 2.96            | 2.01               |
| Pdh Tj = +2°C | 7.90 kW         | 7.60 kW            |
| COP Tj = +2°C | 4.37            | 3.29               |
| Pdh Tj = +7°C | 5.10 kW         | 4.90 kW            |
| COP Tj = +7°C | 5.58            | 4.68               |
| Pdh Tj = 12°C | 6.40 kW         | 6.80 kW            |
| COP Tj = 12°C | 6.99            | 6.51               |

|                                                     |             |             |
|-----------------------------------------------------|-------------|-------------|
| Pdh Tj = Tbiv                                       | 13.40 kW    | 12.70 kW    |
| COP Tj = Tbiv                                       | 2.86        | 1.95        |
| Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 12.50 kW    | 11.00 kW    |
| COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh | 2.71        | 1.95        |
| Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh | 0.97        | 0.98        |
| WTOL                                                | 65 °C       | 65 °C       |
| Poff                                                | 2 W         | 2 W         |
| PTO                                                 | 25 W        | 16 W        |
| PSB                                                 | 15 W        | 15 W        |
| PCK                                                 | 35 W        | 35 W        |
| Supplementary Heater: Type of energy input          | Electricity | Electricity |
| Supplementary Heater: PSUP                          | 2.00 kW     | 3.00 kW     |
| Annual energy consumption Qhe                       | 6702 kWh    | 8431 kWh    |