

**Reciprocating Compressors** 

Datasheets

# Maneurop<sup>®</sup> Reciprocating compressors MT / MTZ / MPZ / NTZ



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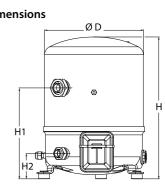
### Datasheet, technical data

## Maneurop reciprocating compressor, MT072-4

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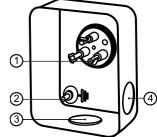
### **General Characteristics**

Model number (on compressor nameplate)		MT72HN4A
Code number for Industrial pack**		MT72-4M
Drawing number		8502014e
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		None
Oil equalisation connection		None
Oil drain connection		None
LP gauge port		Schrader
IPR valve		30 bar / 8 bar
Cylinders	2	2
Swept volume	120,94 c	:m3/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, Mir	neral - 160P
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	(g
Approved refrigerants	R22, R417	7A-160PZ



38 mm 13 mm 265 mm 74 mm

Terminal box



Winding resistance (between phases) +/- 7% at 25°C

**Electrical Characteristics** 

Maximum Continuous Current (MCC)

Locked Rotor Amps (LRA)

Nominal voltage

Motor protection

Voltage range

Recommended Installation torques		(
Oil sight glass	0 Nm	
Power connections / Earth connection	Nm / 2 Nm	
Mounting bolts	15 Nm	IP55 (with
	•	1: S

380-400V/3/50Hz - 460V/3/60Hz

340-440 V @ 50Hz - 414-506 V @ 60Hz

1.9 Ω

15.5 A

80 A

Internal overload protector

### Parts shipped with compressor

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

th cable gland)

- Spade connectors 1/4"
- 2: Earth M4-12

3:

- Knock-out Ø 21 mm (0.83")
- Hole Ø 21 mm (0.83'')
- 4:





### Datasheet, accessories and spare parts

Maneurop reciprocating compressor, MT072-4

Rotolock accessories, suction side	Code no.	
Solder sleeve, P07 (1-3/4" Rotolock, 7/8" ODF)	8153013	
Angle adapter, C07 (1-3/4" Rotolock, 7/8" ODF)	8168008	
Rotolock valve, V07 (1-3/4" Rotolock, 7/8" ODF)	8168032	Gaskets, sleeves and nuts
Gasket, 1-3/4"	8156132	
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)	8168006	
Rotolock valve, V04 (1-1/4" Rotolock, 3/4" ODF)	8168029	
Gasket, 1-1/4"	8156131	1 2 3
Rotolock accessories, sets	Code no.	1: Gasket
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	
Oil / lubricants	Code no.	
Mineral oil, 160P, 2 litre can	7754001	
Mineral oil, 160P, 5 litre can	7754002	
Crankcase heaters	Code no.	Mounting kit
PTC heater 27W	120Z0459	
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	
Belt type crankcase heater, 65 W, 460 V, CE mark, UL	120Z0466	
A41 11 .	<b>C</b> 1	
Miscellaneous accessories	Code no.	
Electronic soft start kit, MCI 15 C	7705006	5
Soft start kit with statoric resistors, prewired box, SCR01	7702003	
Acoustic hood for 2 cylinder compressor	7755002	
Spare parts	Code no.	
Manufactor 12 Contractor all the second second states of a second sector of the		1: Bolt (3x)
Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts	8156001	1. DOIL (JX)
Service kit for terminal box 80 x 96 mm, including 1 cover, 1 clamp	8156001 8156134	2: Lock washer (3x)
		. ,

3: Flat washer (3x 4: Sleeve (3x)

5: Grommet (3x) 6: Nut (3x)



### Maneurop reciprocating compressor. MT072-4

### Performance data at 50 Hz, EN 12900 rating conditions

°C (tc)					ting temperatur		_		1
	-25	-20	-15	-10	-5	0	5	10	15
Cooling capacity									
30	4 564	6 288	8 324	10 706	13 468	16 644	20 270	24 378	29 004
35	4 047	5 708	7 662	9 943	12 585	15 623	19 090	23 020	27 449
40	3 598	5 185	7 046	9 215	11 726	14 613	17 910	21 652	25 873
45	3 224	4 723	6 478	8 521	10 888	13 612	16 726	20 265	24 263
50	-	4 337	5 975	7 883	10 094	12 643	15 564	18 890	22 656
55	-	-	5 541	7 300	9 345	11 708	14 422	17 523	21 043
60	-	-	-	6 781	8 646	10 810	13 306	16 167	19 428
65	-	-	-	-	8 016	9 970	12 237	14 849	17 841
Power input in W		0.000	0.047	0.000	4.044	4.004	4 557	4 704	4 000
30	2 637	2 993	3 347	3 689	4 011	4 304	4 557	4 761	4 909
35	2 768	3 137	3 507	3 870	4 216	4 536	4 822	5 062	5 249
40	2 911	3 295	3 684	4 070	4 443	4 794	5 114	5 394	5 623
45	3 068	3 469	3 880	4 291	4 694	5 079	5 436	5 757	6 032
50	-	3 660	4 096	4 536	4 971	5 391	5 789	6 154	6 476
55	-	-	4 333	4 804	5 274	5 734	6 174	6 585	6 959
60	-	-	-	5 098	5 606	6 107	6 593	7 054	7 480
65	-	-	-	-	5 968	6 513	7 047	7 560	8 043
30	5.52	5.92	6.35	6.78	7.20	7.59	7.94	8.23	8.44
35	5.67	6.09	6.54	7.01	7.47	7.92	8.32	8.67	8.94
40	5.83	6.28	6.77	7.28	7.79	8.28	8.74	9.15	9.50
45	6.01	6.50	7.02	7.58	8.14	8.69	9.22	9.70	10.12
50	-	6.74	7.31	7.91	8.53	9.15	9.74	10.30	10.80
55	-	-	7.63	8.29	8.98	9.66	10.33	10.97	11.56
60	-	-	-	8.72	9.47	10.23	10.98	11.70	12.38
65	-	-	-	-	10.02	10.85	11.69	12.51	13.29
Mass flow in kg/h		126	177	224	279	240	400	496	570
30	100	136	177	224	278	340	409	486	573
35	92	128	169	217	271	332	400	478	564
	85	121	162	209	262	323	391	467	553
40			156	202	254	314	381	456	540
45	80	115			247	305	370	444	526
	-	115 111	150	195	271	905			020
45			150 147	195 190	240	296	360	431	512
45 50	-	111					360 350		
45 50 55	-	111	147	190	240	296		431	512
45 50 55 60 65		111 - - -	147 -	190	240 234	296 288	350	431 419	512 497
45 50 55 60 65 Coefficient of per	- - - formance (C.C	111 - - - D.P.)	147 - -	190 187 -	240 234 230	296 288 282	350 341	431 419 407	512 497 482
45 50 55 60 65 Coefficient of per 30	- - - formance (C.0 1.73	111 - - - <b>D.P.)</b> 2.10	147 - - 2.49	190 187 - 2.90	240 234 230 3.36	296 288 282 3.87	350 341 4.45	431 419 407 5.12	512 497 482 5.91
45 50 55 60 65 Coefficient of per 30 35	- - - formance (C.C 1.73 1.46	111 - - - <b>D.P.)</b> 2.10 1.82	147 - - 2.49 2.18	190 187 - 2.90 2.57	240 234 230 3.36 2.99	296 288 282 3.87 3.44	350 341 4.45 3.96	431 419 407 5.12 4.55	512 497 482 5.91 5.23
45 50 55 60 65 65 65 65 65 65 65 65 65 65 65 65 65	- - - formance (C.0 1.73 1.46 1.24	111 - - - <b>D.P.)</b> 2.10 1.82 1.57	147 - - 2.49 2.18 1.91	190 187 - 2.90 2.57 2.26	240 234 230 3.36 2.99 2.64	296 288 282 3.87 3.44 3.05	350 341 4.45 3.96 3.50	431 419 407 5.12 4.55 4.01	512 497 482 5.91 5.23 4.60
45 50 55 60 65 <b>Coefficient of per</b> 30 35 40 45	- - formance (C.C 1.73 1.46 1.24 1.05	111 - - - <b>D.P.)</b> 2.10 1.82 1.57 1.36	147 - - 2.49 2.18 1.91 1.67	190 187 - 2.90 2.57 2.26 1.99	240 234 230 3.36 2.99 2.64 2.32	296 288 282 3.87 3.44 3.05 2.68	350 341 4.45 3.96 3.50 3.08	431 419 407 5.12 4.55 4.01 3.52	512 497 482 5.91 5.23 4.60 4.02
45       50       55       60       65       20       30       35       40       45       50	- - - formance (C.0 1.73 1.46 1.24	111 - - - - - - - - - - - - - - - - - -	147 - - 2.49 2.18 1.91 1.67 1.46	190 187 - 2.90 2.57 2.26 1.99 1.74	240 234 230 3.36 2.99 2.64 2.32 2.03	296 288 282 3.87 3.44 3.05 2.68 2.35	350 341 4.45 3.96 3.50 3.08 2.69	431 419 407 5.12 4.55 4.01 3.52 3.07	512 497 482 5.91 5.23 4.60 4.02 3.50
45       50       55       60       65       30       35       40       45       50       55	- - - formance (C.C 1.73 1.46 1.24 1.05 -	111 - - - <b>D.P.)</b> 2.10 1.82 1.57 1.36	147 - - 2.49 2.18 1.91 1.67 1.46 1.28	190 187 - 2.90 2.57 2.26 1.99 1.74 1.52	240 234 230 3.36 2.99 2.64 2.32 2.03 1.77	296 288 282 3.87 3.44 3.05 2.68 2.35 2.04	350 341 4.45 3.96 3.50 3.08 2.69 2.34	431 419 407 5.12 4.55 4.01 3.52 3.07 2.66	512 497 482 5.91 5.23 4.60 4.02 3.50 3.02
45       50       55       60       65       20efficient of per       30       35       40       45       50       55       60	- - - formance (C.C 1.73 1.46 1.24 1.05 - - -	111 - - - - - - - - - - - - -	147 - - 2.49 2.18 1.91 1.67 1.46 1.28 -	190 187 - 2.90 2.57 2.26 1.99 1.74 1.52 1.33	240 234 230 3.36 2.99 2.64 2.32 2.03 1.77 1.54	296 288 282 3.87 3.44 3.05 2.68 2.35 2.04 1.77	350 341 4.45 3.96 3.50 3.08 2.69 2.34 2.02	431 419 407 5.12 4.55 4.01 3.52 3.07 2.66 2.29	512 497 482 5.91 5.23 4.60 4.02 3.50 3.02 2.60
45   50   55   60   65   30   35   40   45   50   55	- - - formance (C.C 1.73 1.46 1.24 1.05 -	111 - - - - - - - - - - - - - - - - - -	147 - - 2.49 2.18 1.91 1.67 1.46 1.28	190 187 - 2.90 2.57 2.26 1.99 1.74 1.52	240 234 230 3.36 2.99 2.64 2.32 2.03 1.77	296 288 282 3.87 3.44 3.05 2.68 2.35 2.04	350 341 4.45 3.96 3.50 3.08 2.69 2.34	431 419 407 5.12 4.55 4.01 3.52 3.07 2.66	512 497 482 5.91 5.23 4.60 4.02 3.50 3.02
45 50 55 60 65 <b>Coefficient of per</b> 30 35 40 45 50 55 60 65 <b>Nominal perform</b>	- - formance (C.C 1.73 1.46 1.24 1.05 - - - -	111 - - - - - - - - - - - - - -	147 - - 2.49 2.18 1.91 1.67 1.46 1.28 - -	190 187 - 2.90 2.57 2.26 1.99 1.74 1.52 1.33	240 234 230 3.36 2.99 2.64 2.32 2.03 1.77 1.54	296 288 282 3.87 3.44 3.05 2.68 2.35 2.04 1.77 1.53 <b>Pressure switch</b> 3	350 341 4.45 3.96 3.50 3.08 2.69 2.34 2.02 1.74 settings	431 419 407 5.12 4.55 4.01 3.52 3.07 2.66 2.29 1.96	512 497 482 5.91 5.23 4.60 4.02 3.50 3.02 2.60
45 50 55 60 65 Coefficient of per 30 35 40 45 50 55 60 65 Nominal perform Cooling capacity	- - formance (C.C 1.73 1.46 1.24 1.05 - - - -	111     -     -     0.P.)     2.10     1.82     1.57     1.36     1.18     -     -     -     -     57     1.36     1.18     -     -     -     -     -     -     -     -     -     -     -     -     -     15 564	147 - - 2.49 2.18 1.91 1.67 1.46 1.28 - - -	190 187 - 2.90 2.57 2.26 1.99 1.74 1.52 1.33	240 234 230 3.36 2.99 2.64 2.32 2.03 1.77 1.54	296 288 282 3.87 3.44 3.05 2.68 2.35 2.04 1.77 1.53 <b>Pressure switch</b> s Maximum HP swit	350 341 4.45 3.96 3.50 3.08 2.69 2.34 2.02 1.74 settings ch setting	431 419 407 5.12 4.55 4.01 3.52 3.07 2.66 2.29 1.96 27.7	512 497 482 5.91 5.23 4.60 4.02 3.50 3.02 2.60 2.22
45 50 55 60 65 Coefficient of per 30 35 40 45 50 55 60 65 Nominal perform Cooling capacity Power input	- - - formance (C.C 1.73 1.46 1.24 1.05 - - - - - - - - - -	111     -     -     0.P.)     2.10     1.82     1.57     1.36     1.18     -     -     -     -     5     15     564     5	147 - - 2.49 2.18 1.91 1.67 1.46 1.28 - - -	190 187 - 2.90 2.57 2.26 1.99 1.74 1.52 1.33	240 234 230 3.36 2.99 2.64 2.32 2.03 1.77 1.54	296 288 282 3.87 3.44 3.05 2.68 2.35 2.04 1.77 1.53 <b>Pressure switch</b> s Maximum HP switc Minimum LP switc	350 341 4.45 3.96 3.50 3.08 2.69 2.34 2.02 1.74 settings ch setting h setting	431 419 407 5.12 4.55 4.01 3.52 3.07 2.66 2.29 1.96 27.7 0.2	512 497 482 5.91 5.23 4.60 4.02 3.50 3.02 2.60 2.22 bar(g) bar(g)
45       50       55       60       65       20efficient of per       30       35       40       45       50       60       65	- - - formance (C.C 1.73 1.46 1.24 1.05 - - - - - - - - - -	111     -     -     -     0.P.)     2.10     1.82     1.57     1.36     1.18     - </td <td>147 - - 2.49 2.18 1.91 1.67 1.46 1.28 - - - - - - W W W A</td> <td>190 187 - 2.90 2.57 2.26 1.99 1.74 1.52 1.33</td> <td>240 234 230 3.36 2.99 2.64 2.32 2.03 1.77 1.54</td> <td>296 288 282 3.87 3.44 3.05 2.68 2.35 2.04 1.77 1.53 <b>Pressure switch</b> s Maximum HP swit</td> <td>350 341 4.45 3.96 3.50 3.08 2.69 2.34 2.02 1.74 settings ch setting h setting</td> <td>431 419 407 5.12 4.55 4.01 3.52 3.07 2.66 2.29 1.96 27.7</td> <td>512 497 482 5.91 5.23 4.60 4.02 3.50 3.02 2.60 2.22 bar(g) bar(g)</td>	147 - - 2.49 2.18 1.91 1.67 1.46 1.28 - - - - - - W W W A	190 187 - 2.90 2.57 2.26 1.99 1.74 1.52 1.33	240 234 230 3.36 2.99 2.64 2.32 2.03 1.77 1.54	296 288 282 3.87 3.44 3.05 2.68 2.35 2.04 1.77 1.53 <b>Pressure switch</b> s Maximum HP swit	350 341 4.45 3.96 3.50 3.08 2.69 2.34 2.02 1.74 settings ch setting h setting	431 419 407 5.12 4.55 4.01 3.52 3.07 2.66 2.29 1.96 27.7	512 497 482 5.91 5.23 4.60 4.02 3.50 3.02 2.60 2.22 bar(g) bar(g)
45       50       55       60       65       20efficient of per       30       35       40       45       50       55       60       65	- - - formance (C.C 1.73 1.46 1.24 1.05 - - - - - - - - - -	111     -     -     0.P.)     2.10     1.82     1.57     1.36     1.18     -     15 564     5 789     9.74     370	147 - - 2.49 2.18 1.91 1.67 1.46 1.28 - - -	190 187 - 2.90 2.57 2.26 1.99 1.74 1.52 1.33	240 234 230 3.36 2.99 2.64 2.32 2.03 1.77 1.54	296 288 282 3.87 3.44 3.05 2.68 2.35 2.04 1.77 1.53 <b>Pressure switch</b> 3 Maximum HP switc Minimum LP switc LP pump down se	350 341 4.45 3.96 3.50 3.08 2.69 2.34 2.02 1.74 settings ch setting h setting	431 419 407 5.12 4.55 4.01 3.52 3.07 2.66 2.29 1.96 27.7 0.2	512 497 482 5.91 5.23 4.60 4.02 3.50 3.02 2.60 2.22 bar(g) bar(g)
45       50       55       60       65       20efficient of per       30       35       40       45       50       60       65	- - - formance (C.C 1.73 1.46 1.24 1.05 - - - - - - - - - -	111     -     -     -     0.P.)     2.10     1.82     1.57     1.36     1.18     - </td <td>147 - - 2.49 2.18 1.91 1.67 1.46 1.28 - - - - - - W W W A</td> <td>190 187 - 2.90 2.57 2.26 1.99 1.74 1.52 1.33</td> <td>240 234 230 3.36 2.99 2.64 2.32 2.03 1.77 1.54</td> <td>296 288 282 3.87 3.44 3.05 2.68 2.35 2.04 1.77 1.53 <b>Pressure switch</b> s Maximum HP switc Minimum LP switc</td> <td>350 341 4.45 3.96 3.50 3.08 2.69 2.34 2.02 1.74 settings ch setting h setting h setting</td> <td>431 419 407 5.12 4.55 4.01 3.52 3.07 2.66 2.29 1.96 27.7 0.2</td> <td>512 497 482 5.91 5.23 4.60 4.02 3.50 3.02 2.60</td>	147 - - 2.49 2.18 1.91 1.67 1.46 1.28 - - - - - - W W W A	190 187 - 2.90 2.57 2.26 1.99 1.74 1.52 1.33	240 234 230 3.36 2.99 2.64 2.32 2.03 1.77 1.54	296 288 282 3.87 3.44 3.05 2.68 2.35 2.04 1.77 1.53 <b>Pressure switch</b> s Maximum HP switc Minimum LP switc	350 341 4.45 3.96 3.50 3.08 2.69 2.34 2.02 1.74 settings ch setting h setting h setting	431 419 407 5.12 4.55 4.01 3.52 3.07 2.66 2.29 1.96 27.7 0.2	512 497 482 5.91 5.23 4.60 4.02 3.50 3.02 2.60

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

All performance data +/- 5%

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**R22** 

### Maneurop reciprocating compressor. MT072-4

Performanc	e data at 50	0 Hz, ARI rati	ng conditio	ns					R2
Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15
a aling appaait	in M								
30	4 846	6 672	8 825	11 342	14 257	17 607	21 428	25 754	30 622
35	4 313	6 078	8 152	10 570	13 368	16 582	20 247	24 399	29 073
40	3 850	5 542	7 524	9 831	12 499	15 563	19 060	23 024	27 492
45	3 466	5 073	6 950	9 133	11 658	14 561	17 877	21 641	25 890
50	-	4 681	6 441	8 488	10 858	13 586	16 708	20 260	24 277
55	_	-	6 008	7 906	10 108	12 649	15 565	18 892	22 665
60	_	-	-	7 397	9 419	11 760	14 458	17 547	21 063
65	-	-	-	-	8 801	10 930	13 397	16 235	19 482
ower input in W	N								
ower input in V 30	2 637	2 993	3 347	3 689	4 011	4 304	4 557	4 761	4 909
35	2 768	3 137	3 507	3 870	4 216	4 536	4 822	5 062	5 249
40	2 911	3 295	3 684	4 070	4 443	4 794	5 114	5 394	5 623
45	3 068	3 469	3 880	4 291	4 694	5 079	5 436	5 757	6 032
50	-	3 660	4 096	4 536	4 971	5 391	5 789	6 154	6 476
55	-	-	4 333	4 804	5 274	5 734	6 174	6 585	6 959
60	-	-	-	5 098	5 606	6 107	6 593	7 054	7 480
65	-	-	-	-	5 968	6 513	7 047	7 560	8 043
urrent consum	ntion in A								
30	5.52	5.92	6.35	6.78	7.20	7.59	7.94	8.23	8.44
35	5.67	6.09	6.54	7.01	7.47	7.92	8.32	8.67	8.94
40	5.83	6.28	6.77	7.28	7.79	8.28	8.74	9.15	9.50
45	6.01	6.50	7.02	7.58	8.14	8.69	9.22	9.70	10.12
50	-	6.74	7.31	7.91	8.53	9.15	9.74	10.30	10.80
55	-	-	7.63	8.29	8.98	9.66	10.33	10.97	11.56
60	-	-	-	8.72	9.47	10.23	10.98	11.70	12.38
65	-	-	-	-	10.02	10.85	11.69	12.51	13.29
ass flow in kg/	/h								
30	99	135	176	223	277	338	407	484	570
35	91	127	168	216	269	330	398	475	561
40	84	120	161	208	261	321	389	465	549
45	79	115	155	201	253	312	379	453	537
50	-	110	150	194	245	303	368	441	523
55	-	-	146	189	239	295	358	429	509
60	-	-	-	186	233	287	348	417	494
65	-	-	-	-	229	280	339	405	479
oefficient of ne	erformance (C.C	ופר							
30	1.84	2.23	2.64	3.07	3.55	4.09	4.70	5.41	6.24
35	1.54	1.94	2.32	2.73	3.17	3.66	4.20	4.82	5.54
40	1.30	1.68	2.04	2.42	2.81	3.25	3.73	4.27	4.89
45	1.13	1.46	1.79	2.13	2.48	2.87	3.29	3.76	4.29
50	-	1.28	1.73	1.87	2.18	2.52	2.89	3.29	3.75
55	-	-	1.39	1.65	1.92	2.21	2.52	2.87	3.26
60	-	_	-	1.45	1.68	1.93	2.19	2.49	2.82
65	-	-	-	-	1.00	1.68	1.90	2.15	2.02
	··· -		•	•	•		44	· .	
	nance at to = 7.	2 °C, tc = 54.4 °C	\^/	_	1	Pressure switch Maximum HP swit		07 7	ho-(-)
ooling capacity ower input		17 124 6 309	W			Maximum HP swite Minimum LP swite	•	27.7 0.2	bar(g) bar(g)
Current consump	otion	10.54	A			LP pump down se	•	0.2	bar(g) bar(g)
lass flow		389	kg/h				v		- (3/

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

2.71

All performance data +/- 5%

Sound power data

Sound power level

With accoustic hood

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C.O.P.

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dB(A)

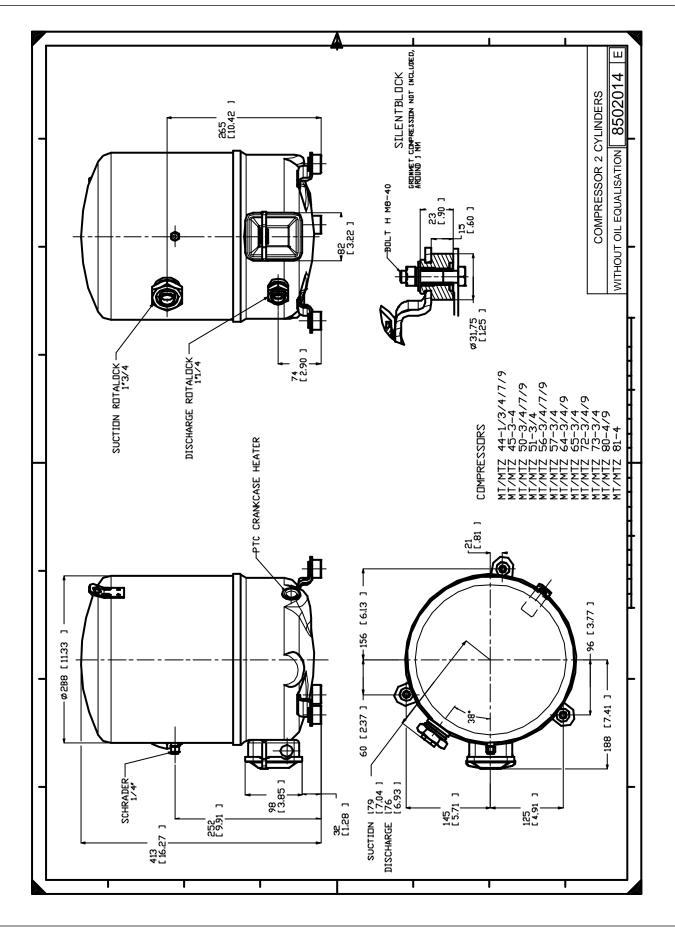
dB(A)



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### Datasheet, drawing

### Maneurop scroll compressor



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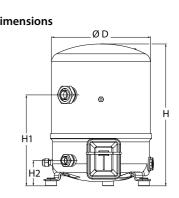
### Datasheet, technical data

### Maneurop reciprocating compressor, MT072-4

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### **General Characteristics**

Model number (on compressor nameplate)	MT72HN4AV
Code number for Singlepack*	MT72-4VI
Code number for Industrial pack**	MT72-4VM
Drawing number	8502012g
Suction and discharge connections	Rotolock
Suction connection	1-3/4 " Rotoloci
Discharge connection	1-1/4 " Rotoloci
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 cm3/rev
Displacement @ Nominal speed	21.0 m3/h @ 2900 rpm - 25.4 m3/h @ 3500 rp
Net weight	40 kg
Oil charge	1,8 litre, Mineral - 160P
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	12
Refrigerant charge limit	5 kg
Approved refrigerants	R22, R417A-160PZ



D=288 mm H=413 mm H1=265 mm H2=74 mm

Terminal 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)	15.5 A
Locked Rotor Amps (LRA)	80 A
Motor protection	Internal overload protector

### **Recommended Installation torques**

ſ	Oil sight glass	50 Nm	
	Power connections / Earth connection	Nm / 2 Nm	IP55 (
	Mounting bolts	15 Nm	1:

### 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)

55 (with cable gland)

- Spade connectors 1/4"
- 2: Earth M4-12

3:

- Knock-out Ø 21 mm (0.83")
- 4: Hole Ø 21 mm (0.83'')



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### Datasheet, accessories and spare parts

Maneurop reciprocating compressor, MT072-4

Rotolock accessories, suction side	Code no.	
Solder sleeve, P07 (1-3/4" Rotolock, 7/8" ODF)	8153013	
Angle adapter, C07 (1-3/4" Rotolock, 7/8" ODF)	8168008	
Rotolock valve, V07 (1-3/4" Rotolock, 7/8" ODF)	8168032	Gaskets, sleeves and nuts
Gasket, 1-3/4"	8156132	
Rotolock accessories, discharge side	Code no.	
Solder sleeve, P04 (1-1/4" Rotolock, 3/4" ODF)	8153008	((())) ( (())opr / /())) /
Angle adapter, C04 (1-1/4" Rotolock, 3/4" ODF)	8168006	
Rotolock valve, V04 (1-1/4" Rotolock, 3/4" ODF)	8168029	
Gasket, 1-1/4"	8156131	1 2 3
Rotolock accessories, sets	Code no.	1: Gasket
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	
Oil / lubricants	Code no.	
Mineral oil, 160P, 2 litre can	7754001	
Mineral oil, 160P, 5 litre can	7754002	
Crankcase heaters	Code no.	Mounting kit
Crankcase heaters	<b>Code no.</b>	Mounting kit
PTC heater 27W	120Z0459	Mounting kit
PTC heater 27W Belt type crankcase heater, 65 W, 230 V, CE mark, UL	120Z0459 7773107	Mounting kit
PTC heater 27W Belt type crankcase heater, 65 W, 230 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL	120Z0459 7773107 7773117	Mounting kit
PTC heater 27W Belt type crankcase heater, 65 W, 230 V, CE mark, UL	120Z0459 7773107	
PTC heater 27W Belt type crankcase heater, 65 W, 230 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL	120Z0459 7773107 7773117	
PTC heater 27W Belt type crankcase heater, 65 W, 230 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL	120Z0459 7773107 7773117 120Z0466	
PTC heater 27W Belt type crankcase heater, 65 W, 230 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Miscellaneous accessories	120Z0459 7773107 7773117 120Z0466 <b>Code no.</b>	
PTC heater 27W Belt type crankcase heater, 65 W, 230 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Miscellaneous accessories Electronic soft start kit, MCI 15 C	120Z0459 7773107 7773117 120Z0466 <b>Code no.</b> 7705006	
PTC heater 27W Belt type crankcase heater, 65 W, 230 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Miscellaneous accessories Electronic soft start kit, MCI 15 C Soft start kit with statoric resistors, prewired box, SCR01	120Z0459 7773107 7773117 120Z0466 <b>Code no.</b> 7705006 7702003	
PTC heater 27W Belt type crankcase heater, 65 W, 230 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Miscellaneous accessories Electronic soft start kit, MCl 15 C Soft start kit with statoric resistors, prewired box, SCR01 Acoustic hood for 2 cylinder compressor Oil equalisation nut	120Z0459 7773107 7773117 120Z0466 <b>Code no.</b> 7705006 7702003 7755002 8153127	
PTC heater 27W Belt type crankcase heater, 65 W, 230 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Miscellaneous accessories Electronic soft start kit, MCI 15 C Soft start kit with statoric resistors, prewired box, SCR01 Acoustic hood for 2 cylinder compressor Oil equalisation nut Spare parts	120Z0459 7773107 7773117 120Z0466 <b>Code no.</b> 7705006 7702003 7755002 8153127 <b>Code no.</b>	1: Bolt (3x)
PTC heater 27W Belt type crankcase heater, 65 W, 230 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Miscellaneous accessories Electronic soft start kit, MCI 15 C Soft start kit with statoric resistors, prewired box, SCR01 Acoustic hood for 2 cylinder compressor Oil equalisation nut Spare parts Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts	120Z0459 7773107 7773117 120Z0466 <b>Code no.</b> 7705006 7702003 7755002 8153127 <b>Code no.</b> 8156001	1: Bolt (3x) 2: Lock washer (3x)
PTC heater 27W Belt type crankcase heater, 65 W, 230 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Miscellaneous accessories Electronic soft start kit, MCI 15 C Soft start kit with statoric resistors, prewired box, SCR01 Acoustic hood for 2 cylinder compressor Oil equalisation nut Spare parts Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts Oil sight glass with gaskets (black & white)	120Z0459 7773107 7773117 120Z0466 <b>Code no.</b> 7705006 7702003 7755002 8153127 <b>Code no.</b> 8156001 8156019	1: Bolt (3x) 2: Lock washer (3x) 3: Flat washer (3x)
PTC heater 27W Belt type crankcase heater, 65 W, 230 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Miscellaneous accessories Electronic soft start kit, MCI 15 C Soft start kit with statoric resistors, prewired box, SCR01 Acoustic hood for 2 cylinder compressor Oil equalisation nut 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)	120Z0459 7773107 7773117 120Z0466 <b>Code no.</b> 7705006 7702003 7755002 8153127 <b>Code no.</b> 8156001 8156019 8156145	1: Bolt (3x) 2: Lock washer (3x) 3: Flat washer (3x) 4: Sleeve (3x)
PTC heater 27W Belt type crankcase heater, 65 W, 230 V, CE mark, UL Belt type crankcase heater, 65 W, 400 V, CE mark, UL Belt type crankcase heater, 65 W, 460 V, CE mark, UL Miscellaneous accessories Electronic soft start kit, MCI 15 C Soft start kit with statoric resistors, prewired box, SCR01 Acoustic hood for 2 cylinder compressor Oil equalisation nut Spare parts Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts Oil sight glass with gaskets (black & white)	120Z0459 7773107 7773117 120Z0466 <b>Code no.</b> 7705006 7702003 7755002 8153127 <b>Code no.</b> 8156001 8156019	1: Bolt (3x) 2: Lock washer (3x) 3: Flat washer (3x)



### Maneurop reciprocating compressor. MT072-4

### Performance data at 50 Hz, EN 12900 rating conditions

°C (tc)					ting temperatur		_		1
	-25	-20	-15	-10	-5	0	5	10	15
Cooling capacity									
30	4 564	6 288	8 324	10 706	13 468	16 644	20 270	24 378	29 004
35	4 047	5 708	7 662	9 943	12 585	15 623	19 090	23 020	27 449
40	3 598	5 185	7 046	9 215	11 726	14 613	17 910	21 652	25 873
45	3 224	4 723	6 478	8 521	10 888	13 612	16 726	20 265	24 263
50	-	4 337	5 975	7 883	10 094	12 643	15 564	18 890	22 656
55	-	-	5 541	7 300	9 345	11 708	14 422	17 523	21 043
60	-	-	-	6 781	8 646	10 810	13 306	16 167	19 428
65	-	-	-	-	8 016	9 970	12 237	14 849	17 841
Power input in W		0.000	0.047	0.000	4.044	4.004	4 557	4 704	4 000
30	2 637	2 993	3 347	3 689	4 011	4 304	4 557	4 761	4 909
35	2 768	3 137	3 507	3 870	4 216	4 536	4 822	5 062	5 249
40	2 911	3 295	3 684	4 070	4 443	4 794	5 114	5 394	5 623
45	3 068	3 469	3 880	4 291	4 694	5 079	5 436	5 757	6 032
50	-	3 660	4 096	4 536	4 971	5 391	5 789	6 154	6 476
55	-	-	4 333	4 804	5 274	5 734	6 174	6 585	6 959
60	-	-	-	5 098	5 606	6 107	6 593	7 054	7 480
65	-	-	-	-	5 968	6 513	7 047	7 560	8 043
30	5.52	5.92	6.35	6.78	7.20	7.59	7.94	8.23	8.44
35	5.67	6.09	6.54	7.01	7.47	7.92	8.32	8.67	8.94
40	5.83	6.28	6.77	7.28	7.79	8.28	8.74	9.15	9.50
45	6.01	6.50	7.02	7.58	8.14	8.69	9.22	9.70	10.12
50	-	6.74	7.31	7.91	8.53	9.15	9.74	10.30	10.80
55	-	-	7.63	8.29	8.98	9.66	10.33	10.97	11.56
60	-	-	-	8.72	9.47	10.23	10.98	11.70	12.38
65	-	-	-	-	10.02	10.85	11.69	12.51	13.29
Mass flow in kg/h		126	177	224	279	240	400	496	570
30	100	136	177	224	278	340	409	486	573
35	92	128	169	217	271	332	400	478	564
	85	121	162	209	262	323	391	467	553
40			156	202	254	314	381	456	540
45	80	115			247	305	370	444	526
	-	115 111	150	195	271	905			020
45			150 147	195 190	240	296	360	431	512
45 50	-	111					360 350		
45 50 55	-	111	147	190	240	296		431	512
45 50 55 60 65		111 - - -	147 -	190	240 234	296 288	350	431 419	512 497
45 50 55 60 65 Coefficient of per	- - - formance (C.C	111 - - - D.P.)	147 - -	190 187 -	240 234 230	296 288 282	350 341	431 419 407	512 497 482
45 50 55 60 65 Coefficient of per 30	- - - formance (C.0 1.73	111 - - - <b>D.P.)</b> 2.10	147 - - 2.49	190 187 - 2.90	240 234 230 3.36	296 288 282 3.87	350 341 4.45	431 419 407 5.12	512 497 482 5.91
45 50 55 60 65 Coefficient of per 30 35	- - - formance (C.C 1.73 1.46	111 - - - <b>D.P.)</b> 2.10 1.82	147 - - 2.49 2.18	190 187 - 2.90 2.57	240 234 230 3.36 2.99	296 288 282 3.87 3.44	350 341 4.45 3.96	431 419 407 5.12 4.55	512 497 482 5.91 5.23
45 50 55 60 65 65 65 65 65 65 65 65 65 65 65 65 65	- - - formance (C.0 1.73 1.46 1.24	111 - - - <b>D.P.)</b> 2.10 1.82 1.57	147 - - 2.49 2.18 1.91	190 187 - 2.90 2.57 2.26	240 234 230 3.36 2.99 2.64	296 288 282 3.87 3.44 3.05	350 341 4.45 3.96 3.50	431 419 407 5.12 4.55 4.01	512 497 482 5.91 5.23 4.60
45 50 55 60 65 <b>Coefficient of per</b> 30 35 40 45	- - formance (C.C 1.73 1.46 1.24 1.05	111 - - - <b>D.P.)</b> 2.10 1.82 1.57 1.36	147 - - 2.49 2.18 1.91 1.67	190 187 - 2.90 2.57 2.26 1.99	240 234 230 3.36 2.99 2.64 2.32	296 288 282 3.87 3.44 3.05 2.68	350 341 4.45 3.96 3.50 3.08	431 419 407 5.12 4.55 4.01 3.52	512 497 482 5.91 5.23 4.60 4.02
45       50       55       60       65       20       30       35       40       45       50	- - - formance (C.0 1.73 1.46 1.24	111 - - - - - - - - - - - - - - - - - -	147 - - 2.49 2.18 1.91 1.67 1.46	190 187 - 2.90 2.57 2.26 1.99 1.74	240 234 230 3.36 2.99 2.64 2.32 2.03	296 288 282 3.87 3.44 3.05 2.68 2.35	350 341 4.45 3.96 3.50 3.08 2.69	431 419 407 5.12 4.55 4.01 3.52 3.07	512 497 482 5.91 5.23 4.60 4.02 3.50
45       50       55       60       65       30       35       40       45       50       55	- - - formance (C.C 1.73 1.46 1.24 1.05 -	111 - - - <b>D.P.)</b> 2.10 1.82 1.57 1.36	147 - - 2.49 2.18 1.91 1.67 1.46 1.28	190 187 - 2.90 2.57 2.26 1.99 1.74 1.52	240 234 230 3.36 2.99 2.64 2.32 2.03 1.77	296 288 282 3.87 3.44 3.05 2.68 2.35 2.04	350 341 4.45 3.96 3.50 3.08 2.69 2.34	431 419 407 5.12 4.55 4.01 3.52 3.07 2.66	512 497 482 5.91 5.23 4.60 4.02 3.50 3.02
45       50       55       60       65       20efficient of per       30       35       40       45       50       55       60	- - - formance (C.C 1.73 1.46 1.24 1.05 - - -	111 - - - - - - - - - - - - -	147 - - 2.49 2.18 1.91 1.67 1.46 1.28 -	190 187 - 2.90 2.57 2.26 1.99 1.74 1.52 1.33	240 234 230 3.36 2.99 2.64 2.32 2.03 1.77 1.54	296 288 282 3.87 3.44 3.05 2.68 2.35 2.04 1.77	350 341 4.45 3.96 3.50 3.08 2.69 2.34 2.02	431 419 407 5.12 4.55 4.01 3.52 3.07 2.66 2.29	512 497 482 5.91 5.23 4.60 4.02 3.50 3.02 2.60
45   50   55   60   65   30   35   40   45   50   55	- - - formance (C.C 1.73 1.46 1.24 1.05 -	111 - - - - - - - - - - - - - - - - - -	147 - - 2.49 2.18 1.91 1.67 1.46 1.28	190 187 - 2.90 2.57 2.26 1.99 1.74 1.52	240 234 230 3.36 2.99 2.64 2.32 2.03 1.77	296 288 282 3.87 3.44 3.05 2.68 2.35 2.04	350 341 4.45 3.96 3.50 3.08 2.69 2.34	431 419 407 5.12 4.55 4.01 3.52 3.07 2.66	512 497 482 5.91 5.23 4.60 4.02 3.50 3.02
45 50 55 60 65 <b>Coefficient of per</b> 30 35 40 45 50 55 60 65 <b>Nominal perform</b>	- - formance (C.C 1.73 1.46 1.24 1.05 - - - -	111 - - - - - - - - - - - - - -	147 - - 2.49 2.18 1.91 1.67 1.46 1.28 - -	190 187 - 2.90 2.57 2.26 1.99 1.74 1.52 1.33	240 234 230 3.36 2.99 2.64 2.32 2.03 1.77 1.54	296 288 282 3.87 3.44 3.05 2.68 2.35 2.04 1.77 1.53 <b>Pressure switch</b> 3	350 341 4.45 3.96 3.50 3.08 2.69 2.34 2.02 1.74 settings	431 419 407 5.12 4.55 4.01 3.52 3.07 2.66 2.29 1.96	512 497 482 5.91 5.23 4.60 4.02 3.50 3.02 2.60
45 50 55 60 65 Coefficient of per 30 35 40 45 50 55 60 65 Nominal perform Cooling capacity	- - formance (C.C 1.73 1.46 1.24 1.05 - - - -	111     -     -     0.P.)     2.10     1.82     1.57     1.36     1.18     -     -     -     -     57     1.36     1.18     -     -     -     -     -     -     -     -     -     -     -     -     -     15 564	147 - - 2.49 2.18 1.91 1.67 1.46 1.28 - - -	190 187 - 2.90 2.57 2.26 1.99 1.74 1.52 1.33	240 234 230 3.36 2.99 2.64 2.32 2.03 1.77 1.54	296 288 282 3.87 3.44 3.05 2.68 2.35 2.04 1.77 1.53 <b>Pressure switch</b> s Maximum HP swit	350 341 4.45 3.96 3.50 3.08 2.69 2.34 2.02 1.74 settings ch setting	431 419 407 5.12 4.55 4.01 3.52 3.07 2.66 2.29 1.96 27.7	512 497 482 5.91 5.23 4.60 4.02 3.50 3.02 2.60 2.22
45 50 55 60 65 Coefficient of per 30 35 40 45 50 55 60 65 Nominal perform Cooling capacity Power input	- - - formance (C.C 1.73 1.46 1.24 1.05 - - - - - - - - - -	111     -     -     0.P.)     2.10     1.82     1.57     1.36     1.18     -     -     -     -     -     5     15     564     5	147 - - 2.49 2.18 1.91 1.67 1.46 1.28 - - -	190 187 - 2.90 2.57 2.26 1.99 1.74 1.52 1.33	240 234 230 3.36 2.99 2.64 2.32 2.03 1.77 1.54	296 288 282 3.87 3.44 3.05 2.68 2.35 2.04 1.77 1.53 <b>Pressure switch</b> s Maximum HP switc Minimum LP switc	350 341 4.45 3.96 3.50 3.08 2.69 2.34 2.02 1.74 settings ch setting h setting	431 419 407 5.12 4.55 4.01 3.52 3.07 2.66 2.29 1.96 27.7 0.2	512 497 482 5.91 5.23 4.60 4.02 3.50 3.02 2.60 2.22 bar(g) bar(g)
45       50       55       60       65       20efficient of per       30       35       40       45       50       55       60       65	- - - formance (C.C 1.73 1.46 1.24 1.05 - - - - - - - - - -	111     -     -     -     0.P.)     2.10     1.82     1.57     1.36     1.18     - </td <td>147 - - 2.49 2.18 1.91 1.67 1.46 1.28 - - - - - - W W W A</td> <td>190 187 - 2.90 2.57 2.26 1.99 1.74 1.52 1.33</td> <td>240 234 230 3.36 2.99 2.64 2.32 2.03 1.77 1.54</td> <td>296 288 282 3.87 3.44 3.05 2.68 2.35 2.04 1.77 1.53 <b>Pressure switch</b> s Maximum HP swit</td> <td>350 341 4.45 3.96 3.50 3.08 2.69 2.34 2.02 1.74 settings ch setting h setting</td> <td>431 419 407 5.12 4.55 4.01 3.52 3.07 2.66 2.29 1.96 27.7</td> <td>512 497 482 5.91 5.23 4.60 4.02 3.50 3.02 2.60 2.22 bar(g) bar(g)</td>	147 - - 2.49 2.18 1.91 1.67 1.46 1.28 - - - - - - W W W A	190 187 - 2.90 2.57 2.26 1.99 1.74 1.52 1.33	240 234 230 3.36 2.99 2.64 2.32 2.03 1.77 1.54	296 288 282 3.87 3.44 3.05 2.68 2.35 2.04 1.77 1.53 <b>Pressure switch</b> s Maximum HP swit	350 341 4.45 3.96 3.50 3.08 2.69 2.34 2.02 1.74 settings ch setting h setting	431 419 407 5.12 4.55 4.01 3.52 3.07 2.66 2.29 1.96 27.7	512 497 482 5.91 5.23 4.60 4.02 3.50 3.02 2.60 2.22 bar(g) bar(g)
45       50       55       60       65       20efficient of per       30       35       40       45       50       55       60       65	- - - formance (C.C 1.73 1.46 1.24 1.05 - - - - - - - - - -	111     -     -     0.P.)     2.10     1.82     1.57     1.36     1.18     -     15 564     5 789     9.74     370	147 - - 2.49 2.18 1.91 1.67 1.46 1.28 - - -	190 187 - 2.90 2.57 2.26 1.99 1.74 1.52 1.33	240 234 230 3.36 2.99 2.64 2.32 2.03 1.77 1.54	296 288 282 3.87 3.44 3.05 2.68 2.35 2.04 1.77 1.53 <b>Pressure switch</b> 3 Maximum HP switc Minimum LP switc LP pump down se	350 341 4.45 3.96 3.50 3.08 2.69 2.34 2.02 1.74 settings ch setting h setting	431 419 407 5.12 4.55 4.01 3.52 3.07 2.66 2.29 1.96 27.7 0.2	512 497 482 5.91 5.23 4.60 4.02 3.50 3.02 2.60 2.22 bar(g) bar(g)
45       50       55       60       65       20efficient of per       30       35       40       45       50       55       60       65	- - - formance (C.C 1.73 1.46 1.24 1.05 - - - - - - - - - -	111     -     -     -     0.P.)     2.10     1.82     1.57     1.36     1.18     - </td <td>147 - - 2.49 2.18 1.91 1.67 1.46 1.28 - - - - - - W W W A</td> <td>190 187 - 2.90 2.57 2.26 1.99 1.74 1.52 1.33</td> <td>240 234 230 3.36 2.99 2.64 2.32 2.03 1.77 1.54</td> <td>296 288 282 3.87 3.44 3.05 2.68 2.35 2.04 1.77 1.53 <b>Pressure switch</b> s Maximum HP switc Minimum LP switc</td> <td>350 341 4.45 3.96 3.50 3.08 2.69 2.34 2.02 1.74 settings ch setting h setting h setting a</td> <td>431 419 407 5.12 4.55 4.01 3.52 3.07 2.66 2.29 1.96 27.7 0.2</td> <td>512 497 482 5.91 5.23 4.60 4.02 3.50 3.02 2.60</td>	147 - - 2.49 2.18 1.91 1.67 1.46 1.28 - - - - - - W W W A	190 187 - 2.90 2.57 2.26 1.99 1.74 1.52 1.33	240 234 230 3.36 2.99 2.64 2.32 2.03 1.77 1.54	296 288 282 3.87 3.44 3.05 2.68 2.35 2.04 1.77 1.53 <b>Pressure switch</b> s Maximum HP switc Minimum LP switc	350 341 4.45 3.96 3.50 3.08 2.69 2.34 2.02 1.74 settings ch setting h setting h setting a	431 419 407 5.12 4.55 4.01 3.52 3.07 2.66 2.29 1.96 27.7 0.2	512 497 482 5.91 5.23 4.60 4.02 3.50 3.02 2.60

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

All performance data +/- 5%

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**R22** 

### Maneurop reciprocating compressor. MT072-4

Performanc	e data at 50	0 Hz, ARI rati	ng conditio	ns					R2
Cond. temp. in				Evapora	ating temperature	in °C (to)			
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15
a aling appaait	in M								
30	4 846	6 672	8 825	11 342	14 257	17 607	21 428	25 754	30 622
35	4 313	6 078	8 152	10 570	13 368	16 582	20 247	24 399	29 073
40	3 850	5 542	7 524	9 831	12 499	15 563	19 060	23 024	27 492
45	3 466	5 073	6 950	9 133	11 658	14 561	17 877	21 641	25 890
50	-	4 681	6 441	8 488	10 858	13 586	16 708	20 260	24 277
55	_	-	6 008	7 906	10 108	12 649	15 565	18 892	22 665
60	_	-	-	7 397	9 419	11 760	14 458	17 547	21 063
65	-	-	-	-	8 801	10 930	13 397	16 235	19 482
ower input in W	N								
ower input in V 30	2 637	2 993	3 347	3 689	4 011	4 304	4 557	4 761	4 909
35	2 768	3 137	3 507	3 870	4 216	4 536	4 822	5 062	5 249
40	2 911	3 295	3 684	4 070	4 443	4 794	5 114	5 394	5 623
45	3 068	3 469	3 880	4 291	4 694	5 079	5 436	5 757	6 032
50	-	3 660	4 096	4 536	4 971	5 391	5 789	6 154	6 476
55	-	-	4 333	4 804	5 274	5 734	6 174	6 585	6 959
60	-	-	-	5 098	5 606	6 107	6 593	7 054	7 480
65	-	-	-	-	5 968	6 513	7 047	7 560	8 043
urrent consum	ntion in A								
30	5.52	5.92	6.35	6.78	7.20	7.59	7.94	8.23	8.44
35	5.67	6.09	6.54	7.01	7.47	7.92	8.32	8.67	8.94
40	5.83	6.28	6.77	7.28	7.79	8.28	8.74	9.15	9.50
45	6.01	6.50	7.02	7.58	8.14	8.69	9.22	9.70	10.12
50	-	6.74	7.31	7.91	8.53	9.15	9.74	10.30	10.80
55	-	-	7.63	8.29	8.98	9.66	10.33	10.97	11.56
60	-	-	-	8.72	9.47	10.23	10.98	11.70	12.38
65	-	-	-	-	10.02	10.85	11.69	12.51	13.29
ass flow in kg/	/h								
30	99	135	176	223	277	338	407	484	570
35	91	127	168	216	269	330	398	475	561
40	84	120	161	208	261	321	389	465	549
45	79	115	155	201	253	312	379	453	537
50	-	110	150	194	245	303	368	441	523
55	-	-	146	189	239	295	358	429	509
60	-	-	-	186	233	287	348	417	494
65	-	-	-	-	229	280	339	405	479
oefficient of ne	erformance (C.C	ופר							
30	1.84	2.23	2.64	3.07	3.55	4.09	4.70	5.41	6.24
35	1.54	1.94	2.32	2.73	3.17	3.66	4.20	4.82	5.54
40	1.30	1.68	2.04	2.42	2.81	3.25	3.73	4.27	4.89
45	1.13	1.46	1.79	2.13	2.48	2.87	3.29	3.76	4.29
50	-	1.28	1.73	1.87	2.18	2.52	2.89	3.29	3.75
55	-	-	1.39	1.65	1.92	2.21	2.52	2.87	3.26
60	-	-	-	1.45	1.68	1.93	2.19	2.49	2.82
65	-	-	-	-	1.00	1.68	1.90	2.15	2.02
	··· -		•	•	•		44	· .	
	nance at to = 7.	2 °C, tc = 54.4 °C	\^/	_	1	Pressure switch Maximum HP swit		07 7	ho-(-)
ooling capacity ower input		17 124 6 309	W			Maximum HP swite Minimum LP swite	•	27.7 0.2	bar(g) bar(g)
Current consump	otion	10.54	A			LP pump down se	•	0.2	bar(g) bar(g)
lass flow		389	kg/h				v		- (3/

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

2.71

All performance data +/- 5%

Sound power data

Sound power level

With accoustic hood

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C.O.P.

0

0

dB(A)

dB(A)



Danfoss

### Maneurop scroll compressor

