

| Model name                                       |                                   |   | EHST30D-MED                  | EHST30D-VM6ED     | EHST30D-YM9ED    | EHST30D-TM9ED    | ERST30D-VM2ED       | ERST30D-VM6ED    | ERST30D-YM9ED | EHST20C-MED       | EHST20C-VM2D     | <b>EHST20C-VM6D</b> | EHST20C-YM9D     | EHST20C-YM9ED    | EHST20C-TM9D |  |  |  |
|--|-----------------------------------|---|------------------------------|-------------------|------------------|------------------|---------------------|------------------|---------------|-------------------|------------------|---------------------|------------------|------------------|--------------|--|--|--|
| Nominal domestic hot water volume                | 300 L                             |   |                              |                   |                  |                  | 200 L               |                  |               |                   |                  |                     |                  |                  |              |  |  |  |
| Overall unit dimensions (Height x Width x Depth) | 2050 x 595 x 680 mm               |   |                              |                   |                  |                  | 1600 x 595 x 680 mm |                  |               |                   |                  |                     |                  |                  |              |  |  |  |
| Water volume of heating circuit in the unit *1   | 3.9 L                             | 3.9 L   | 6.2 L                        | 6.2 L             | 3.9 L            | 3.9 L            | 6.2 L               | 4.6 L            | 4.6 L         | 4.6 L             | 4.6 L            | 4.6 L               | 6.9 L            | 6.9 L            | 6.9 L        |  |  |  |
| Unvented expansion vessel (Primary heating)      | Nominal volume                    | —   |                              |                   |                  |                  |                     | 12 L             |               |                   |                  |                     |                  | —                |              |  |  |  |
| Safety device                                    | Charge pressure                   | —   |                              |                   |                  |                  |                     | 0.1 MPa (1 bar)  |               |                   |                  |                     |                  | 0.1 MPa (1 bar)  |              |  |  |  |
| Safety device                                    | Primary circuit                   | Control thermistor  | 80°C                         |                   |                  |                  |                     |                  |               |                   |                  |                     |                  |                  |              |  |  |  |
|  | Pressure relief valve             | 0.3 MPa (3 bar)   |                              |                   |                  |                  |                     |                  |               |                   |                  |                     |                  |                  |              |  |  |  |
|  | Flow sensor                       | Min. flow 5.0 L/min (See table 4.3.1 about water flow rate range) |                              |                   |                  |                  |                     |                  |               |                   |                  |                     |                  |                  |              |  |  |  |
|  | Booster heater                    | BH manual reset thermostat  | —                            | 90°C              |                  |                  |                     |                  |               | —                 | 90°C             |                     |                  |                  |              |  |  |  |
|  | BH thermal Cut Off                | —   | 121°C                        |                   |                  |                  |                     |                  | —             | 121°C             |                  |                     |                  |                  |              |  |  |  |
|  | DHW tank                          | Control thermistor  | 75°C                         |                   |                  |                  |                     |                  |               |                   |                  |                     |                  |                  |              |  |  |  |
|  | IH manual reset thermostat        | —   |                              |                   |                  |                  |                     |                  |               |                   |                  |                     |                  |                  |              |  |  |  |
| Connections                                      | Water                             | Temperature / Pressure relief valve                               | 1.0 MPa (10 bar)             |                   |                  |                  |                     |                  |               |                   |                  |                     |                  |                  |              |  |  |  |
|  |                                   | Primary circuit   | ø28 mm                       |                   |                  |                  |                     |                  |               |                   |                  |                     |                  |                  |              |  |  |  |
|  | DHW circuit                       | DHW circuit   | ø22 mm                       |                   |                  |                  |                     |                  |               |                   |                  |                     |                  |                  |              |  |  |  |
|  |                                   | Refrigerant (R32/R410A)   | Liquid                       | ø6.35 mm          |                  |                  |                     |                  |               | ø9.52 mm          |                  |                     |                  |                  |              |  |  |  |
| Operating range                                  | Heating                           | Room temperature  | 10 - 30°C                    |                   |                  |                  |                     |                  |               |                   |                  |                     |                  |                  |              |  |  |  |
|  |                                   | Flow temperature  | 20 - 60°C                    |                   |                  |                  |                     |                  |               |                   |                  |                     |                  |                  |              |  |  |  |
|  | Cooling                           | Room temperature  | —                            |                   |                  |                  |                     |                  |               |                   |                  |                     |                  |                  |              |  |  |  |
|  |                                   | Flow temperature  | 5 - 25°C                     |                   |                  |                  |                     |                  | —             |                   |                  |                     |                  |                  |              |  |  |  |
| Guaranteed operating range *2                    | Ambient                           | 0 - 35°C (≤ 80 %RH)   |                              |                   |                  |                  |                     |                  |               |                   |                  |                     |                  |                  |              |  |  |  |
|  | Outdoor temperature               | Heating   | See outdoor unit spec table. |                   |                  |                  |                     |                  |               |                   |                  |                     |                  |                  |              |  |  |  |
|  | DHW tank performance              | Maximum allowable hot water temperature                           | *4                           | 70°C              |                  |                  |                     |                  |               | *4                | 70°C             |                     |                  |                  |              |  |  |  |
| Electrical data                                  | Control board (Including 4 pumps) | Declared load profile   | XL                           |                   |                  |                  |                     |                  | L             |                   |                  |                     |                  |                  |              |  |  |  |
|  |                                   | Power supply (Phase, voltage, frequency)                          | ~/N, 230 V, 50 Hz            |                   |                  |                  |                     |                  |               |                   |                  |                     |                  |                  |              |  |  |  |
|  |                                   | Input   | 0.30 kW                      |                   |                  |                  |                     |                  |               |                   |                  |                     |                  |                  |              |  |  |  |
|  |                                   | Current   | 1.95 A                       |                   |                  |                  |                     |                  |               |                   |                  |                     |                  |                  |              |  |  |  |
|  | Booster heater                    | Breaker   | 10 A                         |                   |                  |                  |                     |                  |               |                   |                  |                     |                  |                  |              |  |  |  |
|  |                                   | Power supply (Phase, voltage, frequency)                          | —                            | ~/N, 230 V, 50 Hz | 3~, 400 V, 50 Hz | 3~, 230 V, 50 Hz | ~/N, 230 V, 50 Hz   | 3~, 400 V, 50 Hz | —             | ~/N, 230 V, 50 Hz | 3~, 400 V, 50 Hz | 3~, 230 V, 50 Hz    | 3~, 400 V, 50 Hz | 3~, 230 V, 50 Hz |              |  |  |  |
|  |                                   | Capacity  | —                            | 2 kW + 4 kW       | 3 kW + 6 kW      |                  | 2 kW                | 2 kW + 4 kW      | —             | 2 kW              | 2 kW + 4 kW      | 3 kW + 6 kW         |                  |                  |              |  |  |  |
|  |                                   | Current   | —                            | 26 A              | 13 A             | 23 A             | 9 A                 | 26 A             | 13 A          | —                 | 9 A              | 26 A                | 13 A             | 23 A             |              |  |  |  |
|  | Immersion heater *5               | Breaker   | —                            | 32 A              | 16 A             | 32 A             | 16 A                | 32 A             | 16 A          | —                 | 16 A             | 32 A                | 16 A             | 32 A             |              |  |  |  |
|  |                                   | Power supply (Phase, voltage, frequency)                          | —                            |                   |                  |                  |                     |                  |               |                   |                  |                     |                  |                  |              |  |  |  |
|  |                                   | Capacity  | —                            |                   |                  |                  |                     |                  |               |                   |                  |                     |                  |                  |              |  |  |  |
|  |                                   | Current   | —                            |                   |                  |                  |                     |                  |               |                   |                  |                     |                  |                  |              |  |  |  |
|  |                                   | Breaker   | —                            |                   |                  |                  |                     |                  |               |                   |                  |                     |                  |                  |              |  |  |  |
| Sound power level (PWL)                          |                                   |   | 41 dB(A)                     |                   |                  |                  |                     |                  | 40 dB(A)      |                   |                  |                     |                  |                  |              |  |  |  |

&lt;Table 3.2&gt;

\*1 Volume of sanitary water circuit, primary DHW circuit (from 3-way valve to confluent point with heating circuit), piping to expansion vessel, and expansion vessel are not included in this value.

\*2 The environment must be frost-free.

\*3 See outdoor unit spec table (min. 10°C). Cooling mode is not available in low outdoor temperature. If you use our system in cooling mode at the low ambient temperature (10°C or below), there are some risks of plate heat exchanger damages by frozen water.

\*4 For the model without booster heater and immersion heater, the maximum allowable hot water temperature is [Maximum outlet water of outdoor unit +3°C]. For the maximum outlet water of outdoor unit, refer to outdoor unit data book.

\*5 Do not fit immersion heaters without thermal cut-out. Use only Mitsubishi Electric service parts as a direct replacement.

### 3 Technical Information

#### ■ Product specification

| Model name                                       |   | ERST20C-VM2D  | ERST20C-VM6D                 | ERST20C-YM9D     | EHST30C-MED         | EHST30C-VM6ED    | EHST30C-YM9ED    | EHST30C-TM9ED       | ERST30C-VM2ED    | ERST30C-VM6ED | ERST30C-YM9ED       | EHPT17X-VM2D     | EHPT17X-VM6D     | EHPT17X-YM9D     | ERPT17X-VM2D     |                  |                  |                  |      |  |  |  |  |  |  |  |
|--|---|---|------------------------------|------------------|---------------------|------------------|------------------|---------------------|------------------|---------------|---------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------|--|--|--|--|--|--|--|
| Nominal domestic hot water volume                |   | 200 L   |                              |                  | 300 L               |                  |                  | 2050 × 595 × 680 mm |                  |               | 1400 × 595 × 680 mm |                  |                  | 170 L            |                  |                  |                  |                  |      |  |  |  |  |  |  |  |
| Overall unit dimensions (Height × Width × Depth) |   | 1600 × 595 × 680 mm   |                              |                  | 1600 × 595 × 680 mm |                  |                  | 1400 × 595 × 680 mm |                  |               | 1400 × 595 × 680 mm |                  |                  | 170 L            |                  |                  |                  |                  |      |  |  |  |  |  |  |  |
| Water volume of heating circuit in the unit *1   |   | 4.6 L   | 4.6 L                        | 6.9 L            | 5.0 L               | 5.0 L            | 7.3 L            | 7.3 L               | 5.0 L            | 5.0 L         | 7.3 L               | 3.2 L            | 3.2 L            | 5.5 L            | 3.2 L            |                  |                  |                  |      |  |  |  |  |  |  |  |
| Safety device                                    | Nominal volume                          | 12 L  |                              |                  | —                   |                  |                  | —                   |                  |               | 12 L                |                  |                  | 0.1 MPa (1 bar)  |                  |                  |                  |                  |      |  |  |  |  |  |  |  |
|  | Charge pressure                         | 0.1 MPa (1 bar)   |                              |                  | —                   |                  |                  | —                   |                  |               | 0.1 MPa (1 bar)     |                  |                  | —                |                  |                  |                  |                  |      |  |  |  |  |  |  |  |
|  | Control thermistor                      | 80°C  |                              |                  |                     |                  |                  |                     |                  |               |                     |                  |                  |                  | —                |                  |                  |                  |      |  |  |  |  |  |  |  |
|  | Pressure relief valve                   | 0.3 MPa (3 bar)   |                              |                  |                     |                  |                  |                     |                  |               |                     |                  |                  |                  | —                |                  |                  |                  |      |  |  |  |  |  |  |  |
|  | Flow sensor                             | Min. flow 5.0 L/min (See table 4.3.1 about water flow rate range) |                              |                  |                     |                  |                  |                     |                  |               |                     |                  |                  |                  | —                |                  |                  |                  |      |  |  |  |  |  |  |  |
|  | BH manual reset thermostat              | 90°C  |                              |                  | —                   |                  |                  | 90°C                |                  |               | —                   |                  |                  | —                |                  |                  |                  |                  |      |  |  |  |  |  |  |  |
|  | BH thermal Cut Off                      | 121°C   |                              |                  | —                   |                  |                  | 121°C               |                  |               | —                   |                  |                  | —                |                  |                  |                  |                  |      |  |  |  |  |  |  |  |
|  | Control thermistor                      | 75°C  |                              |                  |                     |                  |                  |                     |                  |               |                     |                  |                  |                  | —                |                  |                  |                  |      |  |  |  |  |  |  |  |
| Connections                                      | IH manual reset thermostat              | —   |                              |                  |                     |                  |                  |                     |                  |               |                     |                  |                  |                  | —                |                  |                  |                  |      |  |  |  |  |  |  |  |
|  | Temperature / Pressure relief valve     | 1.0 MPa (10 bar)  |                              |                  |                     |                  |                  |                     |                  |               |                     |                  |                  |                  | —                |                  |                  |                  |      |  |  |  |  |  |  |  |
|  | Water                                   | Primary circuit   | ø28 mm                       |                  |                     |                  |                  |                     |                  |               |                     |                  |                  |                  |                  | —                |                  |                  |      |  |  |  |  |  |  |  |
|  |   | DHW circuit   | ø22 mm                       |                  |                     |                  |                  |                     |                  |               |                     |                  |                  |                  |                  | —                |                  |                  |      |  |  |  |  |  |  |  |
| Operating range                                  | Refrigerant (R32/ R410A)                | Liquid  | ø9.52 mm                     |                  |                     |                  |                  |                     |                  |               |                     |                  | —                |                  |                  | —                |                  |                  |      |  |  |  |  |  |  |  |
|  |   | Gas   | ø15.88 mm                    |                  |                     |                  |                  |                     |                  |               |                     |                  |                  |                  |                  | —                |                  |                  |      |  |  |  |  |  |  |  |
|  | Heating                                 | Room temperature  | 10 - 30°C                    |                  |                     |                  |                  |                     |                  |               |                     |                  |                  |                  |                  | —                |                  |                  |      |  |  |  |  |  |  |  |
|  |   | Flow temperature  | 20 - 60°C                    |                  |                     |                  |                  |                     |                  |               |                     |                  |                  |                  |                  | —                |                  |                  |      |  |  |  |  |  |  |  |
| Guaranteed operating range *2                    | Cooling                                 | Room temperature  | —                            |                  |                     |                  |                  |                     |                  |               |                     |                  |                  |                  |                  | —                |                  |                  |      |  |  |  |  |  |  |  |
|  | Ambient                                 | 0 - 35°C (≤ 80 %RH)   |                              |                  |                     |                  |                  |                     |                  |               |                     |                  |                  |                  | —                |                  |                  |                  |      |  |  |  |  |  |  |  |
|  | Outdoor temperature                     | Heating   | See outdoor unit spec table. |                  |                     |                  |                  |                     |                  |               |                     |                  |                  |                  |                  | —                |                  |                  |      |  |  |  |  |  |  |  |
|  |   | Cooling   | *3                           |                  |                     |                  |                  |                     |                  |               |                     |                  |                  |                  |                  | *3               |                  |                  |      |  |  |  |  |  |  |  |
| DHW tank performance                             | Maximum allowable hot water temperature | 70°C  |                              |                  | *4                  |                  |                  | —                   |                  |               | 70°C                |                  |                  | —                |                  |                  | *3               |                  |      |  |  |  |  |  |  |  |
|  | Declared load profile                   | L   |                              |                  | XL                  |                  |                  | —                   |                  |               | L                   |                  |                  | —                |                  |                  | —                |                  |      |  |  |  |  |  |  |  |
| Electrical data                                  | Control board (Including 4 pumps)       | Power supply (Phase, voltage, frequency)                          | ~N, 230 V, 50 Hz             |                  |                     |                  |                  |                     |                  |               |                     |                  |                  |                  |                  | —                |                  |                  |      |  |  |  |  |  |  |  |
|  |   | Input   | 0.30 kW                      |                  |                     |                  |                  |                     |                  |               |                     |                  |                  |                  |                  | —                |                  |                  |      |  |  |  |  |  |  |  |
|  |   | Current   | 1.95 A                       |                  |                     |                  |                  |                     |                  |               |                     |                  |                  |                  |                  | —                |                  |                  |      |  |  |  |  |  |  |  |
|  |   | Breaker   | 10 A                         |                  |                     |                  |                  |                     |                  |               |                     |                  |                  |                  |                  | —                |                  |                  |      |  |  |  |  |  |  |  |
|  | Booster heater                          | Power supply (Phase, voltage, frequency)                          | ~N, 230 V, 50 Hz             | 3~, 400 V, 50 Hz | —                   | ~N, 230 V, 50 Hz | 3~, 400 V, 50 Hz | 3~, 230 V, 50 Hz    | ~N, 230 V, 50 Hz | 2 kW          | 2 kW + 4 kW         | ~N, 230 V, 50 Hz | 3~, 400 V, 50 Hz | ~N, 230 V, 50 Hz | 3~, 400 V, 50 Hz | ~N, 230 V, 50 Hz | 3~, 400 V, 50 Hz | ~N, 230 V, 50 Hz |      |  |  |  |  |  |  |  |
|  |   | Capacity  | 2 kW                         | 2 kW + 4 kW      | 3 kW + 6 kW         | —                | 2 kW + 4 kW      | 3 kW + 6 kW         | —                | 2 kW          | 2 kW + 4 kW         | 2 kW + 4 kW      | 2 kW             | 2 kW + 4 kW      | 2 kW             | 2 kW + 4 kW      | 2 kW             | 2 kW + 4 kW      |      |  |  |  |  |  |  |  |
|  |   | Current   | 9 A                          | 26 A             | 13 A                | —                | 26 A             | 13 A                | 23 A             | 9 A           | 26 A                | 13 A             | 9 A              | 26 A             | 13 A             | 9 A              | 26 A             | 13 A             | 9 A  |  |  |  |  |  |  |  |
|  |   | Breaker   | 16 A                         | 32 A             | 16 A                | —                | 32 A             | 16 A                | 32 A             | 16 A          | 32 A                | 16 A             | 32 A             | 16 A             | 32 A             | 16 A             | 32 A             | 16 A             | 32 A |  |  |  |  |  |  |  |
|  | Immersion heater *5                     | Power supply (Phase, voltage, frequency)                          | —                            |                  |                     |                  |                  |                     |                  |               |                     |                  |                  |                  |                  | —                |                  |                  |      |  |  |  |  |  |  |  |
|  |   | Capacity  | —                            |                  |                     |                  |                  |                     |                  |               |                     |                  |                  |                  |                  | —                |                  |                  |      |  |  |  |  |  |  |  |
|  |   | Current   | —                            |                  |                     |                  |                  |                     |                  |               |                     |                  |                  |                  |                  | —                |                  |                  |      |  |  |  |  |  |  |  |
|  |   | Breaker   | —                            |                  |                     |                  |                  |                     |                  |               |                     |                  |                  |                  |                  | —                |                  |                  |      |  |  |  |  |  |  |  |
| Sound power level (PWL)                          |   | 40 dB(A)  |                              |                  |                     |                  |                  |                     |                  |               |                     |                  |                  |                  |                  | —                |                  |                  |      |  |  |  |  |  |  |  |

<Table 3.3>

\*1 Volume of sanitary water circuit, primary DHW circuit (from 3-way valve to confluent point with heating circuit), piping to expansion vessel, and expansion vessel are not included in this value.

\*2 The environment must be frost-free.

\*3 See outdoor unit spec table (min, 10°C). Cooling mode is not available in low outdoor temperature. If you use our system in cooling mode at the low ambient temperature (10°C or below), there are some risks of plate heat exchanger damages by frozen water.

\*4 For the model without booster heater and immersion heater, the maximum allowable hot water temperature is [Maximum outlet water of outdoor unit -3°C]. For the maximum outlet water of outdoor unit, refer to outdoor unit data book.

\*5 Do not fit immersion heaters without thermal cut-out. Use only Mitsubishi Electric service parts as a direct replacement.