

## 1. Product Specifications

|   |                                 |          |   |
|---|---------------------------------|----------|---|
| Model   |                                 |          | EACV-M1800YCL(-N)(-BS)  |
| Power source  |                                 |          | 3-phase 4-wire 380-400-415V 50/60Hz                             |
| Cooling capacity *1                                       |                                 | kW       | 180.00  |
|   |                                 | kcal/h   | 154,800   |
|   |                                 | BTU/h    | 614,160   |
|   | Power input                     | kW       | 57.02   |
|   | EER                             |          | 3.16  |
|   | IPLV *4                         |          | 6.31  |
|   | Water flow rate                 | m³/h     | 31.0  |
| Cooling capacity(EN14511) *2                              |                                 | kW       | 178.80  |
|   |                                 | kcal/h   | 153,768   |
|   |                                 | BTU/h    | 610,066   |
|   | Power input                     | kW       | 58.22   |
|   | EER                             |          | 3.07  |
|   | Eurovent efficiency class       |          | B   |
|   | SEER                            |          | 5.36  |
|   | ηsc                             | %        | 211.4   |
|   | Water flow rate                 | m³/h     | 31.0  |
| Current input   | Cooling current 380-400-415V *1 | A        | 96 - 91 - 88  |
|   | Maximum current                 | A        | 120   |
| Water pressure drop *1                                    | Standard piping                 | kPa      | 79  |
|   | Inside header piping            | kPa      | 190   |
| Temp range  | Cooling                         | °C       | Outlet water 4~30 *5  |
|   |                                 | °F       | Outlet water 39.2~86 *5   |
|   | Outdoor                         | °C       | -15~52 *5   |
|   |                                 | °F       | 5~125.6 *5  |
| Circulating water volume range                            |                                 | m³/h     | 12.9~43.0   |
| Sound pressure level (measured in anechoic room) at 1m *1 |                                 | dB (A)   | 67  |
| Sound power level (measured in anechoic room) *1          |                                 | dB (A)   | 85  |
| Diameter of water pipe<br>(Standard piping)               | Inlet                           | mm (in)  | 65A (2 1/2B) housing type joint                                 |
|   | Outlet                          | mm (in)  | 65A (2 1/2B) housing type joint                                 |
| Diameter of water pipe<br>(Inside header piping)          | Inlet                           | mm (in)  | 150A (6B) housing type joint                                    |
|   | Outlet                          | mm (in)  | 150A (6B) housing type joint                                    |
| External finish   |                                 |          | Polyester powder coating steel plate                            |
| External dimension H × W × D                              |                                 | mm       | 2350 × 3400 × 1080  |
| Net weight  | Standard piping                 | kg (lbs) | 1039 (2291)   |
|   | Inside header piping            | kg (lbs) | 1067 (2352)   |
| Design pressure   | R32                             | MPa      | 4.15  |
|   | Water                           | MPa      | 1.0   |
| Heat exchanger  | Water side                      |          | Stainless steel plate and copper brazing                        |
|   | Air side                        |          | Salt-resistant corrugated fin & aluminium micro channel         |
| Compressor  | Type                            |          | Inverter scroll hermetic compressor                             |
|   | Maker                           |          | MITSUBISHI ELECTRIC CORPORATION                                 |
|   | Starting method                 |          | Inverter  |
|   | Quantity                        |          | 4   |
|   | Motor output                    | kW       | 11.5 × 4  |
|   | Lubricant                       |          | MEL46EH   |
| Fan   | Air flow rate                   | m³/min   | 270 × 4   |
|   |                                 | L/s      | 4500 × 4  |
|   |                                 | cfm      | 9534 × 4  |
|   | Type, Quantity                  |          | Propeller fan × 4   |
|   | Starting method                 |          | Inverter  |
|   | Motor output                    | kW       | 0.92 × 4  |
|   | External static pressure        | Pa       | 20  |
| Protection  | High pressure protection        |          | High pressure sensor & High pressure switch at 4.15MPa (601psi) |
|   | Inverter circuit                |          | Over-heat protection, Over current protection                   |
|   | Compressor                      |          | Over-heat protection  |
| Refrigerant   | Type × charge                   |          | R32 × 4.7 (kg) × 4 *3   |
|   | Control                         |          | LEV   |

### Notes:

- \*1 Under normal cooling conditions at outdoor temp 35°CDB/24°CWB (95°FDB/75.2°FWB) outlet water temp 7°C (44.6°F) inlet water temp 12°C (53.6°F). Pump input is not included in cooling capacity and power input.
- \*2 Under normal cooling conditions at outdoor temp 35°CDB/24°CWB (95°FDB/75.2°FWB) outlet water temp 7°C (44.6°F) inlet water temp 12°C (53.6°F). Pump input is included in cooling capacity and power input based on EN14511.
- \*3 Amount of factory-charged refrigerant is 2.95 (kg) × 4. Please add the refrigerant at the field.
- \*4 IPLV is calculated in accordance with AHRI 551-591.
- \*Please don't use the steel material for the water piping.
- \*Please always make water circulate, or pull the circulation water out completely when not in use.
- \*Please do not use groundwater or well water in direct.
- \*The water circuit must be closed circuit.
- \*Due to continuous improvement, the above specifications may be subject to change without notice.
- \*This model doesn't equip with a pump.
- \*5 Please refer to 2-1-6. Operation temperature range.

### Unit converter

|        |                               |
|--------|-------------------------------|
| kcal/h | = kW × 860                    |
| BTU/h  | = kW × 3,412                  |
| lbs    | = kg/0.4536                   |
| cfm    | = m <sup>3</sup> /min × 35.31 |