ENGINEERING TOMORROW



Datasheets

# Danfoss Reciprocating compressors MT / MTZ / NTZ





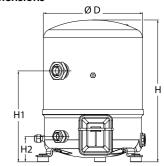


#### Datasheet, technical data

# **General Characteristics**

Model number (on compressor nameplate)		MT64HM4DVE	
Code number for Singlepack*		MT64-4VI	
Code number for Industrial pack**		MT64-4VM	
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	107.71 c	cm3/rev	
Displacement @ Nominal speed	18.7 m3/h @ 2900 rpm -	· 22.6 m3/h @ 3500 rpm	
Net weight	39	39 kg	
Oil charge	1.8 litre, Mir	1.8 litre, Mineral - 160P	
Maximum system test pressure Low Side / High side	25 bar(g) /	25 bar(g) / 30 bar(g)	
Maximum differential test pressure	30	30 bar	
Maximum number of starts per hour	1	12	
Refrigerant charge limit	51	5 kg	
Approved refrigerants	R22, R417	R22, R417A-160PZ	

#### **Dimensions**



D=288 mm H=413 mm H1=265 mm H2=74 mm H3=- mm

**Terminal box** 

(1)

#### **Electrical Characteristics**

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	2.39 Ω
Maximum Continuous Current (MCC)	14 A
Locked Rotor Amps (LRA)	64 A
Motor protection	Internal overload protector

**Recommended Installation torques** 

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

## IP55 (with cable gland)

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

## 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), CCC certified

\*Singlepack: Compressor in cardboard box

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



## Datasheet, technical data

## Danfoss scroll compressor, SH120-4

## **General Characteristics**

Model number (on compressor nameplate)		SH120A4ALC	
Code number for Singlepack*		120H0013	
Code number for Industrial pack**		120H0014	
Drawing number		8560003h	
Suction and discharge connections		Brazed	
Suction connection		1-3/8 " ODF	
Discharge connection		7/8 " ODF	
Oil sight glass		Threaded	
Oil equalization connection		1-3/4" Rotolock	
Oil drain connection		None	
LP gauge port		Schrader	
IPR valve		None	
Swept volume	7.13 in3/rev		
Displacement @ Nominal speed	718 cfh @ 2900 rpm - 867 cfh @ 3500 rpm		
Net weight	142 lbs		
Oil charge	112 oz, POE - 160SZ		
Maximum system test pressure Low Side / High side	483 psi / 706 psi		
Maximum differential test pressure	537 psi		
Maximum number of starts per hour	12		
Refrigerant charge limit	17	17 lbs	
Approved refrigerants	R410	R410A	

## **Electrical Characteristics**

Nominal voltage	380-400V/3/50Hz - 460V/3/60Hz	
Voltage range	342-440 V @ 50Hz - 414-506 V @ 60Hz	
Winding resistance (between phases) +/- 7% at 77°F	1.05 Ω	
Rated Load Amps (RLA)	20.7 A	
Maximum Continuous Current (MCC)	29 A	
Locked Rotor Amps (LRA)	142 A	
Motor protection	Internal overload protector	

# **Recommended Installation torques**

Oil sight glass	37 ft.lbs	
Power connections / Earth connection	2 ft.lbs / 1 ft.lbs	
Mounting bolts	11 ft.lbs	

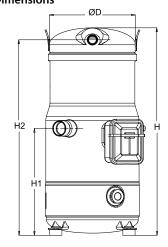
# Parts shipped with compressor

Mounting kit with grommets, bolts, nuts, sleeves and washers
Initial oil charge
Installation instructions

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

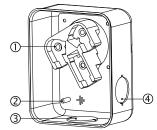
- \*Singlepack: Compressor in cardboard box
- \*\*Industrial pack: 8 Unboxed compressors on pallet (order per multiples of 8)

# Dimensions



D=9.6 inch, H=21.3 inch, H1=10.9 inch, H2=20 inch, H3=- inch

## **Terminal box**



IP54 (with cable gland)

- 1: Power connection, 3 x 4.8 mm (3/16")
- 2: Earth M4-12
- 3: Knock-out Ø 29 mm (1.14")
- 4: Knock-out Ø 25.5 mm (1.00")



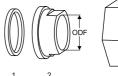
## Datasheet, accessories and spare parts

# Maneurop reciprocating compressor, MT064-4

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
Gasket, 1-3/4"	8156132

# Gaskets, sleeves and nuts

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



ODF	
2	3

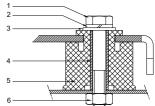
Rotolock accessories, sets	Code no.
Angle adapter set, C07 (1-3/4"~7/8"), C04 (1-1/4"~3/4")	7703013
Valve set, V07 (1-3/4"~7/8"), V04 (1-1/4"~3/4")	7703006
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009

	l: Gasket
2	2: Solder sleeve
3	3: Rotolock nut

Oil / lubricants	Code no.
Mineral oil, 160P, 2 litre can	7754001
Mineral oil, 160P, 5 litre can	7754002

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IVIO	antung	KIL

Crankcase heaters	Code no.
PTC heater 27W,CE mark, UL	120Z0459
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 holts	8156001

Spare parts	couc no.	
Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts	8156001	1: Bolt (3
Oil sight glass with gaskets (black & white)	8156019	2: Lock v
Gasket for oil sight glass (black chloroprene)	8156145	3: Flat wa
Service kit for terminal box 80 x 96 mm, including 1 cover, 1 clamp	8156134	4: Sleeve
		5: Gromi

1: BOIL (3X)
2: Lock washer (3x)
3: Flat washer (3x)
4: Sleeve (3x)

5: Grommet (3x)

6: Nut (3x)





## Datasheet, accessories and spare parts

Danfoss scroll compressor, SH120-4

Rotolock accessories, suction side	Code no.
Solder sleeve, P10 (1-3/4" Rotolock, 1-3/8" ODF)	8153003
Rotolock valve, V10 (1-3/4" Rotolock, 1-3/8" ODF)	8168022
Gasket, 1-3/4"	8156132
Rotolock accessories, discharge side	Code no.
Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030
Gasket, 1-3/4"	8156132
Rotolock accessories, sets	Code no.
Solder sleeve adapter set, 1-1/8" ODF & 7/8" ODF	120Z0405
Valve set, V10 (1-3/4"~1-3/8"), V05 (1-1/4"~7/8")	7703392
Gasket set, 1-1/4", 1-3/4", 2-1/4", OSG gaskets black & white	8156013
Oil / lubricants	Code no.
POE lubricant, 160SZ, 1 liter can	7754023
POE lubricant, 160SZ, 2 liter can	120Z0571
Crankcase heaters	Code no.
Surface sump heater, 80 W, 24 V, CE mark, UL	120Z0388
Surface sump heater, 80 W, 230 V, CE mark, UL	120Z0389
Surface sump heater, 80 W, 400 V, CE mark, UL	120Z0390
Surface sump heater, 80 W, 460 V, CE mark, UL	120Z0391
Miscellaneous accessories	Code no.
Acoustic hood for scroll compressor SH105-161 & SM124, SM147	120Z0035
Gasket, 1-3/4"	8156132
Discharge thermostat kit	7750009
Spare parts	Code no.
Mounting kit for 1 scroll compressor including 4 grommets, 4	120Z0066
sleeves, 4 bolts, 4 washers	
Oil sight glass with gaskets (black & white)	8156019
Service kit for terminal box 96 x 115 mm, including 1 cover, 1	8156135
clamp	
T block connector 2.1" x 2.3"	8173230

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# Maneurop reciprocating compressor. MT064-4

# Performance data at 50 Hz, EN 12900 rating conditions

**R22** 

Cond. temp. in	emp. in Evaporating temperature in °C (to)								
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15
Cooling capacit	v in W								
30	4 151	5 704	7 573	9 791	12 392	15 408	18 872	22 819	27 280
35	3 736	5 224	7 009	9 125	11 604	14 480	17 786	21 556	25 822
40	3 324	4 741	6 435	8 442	10 794	13 524	16 666	20 252	24 316
45	2 923	4 261	5 860	7 751	9 970	12 547	15 518	18 915	22 771
50	-	3 793	5 289	7 059	9 138	11 557	14 350	17 551	21 193
55	-	-	4 731	6 374	8 306	10 560	13 170	16 169	19 590
60	-	-	-	5 701	7 481	9 564	11 985	14 776	17 970
65	-	-	-	-	6 671	8 577	10 802	13 378	16 339
Power input in V	N								
30	2 297	2 598	2 861	3 087	3 277	3 432	3 553	3 642	3 699
35	2 356	2 704	3 012	3 282	3 516	3 713	3 875	4 004	4 100
40	2 391	2 791	3 150	3 469	3 751	3 995	4 204	4 377	4 517
45	2 397	2 852	3 267	3 641	3 976	4 272	4 532	4 755	4 944
50	-	2 882	3 357	3 790	4 183	4 537	4 852	5 131	5 374
55	-	-	3 412	3 910	4 366	4 782	5 158	5 497	5 799
60	-	-	-	3 993	4 517	5 000	5 443	5 846	6 212
65	-	-	-	-	4 630	5 185	5 699	6 172	6 606
					-	•			
Current consum	ption in A								
30	5.52	5.84	6.14	6.42	6.67	6.89	7.07	7.20	7.28
35	5.60	5.95	6.30	6.62	6.91	7.16	7.38	7.55	7.67
40	5.64	6.05	6.45	6.83	7.17	7.48	7.75	7.97	8.13
45	5.63	6.12	6.59	7.03	7.45	7.82	8.16	8.44	8.67
50	-	6.12	6.68	7.21	7.71	8.17	8.58	8.95	9.25
55	-	-	6.71	7.34	7.94	8.49	9.00	9.46	9.86
60	-	-	-	7.40	8.11	8.78	9.40	9.97	10.48
65	-	-	-	-	8.22	9.01	9.76	10.45	11.08
Mass flow in kg	/h								
30	90	122	161	205	256	315	381	456	540
35	84	117	154	198	249	307	373	447	530
40	78	110	148	191	241	298	363	436	518
45	72	104	140	183	232	288	352	424	505
50	-	97	133	175	223	278	340	411	491
55	-	-	125	166	213	266	328	397	475
60	-	-	-	156	202	254	314	382	458
65	-	-	-	-	191	241	299	365	439
Coefficient of pe	erformance (C.C	D.P.)							
30	1.81	2.20	2.65	3.17	3.78	4.49	5.31	6.27	7.38
35	1.59	1.93	2.33	2.78	3.30	3.90	4.59	5.38	6.30
40	1.39	1.70	2.04	2.43	2.88	3.39	3.96	4.63	5.38
45	1.22	1.49	1.79	2.13	2.51	2.94	3.42	3.98	4.61
50	-	1.32	1.58	1.86	2.18	2.55	2.96	3.42	3.94
55	-	-	1.39	1.63	1.90	2.21	2.55	2.94	3.38
60	-	-	-	1.43	1.66	1.91	2.20	2.53	2.89
65	-	-	-	-	1.44	1.65	1.90	2.17	2.47

# Nominal performance at to = 5 °C, tc = 50 °C

tronima portormanos arto o o, to	•• •	
Cooling capacity	14 350	W
Power input	4 852	W
Current consumption	8.58	Α
Mass flow	340	kg/h
C.O.P.	2.96	

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	27.9	bar(g)
Minimum LP switch setting	0.7	bar(g)
LP pump down setting	0.9	bar(g)

# Sound power data

Sound power level	77	dB(A)
With accoustic hood	71	dB(A)

Tolerance according EN12900

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tc: Condensing temperature at dew point



Danfoss scroll compressor. SH120-4

# Performance data at 60 Hz, ARI rating conditions

**R410A** 

Cond. temp. Evaporating temperature								1	1
in °F (tc)	-10	0	10	20	30	40	45	50	55
ooling capaci	tu in Dtu/h								
90	48 427	62 189	78 548	97 881	120 562	146 968	161 685	177 473	194 381
100	45 112	58 427	74 147	92 650	114 310	139 504	153 542	168 605	184 739
110	-	54 359	69 381	86 993	107 571	131 492	144 822	159 129	174 459
120	-	-	64 210	80 871	100 307	122 893	135 485	149 006	163 502
130	-	_	-	74 244	92 477	113 670	125 493	138 197	151 829
140	-	_	_	-	84 044	103 782	114 807	126 664	139 402
150	-	-	-	-	-	93 193	103 389	114 369	126 182
		•	•	1		1			
Power input in	<b>W</b> 6 694	6.015	6.044	7 089	7 258	7 458	7 572	7 697	7 833
90		6 815	6 944	+			1		
100	7 498	7 609	7 729	7 864 8 751	8 023	8 213 9 064	8 322 9 164	8 441	8 572 9 397
110 120	<u> </u>	8 531	8 633 9 688	9 781	8 892 9 898	10 045	10 132	9 275 10 230	10 340
130	<u> </u>		9 000	10 987	11 071	11 185	11 256	11 338	11 431
140		-	-	10 987	12 443	12 517	12 568	12 630	12 703
150		<u> </u>	<del>-</del>	<del>   </del>	12 443	14 072	14 099	14 137	14 186
150	<del>-</del>	_			-	14 072	14 099	14 137	14 100
Current consur	nption in A								
90	11.92	12.11	12.25	12.37	12.48	12.61	12.69	12.78	12.89
100	12.71	12.91	13.05	13.18	13.31	13.47	13.56	13.67	13.79
110	-	13.86	14.00	14.12	14.25	14.41	14.51	14.63	14.76
120	-	-	15.14	15.24	15.36	15.51	15.61	15.72	15.85
130	-	-	-	16.60	16.69	16.81	16.90	17.00	17.12
140	-	-	-	-	18.30	18.38	18.44	18.53	18.63
150	-	-	-	-	-	20.26	20.30	20.36	20.44
Mass flow in lb	s/h								
90	609	772	962	1 184	1 441	1 737	1 902	2 078	2 267
100	599	764	955	1 177	1 435	1 731	1 896	2 072	2 260
110	-	751	944	1 167	1 424	1 721	1 885	2 061	2 248
120	-	-	928	1 151	1 409	1 706	1 870	2 045	2 232
130	-	-	-	1 130	1 389	1 685	1 849	2 024	2 210
140	-	-	-	-	1 361	1 657	1 821	1 996	2 182
150	-	-	-	-	-	1 623	1 786	1 960	2 145
		•	•	•	•	•	•	•	•
Energy Efficien	cy Ratio (E.E.R.	.)	_		1			1	
90	7.23	9.13	11.31	13.81	16.61	19.71	21.35	23.06	24.82
100	6.02	7.68	9.59	11.78	14.25	16.99	18.45	19.97	21.55
110	-	6.37	8.04	9.94	12.10	14.51	15.80	17.16	18.57
120	-	-	6.63	8.27	10.13	12.23	13.37	14.57	15.81
130		-	-	6.76	8.35	10.16	11.15	12.19	13.28
140	-	-	-	-	6.75	8.29	9.13	10.03	10.97
			1		1	6.62	7.33	8.09	8.89

Cooling capacity125 493Btu/hCurrent consumption16.90APower input11 256WMass flow1 849lbs/hE.E.R.11.15

T 0 : Evaporating temperature at dew point

Nominal performance at to = 45 °F, tc = 130 °F

T C : Condensing temperature at dew point

Rating conditions : Superheat = 20  $^{\circ}F$  , Subcooling = 15  $^{\circ}F$ 

Tolerance according EN12900

Pressure switch settings

Maximum HP switch setting	653	psi(g)
Minimum LP switch setting	22	psi(g)
LP pump down setting	25	psi(g)

#### Sound power data

Sound power level	75	dB(A)	
With accoustic hood	69	dB(A)	

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# Maneurop reciprocating compressor. MT064-4

# Performance data at 50 Hz, ARI rating conditions

**R22** 

Cond. temp. in			1	Evapor	ating temperature in	n °C (to)	1	1	r
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15
Cooling capacity	in W								
30	4 409	6 053	8 030	10 374	13 120	16 302	19 954	24 111	28 807
35	3 982	5 563	7 458	9 701	12 327	15 370	18 866	22 848	27 351
40	3 558	5 068	6 874	9 009	11 509	14 408	17 740	21 541	25 845
45	3 143	4 576	6 286	8 307	10 674	13 422	16 585	20 199	24 297
50	-	4 095	5 703	7 603	9 831	12 421	15 409	18 828	22 715
55	-	-	5 131	6 904	8 987	11 413	14 218	17 438	21 106
60	-	-	-	6 219	8 149	10 405	13 022	16 035	19 480
65	-	-	-	-	7 326	9 405	11 828	14 630	17 845
Power input in W	1	·							
30	2 297	2 598	2 861	3 087	3 277	3 432	3 553	3 642	3 699
35	2 356	2 704	3 012	3 282	3 516	3 713	3 875	4 004	4 100
40	2 391	2 791	3 150	3 469	3 751	3 995	4 204	4 377	4 517
45	2 397	2 852	3 267	3 641	3 976	4 272	4 532	4 755	4 944
50	-	2 882	3 357	3 790	4 183	4 537	4 852	5 131	5 374
55	-	-	3 412	3 910	4 366	4 782	5 158	5 497	5 799
60	-	_	-	3 993	4 517	5 000	5 443	5 846	6 212
65	-	_	-	-	4 630	5 185	5 699	6 172	6 606
Current consump	ption in A	5.84	6.14	6.42	6.67	6.89	7.07	7.20	7.28
35	5.60	5.95	6.30	6.62	6.91	7.16	7.38	7.55	7.67
40	5.64	6.05	6.45	6.83	7.17	7.10	7.75	7.97	8.13
45	5.63	6.12	6.59	7.03	7.45	7.40	8.16	8.44	8.67
50	5.05	6.12	6.68	7.03	7.71	8.17	8.58	8.95	9.25
55			6.71	7.21	7.94	8.49	9.00	9.46	9.86
60		_	-	7.40	8.11	8.78	9.40	9.97	10.48
65		1 -	-	-	8.22	9.01	9.76	10.45	11.08
Mass flow in kg/l	n 89	122	160	204	255	313	379	453	537
35	84	116	154	197	248	305	371	444	527
40	78	110	147	190	240	297	361	434	515
45	72	103	140	182	231	287	350	422	502
50	-	96	132	174	222	276	339	409	488
55	-	-	124	165	211	265	326	395	472
60	-	-	-	155	201	253	312	379	455
65	-	-	-	-	190	240	298	363	437
Coefficient of pe	rformance (C.C	D.P.)							•
30	1.92	2.33	2.81	3.36	4.00	4.75	5.62	6.62	7.79
35	1.69	2.06	2.48	2.96	3.51	4.14	4.87	5.71	6.67
40	1.49	1.82	2.18	2.60	3.07	3.61	4.22	4.92	5.72
45	1.31	1.60	1.92	2.28	2.69	3.14	3.66	4.25	4.91
50	-	1.42	1.70	2.01	2.35	2.74	3.18	3.67	4.23
55	-	-	1.50	1.77	2.06	2.39	2.76	3.17	3.64
60	-	_	-	1.56	1.80	2.08	2.39	2.74	3.14
		+	1	·	+			+	<del> </del>

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

reciminal portermance at to 7:2 0, to	U-1T U	
Cooling capacity	15 736	W
Power input	5 273	W
Current consumption	9.16	Α
Mass flow	357	kg/h
C.O.P.	2.98	

to: Evaporating temperature at dew point

Pressure switch settings

Maximum HP switch setting	27.9	bar(g)
Minimum LP switch setting	0.7	bar(g)
LP pump down setting	0.9	bar(g)

2.37

2.70

2.08

# Sound power data

1.81

1.58

Sound power level	77	dB(A)
With accoustic hood	71	dB(A)

Tolerance according EN12900

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tc: Condensing temperature at dew point

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



# Maneurop reciprocating compressor. MT064-4

# Performance data at 60 Hz, EN 12900 rating conditions

**R22** 

Cond. temp. in Evaporating temperature in °C (to)									
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15
		1		•	•	•		•	
Cooling capacity		0.070	0.040	11 101	44.407	40.050	22.244	20,070	32 392
30	4 936	6 676	8 818	11 401	14 467	18 058	22 214	26 978	
35	4 602	6 247	8 273	10 722	13 633	17 049	21 011	25 560	30 738
40	4 275	5 815	7 717	10 021	12 767	15 999	19 756	24 079	29 011
45	3 965	5 391	7 159	9 308	11 881	14 918	18 460	22 548	27 224
50	-	4 987	6 610	8 596	10 985	13 817	17 135	20 978	25 388
55	-	-	6 082	7 895	10 090	12 708	15 791	19 379	23 513
60	-	-	-	7 215	9 207	11 602	14 440	17 763	21 610
65	-	-	-	-	8 346	10 508	13 092	16 139	19 688
Power input in V	v								
30	2 914	3 214	3 502	3 778	4 041	4 291	4 527	4 750	4 958
35	3 030	3 362	3 681	3 986	4 277	4 555	4 817	5 065	5 298
40	3 142	3 512	3 867	4 208	4 534	4 845	5 140	5 419	5 681
45	3 240	3 653	4 051	4 433	4 799	5 149	5 482	5 798	6 097
50	-	3 773	4 219	4 649	5 062	5 457	5 834	6 193	6 534
55	-	-	4 363	4 846	5 310	5 757	6 184	6 592	6 981
60	-	-	-	5 011	5 534	6 037	6 521	6 984	7 426
65	-	-	-	-	5 722	6 288	6 833	7 357	7 860
Current consum		5.00		1 000	T 0.00	T 0.00	744	T 7.05	7.50
30	5.59	5.83	6.09	6.36	6.63	6.89	7.14	7.35	7.52
35	5.61	5.90	6.21	6.53	6.85	7.16	7.45	7.70	7.91
40	5.66	6.01	6.39	6.76	7.14	7.50	7.84	8.14	8.39
45	5.72	6.14	6.58	7.02	7.46	7.88	8.27	8.62	8.93
50	-	6.26	6.77	7.28	7.79	8.27	8.72	9.14	9.50
55	-	-	6.93	7.52	8.09	8.65	9.17	9.65	10.08
60	-	-	-	7.70	8.35	8.99	9.59	10.14	10.64
65	-	-	-	-	8.54	9.26	9.94	10.57	11.15
Mass flow in kg/	'h								
30	107	144	187	239	299	369	448	539	641
35	104	140	182	233	293	361	440	530	631
40	101	135	177	227	285	353	430	519	618
45	98	131	172	220	277	343	419	506	604
50	-	127	166	213	268	332	407	492	588
55	-	-	160	205	258	321	393	476	570
60	-	-	-	198	248	308	378	459	550
65	-	-	-	-	238	296	363	441	529
Coefficient of pe	erformance (C.C 1.69	2.08	2.52	3.02	3.58	4.21	4.91	5.68	6.53
35	1.52	1.86	2.25	2.69	3.19	3.74	4.36	5.05	5.80
40	1.36	1.66	2.20	2.38	2.82	3.30	3.84	4.44	5.00
45	1.22	1.48	1.77		2.62	2.90	3.37	3.89	4.47
		1.48		2.10 1.85	2.48		2.94		3.89
50	-		1.57			2.53		3.39	
55 60	-	-	1.39	1.63	1.90	2.21	2.55	2.94	3.37
60	-	-	-	1.44	1.66	1.92	2.21	2.54	2.91

#### Nominal performance at to = 5 °C, tc = 50 °C

Cooling capacity	17 135	W
Power input	5 834	W
Current consumption	8.72	Α
Mass flow	407	kg/h
C.O.P.	2.94	

to: Evaporating temperature at dew point

Pressure switch settings

Maximum HP switch setting	27.9	bar(g)
Minimum LP switch setting	0.7	bar(g)
LP pump down setting	0.9	bar(g)

2.19

2.50

1.92

# Sound power data

1.67

1.46

S	ound power level	80	dB(A)
W	/ith accoustic hood	74	dB(A)

Tolerance according EN12900

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tc: Condensing temperature at dew point

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



# Maneurop reciprocating compressor. MT064-4

# Performance data at 60 Hz, ARI rating conditions

**R22** 

Cond. temp. in	in Evaporating temperature in °C (to)								
°C (tc)	-25	-20	-15	-10	-5	0	5	10	15
Cooling capacit	v in W								
30	5 242	7 085	9 350	12 080	15 317	19 106	23 488	28 506	34 204
35	4 905	6 653	8 803	11 399	14 482	18 097	22 286	27 092	32 557
40	4 575	6 217	8 242	10 693	13 613	17 044	21 029	25 612	30 835
45	4 263	5 790	7 680	9 976	12 721	15 958	19 729	24 079	29 049
50	-	5 383	7 127	9 258	11 818	14 851	18 398	22 504	27 211
55	-	-	6 597	8 552	10 917	13 735	17 048	20 900	25 333
60	-	_	-	7 869	10 029	12 621	15 690	19 277	23 426
65	-	-	-	-	9 165	11 523	14 336	17 649	21 504
Power input in \	N	•				•			
30	2 914	3 214	3 502	3 778	4 041	4 291	4 527	4 750	4 958
35	3 030	3 362	3 681	3 986	4 277	4 555	4 817	5 065	5 298
40	3 142	3 512	3 867	4 208	4 534	4 845	5 140	5 419	5 681
45	3 240	3 653	4 051	4 433	4 799	5 149	5 482	5 798	6 097
50	-	3 773	4 219	4 649	5 062	5 457	5 834	6 193	6 534
55	-	_	4 363	4 846	5 310	5 757	6 184	6 592	6 981
60	-	-	-	5 011	5 534	6 037	6 521	6 984	7 426
65	-	-	-	-	5 722	6 288	6 833	7 357	7 860
Current consum	ention in A								
30	5.59	5.83	6.09	6.36	6.63	6.89	7.14	7.35	7.52
35	5.61	5.90	6.21	6.53	6.85	7.16	7.14	7.70	7.91
40	5.66	6.01	6.39	6.76	7.14	7.10	7.43	8.14	8.39
45	5.72	6.14	6.58	7.02	7.14	7.88	8.27	8.62	8.93
50	5.72	6.26	6.77	7.02	7.79	8.27	8.72	9.14	9.50
55		-	6.93	7.52	8.09	8.65	9.17	9.65	10.08
60	-	_	-	7.70	8.35	8.99	9.59	10.14	10.64
65	-	_	_	-	8.54	9.26	9.94	10.57	11.15
					0.01	0.20	0.01	10.07	11.10
Mass flow in kg									
30	107	143	186	237	297	367	446	536	637
35	104	139	181	232	291	359	438	527	627
40	100	135	176	226	284	351	428	516	615
45	98	131	171	219	275	341	417	503	601
50	-	127	165	211	266	330	404	489	584
55	-	-	160	204	257	319	391	473	567
60	-	-	-	197	247	307	376	456	547
65	-	-	-	-	237	294	361	438	526
· ·	erformance (C.C	, <i>'</i>	2.67	2 20	2.70	1.45	5.10	6.00	6.00
30	1.80	2.20	2.67	3.20	3.79	4.45	5.19	6.00	6.90
35	1.62	1.98	2.39	2.86	3.39	3.97	4.63	5.35	6.15
40	1.46	1.77	2.13	2.54	3.00	3.52	4.09	4.73	5.43
45	1.32	1.59	1.90	2.25	2.65	3.10	3.60	4.15	4.76
50	-	1.43	1.69	1.99	2.33	2.72	3.15	3.63	4.16
55	-	-	1.51	1.76	2.06	2.39	2.76	3.17	3.63

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

Monimum portormanoo at to	. 0, 10 04.4 0	
Cooling capacity	18 850	W
Power input	6 322	W
Current consumption	9.33	Α
Mass flow	427	kg/h
C.O.P.	2.98	

to: Evaporating temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	27.9	bar(g)
Minimum LP switch setting	0.7	bar(g)
LP pump down setting	0.9	bar(g)

2.41

2.10

2.76

2.40

3.15

2.74

# Sound power data

2.09

1.83

Sound power level	80	dB(A)	
With accoustic hood	74	dB(A)	

Tolerance according EN12900

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1.57

1.81

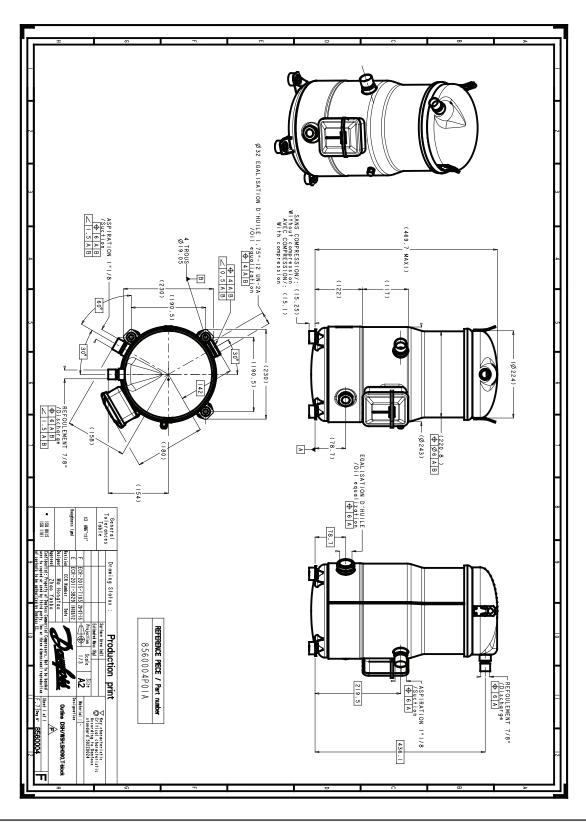
1.60



60

tc: Condensing temperature at dew point

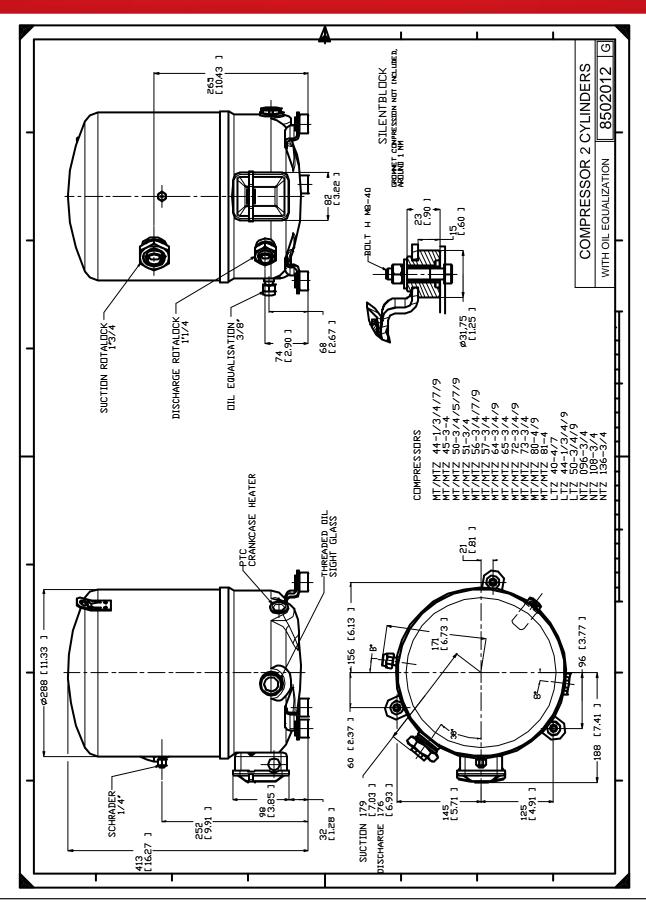




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