

ENGINEERING TOMORROW

Datasheets

Danfoss Reciprocating compressors **MT / MTZ / NTZ**



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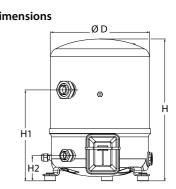
Datasheet, technical data

Maneurop reciprocating compressor, MTZ072-4

Danfoss

General Characteristics

Model number (on compressor nameplate)		MTZ72HN4AVE		
Code number for Singlepack*		MTZ72-4VI		
Code number for Industrial pack**		MTZ72-4VM		
Drawing number		8502012g		
Suction and discharge connections		Rotolock		
Suction connection		1-3/4 " Rotolock		
Discharge connection		1-1/4 " Rotolock		
Suction connection with supplied sleeve		7/8 " ODF		
Discharge connection with supplied sleeve		3/4 " ODF		
Oil sight glass		Threaded		
Oil equalisation connection		3/8" flare SAE		
Oil drain connection		None		
LP gauge port		Schrader		
IPR valve		30 bar / 8 bar		
Cylinders		2		
Swept volume	120,94 0	cm3/rev		
Displacement @ Nominal speed	21.0 m3/h @ 2900 rpm	25.4 m3/h @ 3500 rpm		
Net weight	40	kg		
Oil charge	1,8 litre, PC	DE - 160PZ		
Maximum system test pressure Low Side / High side	25 bar(g) /	′ 30 bar(g)		
Maximum differential test pressure	30	bar		
Maximum number of starts per hour	1	2		
Refrigerant charge limit	5	kg		
Approved refrigerants	R404A, R507A, R134a, R407C, R407A, R407F			



288 mm -413 mm l=265 mm 2=74 mm =- mm

erminal box

Electrical Characteristics

Nominal voltage	380-400V/3/50Hz - 460V/3/60Hz			
Voltage range	340-440 V @ 50Hz - 414-506 V @ 60Hz			
Winding resistance (between phases) +/- 7% at 25°C	1.9 Ω			
Maximum Continuous Current (MCC)	17 A			
Locked Rotor Amps (LRA)	80 A			
Motor protection	Internal overload protector			

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Recommended Installation torques

Oil sight glass	50 Nm	
Power connections / Earth connection	Nm / 2 Nm	
Mounting bolts	15 Nm	IP:

Parts shipped with compressor

Mounting kit with grommets, bolts, nuts, sleeves and washers

Suction & Discharge solder sleeves, rotolock nuts and gaskets (shipped with rotolock version only) Initial oil charge

Installation instructions

Approvals : CE certified, UL certified (file SA6873), -

*Singlepack: Compressor in cardboard box

**Industrial pack: 6 Unboxed compressors on pallet (order per multiples of 6)

P55 (with cable gland)

- 1: Spade connectors 1/4" 2:
 - Earth M4-12
- Knock-out Ø 21 mm (0.83") 3:
- 4: Hole Ø 21 mm (0.83'')



Danfoss

Datasheet, accessories and spare parts

Maneurop reciprocating compressor, MTZ072-4

6: Nut (3x)

Solder sleeve, P07 (1-3/4* Rotolock, 7/8* ODE) 8153013 Angle adapter, C07 (1-3/4* Rotolock, 7/8* ODE) 8156002 Gaskets, 1-3/4* 8166032 Rotolock valve, V07 (1-3/4* Rotolock, 7/8* ODE) 8156032 Solder sleeve, P04 (1-1/4* Rotolock, 3/4* ODE) 8156006 Rotolock valve, V04 (1-1/4* Rotolock, 3/4* ODE) 8156006 Saket, sleeves valve, V07 (1-3/4* -7/8*), C04 (1-1/4* -3/4*) 7703013 Yahve set, V07 (1-3/4* -7/8*), C04 (1-1/4* -3/4*) 7703006 Gasket set, T, 1-1/4*, 1-3/4*, OSG gaskets black & white 8156009 Oil / lubricant, 160P2, 1 litre can 7754019 POE lubricant, 160P2, 2.5 litre can 12020459 PTC heater 27W,CE mark, UL 9773107 Bet type crankcase heater, 65 W, 460 V, CE mark, UL 9773107 Bet type crankcase heater, 65 W, 460 V, CE mark, UL 9773107 Bet type crankcase heater, 65 W, 460 V, CE mark, UL	Rotolock accessories, suction side	Code no.	
Brotolock valve, V07 (1-3/4* Rotolock, 7/8* ODF) 8 168032 Gaskets, sleeves and nuts Casket, 1-3/4* 8156132 Gaskets, sleeves and nuts Solder sleeve, P04 (1-1/4* Rotolock, 3/4* ODF) 8153008 Angle adapter, C04 (1-1/4* Rotolock, 3/4* ODF) 8158008 Rotolock valve, V04 (1-1/4* Rotolock, 3/4* ODF) 8168002 Gasket, 1-1/4* 8156131 Rotolock cacessories, sets Code no. Angle adapter set, C07 (1-3/4*7/8*), C04 (1-1/4*-3/4*) 7703013 Yalve set, V07 (1-3/4*7/8*), V04 (1-1/4*-3/4*) 7703006 Gasket set, 1*, 1-1/4*, 1-3/4*, OSG gaskets black & white 8156009 Oil / lubricant, 160PZ, 1 litre can 7754019 POE lubricant, 160PZ, 2 litre can 7773107 PC hater 27W/CE mark, UL 12020459 Bet type crankcase heater, 65 W, 400 V, CE mark, UL 7773107 Bet type crankcase heater, 65 W, 400 V, CE mark, UL 7773107 Bet type crankcase heater, 65 W, 400 V, CE mark, UL 7705006 Electronic soft start kit, MCI 15 C 7705006 Acoustic hood for 2 cylinder compressor 12020472 Oil equalisation nut 8156019 Stare parts Code no. Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts 8156019 Oil equalisation nut 8156019 <td< td=""><td>Solder sleeve, P07 (1-3/4" Rotolock, 7/8" ODF)</td><td>8153013</td><td></td></td<>	Solder sleeve, P07 (1-3/4" Rotolock, 7/8" ODF)	8153013	
Gasket, 1:3/4" B156132 Rotolock accessories, discharge side Code no. Solder sleeve, P04 (1:1/4" Rotolock, 3/4" ODF) B153008 Angle adapter, C04 (1:1/4" Rotolock, 3/4" ODF) B156002 Brotolock Vavy V04 (1:1/4" Rotolock, 3/4" ODF) B156029 Gasket, 1:1/4" B156131 Rotolock vavy, V04 (1:1/4" Rotolock, 3/4" ODF) B156131 Gasket, 1:1/4" B156131 Rotolock vavy, V04 (1:1/4" Rotolock, 3/4" ODF) B156131 Gasket, 1:1/4" B156131 Rotolock vavy, V04 (1:1/4"-3/4") 7703013 Gasket et, 1'', 1:1/4", 1:3/4", OSG gaskets black & white 1: Gasket Oil / lubricant, 160PZ, 2.5 litre can 7753107 POE lubricant, 160PZ, 2.5 litre can 12020459 PTC heater 27W,CE mark, UL 12020459 Bet type crankcase heater, 65 W, 400 V, CE mark, UL 12020459 Bet type crankcase heater, 65 W, 400 V, CE mark, UL 12020456 Bet type crankcase heater, 65 W, 400 V, CE mark, UL 12020472 Bet type crankcase heater, 65 W, 400 V, CE mark, UL 12020472 Bet type crankcase heater, 65 W, 400 V, CE mark, UL 12020472 Bet type crankcase heater, 65 W, 400 V, CE mark, UL 12020472 Bet type crankcase heater, 65 W, 400 V, CE mark, UL 12020472 Bit type crankcase heater, 65 W, 400 V, CE mark, UL	Angle adapter, C07 (1-3/4" Rotolock, 7/8" ODF)	8168008	
Rotolock accessories, discharge side Code no. Solder sleeve, P04 (1-1/4* Rotolock, 3/4* ODF) 8153008 Angle adapter, C04 (1-1/4* Rotolock, 3/4* ODF) 8158008 Rotolock valve, W04 (1-1/4* Rotolock, 3/4* ODF) 8156031 Gasket, 1-1/4* 8156131 Rotolock accessories, sets Code no. Angle adapter set, C07 (1-3/4*-7/8*), C04 (1-1/4*-3/4*) 7703003 Yalve set, V07 (1-3/4*-7/8*), C04 (1-1/4*-3/4*) 7703006 Gasket set, 1*, 1-1/4*, 1-3/4*, OSG gaskets black & white 8156009 Oil / lubricants Code no. POE lubricant, 160P2, 1 litre can 7754019 POE lubricant, 160P2, 2.5 litre can 12020573 Crankcase heater, 65 W, 230 V, CE mark, UL 12020573 Belt type crankcase heater, 65 W, 460 V, CE mark, UL 12020469 Belt type crankcase heater, 65 W, 460 V, CE mark, UL 12020469 Miscellaneous accessories Code no. Idet type crankcase heater, 65 W, 460 V, CE mark, UL 12020469 Miscellaneous accessories 7705006 Rooustic hodo for 2 cylinder compressor 12020472 Oil equalisation nut 815601 Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts 815601 Oil equalisation nut 815601 Spare parts Code no.	Rotolock valve, V07 (1-3/4" Rotolock, 7/8" ODF)	8168032	Gaskets, sleeves and nuts
Solder sleeve, P04 (1-1/4" Rotolock, 3/4" ODF) 8153008 8158006 Angle adapter, CM (1-1/4" Rotolock, 3/4" ODF) 8168006 81680029 Rotolock valve, V04 (1-1/4" Rotolock, 3/4" ODF) 8166131 1 2 Rotolock accessories, sets Code no. 1: Gasket 2: Solder sleeve Angle adapter set, CO7 (1-3/4"-7/8"), CO4 (1-1/4"-3/4") 7703013 2: Solder sleeve 3: Rotolock nut Maye set, VO7 (1-3/4"-7/8"), VO4 (1-1/4"-3/4") 7703006 8156009 3: Rotolock nut Oil / lubricants Code no. 7754019 2: Solder sleeve 3: Rotolock nut POE lubricant, 160PZ, 2.5 litre can 120204573 12020457 12020457 Belt type crankcase heater, 65 W, 400 V, CE mark, UL 12020459 12020459 Belt type crankcase heater, 65 W, 400 V, CE mark, UL 7773107 7773107 Belt type crankcase heater, 65 W, 400 V, CE mark, UL 12020459 12020459 Belt type crankcase heater, 65 W, 400 V, CE mark, UL 12020459 12020459 Oli equalisation nut 132020459 12020459 12020459 Belt type crankcase heater, 65 W, 400 V, CE mark, UL 12020459	Gasket, 1-3/4"	8156132	
Solder sleeve, P04 (1-1/4" Rotolock, 3/4" ODF) 8153008 8158006 Angle adapter, CM (1-1/4" Rotolock, 3/4" ODF) 8168006 81680029 Rotolock valve, V04 (1-1/4" Rotolock, 3/4" ODF) 8166131 1 2 Rotolock accessories, sets Code no. 1: Gasket 2: Solder sleeve Angle adapter set, CO7 (1-3/4"-7/8"), CO4 (1-1/4"-3/4") 7703013 2: Solder sleeve 3: Rotolock nut Maye set, VO7 (1-3/4"-7/8"), VO4 (1-1/4"-3/4") 7703006 8156009 3: Rotolock nut Oil / lubricants Code no. 7754019 2: Solder sleeve 3: Rotolock nut POE lubricant, 160PZ, 2.5 litre can 120204573 12020457 12020457 Belt type crankcase heater, 65 W, 400 V, CE mark, UL 12020459 12020459 Belt type crankcase heater, 65 W, 400 V, CE mark, UL 7773107 7773107 Belt type crankcase heater, 65 W, 400 V, CE mark, UL 12020459 12020459 Belt type crankcase heater, 65 W, 400 V, CE mark, UL 12020459 12020459 Oli equalisation nut 132020459 12020459 12020459 Belt type crankcase heater, 65 W, 400 V, CE mark, UL 12020459			
Angle adapter, Co4 (1-1/4" Rotolock, 3/4" ODF) 8168006 Rotolock valve, V04 (1-1/4" Rotolock, 3/4" ODF) 8156131 asket, 1-1/4" 8156131 Rotolock accessories, sets Code no. Angle adapter set, C07 (1-3/4"-7/8"), C04 (1-1/4"-3/4") 7703013 Valve set, V07 (1-3/4"-7/8"), C04 (1-1/4"-3/4") 7703006 Valve set, V07 (1-3/4"-7/8"), C04 (1-1/4"-3/4") 7703006 Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white 8156009 Oil / lubricants Code no. POE lubricant, 160PZ, 2.5 litre can 7754019 POE lubricant, 160PZ, 2.5 litre can 12020459 PTC heater 27W/CE mark, UL 12020459 Belt type crankcase heater, 65 W, 300 V, CE mark, UL 7773107 Belt type crankcase heater, 65 W, 300 V, CE mark, UL 12020459 Miscellaneous accessories Code no. Electronic soft start kit, MCI 15 C 7705006 Acoustic hood for 2 cylinder compressor 12020472 Oil equalisation nut 815601 Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts 815601 Oil equalisation nut 815614	Rotolock accessories, discharge side	Code no.	
Rotolock valve, V04 (1-1/4" Rotolock, 3/4" ODF) 8168029 Gasket, 1-1/4" 8168029 Rotolock accessories, sets Code no. Angle adapter set, C07 (1-3/4"~78"), C04 (1-1/4"~3/4") 7703013 Yalve set, V07 (1-3/4"~78"), V04 (1-1/4"~3/4") 7703006 Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white 8156009 Oil / lubricant, 160PZ, 13/4" - 78", V04 (1-1/4"-3/4") 8168029 Oil / lubricant, 160PZ, 11/4", -3/4", OSG gaskets black & white 8156009 Oil / lubricant, 160PZ, 12.5 litre can 12020573 Crankcase heaters Code no. POE lubricant, 160PZ, 12.5 litre can 12020459 POE tubricant, 160PZ, 12.5 litre can 12020459 PTC heater 27W/CE mark, UL 12020459 Belt type crankcase heater, 65 W, 200 V, CE mark, UL 7773107 Belt type crankcase heater, 65 W, 400 V, CE mark, UL 7773107 Belt type crankcase heater, 65 W, 400 V, CE mark, UL 7705006 Acoustic hood for 2 cylinder compressor 12020472 Oil equalisation nut 815601 Spare parts Code no. Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts 8156019 Oil sight glass vith gaskets (b	Solder sleeve, P04 (1-1/4" Rotolock, 3/4" ODF)	8153008	(()))((())opr (()))))
Gasket, 1-1/4" 8156131 1 2 3 Rotolock accessories, sets Angle adapter set, C07 (1-3/4"~7/8"), C04 (1-1/4"~3/4") 7703013 2: Solder sleeve Valve set, V07 (1-3/4"~7/8"), V04 (1-1/4"~3/4") 7703006 3: Rotolock nut Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white 8156009 3: Rotolock nut Oil / lubricants Code no. 7754019 POE lubricant, 160PZ, 1 litre can 7754019 12020573 Mounting kit PTC heater 27W,CE mark, UL 12020459 Belt type crankcase heater, 65 W, 300 V, CE mark, UL 12020459 Belt type crankcase heater, 65 W, 400 V, CE mark, UL 7775107 Belt type crankcase heater, 65 W, 400 V, CE mark, UL 12020466 Miscellaneous accessories Code no. Electronic soft start kit, MCl 15 C 7705006 Acoustic hood for 2 cylinder compressor 12020472 Oil equalisation nut 815601 Spare parts Code no. Mountling kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts 8156001 Oil sight glass with gaskets (black & white) 8156145 Gasket for 1 sight glass (black chloroprene) 8156134	Angle adapter, C04 (1-1/4" Rotolock, 3/4" ODF)	8168006	
Rotolock accessories, sets Code no. 1: Gasket Angle adapter set, CO7 (1-3/4"~7/8"), CO4 (1-1/4"~3/4") 7703013 2: Solder sleeve Valve set, VO7 (1-3/4"~7/8"), VO4 (1-1/4"~3/4") 7703006 3: Rotolock nut Gasket set, 1", 1-14", 1-3/4", OSG gaskets black & white 8156009 3: Rotolock nut Oil / lubricants Code no. 7754019 POE lubricant, 160PZ, 2.5 litre can 12020573 12020573 Crankcase heaters Code no. Mounting kit PTC heater 27W/CE mark, UL 120204599 120204599 Belt type crankcase heater, 65 W, 400 V, CE mark, UL 7773107 1 Belt type crankcase heater, 65 W, 400 V, CE mark, UL 7705006 1 Belt type crankcase heater, 65 W, 400 V, CE mark, UL 7705006 1 Belt type crankcase heater, 65 W, 400 V, CE mark, UL 7705006 1 Belt type crankcase heater, 65 W, 400 V, CE mark, UL 7705006 1 Belt type crankcase heater, 65 W, 400 V, CE mark, UL 12020472 0 Belt type crankcase heater, 65 W, 400 V, CE mark, UL 12020472 0 0 Di equalisation nut 8153127 0 0 0 Spare parts<	Rotolock valve, V04 (1-1/4" Rotolock, 3/4" ODF)	8168029	
Angle adapter set, C07 (1-3/4*7/8"), C04 (1-1/4*3/4") 7703013 2: Solder sleeve Valve set, V07 (1-3/4*7/8"), V04 (1-1/4*3/4") 7703006 3: Rotolock nut Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white 8156009 3: Rotolock nut Oil / lubricants Code no. POE lubricant, 160P2, 1 litre can 77754019 POE lubricant, 160P2, 2.5 litre can 12020573 Crankcase heaters Code no. PTC heater 27W,CE mark, UL 12020459 Belt type crankcase heater, 65 W, 230 V, CE mark, UL 7773107 Belt type crankcase heater, 65 W, 400 V, CE mark, UL 7775006 Belt type crankcase heater, 65 W, 400 V, CE mark, UL 12020466 Miscellaneous accessories Code no. Electronic soft start kit, MCI 15 C 7705006 Acoustic hood for 2 cylinder compressor 12020472 Oil equalisation nut 815601 Spare parts Code no. Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts 815601 Oil sight glass (black kloroprene) 8156145 Service kit for terminal box 80 × 96 mm, including 1 cover, 1 clamp 8156134	Gasket, 1-1/4"	8156131	1 2 3
Angle adapter set, C07 (1-3/4*7/8"), C04 (1-1/4*3/4") 7703013 2: Solder sleeve Valve set, V07 (1-3/4*7/8"), V04 (1-1/4*3/4") 7703006 3: Rotolock nut Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white 8156009 3: Rotolock nut Oil / lubricants Code no. POE lubricant, 160P2, 1 litre can 77754019 POE lubricant, 160P2, 2.5 litre can 12020573 Crankcase heaters Code no. PTC heater 27W,CE mark, UL 12020459 Belt type crankcase heater, 65 W, 230 V, CE mark, UL 7773107 Belt type crankcase heater, 65 W, 400 V, CE mark, UL 7775006 Belt type crankcase heater, 65 W, 400 V, CE mark, UL 12020466 Miscellaneous accessories Code no. Electronic soft start kit, MCI 15 C 7705006 Acoustic hood for 2 cylinder compressor 12020472 Oil equalisation nut 815601 Spare parts Code no. Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts 815601 Oil sight glass (black kloroprene) 8156145 Service kit for terminal box 80 × 96 mm, including 1 cover, 1 clamp 8156134			
Valve set, V07 (1-3/4"~-7/8"), V04 (1-1/4"~-3/4") 7703006 3: Rotolock nut Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white 8156009 3: Rotolock nut Oil / lubricants Code no. POE lubricant, 160PZ, 2.5 litre can 7754019 POE lubricant, 160PZ, 2.5 litre can 12020573 Crankcase heaters Code no. PTC heater 27W,CE mark, UL 12020459 Belt type crankcase heater, 65 W, 230 V, CE mark, UL 7773107 Belt type crankcase heater, 65 W, 460 V, CE mark, UL 7773117 Belt type crankcase heater, 65 W, 460 V, CE mark, UL 12020466 Miscellaneous accessories Code no. Electronic soft start kit, MCI 15 C 7705006 Acoustic hood for 2 cylinder compressor 12020472 Oil sight glass with gaskets (black & white) 815601 Gasket for oil sight glass (black & white) 815601 Oil sight glass (black horoprene) 815614 Service kit for terminal box 80 x 96 mm, including 1 cover, 1 clamp 8156134	Rotolock accessories, sets	Code no.	1: Gasket
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white 8156009 Oil / lubricants Code no. POE lubricant, 160PZ, 2.5 litre can 7754019 POE lubricant, 160PZ, 2.5 litre can 12020573 Crankcase heaters Code no. PTC heater 27W,CE mark, UL 12020459 Belt type crankcase heater, 65 W, 200 V, CE mark, UL 7773107 Belt type crankcase heater, 65 W, 460 V, CE mark, UL 7773107 Belt type crankcase heater, 65 W, 460 V, CE mark, UL 7705006 Iscellaneous accessories Code no. Electronic soft start kit, MCI 15 C 7705006 Acoustic hood for 2 cylinder compressor 12020472 Oil equalisation nut 8153127 Spare parts Code no. Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts 8156001 Oil sight glass (black chloroprene) 8156145 Service kit for terminal box 80 x 96 mm, including 1 cover, 1 clamp 8156134	Angle adapter set, C07 (1-3/4"~7/8"), C04 (1-1/4"~3/4")	7703013	2: Solder sleeve
Oil / lubricants Code no. POE lubricant, 160PZ, 1 litre can 7754019 POE lubricant, 160PZ, 2.5 litre can 12020573 Crankcase heaters Code no. PTC heater 27W/CE mark, UL 12020459 Belt type crankcase heater, 65 W, 230 V, CE mark, UL 7773107 Belt type crankcase heater, 65 W, 400 V, CE mark, UL 7773117 Belt type crankcase heater, 65 W, 460 V, CE mark, UL 7773117 Belt type crankcase heater, 65 W, 460 V, CE mark, UL 77705006 Acoustic hood for 2 cylinder compressor 12020472 Oil equalisation nut 8153127 Spare parts Code no. Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts 8156019 Oil sight glass (black kolroprene) 815619 Service kit for cli sight glass (black chloroprene) 815614 Service kit for terminal box 80 x 96 mm, including 1 cover, 1 clamp 8156134	Valve set, V07 (1-3/4"~7/8"), V04 (1-1/4"~3/4")	7703006	3: Rotolock nut
POE lubricant, 160PZ, 1 litre can 7754019 POE lubricant, 160PZ, 2.5 litre can 7754019 POE lubricant, 160PZ, 2.5 litre can 120Z0573 Crankcase heaters Code no. Mounting kit PTC heater 27W,CE mark, UL 120Z0459 7773107 Belt type crankcase heater, 65 W, 230 V, CE mark, UL 120Z0466 4 Belt type crankcase heater, 65 W, 460 V, CE mark, UL 7773107 7773107 Belt type crankcase heater, 65 W, 460 V, CE mark, UL 120Z0466 4 Miscellaneous accessories Code no. 4 Electronic soft start kit, MCI 15 C 7705006 120Z0472 Acoustic hood for 2 cylinder compressor 120Z0472 8153127 Oil equalisation nut 8156001 1: Bolt (3x) 2: Lock washer (3x) Spare parts Code no. 1: Bolt (3x) 2: Lock washer (3x) Gasket for oil sight glass (black chloroprene) 8156019 3: Flat washer (3x) 3: Flat washer (3x) Service kit for terminal box 80 x 96 mm, including 1 cover, 1 clamp 8156134 4: Sleeve (3x)	Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009	
POE lubricant, 160PZ, 1 litre can 7754019 POE lubricant, 160PZ, 2.5 litre can 7754019 POE lubricant, 160PZ, 2.5 litre can 120Z0573 Crankcase heaters Code no. Mounting kit PTC heater 27W,CE mark, UL 120Z0459 7773107 Belt type crankcase heater, 65 W, 230 V, CE mark, UL 120Z0466 4 Belt type crankcase heater, 65 W, 460 V, CE mark, UL 7773107 7773107 Belt type crankcase heater, 65 W, 460 V, CE mark, UL 120Z0466 4 Miscellaneous accessories Code no. 4 Electronic soft start kit, MCI 15 C 7705006 120Z0472 Acoustic hood for 2 cylinder compressor 120Z0472 8153127 Oil equalisation nut 8156001 1: Bolt (3x) 2: Lock washer (3x) Spare parts Code no. 1: Bolt (3x) 2: Lock washer (3x) Gasket for oil sight glass (black chloroprene) 8156019 3: Flat washer (3x) 3: Flat washer (3x) Service kit for terminal box 80 x 96 mm, including 1 cover, 1 clamp 8156134 4: Sleeve (3x)			
POE lubricant, 160PZ, 2.5 litre can12020573Crankcase heatersCode no.PTC heater 27W,CE mark, UL12020459Belt type crankcase heater, 65 W, 230 V, CE mark, UL12020459Belt type crankcase heater, 65 W, 400 V, CE mark, UL7773107Belt type crankcase heater, 65 W, 460 V, CE mark, UL7773117Belt type crankcase heater, 65 W, 460 V, CE mark, UL12020466Miscellaneous accessoriesCode no.Electronic soft start kit, MCI 15 C7705006Acoustic hood for 2 cylinder compressor12020472Oil equalisation nut8153127Spare partsCode no.Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts8156001Oil sight glass with gaskets (black & white)8156145Gasket for oil sight glass (black chloroprene)8156145Service kit for terminal box 80 x 96 mm, including 1 cover, 1 clamp8156134	Oil / lubricants	Code no.	
Crankcase heaters Code no. Mounting kit PTC heater 27W,CE mark, UL 120Z0459 7773107 Belt type crankcase heater, 65 W, 230 V, CE mark, UL 7773107 1 Belt type crankcase heater, 65 W, 400 V, CE mark, UL 7773117 1 Belt type crankcase heater, 65 W, 460 V, CE mark, UL 7773117 1 Belt type crankcase heater, 65 W, 460 V, CE mark, UL 7773117 1 Belt type crankcase heater, 65 W, 460 V, CE mark, UL 77705006 4 Miscellaneous accessories Code no. 4 Electronic soft start kit, MCI 15 C 77705006 5 Acoustic hood for 2 cylinder compressor 120Z0472 6 Oil equalisation nut 8153127 6 6 Spare parts Code no. 1: Bolt (3x) 2: Lock washer (3x) Oil sight glass with gaskets (black & white) 8156019 1: Bolt (3x) 2: Lock washer (3x) Gasket for oil sight glass (black chloroprene) 8156145 3: Flat washer (3x) 3: Flat washer (3x) Service kit for terminal box 80 x 96 mm, including 1 cover, 1 clamp 8156134 4: Sleeve (3x)	POE lubricant, 160PZ, 1 litre can	7754019	
PTC heater 27W,CE mark, UL 12020459 Belt type crankcase heater, 65 W, 230 V, CE mark, UL 7773107 Belt type crankcase heater, 65 W, 400 V, CE mark, UL 7773117 Belt type crankcase heater, 65 W, 460 V, CE mark, UL 12020466 Miscellaneous accessories Code no. Electronic soft start kit, MCI 15 C 7705006 Acoustic hood for 2 cylinder compressor 12020472 Oil equalisation nut 8153127 Spare parts Code no. Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts 8156001 Oil sight glass with gaskets (black & white) 8156019 Gasket for oil sight glass (black chloroprene) 8156145 Service kit for terminal box 80 x 96 mm, including 1 cover, 1 clamp 8156134	POE lubricant, 160PZ, 2.5 litre can	120Z0573	
PTC heater 27W,CE mark, UL 12020459 Belt type crankcase heater, 65 W, 230 V, CE mark, UL 7773107 Belt type crankcase heater, 65 W, 400 V, CE mark, UL 7773117 Belt type crankcase heater, 65 W, 460 V, CE mark, UL 12020466 Miscellaneous accessories Code no. Electronic soft start kit, MCI 15 C 7705006 Acoustic hood for 2 cylinder compressor 12020472 Oil equalisation nut 8153127 Spare parts Code no. Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts 8156001 Oil sight glass with gaskets (black & white) 8156019 Gasket for oil sight glass (black chloroprene) 8156145 Service kit for terminal box 80 x 96 mm, including 1 cover, 1 clamp 8156134			
Belt type crankcase heater, 65 W, 230 V, CE mark, UL 7773107 Belt type crankcase heater, 65 W, 400 V, CE mark, UL 7773117 Belt type crankcase heater, 65 W, 460 V, CE mark, UL 120Z0466 Miscellaneous accessories Code no. Electronic soft start kit, MCI 15 C 7705006 Acoustic hood for 2 cylinder compressor 120Z0472 Oil equalisation nut 8153127 Spare parts Code no. Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts 8156001 Oil sight glass with gaskets (black & white) 815619 Gasket for oil sight glass (black chloroprene) 8156145 Service kit for terminal box 80 x 96 mm, including 1 cover, 1 clamp 8156134			Mounting kit
Belt type crankcase heater, 65 W, 400 V, CE mark, UL 7773117 2 Belt type crankcase heater, 65 W, 460 V, CE mark, UL 12020466 3 Miscellaneous accessories Code no. 4 Electronic soft start kit, MCI 15 C 7705006 Acoustic hood for 2 cylinder compressor 12020472 Oil equalisation nut 8153127 Spare parts Code no. Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts 8156001 Oil sight glass with gaskets (black & white) 815619 Gasket for oil sight glass (black chloroprene) 8156145 Service kit for terminal box 80 x 96 mm, including 1 cover, 1 clamp 8156134			
Belt type crankcase heater, 65 W, 460 V, CE mark, UL 120Z0466 3 Miscellaneous accessories Code no. 4 Electronic soft start kit, MCI 15 C 7705006 5 Acoustic hood for 2 cylinder compressor 120Z0472 6 Oil equalisation nut 8153127 6 6 Spare parts Code no. 1: Bolt (3x) 2: Lock washer (3x) Oil sight glass with gaskets (black & white) 8156019 3: Flat washer (3x) Gasket for oil sight glass (black chloroprene) 8156145 3: Flat washer (3x) Service kit for terminal box 80 x 96 mm, including 1 cover, 1 clamp 8156134 4: Sleeve (3x)			1
Miscellaneous accessories Code no. Electronic soft start kit, MCI 15 C 7705006 Acoustic hood for 2 cylinder compressor 120Z0472 Oil equalisation nut 8153127 Spare parts Code no. Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts 8156001 Oil sight glass with gaskets (black & white) 8156019 Gasket for oil sight glass (black chloroprene) 8156145 Service kit for terminal box 80 x 96 mm, including 1 cover, 1 clamp 8156134		-	
Electronic soft start kit, MCl 15 C 7705006 120Z0472 Acoustic hood for 2 cylinder compressor 120Z0472 6 Oil equalisation nut 8153127 6 Code no. Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts 8156001 1: Bolt (3x) Oil sight glass with gaskets (black & white) 8156019 2: Lock washer (3x) Gasket for oil sight glass (black chloroprene) 8156145 3: Flat washer (3x) Service kit for terminal box 80 x 96 mm, including 1 cover, 1 clamp 8156134 4: Sleeve (3x)	Belt type crankcase heater, 65 W, 460 V, CE mark, UL	120Z0466	
Electronic soft start kit, MCl 15 C 7705006 Acoustic hood for 2 cylinder compressor 120Z0472 Oil equalisation nut 8153127 Spare parts Code no. Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts 8156001 Oil sight glass with gaskets (black & white) 8156019 Gasket for oil sight glass (black chloroprene) 8156145 Service kit for terminal box 80 x 96 mm, including 1 cover, 1 clamp 8156134		C 1	
Acoustic hood for 2 cylinder compressor 120Z0472 Oil equalisation nut 8153127 Spare parts Code no. Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts 8156001 Oil sight glass with gaskets (black & white) 8156019 Gasket for oil sight glass (black chloroprene) 8156145 Service kit for terminal box 80 x 96 mm, including 1 cover, 1 clamp 8156134			
Oil equalisation nut81531276Spare partsCode no.Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts81560011: Bolt (3x)Oil sight glass with gaskets (black & white)81560192: Lock washer (3x)Gasket for oil sight glass (black chloroprene)81561453: Flat washer (3x)Service kit for terminal box 80 x 96 mm, including 1 cover, 1 clamp81561344: Sleeve (3x)			5
Spare partsCode no.Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts81560011: Bolt (3x)Oil sight glass with gaskets (black & white)81560192: Lock washer (3x)Gasket for oil sight glass (black chloroprene)81561453: Flat washer (3x)Service kit for terminal box 80 x 96 mm, including 1 cover, 1 clamp81561344: Sleeve (3x)	Acoustic hood for 2 cylinder compressor		
Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts81560011: Bolt (3x)Oil sight glass with gaskets (black & white)81560192: Lock washer (3x)Gasket for oil sight glass (black chloroprene)81561453: Flat washer (3x)Service kit for terminal box 80 x 96 mm, including 1 cover, 1 clamp81561344: Sleeve (3x)			
Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts81560011: Bolt (3x)Oil sight glass with gaskets (black & white)81560192: Lock washer (3x)Gasket for oil sight glass (black chloroprene)81561453: Flat washer (3x)Service kit for terminal box 80 x 96 mm, including 1 cover, 1 clamp81561344: Sleeve (3x)	Oil equalisation nut	8153127	
Oil sight glass with gaskets (black & white)81560192: Lock washer (3x)Gasket for oil sight glass (black chloroprene)81561453: Flat washer (3x)Service kit for terminal box 80 x 96 mm, including 1 cover, 1 clamp81561344: Sleeve (3x)		•	
Gasket for oil sight glass (black chloroprene)81561453: Flat washer (3x)Service kit for terminal box 80 x 96 mm, including 1 cover, 1 clamp81561344: Sleeve (3x)	Spare parts	Code no.	0 U
Service kit for terminal box 80 x 96 mm, including 1 cover, 1 clamp 8156134 4: Sleeve (3x)	Spare parts Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts	Code no. 8156001	, ,
Service kit for terminal box 80 x 90 min, including 1 cover, 1 clamp 8150154	Spare parts Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts Oil sight glass with gaskets (black & white)	Code no. 8156001 8156019	2: Lock washer (3x)
	Spare parts Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts Oil sight glass with gaskets (black & white) Gasket for oil sight glass (black chloroprene)	Code no. 8156001 8156019 8156145	2: Lock washer (3x) 3: Flat washer (3x)



Maneurop reciprocating compressor. MTZ072-4

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at 50 Ha. EN 42000 rati Dorf 4.4 4:4:

Performanc	e data at 50) Hz, EN 1290	0 rating co	nditions				ſ	R4070
Cond. temp. in				Evapora	ting temperatu	re in °C (to)			
°C (tc)	-15	-10	-5	0	5	10	15		
aaling conceits	in M								
35	7 117	9 459	12 275	15 619	19 545	24 108	29 362		
		+ +					-	-	-
40	6 440	8 650	11 307	14 465	18 178	22 503	27 492 25 553	-	-
45 50	5 767	7 832 7 018	10 318 9 320	13 278	16 768	20 841		-	-
	-	+ +		12 071	15 324	19 135	23 558	-	-
55	-	-	8 327	10 856	13 861	17 398	21 520	-	-
60	-	-	-	9 645	12 391	15 641	19 450	-	-
65	-	-	-	8 452	10 926	13 877	17 361	-	-
ower input in V	v								
35	3 308	3 657	3 961	4 218	4 426	4 584	4 691	-	-
40	3 415	3 824	4 187	4 504	4 774	4 994	5 163	-	-
45	3 488	3 960	4 389	4 771	5 106	5 392	5 629	-	-
50	-	4 064	4 562	5 015	5 421	5 778	6 086	-	-
55	-	-	4 705	5 232	5 714	6 148	6 533	-	-
60	-	-	-	5 422	5 984	6 499	6 966	-	-
65	-	-	-	5 580	6 227	6 829	7 382	-	-
urrent consum	•								
35	7.28	7.67	8.03	8.34	8.60	8.81	8.95	-	-
40	7.40	7.86	8.28	8.66	8.99	9.26	9.47	-	-
45	7.51	8.04	8.54	9.00	9.41	9.77	10.07	-	-
50	-	8.20	8.79	9.34	9.85	10.31	10.70	-	-
55	-	-	9.00	9.66	10.27	10.84	11.36	-	-
60	-	-	-	9.92	10.66	11.35	11.99	-	-
65	-	-	-	10.09	10.97	11.80	12.58	-	-
lass flow in kg/l	h								
35	154	202	258	323	398	484	581	-	-
40	147	194	249	314	388	473	570	-	-
45	139	185	240	303	376	461	557	_	-
50	-	176	229	291	364	447	542	_	-
55	-	-	218	279	350	431	524	_	-
60	-	-	-	265	334	414	506	-	-
65	-	-	-	251	318	396	486	_	-
00				201	010	000	100		
oefficient of pe	erformance (C.C).P.)		-	1	1	1		
35	2.15	2.59	3.10	3.70	4.42	5.26	6.26	-	-
40	1.89	2.26	2.70	3.21	3.81	4.51	5.33	-	-
45	1.65	1.98	2.35	2.78	3.28	3.86	4.54	-	-
50	-	1.73	2.04	2.41	2.83	3.31	3.87	-	-
55	-	-	1.77	2.07	2.43	2.83	3.29	-	-
60	-	-	-	1.78	2.07	2.41	2.79	-	-
65	-	-	-	1.51	1.75	2.03	2.35	-	-
ominal perform	nance at to = 5	°C. tc = 50 °C				Pressure switch	settinas		
Cooling capacity		15 324	W		/ ¬	Maximum HP swit	-	29.4	bar(g)
Power input		5 421	Ŵ		/	Minimum LP swite	•	0.2	bar(g)
Current consump	tion	9.85	А	/		LP pump down se	-	1.3	bar(g)
lass flow		364	kg/h			-			
		2.83		/ PR	RTIFIED ODUCT	Sound power dat	a		
C.O.P.						Sound power leve		82	dB(A)

tc: Condensing temperature at dew point

Rating conditions : Superheat = 10 K , Subcooling = 0 K



All performance data +/- 5%

Maneurop reciprocating compressor. MTZ072-4

<u>Danfoss</u>

R407C

Performance data at 50 Hz, ARI rating conditions

Cond. temp. in	Evaporating temperature in °C (to)								
°C (tc)	-15	-10	-5	0	5	10	15		
Cooling capacity	/ in W		I			I	I	1	
35	/ in W 7 660	10 169	13 180	16 752	20 940	25 801	31 394	-	-
		10 169 9 349	13 180 12 204	16 752 15 592	20 940 19 572	25 801 24 200	31 394 29 533	-	-
35	7 660								-

45	6 281	8 517	11 203	14 397	18 15 <i>1</i>	22 538	27 600	-	-
50	-	7 687	10 192	13 179	16 706	20 830	25 610	-	-
55	-	-	9 184	11 952	15 234	19 088	23 574	-	-
60	-	-	-	10 728	13 754	17 328	21 508	-	-
65	-	-	-	9 524	12 282	15 564	19 430	-	-

Power input in W

35	3 308	3 657	3 961	4 218	4 426	4 584	4 691	-	-
40	3 415	3 824	4 187	4 504	4 774	4 994	5 163	-	-
45	3 488	3 960	4 389	4 771	5 106	5 392	5 629	-	-
50	-	4 064	4 562	5 015	5 421	5 778	6 086	-	-
55	-	-	4 705	5 232	5 714	6 148	6 533	-	-
60	-	-	-	5 422	5 984	6 499	6 966	-	-
65	-	-	-	5 580	6 227	6 829	7 382	-	-

Current consumption in A

35	7.28	7.67	8.03	8.34	8.60	8.81	8.95	-	-
40	7.40	7.86	8.28	8.66	8.99	9.26	9.47	-	-
45	7.51	8.04	8.54	9.00	9.41	9.77	10.07	-	-
50	-	8.20	8.79	9.34	9.85	10.31	10.70	-	-
55	-	-	9.00	9.66	10.27	10.84	11.36	-	-
60	-	-	-	9.92	10.66	11.35	11.99	-	-
65	-	-	-	10.09	10.97	11 80	12 58	-	-

Mass flow in kg/h

35	154	201	256	321	396	481	578	-	-
40	146	193	248	312	386	470	567	-	-
45	138	184	238	301	374	458	553	-	-
50	-	175	228	290	362	444	538	-	-
55	-	-	217	277	348	429	521	-	-
60	-	-	-	264	333	412	503	-	-
65	-	-	-	250	316	394	483	-	-

Coefficient of performance (C.O.P.)

		/							
35	2.32	2.78	3.33	3.97	4.73	5.63	6.69	-	-
40	2.04	2.44	2.91	3.46	4.10	4.85	5.72	-	-
45	1.80	2.15	2.55	3.02	3.56	4.18	4.90	-	-
50	-	1.89	2.23	2.63	3.08	3.60	4.21	-	-
55	-	-	1.95	2.28	2.67	3.10	3.61	-	-
60	-	-	-	1.98	2.30	2.67	3.09	-	-
65	-	-	-	1.71	1.97	2.28	2.63	_	-

Nominal performance at to = 7.2 °C, tc = 54.4 °C

Cooling capacity	17 047	W
Power input	5 873	W
Current consumption	10.48	Α
Mass flow	384	kg/h
C.O.P.	2.90	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings									
Maximum HP switch setting	29.4	bar(g)							
Minimum LP switch setting	0.2	bar(g)							
LP pump down setting	1.3	bar(g)							

Sound power data

Sound power level	82	dB(A)
With accoustic hood	75	dB(A)

All performance data +/- 5%



Maneurop reciprocating compressor. MTZ072-4

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R134a

Performance data at 50 Hz, EN 12900 rating conditions

-15 n W 3 984 3 594	-10	-5	⊏vaµ0ia		re in ~(1)(te)			
ו W 3 984 3 594		-0	0	5	re in °C (to)	15	20	
3 984 3 594			U	5	10	15	20	
3 984 3 594								
	5 591	7 551	9 911	12 715	16 009	19 838	24 247	-
	5 130	6 999	9 247	11 918	15 058	18 713	22 928	-
3 197	4 656	6 427	8 556	11 089	14 069	17 544	21 557	-
2 800	4 175	5 843	7 847	10 234	13 049	16 337	20 143	-
2 409	3 695	5 252	7 126	9 362	12 005	15 100	18 693	-
-	3 222	4 663	6 400	8 478	10 943	13 839	17 212	-
-	-	-	5 676	7 590	9 870	12 561	15 709	-
-	-	-	-	-	8 794	11 274	14 189	-
	·							
								-
								-
								-
								-
								-
								-
-	-	-						-
	<u></u>		1	1				
ion in A								
6.39	6.54	6.72	6.91	7.10	7.28	7.43	7.55	-
6.42	6.61	6.83	7.05	7.27	7.49	7.67	7.82	-
6.44	6.67	6.93	7.20	7.46	7.71	7.94	8.13	-
6.43	6.72	7.02	7.34	7.66	7.96	8.23	8.46	-
6.40	6.75	7.11	7.48	7.85	8.21	8.54	8.82	-
-	6.75	7.18	7.62	8.05	8.47	8.86	9.21	-
-	-	-	7.75	8.25	8.73	9.19	9.60	-
-	-	-	-	-	9.00	9.53	10.02	-
07	122	176	226	294	251	407	512	-
							1	-
								-
								-
-								-
-	-	-					1	-
-	-	-		-	292	364	445	-
			•					
ormance (C.O	.P.)		1	1		r		
1.90	2.37	2.92	3.55	4.28	5.12	6.07	7.14	-
1.68	2.10	2.59	3.15	3.79	4.52	5.35	6.28	-
1.48	1.86	2.29	2.78	3.33	3.97	4.69	5.51	-
1.29	1.64	2.01	2.44	2.92	3.48	4.10	4.80	-
1.13	1.43	1.76	2.13	2.55	3.03	3.56	4.17	-
	1.25	1.54	1.86	2.22	2.62	3.08	3.60	-
-	-	-	1.60	1.91	2.26	2.65	3.10	-
-	<u>†</u> i	-	-	-	1.93	2.26	2.64	-
	-							
-					Pressure switch	settinas		
-		W			Pressure switch Maximum HP swit	-	22.6	bar(g)
-	°C, tc = 50 °C	W W				tch setting	22.6 0.2	bar(g) bar(g)
-	°C, tc = 50 °C 10 234 3 499 7.66	W A			Maximum HP swit	tch setting ch setting		
- - nce at to = 5 °	2 °C, tc = 50 °C 10 234 3 499 7.66 267	W			Maximum HP swite Minimum LP swite LP pump down se	tch setting ch setting etting	0.2	bar(g)
- - nce at to = 5 °	°C, tc = 50 °C 10 234 3 499 7.66	W A			Maximum HP swite Minimum LP swite	tch setting ch setting tting	0.2	bar(g)
	- 2 095 2 139 2 164 2 166 2 142 - - ion in A 6.39 6.42 6.44 6.43 6.40 - - 97 92 86 80 74 - - - - - - - - - - - - -	- - 2 095 2 356 2 139 2 437 2 164 2 503 2 166 2 552 2 142 2 579 - 2 583 - - - 2 583 - - - - ion in A 6.39 6.42 6.61 6.43 6.72 6.40 6.75 - - 97 133 92 128 86 123 80 117 74 110 - - - - - - - -	- - - 2 095 2 356 2 587 2 139 2 437 2 703 2 164 2 503 2 808 2 166 2 552 2 901 2 142 2 579 2 977 - 2 583 3 035 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	- - - - 2 095 2 356 2 587 2 791 2 139 2 437 2 703 2 939 2 164 2 503 2 808 3 081 2 166 2 552 2 901 3 216 2 142 2 579 2 977 3 339 - 2 583 3 035 3 449 - - - 3 542 - - - 3 542 - - - - ion in A 6.54 6.72 6.91 6.42 6.61 6.83 7.05 6.43 6.72 7.02 7.34 6.40 6.75 7.11 7.48 - 6.75 7.18 7.62 - - - - - 97 133 176 226 92 128 171 221 86 123 166 216 80	- - - - - - 2 095 2 356 2 587 2 791 2 971 2 139 2 437 2 703 2 939 3 148 2 164 2 503 2 808 3 081 3 325 2 166 2 552 2 901 3 216 3 499 2 142 2 579 2 977 3 339 3 667 - 2 583 3 035 3 449 3 827 - - - 3 542 3 974 - - - - - - 6.39 6.54 6.72 6.91 7.10 6.42 6.61 6.83 7.05 7.27 6.44 6.67 6.93 7.20 7.46 6.43 6.72 7.02 7.34 7.66 6.40 6.75 7.11 7.48 7.85 - - - - - 97 133 176 226	- - - - 8 794 2 095 2 356 2 587 2 791 2 971 3 130 2 139 2 437 2 703 2 939 3 148 3 334 2 164 2 503 2 808 3 081 3 325 3 544 2 166 2 552 2 901 3 216 3 499 3 755 2 142 2 579 2 977 3 339 3 667 3 965 - 2 583 3 035 3 449 3 827 4 172 - - - 3 542 3 974 4 371 - - - - - 4 561 ion in A - - - - - 4 561 6.39 6.54 6.72 6.91 7.10 7.28 6.42 6.61 6.83 7.05 7.27 7.49 6.44 6.67 6.93 7.20 7.46 7.71 6.43 6.75 7.11 7.4	- - - 8 794 11 274 2 095 2 356 2 587 2 791 2 971 3 130 3 270 2 139 2 437 2 703 2 939 3 148 3 334 3 500 2 164 2 503 2 808 3 081 3 325 3 544 3 739 2 166 2 552 2 901 3 216 3 499 3 755 3 986 2 142 2 579 2 977 3 339 3 667 3 985 4 236 - 2 563 3 035 3 449 3 827 4 172 4 487 - - - 3 542 3 974 4 371 4 737 - - - - - 4 561 4 981 ion in A - - - - - 4 561 4 981 ion i A - - - - 7.00 7.34 7.66 7.67 6.42 6.61 6.83 7.05 7.25 8794 11274 14 189 2 096 2 356 2 587 2 791 2 971 3 130 3 270 3 396 2 139 2 437 2 703 2 939 3 148 3 334 3 500 3 648 2 164 2 503 2 808 3 081 3 325 3 544 3 739 3 916 2 166 2 552 2 907 3 339 3 667 3 965 4 236 4 483 - 2 583 3 035 3 449 3 827 4 172 4 487 4 777 - - - - 4 561 4 981 5 371 - - - - 4 561 4 981 5 371 ion in A - - - 4 561 4 981 5 371 6.42 6.61 6.83 7.05 7.27 7.49 7.67 7.82 6.44 6.67 6.93 7.20 7.34 7.66 7.9

tc: Condensing temperature at dew point

Rating conditions : Superheat = 10 K , Subcooling = 0 K

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All performance data +/- 5%

Maneurop reciprocating compressor. MTZ072-4

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R134a

Performance data at 50 Hz, ARI rating conditions

Cond. temp. in	Evaporating temperature in °C (to)										
°C (tc)	-15	-10	-5	0	5	10	15	20			
Cooling capacity	r in W										
35	4 315	6 045	8 152	10 683	13 685	17 205	21 290	25 988	-		
40	3 914	5 576	7 594	10 015	12 887	16 257	20 172	24 679	-		
45	3 503	5 091	7 013	9 319	12 054	15 268	19 006	23 317	-		
50	3 090	4 597	6 418	8 601	11 194	14 245	17 801	21 909	-		
55	2 682	4 101	5 814	7 869	10 313	13 195	16 562	20 462	-		
60	-	3 611	5 210	7 130	9 419	12 126	15 298	18 984	-		
65	-	-	-	6 391	8 519	11 046	14 018	17 484	-		
70	-	-	-	-	-	9 962	12 729	15 972	-		
		•	•	•	•	•	-	·	•		
Power input in W	1										
35	2 095	2 356	2 587	2 791	2 971	3 130	3 270	3 396	-		
40	2 139	2 437	2 703	2 939	3 148	3 334	3 500	3 648	-		
45	2 164	2 503	2 808	3 081	3 325	3 544	3 739	3 916	-		
									1		

40	2 139	2 437	2 703	2 939	3 148	3 334	3 500	3 648	-
45	2 164	2 503	2 808	3 081	3 325	3 544	3 739	3 916	-
50	2 166	2 552	2 901	3 216	3 499	3 755	3 986	4 195	-
55	2 142	2 579	2 977	3 339	3 667	3 965	4 236	4 483	-
60	-	2 583	3 035	3 449	3 827	4 172	4 487	4 777	-
65	-	-	-	3 542	3 974	4 371	4 737	5 073	-
70	-	-	-	-	-	4 561	4 981	5 371	-

Current consumption in A

35	6.39	6.54	6.72	6.91	7.10	7.28	7.43	7.55	-
40	6.42	6.61	6.83	7.05	7.27	7.49	7.67	7.82	-
45	6.44	6.67	6.93	7.20	7.46	7.71	7.94	8.13	-
50	6.43	6.72	7.02	7.34	7.66	7.96	8.23	8.46	-
55	6.40	6.75	7.11	7.48	7.85	8.21	8.54	8.82	-
60	-	6.75	7.18	7.62	8.05	8.47	8.86	9.21	-
65	-	-	-	7.75	8.25	8.73	9.19	9.60	-
70	-	-	-	-	-	9.00	9.53	10.02	-

Mass flow in kg/h

35	96	132	175	225	283	349	424	510	-
40	91	128	170	220	278	344	419	505	-
45	86	122	165	215	272	338	413	498	-
50	80	116	159	208	265	331	405	489	-
55	74	110	152	201	257	322	396	480	-
60	-	102	144	192	248	313	386	469	-
65	-	-	-	183	239	302	374	456	-
70	-	-	-	-	-	290	362	442	-

Coefficient of performance (C.O.P.)

35	2.06	2.57	3.15	3.83	4.61	5.50	6.51	7.65	-
40	1.83	2.29	2.81	3.41	4.09	4.88	5.76	6.76	-
45	1.62	2.03	2.50	3.02	3.63	4.31	5.08	5.95	-
50	1.43	1.80	2.21	2.67	3.20	3.79	4.47	5.22	-
55	1.25	1.59	1.95	2.36	2.81	3.33	3.91	4.56	-
60	-	1.40	1.72	2.07	2.46	2.91	3.41	3.97	-
65	-	-	-	1.80	2.14	2.53	2.96	3.45	-
70	-	-	-	-	-	2.18	2.56	2.97	-

Nominal performance at to = 7.2 °C, tc = 54.4 °C								
Cooling capacity	11 640	W						
Power input	3 780	W						
Current consumption	7.99	A						
Mass flow	286	kg/h						
C.O.P.	3.08							

Maximum HP switch setting	22.6	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)
Sound power data		
Sound power level	0	dB(A)
	0	uD(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

All performance data +/- 5%

Pressure switch settings



Maneurop reciprocating compressor. MTZ072-4

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R404A

Performance data at 50 Hz, EN 12900 rating conditions

Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
	\A /								
ooling capacity 30	4 049	5 567	7 457	9 763	12 535	15 819	19 661	24 109	29 209
30	3 504	4 891	6 619	8 735	12 535	14 319	17 881	22 019	29 209 26 781
40	3 007 2 552	4 262	5 828	7 752	10 082	12 864	16 146	19 974	24 395
45		3 674	5 078	6 810 5 002	8 918	11 449	14 449	17 966	22 046
50 55	2 135	3 123 2 604	4 364 3 681	5 903 5 027	7 789 6 689	10 067 8 715	12 785 11 150	15 991 14 043	19 730 17 441
60	-	2 004	3 023	4 175	5 614	7 386	9 538	12 119	15 173
60	-	2111	3 023	4 175	5014	7 300	9 556	12 119	15 17 3
ower input in W	1	1			-			1	1
30	2 764	3 166	3 541	3 886	4 196	4 469	4 701	4 887	5 025
35	2 767	3 206	3 623	4 012	4 371	4 695	4 981	5 226	5 425
40	2 756	3 234	3 692	4 126	4 533	4 909	5 250	5 552	5 813
45	2 736	3 253	3 752	4 231	4 686	5 113	5 509	5 870	6 192
50	2 710	3 265	3 806	4 330	4 833	5 312	5 763	6 182	6 565
55	-	3 274	3 857	4 426	4 977	5 508	6 014	6 491	6 936
60	-	3 284	3 908	4 522	5 122	5 704	6 265	6 801	7 308
Current consum	otion in A 6.79	7.16	7.56	7.99	8.42	8.84	9.22	9.57	9.86
30	6.81	7.10	7.66		8.60	9.06	9.22		9.00
40	6.80	7.22	7.00	8.13 8.25	8.77	9.06	9.50	9.90 10.23	10.24
		7.25	7.74			9.29	9.78		11.05
45 50	6.77 6.73	7.28	7.87	8.37 8.49	8.95 9.13	9.52	10.38	10.59 10.97	11.50
55	-	7.20	7.94	8.63	9.34	10.04	10.30	11.38	11.99
60	_	7.31	8.04	8.79	9.57	10.35	11.11	11.85	12.53
00	_	7.01	0.04	0.75	5.51	10.00		11.00	12.00
/lass flow in kg/l	ı								
30	127	171	224	286	358	441	536	644	767
35	119	161	213	273	343	425	519	626	746
40	110	152	202	261	330	410	502	607	726
45	103	143	191	249	316	394	485	588	706
50	96	134	181	237	303	380	468	570	686
55	-	126	171	226	290	365	452	552	666
60	-	119	162	215	277	351	436	534	646
Coefficient of per	formance (C.C	D.P.)			·	-			
30	1.46	1.76	2.11	2.51	2.99	3.54	4.18	4.93	5.81
35	1.27	1.53	1.83	2.18	2.58	3.05	3.59	4.21	4.94
40	1.09	1.32	1.58	1.88	2.22	2.62	3.08	3.60	4.20
45	0.93	1.13	1.35	1.61	1.90	2.24	2.62	3.06	3.56
50	0.79	0.96	1.15	1.36	1.61	1.90	2.22	2.59	3.01
55	-	0.80	0.95	1.14	1.34	1.58	1.85	2.16	2.51
60	-	0.64	0.77	0.92	1.10	1.29	1.52	1.78	2.08
						•		•	
lominal perform	ance at to = -1	-				Pressure switch	-		
Cooling capacity		8 918	W			Maximum HP swi	tch setting	27.7	bar(g)

Nominal periormanee at to	10 0,10	40 0	
Cooling capacity		8 918	W
Power input		4 686	W
Current consumption		8.95	Α
Mass flow		316	kg/h
C.O.P.		1.90	

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Sound power data		
LP pump down setting	0.9	bar(g)
Minimum LP switch setting	0.2	bar(g)
Maximum officer betang	27.7	bui(g)

79

72

dB(A)

dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Superheat = 10 K , Subcooling = 0 K

All performance data +/- 5%

Sound power level

With accoustic hood



Maneurop reciprocating compressor. MTZ072-4

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Performance data at 50 Hz, ARI rating conditions

Cond. temp. in				Evapora	ating temperatur	e in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
cooling capacity		6 191	9.057	10 795	12 914	17 205	21 575	26.404	21.021
30	4 507	6 181	8 257	10 785	13 814	17 395	21 575	26 404	31 931
35	3 943	5 486	7 402	9 740	12 551	15 884	19 789	24 314	29 509
40	3 428	4 840	6 595	8 744	11 336	14 422	18 051	22 272	27 136
45	2 958	4 239	5 833	7 792	10 166	13 005	16 359	20 279	24 813
50	2 529	3 678	5 112	6 881	9 037	11 631	14 713	18 333	22 542
55	-	3 155	4 429	6 010	7 951	10 302	13 116	16 443	20 334
60	-	2 668	3 786	5 183	6 913	9 030	11 585	14 629	18 214
Power input in W									
30	2 764	3 166	3 541	3 886	4 196	4 469	4 701	4 887	5 025
35	2 767	3 206	3 623	4 012	4 371	4 695	4 981	5 226	5 425
40	2 756	3 234	3 692	4 126	4 533	4 909	5 250	5 552	5 813
45	2 736	3 253	3 752	4 231	4 686	5 113	5 509	5 870	6 192
50	2 710	3 265	3 806	4 330	4 833	5 312	5 763	6 182	6 565
55	-	3 274	3 857	4 426	4 977	5 508	6 014	6 491	6 936
60	-	3 284	3 908	4 522	5 122	5 704	6 265	6 801	7 308
30	6.79	7.16	7.56	7.99	8.42	8.84	9.22	9.57	9.86
35	6.81	7.22	7.66	8.13	8.60	9.06	9.50	9.90	10.24
40	6.80	7.25	7.74	8.25	8.77	9.29	9.78	10.23	10.63
45	6.77	7.27	7.80	8.37	8.95	9.52	10.07	10.59	11.05
50	6.73	7.28	7.87	8.49	9.13	9.77	10.38	10.97	11.50
55	-	7.29	7.94	8.63	9.34	10.04	10.73	11.38	11.99
60	-	7.31	8.04	8.79	9.57	10.35	11.11	11.85	12.53
00		7.51	0.04	0.79	9.51	10.00	11.11	11.00	12.55
lass flow in kg/h				1			1	1	1
30	126	170	223	284	355	438	533	640	762
35	118	161	211	271	341	422	516	622	741
40	110	151	201	259	328	407	499	603	721
45	102	142	190	247	314	392	482	585	701
50	95	134	180	235	301	377	465	566	681
55	-	126	170	224	288	363	449	548	661
60	-	118	161	214	276	349	433	531	642
Coefficient of per	formance (C.C).P.)							
30	1.63	1.95	2.33	2.78	3.29	3.89	4.59	5.40	6.35
35	1.43	1.71	2.04	2.43	2.87	3.38	3.97	4.65	5.44
40	1.24	1.50	1.79	2.12	2.50	2.94	3.44	4.01	4.67
45	1.08	1.30	1.55	1.84	2.00	2.54	2.97	3.45	4.01
50	0.93	1.13	1.34	1.59	1.87	2.19	2.55	2.97	3.43
55	-	0.96	1.15	1.39	1.60	1.87	2.33	2.53	2.93
60	-	0.96	0.97	1.15	1.80	1.58	1.85	2.55	2.93
				•				1	
Iominal perform	ance at to = -1	-				Pressure switch			
Cooling capacity Power input		10 166 4 686	6 W W			Maximum HP swi Minimum LP swite		27.7 0.2	bar(g)
Power input		4 080	vv			I P numn down se	U	0.2	bar(g)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

8.95

314

2.17

А

kg/h

Maximum m Switch Setting	21.1	bai(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.9	bar(g)
Sound power data		
Sound power data Sound power level	79	dB(A)

All performance data +/- 5%

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Current consumption

Mass flow

C.O.P.

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