



### **MTZ28-1VI** ☑

# $Reciprocating\ compressor,\ MTZ28JE1AVE$

Refrigerants: R404A; R407C; R452A; R407A; R134a; R454C; R407F; R513A; R448A; R455A; R454A; R449A, Segment usage: Refrigeration MT, Compressor power supply [V]: 208-230/1/60, Packing format: Single pack

### PRODUCT DETAILS

Gross weight	24.88 Kg
Net weight	23 Kg
Volume	37.73 Liter
EAN	5702428980555
Approval	CE
	UL
	UKCA
Auxiliary winding resistance	1.84
(start winding) for single-phase	
compressors [Ohm]	
Brand technique	Reciprocating compressor
Capacity control	Fixed speed
Capacity of capacitor A	25 μF
Capacity of capacitor B	135 μF
Capacity of capacitor C	25 μF
China RoHS compliance	Out of scope
Colour	Blue
Compressor power supply [V]	208-230/1/60
Configuration code	Single
Connection type	Rotolock
Cylinder	1
Description	MTZ028-1
Diameter [mm]	224 mm
Discharge connection height [mm]	68 mm
Discharge connection pipe size [in]	1/2 in
Discharge connection size [in]	1 in
Drawing number	8501020e
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



### **PRODUCT DETAILS**

PRODUCT DETAILS	
Glass mounting	Threaded
Glass torque [Nm]	50 N-m
GP LP torque [Nm]	15 N-m
High Side TS Max	150 ℃
High Side TS Min	-35 ℃
High Side Volume	0.3 L
High value of nominal voltage at	230 V
60Hz [V]	
High value of voltage range at 60Hz	253 V
[V]	
In scope of WEEE and contain	No
batteries	
IP protection class	IP55 (with cable gland)
Low Side TS Max	50 °C
Low Side TS Min	-35 ℃
Low Side Volume	7.5 L
Low value of nominal voltage at	208 V
60Hz [V]	
Low value of voltage range at 60Hz	187 V
[V]	
LRA	81 A
Main winding resistance for single-	0.68
phase compressors [Ohm]	
Max pressure (PS) - high side	29.4 bar
Max pressure (PS) - low side	22.6 bar
MCC	25 A
Model number	MTZ28JE1AVE
Motor protection	Internal overload protector
Mounting torque [Nm]	15 N-m
Network power supply [V/Ph/Hz]	208-230/1/60
Number of starts per hour [Max]	12
Oil charge [L]	0.95 L
Oil equalization	3/8" flare SAE
Oil equalization torque [Nm]	30 N-m
Oil reference	175PZ
Packaging height [mm]	385 mm
Packaging length [mm]	330 mm
Packaging weight [Kg]	26 kg
Packaging width [mm]	295 mm
Packing format	Single pack
Packing quantity	1
Phase	1
Power connections	Spade
Product group	Hermetic compressors
Product Name Description	MTZ
REACH Candidate List substances	Lead (CAS no. 7439-92-1)
Refrigerant charge [kg] [Max]	2.5 kg
Refrigerants	R134a
	R404A
	R407A
	R407C
	R407F



PRODUCT DETAILS	
-----------------	--

PRODUCT DETAILS		
	R448A	
	R449A	
	R452A	
	R513A	
	R454C	
	R455A	
	R454A	
Rotational speed at 60Hz [rpm]	3500 rpm	
SCIP dossier no.	5a332c1b-1d1b-4998-8115-	
	d0929877ecb4	
Segment usage	Refrigeration MT	
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]	263 mm	
Suction connection material	-	
Suction connection pipe size [in]	5/8 in	
Suction connection size [in]	1 1/4 in	
Swept volume [cm3]	48.06 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]	356 mm	
Туре	MTZ028	
UK RoHS compliance	Out of scope	
Voltage of capacitor A [V]	440 V	
Voltage of capacitor B [V]	330 V	
Voltage of capacitor C [V]	440 V	
Proposition 65	WARNING: Cancer and Reproductive	
	Harm	

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

## Accessories



# 8153011 🗷

**Connector, Solder Sleeve** 

Solder sleeve, P09 (1-1/4" rotolock, 5/8" ODF)

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



#### Accessories



# 120Z0575 🗷

#### Acoustic hood, Reciprocating

Acoustic hood for one-cylinder compressor



### 7750009 🗷

#### Electrical component, Discharge thermostat kit

Discharge thermostat kit



#### 8156009 🗷

# Connector, GASKET

Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black and white



#### 8156130 🗷

### Connector, GASKET

Gasket, 1"



### 8153007 🗷

### **Connector, Solder Sleeve**

Solder sleeve, P06 (1" rotolock, 1/2" ODF)



#### 8173002 🗷

## **Electrical component, Start capacitor**

Start capacitor 330V, 140  $\mu F$ 



# 8156131 🗷

### Connector, GASKET

Gasket, 1-1/4"



# 8156001 🗷

### **Mounting, Compressor kit**

Mounting kit for one and two-cylinder compressor, including 3 grommets, 3 bolts



### 8156134 🗅

# **Electrical component, Terminal box**

Service kit for terminal box 80 x 96 mm, including 1 cover, 1 clamp



#### **Spare Parts**



## 7773106 🗷

#### Crankcase heater, Belt heater

Belt type crankcase heater, 54 W, 230 V, CE mark, UL



### 120Z0459 🗈

## Crankcase heater, PTC heater

PTC heater 27W, CE mark, UL



# 8156019 🗷

#### **Connector, Sight glass**

Oil sight glass with gaskets (black and white)



### 7701154 🗷

### **Electrical component, Starting kit**

CSR starting kit, 25  $\mu$ F, 25  $\mu$ F, 140  $\mu$ F



#### 8173022 🗷

# **Electrical component, Relay**

Starting relay type RVA-6AMKL/3ARR3J4A4



## 8168033 🗷

## Connector, Rotolock service valve

Rotolock valve, V09 (1-1/4" rotolock, 5/8" ODF)



# 7703005 🗷

## Connector, Valve set

Valve set, V09 (1-1/4"~5/8"), V06 (1"~1/2")



### 120Z0638 🗷

Lubricant, 175PZ

POE lubricant, 175PZ, 1-litre can



## 8156145 🗷

### Connector, GASKET

Gasket for oil sight glass (black chloroprene)

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



### **Spare Parts**



# 8168031 🗷

### Connector, Rotolock service valve

Rotolock valve, V06 (1" rotolock, 1/2" ODF)