



# MTZ50-1VI

# Reciprocating compressor, MTZ50HK1BVE

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

# PRODUCT DETAILS

Gross weight	39.5 Kg
Net weight	37 Kg
Volume	61.54 Liter
EAN	5702428888110
Approval	CE
	UL
	UKCA
Auxiliary winding resistance	1.83
(start winding) for single-phase	
compressors [Ohm]	
Brand technique	Reciprocating compressor
Capacity control	Fixed speed
Capacity of capacitor A	30 μF
Capacity of capacitor B	135 μF
Capacity of capacitor C	15 μF
China RoHS compliance	Out of scope
Colour	Blue
Compressor power supply [V]	208-230/1/60
Configuration code	Single
Connection type	Rotolock
Cylinder	2
Description	MTZ050-1
Diameter [mm]	288 mm
Discharge connection height [mm]	74 mm
Discharge connection pipe size [in]	3/4 in
Discharge connection size [in]	1 1/4 in
Drawing number	8502011e
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 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	IP54 (with cable gland)
Low value of nominal voltage at	208 V
60Hz [V]	
Low value of voltage range at 60Hz	187 V
[V]	
LRA	114 A
Main winding resistance for single-	0.38
phase compressors [Ohm]	
Max pressure (PS) - high side	29.4 bar
Max pressure (PS) - low side	22.6 bar
MCC	36 A
Model number	MTZ50HK1BVE
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]	1.8 L
Oil equalization	3/8" flare SAE
Oil equalization torque [Nm] Oil reference	30 N-m
	175PZ
Packaging height [mm]	455 mm
Packaging length [mm]	395 mm
Packaging weight [Kg]	39 kg
Packaging width [mm]	365 mm
Packing format	Single pack
Packing quantity	1
Phase	1
Power connections	Screw connectors 10-32 UNF x 9.5
Product group	Hermetic compressors
Product Name Description	Reciprocating compressor MTZ
REACH Candidate List substances	Lead (CAS no. 7439-92-1)
Refrigerant charge [kg] [Max]	5 kg
Refrigerants	R134a
	R404A
	R407A
	R407C
	R407F
	R448A
	R449A
	R452A
	R513A
	8.5.4
	R454A
	R454A R454C R455A



# **PRODUCT DETAILS**

Rotational speed at 60Hz [rpm]	3500 rpm	
SCIP dossier no.	9b3fb119-9852-486a-92dd-53aa9c96fd3b	
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]	265 mm	
Suction connection material	-	
Suction connection pipe size [in]	7/8 in	
Suction connection size [in]	1 3/4 in	
Swept volume [cm3]	85.64 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]	413 mm	
Туре	MTZ050	
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	

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

#### Accessories



# 7701035 🗷

**Electrical component, Starting kit** 

PSC starting kit, 30  $\mu\text{F}$ , 15  $\mu\text{F}$ 



# 120Z0576 🗷

Acoustic hood, Reciprocating

Acoustic hood for two-cylinder compressor



# 8156131 🗷

Connector, Gasket

Gasket, 1-1/4"

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



#### **Accessories**



# 8173002 🗷

#### **Electrical component, Start capacitor**

Start capacitor 330V, 140  $\mu F$ 



# 8156135 🗷

#### **Electrical component, Terminal box**

Service kit for terminal box 96 x 115 mm, including 1 cover, 1 clamp



# 8156009 🗷

# Connector, Gasket

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



#### 8156132 🗷

# Connector, Gasket

Gasket, 1-3/4"



# 8153008 🗷

# Connector, Solder sleeve

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



#### 8153013 🗷

# Connector, Solder sleeve

Solder sleeve, P07 (1-3/4" rotolock, 7/8" ODF)



# **7750009** 🗷

# Electrical component, Discharge thermostat kit

Discharge thermostat kit



# 8173230 🗷

# **Electrical component, T block**

T block connector 52 x 57 mm



# 120Z0762 🗷

# Mounting, Compressor kit

Mounting kit 2 cylinder except HP



#### **Spare Parts**



# 120Z0639 🗷

Lubricant, 175PZ

POE lubricant, 175PZ,2.5L CAN



# 7701035 🗷

**Electrical component, Starting kit** 

PSC starting kit, 30  $\mu$ F, 15  $\mu$ F



# 7701042 🗷

**Electrical component, Starting kit** 

CSR starting kit, 30  $\mu$ F, 15  $\mu$ F, 140  $\mu$ F



# 120Z0638 🗷

Lubricant, 175PZ

POE lubricant, 175PZ, 1-litre can



#### 8156019 🗷

**Connector, Sight glass** 

Oil sight glass with gaskets (black and white)



# 8173022 🗷

**Electrical component, Relay** 

Starting relay type RVA-6AMKL/3ARR3J4A4



# 7703006 🗷

Connector, Valve set

Valve set, V07 (1-3/4"~7/8"), V04 (1-1/4"~3/4")



# 8168032 🖸

Connector, Rotolock service valve

Rotolock valve, V07 (1-3/4" rotolock, 7/8" ODF)



# 8168029 🗷

Connector, Rotolock service valve

Rotolock valve, V04 (1-1/4" rotolock, 3/4" ODF)



#### 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**



# 120Z0459 🗷

Crankcase heater, PTC heater

PTC heater 27W



# **7773107** 🗷

Crankcase heater, Belt heater

Belt type crankcase heater, 65 W, 230 V