

# SPECIFICATIONS

| Item                       |   | Model                | TU85  |                  |
|----------------------------|---|----------------------|---|------------------|
| Freezing capacity          | Conditions                              | °C                   | Ambient temperature 35°C  |                  |
|                            |   |                      | RT = -20  | RT = 0           |
|                            | Sub-engine drive                        | W                    | 5612  | 10298            |
| Standby motor drive        | 4500                                    |                      | 8291  |                  |
| Working environment        | Inside container temperature            | °C                   | -35 ~ +30   |                  |
|                            | Ambient temperature                     |                      | -20 ~ +40   |                  |
| Unit dimensions            | Condensing unit                         | W x H x D            | mm  | 1589 × 609 × 695 |
|                            | Evaporator unit                         |                      |   | 2000 × 200 × 744 |
| Unit weight                | Condensing unit                         | kg                   | 425   |                  |
|                            | Evaporator unit                         |                      | 54  |                  |
| Drive system               |   |                      | Dedicated sub-engine and standby motor  |                  |
| Operating system           |   |                      | Automatic start/stop and continuous operation selection   |                  |
| Sub-engine                 | Model                                   |                      | 3TNV 76 (4-cycle water-cooled vertical diesel engine)   |                  |
|                            | Displacement                            | cm <sup>3</sup>      | 1116  |                  |
|                            | Bore x Stroke x Cylinders               | mm                   | ø 76 × 82 × 3   |                  |
|                            | Continuous operation fuel consumption   | L/h                  | 1.8 (Ambient temperature 35°C, inside container temperature 0 °C, high speed, at shipment )   |                  |
|                            | Oil capacity                            | L                    | 9.5 (Diesel oil 10W -30, CE (API) or above)   |                  |
|                            | Fuel                                    |                      | Light oil ( Diesel fuel ),<br>Intense cold season (Cold weather diesel fuel )   |                  |
|                            | Rated output/speed                      | kW/min <sup>-1</sup> | <High speed> 12.5/2100, <Low speed> 6.9/1500  |                  |
| Compressor                 | Model                                   |                      | CS/CSA130 (Open, 3D scroll)   |                  |
|                            | Working speed                           | min <sup>-1</sup>    | <High> 3150, <Low> 2250 , <Motor (50Hz)> 2200   |                  |
|                            | Refrigeration machine oil charge volume | L                    | JX Nippon Oil & Energy Corp. Diamond Freeze MA3 2R<br>1-tier oil separator specification: 0.95<br>2-tier oil separator specification: 1.25  |                  |
| Evaporator                 | Type                                    |                      | Aluminum fin & copper tubes   |                  |
|                            | Fan                                     |                      | ø 222mm turbo fan & DC brushless motor x 4  |                  |
|                            | Fan speed                               | min <sup>-1</sup>    | 2600  |                  |
| Condenser                  | Type                                    |                      | Aluminum multi -flow  |                  |
|                            | Fan                                     |                      | ø 440mm propeller fan x 1   |                  |
|                            | Fan speed                               | min <sup>-1</sup>    | Sub-engine drive: <High speed> 2100, <Low speed> 1500, Standby motor drive ( 50Hz): 1470  |                  |
| Standby motor              | Type                                    |                      | Totally -enclosed fan-cooled outdoor type   |                  |
|                            | Power supply                            |                      | 3-phase AC 400V 50Hz  |                  |
|                            | Rated output                            | kW                   | 6.3   |                  |
|                            | Number of poles                         |                      | 4   |                  |
| Refrigerant charge volume  |   | kg                   | R404A, 4.3  |                  |
| Inside temperature control |   |                      | Electronic thermostat   |                  |
| Operation control          |   |                      | Microcomputer controller  |                  |
| Defrosting device          |   |                      | Hot gas defrost (Automatic timer and manual )   |                  |
| Safety device              |   |                      | High-pressure switch, engine oil pressure switch, engine water temperature switch, fusible plug, motor over-current relay , DC circuit fuse, DC circuit fusible link, front panel open detection switch , automatic power supply anti-phase reversal switching and engine clutch temperature sensor |                  |