



### MTZ100-3VI 🕑

### Reciprocating compressor, MTZ100HS3VE

Refrigerants: R404A; R407C; R452A; R407A; R134a; R407F; R513A; R448A; R449A, Segment usage: Refrigeration MT, Compressor power supply [V]: 200-230/3/60, Packing format: Single pack

#### PRODUCT DETAILS

| Gross weight                        | 66.75 Kg                               |
|-------------------------------------|--|
| Net weight                          | 63 Kg                                  |
| Volume                              | 100.75 Liter                           |
| EAN                                 | 5702428888318                          |
| Approval                            | CE                                     |
|                                     | UL                                     |
|                                     | UKCA                                   |
| Brand technique                     | Reciprocating compressor               |
| Capacity control                    | Fixed speed                            |
| China RoHS compliance               | Out of scope                           |
| Colour                              | Blue                                   |
| Compressor power supply [V]         | 200-230/3/60                           |
| Configuration code                  | Single                                 |
| Connection type                     | Rotolock                               |
| Cylinder                            | 4                                      |
| Description                         | MTZ100-3                               |
| Diameter [mm]                       | 352 mm                                 |
| Discharge connection height [mm]    | 125 mm                                 |
| Discharge connection pipe size [in] | 3/4 in                                 |
| Discharge connection size [in]      | 1 1/4 in                               |
| Drawing number                      | 8504010f                               |
| Economizer                          | No                                     |
| EU RoHS compliance                  | Yes with exemptions                    |
| EU RoHS exemption clause            | 6(a), 6(a)-I, 7(a), 7(c)-I, 8(b), 9(b) |
| Factory HP [bar]                    | 25 bar                                 |
| Factory LP [bar]                    | 25 bar                                 |
| Family                              | MTZ                                    |
| Fitting remark                      | (shipped with rotolock version only)   |
| Fitting sleeve                      | ODF                                    |
| Fitting standard                    | Rotolock                               |
| Frequency [Hz]                      | 60                                     |
| Gauge port HP                       | None                                   |
| Gauge port LP                       | Schrader                               |
| Glass mounting                      | Threaded                               |
| Glass torque [Nm]                   | 50 N-m                                 |
| GP LP torque [Nm]                   | 15 N-m                                 |
| High Side TS Max                    | 150 °C                                 |
| High Side TS Min                    | -35 ℃                                  |
|                                     |  |

#### Product Detail | Reciprocating compressor, MTZ100HS3VE

| PRODUCT DETAILS                                 | 1.21                                 |
|---|--------------------------------------|
| High Side Volume                                | 1.2L                                 |
| High value of nominal voltage at                | 230 V                                |
| 60Hz [V]<br>High value of voltage range at 60Hz | 253 V                                |
| Figh value of voltage range at 60Hz<br>[V]      | 253 V                                |
| In scope of WEEE and contain                    | No                                   |
| batteries                                       | NU                                   |
| IP protection class                             | IP54 (with cable gland)              |
| Low Side TS Max                                 | 50 °C                                |
| Low Side TS Min                                 | -35 °C                               |
| Low Side Volume                                 | 31L                                  |
|   | 200 V                                |
| Low value of nominal voltage at<br>60Hz [V]     | 200 V                                |
| Low value of voltage range at 60Hz              | 180 V                                |
| [V]   | 160 V                                |
| LBA   | 157 A                                |
|   | 29.4 bar                             |
| Max pressure (PS) - high side                   | 29.4 bar<br>22.6 bar                 |
| Max pressure (PS) - low side                    |                                      |
| MCC   | 43 A                                 |
| Model number                                    | MTZ100HS3VE                          |
| Motor protection                                | Internal overload protector          |
| Mounting torque [Nm]                            | 50 N-m                               |
| Network power supply [V/Ph/Hz]                  | 208-230/3/60                         |
| Number of starts per hour [Max]                 | 12                                   |
| Oil charge [L]                                  | 3.9 L                                |
| Oil equalization                                | 3/8" flare SAE                       |
| Oil equalization torque [Nm]                    | 30 N-m                               |
| Oil reference                                   | 175PZ                                |
| Packaging height [mm]                           | 720 mm                               |
| Packaging length [mm]                           | 570 mm                               |
| Packaging weight [Kg]                           | 70 kg                                |
| Packaging width [mm]                            | 400 mm                               |
| Packing format                                  | Single pack                          |
| Packing quantity                                | 1                                    |
| Phase   | 3                                    |
| Power connections                               | Screw connectors 10-32 UNF x 9.5     |
| Product group                                   | Hermetic compressors                 |
| Product Name Description                        | MTZ                                  |
| REACH Candidate List substances                 | Lead (CAS no. 7439-92-1)             |
| Refrigerant charge [kg] [Max]                   | 10 kg                                |
| Refrigerants                                    | R134a                                |
| -   | R404A                                |
|   | R407A                                |
|   | R407C                                |
|   | R407F                                |
|   | R448A                                |
|   | R449A                                |
|   | R452A                                |
|   | R513A                                |
| Rotational speed at 60Hz [rpm]                  | 3500 rpm                             |
| SCIP dossier no.                                | 6971587b-85b6-4808-886d-274e8a9998d4 |
|   |                                      |

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**Refrigeration MT** 

Segment usage

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#### **PRODUCT DETAILS**

| Shipped fittings                  | Suction and discharge solder sleeves, |
|-----------------------------------|---------------------------------------|
|                                   | rotolock nuts, and gaskets            |
| Shipped instructions              | Installation instructions             |
| Shipped mounting                  | Mounting kit with grommets, bolts,    |
|                                   | nuts, sleeves and washers             |
| Shipped oil                       | Initial oil charge                    |
| Suction connection height [mm]    | 233 mm                                |
| Suction connection material       | -                                     |
| Suction connection pipe size [in] | 1 1/8 in                              |
| Suction connection size [in]      | 1 3/4 in                              |
| Swept volume [cm3]                | 171.26 cm <sup>3</sup>                |
| Technology                        | Reciprocating                         |
| Test Dif [bar] [Max]              | 30 bar                                |
| Test HP [bar] [Max]               | 30 bar                                |
| Test LP [bar] [Max]               | 25 bar                                |
| Torque earth [Nm]                 | 3 N-m                                 |
| Torque power [Nm]                 | 3 N-m                                 |
| Total height [mm]                 | 519 mm                                |
| Туре                              | MTZ100                                |
| UK RoHS compliance                | Out of scope                          |
| Winding resistance for three-     | 0.51 Ohm                              |
| phase compressors with identical  |                                       |
| windings [Ohm]                    |                                       |
| Proposition 65                    | WARNING: Cancer and Reproductive      |
|                                   | Harm                                  |
|                                   | www.p65warnings.ca.gov                |

For Documents, Software, Visuals and more information, please use this link to visit the product page on Danfoss Product Store 🖸

#### Accessories



# 8156007 🛽

Mounting, Compressor kit

Mounting kit for four-cylinder compressor and MS, including 4 grommets, 4 bolts



#### 8153004 🕑

**Connector, Solder Sleeve** Solder sleeve, P02 (1-3/4" rotolock, 1-1/8" ODF)



#### 8153008 🛛

**Connector, Solder Sleeve** Solder sleeve, P04 (1-1/4" rotolock, 3/4" ODF)

#### For more information, please use this link to visit the product page on Danfoss Product Store 🗅

#### Product Detail | Reciprocating compressor, MTZ100HS3VE



|   | 8156135 🗹<br>Electrical component, Terminal box<br>Service kit for terminal box 96 x 115 mm, including 1 cover, 1 clamp |
|---|---|
|   | 8156132 🗷<br>Connector, GASKET<br>Gasket, 1-3/4"  |
| 0 | <b>7750009 ⊵</b><br>Electrical component, Discharge thermostat kit<br>Discharge thermostat kit                          |
|   | 8173230 🖻<br>Electrical component, T block<br>T block connector 52 x 57 mm  |
|   | 8156009 ≥<br>Connector, GASKET<br>Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black and white                           |
|   | 8156131 🗹<br>Connector, GASKET<br>Gasket, 1-1/4"  |
|   | <b>120Z0577 </b><br><b>Acoustic hood, Reciprocating</b><br>Acoustic hood for four-cylinder compressor                   |
|   |   |

Spare Parts

### 7773110 🖻

**Crankcase heater, Belt heater** Belt type crankcase heater, 75 W, 110 V, CE mark, UL



## 120Z0638 🖻

**Lubricant, 175PZ** POE lubricant, 175PZ, 1-litre can

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### Product Detail | Reciprocating compressor, MTZ100HS3VE

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| The second second | 8168028 🗹<br>Connector, Rotolock service valve<br>Rotolock valve, V02 (1-3/4" rotolock, 1-1/8" ODF)               |
|-------------------|---|
|                   | 8156019 🗹<br>Connector, Sight glass<br>Oil sight glass with gaskets (black and white)                             |
| Ò                 | <b>7773108 </b> ☑<br><b>Crankcase heater, Belt heater</b><br>Belt type crankcase heater, 75 W, 230 V, CE mark, UL |
|                   | 8156145 ☑<br>Connector, GASKET<br>Gasket for oil sight glass (black chloroprene)                                  |
| $( \mathbf{O} )$  | <b>120Z0459 ⊠</b><br>Crankcase heater, PTC heater<br>PTC heater 27W, CE mark, UL                                  |
| <b>~</b>          | 8168029 ☑<br>Connector, Rotolock service valve<br>Rotolock valve, V04 (1-1/4" rotolock, 3/4" ODF)                 |
|                   | <b>7703009 ⊠</b><br><b>Connector, Valve set</b><br>Valve set, V02 (1-3/4"~1-1/8"), V04 (1-1/4"~3/4")              |

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