

**MTZ144-4VI****Reciprocating compressor, MTZ144HV4AVE**

Refrigerants: R404A; R407C; R452A; R407A; R134a; R407F; R513A; R448A; R449A,  
Segment usage: Refrigeration MT, Compressor power supply [V/Ph/Hz]: 400/3/50  
460/3/60

**PRODUCT DETAILS**

<b>Gross weight</b>	72.75 Kg
<b>Net weight</b>	69 Kg
<b>Volume</b>	122.411 Liter
<b>EAN</b>	5702428888288
<b>Approval standard</b>	CE UL
<b>Brand technique</b>	Reciprocating compressor
<b>Capacity control</b>	Fixed speed
<b>Colour</b>	Blue
<b>Compressor power supply [V/Ph/Hz]</b>	400/3/50 460/3/60
<b>Configuration code</b>	Single
<b>Connection type</b>	Rotolock
<b>Cylinder</b>	4
<b>Description</b>	MTZ144-4
<b>Diameter [mm]</b>	352 mm
<b>Discharge connection height [mm]</b>	125 mm
<b>Discharge connection pipe size [in]</b>	3/4 in
<b>Discharge connection size [in]</b>	1 1/4 in
<b>Drawing number</b>	8504011e
<b>Economizer</b>	No
<b>Factory HP [bar]</b>	25 bar
<b>Factory LP [bar]</b>	25 bar
<b>Family</b>	MTZ
<b>Fitting remark</b>	(shipped with rotolock version only)
<b>Fitting sleeve</b>	ODF
<b>Fitting standard</b>	Rotolock
<b>Frequency [Hz]</b>	50/60
<b>Gauge port HP</b>	None
<b>Gauge port LP</b>	Schrader
<b>Generation code</b>	No
<b>Glass mounting</b>	Threaded
<b>Glass torque [Nm]</b>	50 N-m
<b>GP LP torque [Nm]</b>	15 N-m
<b>High side max pressure (Ps)</b>	29.4 bar
<b>High Side TS Max</b>	150 °C
<b>High Side TS Min</b>	-35 °C
<b>High Side Volume</b>	1.2 L

## Product Detail | Reciprocating compressor, MTZ144HV4AVE

## PRODUCT DETAILS

High value of nominal voltage at 50Hz [V]	400 V
High value of nominal voltage at 60Hz [V]	460 V
High value of voltage range at 50Hz [V]	460 V
High value of voltage range at 60Hz [V]	506 V
IP protection class	IP54 (with cable gland)
Low side max pressure (Ps)	22.6 bar
Low Side TS Max	50 °C
Low Side TS Min	-35 °C
Low Side Volume	31 L
Low value of nominal voltage at 50Hz [V]	380 V
Low value of nominal voltage at 60Hz [V]	460 V
Low value of voltage range at 50Hz [V]	340 V
Low value of voltage range at 60Hz [V]	414 V
LRA	130 A
MCC	36 A
Model Number	MTZ144HV4AVE
Motor protection	Internal overload protector
Mounting torque [Nm]	50 N-m
Network power supply [V/Ph/Hz]	380-415/3/50 460/3/60
Nominal cooling capacity at 50Hz	18.5 kW
Nominal cooling capacity at 60Hz	23.6 kW
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]	72 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
Refrigerant charge [kg] [Max]	10 kg
Refrigerants	R134a R404A R407A R407C R407F R448A R449A R452A

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## Product Detail | Reciprocating compressor, MTZ144HV4AVE

## PRODUCT DETAILS

	R513A
Relief valve	30 bar/8 bar
Rotational speed at 50Hz [rpm]	2900 rpm
Rotational speed at 60Hz [rpm]	3500 rpm
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]	233 mm
Suction connection material	-
Suction connection pipe size [in]	1 1/8 in
Suction connection size [in]	1 3/4 in
Swept volume [cm <sup>3</sup> ]	241.87 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]	540 mm
Type	MTZ144
Winding resistance for three-phase compressors with identical windings [Ohm]	1.15 Ohm

For Documents, Software, Visuals and more information, please use this link to visit the product page on Danfoss Product Store [🔗](#)

## Accessories



**8156135** [🔗](#)

**Electrical component, Terminal box**

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



**120Z0577** [🔗](#)

**Acoustic hood, Reciprocating**

Acoustic hood for four-cylinder compressor



**8173230** [🔗](#)

**Electrical component, T block**

T block connector 52 x 57 mm

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Accessories



**120Z0639** [🔗](#)

**Lubricant, 175PZ**

POE lubricant, 175PZ, 2.5L CAN



**8153008** [🔗](#)

**Connector, Solder Sleeve**

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



**8153004** [🔗](#)

**Connector, Solder Sleeve**

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



**8156007** [🔗](#)

**Mounting, Compressor kit**

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



**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



**8156131** [🔗](#)

**Connector, GASKET**

Gasket, 1-1/4"



**8156132** [🔗](#)

**Connector, GASKET**

Gasket, 1-3/4"



**120Z0638** [🔗](#)

**Lubricant, 175PZ**

POE lubricant, 175PZ, 1-litre can

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## Spare Parts

**7705007** [↗](#)**Electrical component, MCI**

Electronic soft start kit, MCI 25 C

**7773118** [↗](#)**Heater, Belt heater**

Belt type crankcase heater, 75 W, 400 V, CE mark, UL

**8156145** [↗](#)**Connector, GASKET**

Gasket for oil sight glass (black chloroprene)

**7773108** [↗](#)**Heater, Belt heater**

Belt type crankcase heater, 75 W, 230 V, CE mark, UL

**8168028** [↗](#)**Connector, Rotolock service valve**

Rotolock valve, V02 (1-3/4" rotolock, 1-1/8" ODF)

**8156019** [↗](#)**Connector, Sight glass**

Oil sight glass with gaskets (black and white)

**7703009** [↗](#)**Connector, Valve set**

Valve set, V02 (1-3/4"~1-1/8"), V04 (1-1/4"~3/4")

**120Z0464** [↗](#)**Heater, Belt heater**

Belt type crankcase heater, 75 W, 460 V, CE mark, UL

**8168029** [↗](#)**Connector, Rotolock service valve**

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

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Spare Parts



**120Z0459** [🔗](#)

**Heater, PTC heater**

PTC heater 27W, CE mark, UL

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