

ENGINEERING  
TOMORROW

*Danfoss*

Datasheets

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



FRCC.UD.180316.103432

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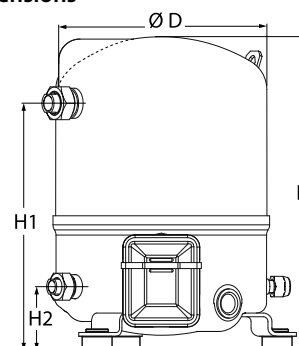
Datasheet, technical data

Maneurop reciprocating compressor, MTZ028-5

General Characteristics

Model number (on compressor nameplate)		<b>MTZ28JE5AVE</b>
Code number for Singlepack*		MTZ28-5VI
Code number for Industrial pack**		MTZ28-5VM
Drawing number		8501021e
Suction and discharge connections		Rotolock
Suction connection		1" Rotolock
Discharge connection		1" Rotolock
Suction connection with supplied sleeve		1/2" ODF
Discharge connection with supplied sleeve		3/8" ODF
Oil sight glass		Threaded
Oil equalisation connection		3/8" flare SAE
Oil drain connection		None
LP gauge port		Schrader
IPR valve		None
Cylinders		1
Swept volume		48.06 cm <sup>3</sup> /rev
Displacement @ Nominal speed		8.4 m <sup>3</sup> /h @ 2900 rpm
Net weight		23 kg
Oil charge		0.95 litre, POE - 175PZ
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		2.5 kg
Approved refrigerants		R404A,R134a,R407A/C/F,R448A,R449A,R452A,R513A

Dimensions



D=224 mm

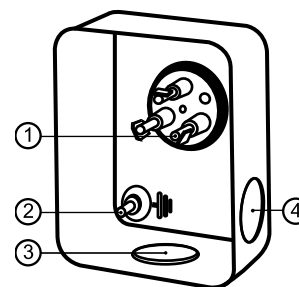
H=333 mm

H1=263 mm

H2=68 mm

H3= mm

Terminal box



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")

Electrical Characteristics

Nominal voltage		220-240V/1/50Hz
Voltage range		220-240 V
Winding resistance (main / start) at 25°C		1.07 Ω / 3.26 Ω
Run capacitors A + C		20 μF + 10 μF
Start capacitor B		100 μF
Start relay		RVA-6AMKL
Maximum Continuous Current (MCC)		20 A
Locked Rotor Amps (LRA)		51 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

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, -, -

\*Singlepack: Compressor in cardboard box

\*\*Industrial pack: 12 Unboxed compressors on pallet (order per multiples of 12)

**Rotolock accessories, suction side**

**Code no.**

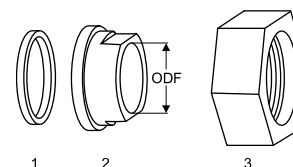
Solder sleeve, P06 (1" Rotolock, 1/2" ODF)	8153007
Rotolock valve, V06 (1" Rotolock, 1/2" ODF)	8168031
Gasket, 1"	8156130

**Gaskets, sleeves and nuts**

**Rotolock accessories, discharge side**

**Code no.**

Solder sleeve, P01 (1" Rotolock, 3/8" ODF)	8153010
Rotolock valve, V01 (1" Rotolock, 3/8" ODF)	8168027
Gasket, 1"	8156130



- 1: Gasket
- 2: Solder sleeve
- 3: Rotolock nut

**Rotolock accessories, sets**

**Code no.**

Valve set, V06 (1"~1/2"), V01 (1"~3/8")	7703004
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009

**Oil / lubricants**

**Code no.**

POE lubricant, 175PZ, 1 litre can	120Z0638
POE lubricant, 175PZ, 2.5 litre can	120Z0639

**Crankcase heaters**

**Code no.**

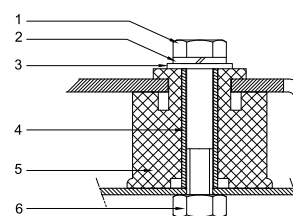
PTC heater 27W, CE mark, UL	120Z0459
Belt type crankcase heater, 54 W, 230 V, CE mark, UL	7773106

**Miscellaneous accessories**

**Code no.**

PSC starting kit, 20 µF, 10 µF	7701026
CSR starting kit, 20 µF, 10 µF, 98 µF	7701022
CSR starting kit, prewired box, 20 µF, 10 µF, 98 µF	7701028
Acoustic hood for 1 cylinder compressor	120Z0575
Oil equalisation nut	8153127

**Mounting kit**



- 1: Bolt (3x)
- 2: Lock washer (3x)
- 3: Flat washer (3x)
- 4: Sleeve (3x)
- 5: Grommet (3x)
- 6: Nut (3x)

**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



**Datasheet, performance data**

**Maneurop reciprocating compressor. MTZ028-5**

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

**R407C**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
	-15	-10	-5	0	5	10	15	

**Cooling capacity in W**

35	2 485	3 478	4 654	6 036	7 643	9 497	11 616	-	-
40	2 217	3 156	4 258	5 544	7 034	8 749	10 708	-	-
45	1 939	2 831	3 864	5 060	6 438	8 020	9 824	-	-
50	-	2 497	3 468	4 579	5 851	7 305	8 961	-	-
55	-	-	3 064	4 097	5 268	6 600	8 113	-	-
60	-	-	-	3 609	4 686	5 902	7 277	-	-
65	-	-	-	3 113	4 101	5 206	6 449	-	-

**Power input in W**

35	1 308	1 461	1 590	1 693	1 771	1 824	1 850	-	-
40	1 335	1 515	1 671	1 802	1 907	1 988	2 043	-	-
45	1 355	1 563	1 748	1 908	2 044	2 155	2 240	-	-
50	-	1 605	1 821	2 013	2 181	2 324	2 443	-	-
55	-	-	1 889	2 115	2 318	2 496	2 649	-	-
60	-	-	-	2 215	2 454	2 669	2 860	-	-
65	-	-	-	2 312	2 589	2 844	3 074	-	-

**Current consumption in A**

35	8.47	8.77	9.11	9.45	9.75	9.99	10.11	-	-
40	8.55	8.94	9.36	9.78	10.18	10.50	10.72	-	-
45	8.61	9.09	9.62	10.15	10.65	11.08	11.41	-	-
50	-	9.23	9.88	10.53	11.16	11.72	12.18	-	-
55	-	-	10.12	10.92	11.69	12.40	13.01	-	-
60	-	-	-	11.30	12.23	13.10	13.88	-	-
65	-	-	-	11.66	12.77	13.83	14.79	-	-

**Mass flow in kg/h**

35	54	74	98	125	156	191	230	-	-
40	51	71	94	120	150	184	222	-	-
45	47	67	90	116	145	177	214	-	-
50	-	63	85	111	139	171	206	-	-
55	-	-	80	105	133	164	198	-	-
60	-	-	-	99	126	156	189	-	-
65	-	-	-	93	119	149	181	-	-

**Coefficient of performance (C.O.P.)**

35	1.90	2.38	2.93	3.56	4.31	5.21	6.28	-	-
40	1.66	2.08	2.55	3.08	3.69	4.40	5.24	-	-
45	1.43	1.81	2.21	2.65	3.15	3.72	4.39	-	-
50	-	1.56	1.90	2.27	2.68	3.14	3.67	-	-
55	-	-	1.62	1.94	2.27	2.64	3.06	-	-
60	-	-	-	1.63	1.91	2.21	2.54	-	-
65	-	-	-	1.35	1.58	1.83	2.10	-	-

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

Cooling capacity	5 851	W
Power input	2 181	W
Current consumption	11.16	A
Mass flow	139	kg/h
C.O.P.	2.68	



**Pressure switch settings**

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	1.4	bar(g)
LP pump down setting	1.7	bar(g)

**Sound power data**

Sound power level	73	dB(A)
With acoustic hood	66	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Tolerance according EN12900

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Datasheet, performance data

Maneurop reciprocating compressor. MTZ028-5

Performance data at 50 Hz, ARI rating conditions

R407C

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
	-15	-10	-5	0	5	10	15	

Cooling capacity in W

35	2 675	3 738	4 998	6 474	8 189	10 164	12 420	-	-
40	2 399	3 411	4 596	5 977	7 574	9 409	11 503	-	-
45	2 111	3 078	4 196	5 487	6 972	8 673	10 612	-	-
50	-	2 735	3 792	4 999	6 379	7 952	9 741	-	-
55	-	-	3 380	4 510	5 790	7 242	8 887	-	-
60	-	-	-	4 014	5 202	6 539	8 047	-	-
65	-	-	-	3 508	4 610	5 839	7 217	-	-

Power input in W

35	1 308	1 461	1 590	1 693	1 771	1 824	1 850	-	-
40	1 335	1 515	1 671	1 802	1 907	1 988	2 043	-	-
45	1 355	1 563	1 748	1 908	2 044	2 155	2 240	-	-
50	-	1 605	1 821	2 013	2 181	2 324	2 443	-	-
55	-	-	1 889	2 115	2 318	2 496	2 649	-	-
60	-	-	-	2 215	2 454	2 669	2 860	-	-
65	-	-	-	2 312	2 589	2 844	3 074	-	-

Current consumption in A

35	8.47	8.77	9.11	9.45	9.75	9.99	10.11	-	-
40	8.55	8.94	9.36	9.78	10.18	10.50	10.72	-	-
45	8.61	9.09	9.62	10.15	10.65	11.08	11.41	-	-
50	-	9.23	9.88	10.53	11.16	11.72	12.18	-	-
55	-	-	10.12	10.92	11.69	12.40	13.01	-	-
60	-	-	-	11.30	12.23	13.10	13.88	-	-
65	-	-	-	11.66	12.77	13.83	14.79	-	-

Mass flow in kg/h

35	54	74	97	124	155	190	229	-	-
40	50	70	93	120	149	183	221	-	-
45	46	67	89	115	144	176	213	-	-
50	-	62	85	110	138	170	205	-	-
55	-	-	80	105	132	163	197	-	-
60	-	-	-	99	126	155	188	-	-
65	-	-	-	92	119	148	179	-	-

Coefficient of performance (C.O.P.)

35	2.05	2.56	3.14	3.82	4.62	5.57	6.71	-	-
40	1.80	2.25	2.75	3.32	3.97	4.73	5.63	-	-
45	1.56	1.97	2.40	2.87	3.41	4.02	4.74	-	-
50	-	1.70	2.08	2.48	2.92	3.42	3.99	-	-
55	-	-	1.79	2.13	2.50	2.90	3.35	-	-
60	-	-	-	1.81	2.12	2.45	2.81	-	-
65	-	-	-	1.52	1.78	2.05	2.35	-	-

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

Cooling capacity	6 483	W
Power input	2 381	W
Current consumption	11.94	A
Mass flow	146	kg/h
C.O.P.	2.72	

Pressure switch settings

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	1.4	bar(g)
LP pump down setting	1.7	bar(g)

Sound power data

Sound power level	73	dB(A)
With acoustic hood	66	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Tolerance according EN12900

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Datasheet, performance data

Maneurop reciprocating compressor. MTZ028-5

Performance data at 50 Hz, EN 12900 rating conditions

R134a

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
	-25	-20	-10	-5	0	5	10	15

Cooling capacity in W

35	847	1 202	2 211	2 915	3 785	4 845	6 121	7 637	9 419
40	727	1 069	2 021	2 680	3 496	4 491	5 692	7 122	8 808
45	601	929	1 823	2 438	3 198	4 128	5 252	6 596	8 185
50	473	787	1 621	2 190	2 894	3 757	4 805	6 062	7 553
55	-	-	1 416	1 939	2 586	3 383	4 353	5 522	6 915
60	-	-	-	1 688	2 278	3 007	3 899	4 979	6 273
65	-	-	-	-	1 971	2 631	3 445	4 436	5 630
75	-	-	-	-	-	-	2 547	3 357	4 350

Power input in W

35	690	786	980	1 072	1 157	1 233	1 296	1 345	1 376
40	714	814	1 022	1 124	1 221	1 310	1 390	1 456	1 507
45	731	837	1 061	1 174	1 284	1 389	1 485	1 570	1 642
50	740	853	1 096	1 221	1 346	1 467	1 581	1 687	1 780
55	-	-	1 125	1 264	1 404	1 543	1 677	1 804	1 921
60	-	-	-	1 301	1 458	1 615	1 770	1 920	2 062
65	-	-	-	-	1 506	1 683	1 860	2 034	2 202
75	-	-	-	-	-	-	2 026	2 251	2 475

Current consumption in A

35	6.75	6.90	7.22	7.38	7.54	7.69	7.83	7.95	8.07
40	6.78	6.95	7.32	7.51	7.71	7.90	8.09	8.27	8.45
45	6.79	6.98	7.40	7.63	7.86	8.11	8.35	8.59	8.83
50	6.77	6.99	7.47	7.73	8.01	8.31	8.61	8.92	9.23
55	-	-	7.51	7.82	8.15	8.50	8.86	9.24	9.63
60	-	-	-	7.90	8.28	8.69	9.12	9.57	10.03
65	-	-	-	-	8.40	8.87	9.37	9.89	10.44
75	-	-	-	-	-	-	9.84	10.53	11.25

Mass flow in kg/h

35	21	30	53	68	86	108	134	164	200
40	19	28	51	65	83	105	130	160	196
45	17	26	48	63	80	102	127	156	190
50	14	23	45	60	77	98	122	151	185
55	-	-	42	56	73	93	117	146	178
60	-	-	-	52	69	89	112	139	172
65	-	-	-	-	64	83	106	133	164
75	-	-	-	-	-	-	92	118	147

Coefficient of performance (C.O.P.)

35	1.23	1.53	2.26	2.72	3.27	3.93	4.72	5.68	6.85
40	1.02	1.31	1.98	2.39	2.86	3.43	4.10	4.89	5.85
45	0.82	1.11	1.72	2.08	2.49	2.97	3.54	4.20	4.99
50	0.64	0.92	1.48	1.79	2.15	2.56	3.04	3.59	4.24
55	-	-	1.26	1.53	1.84	2.19	2.60	3.06	3.60
60	-	-	-	1.30	1.56	1.86	2.20	2.59	3.04
65	-	-	-	-	1.31	1.56	1.85	2.18	2.56
75	-	-	-	-	-	-	1.26	1.49	1.76

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

Cooling capacity	3 757	W
Power input	1 467	W
Current consumption	8.31	A
Mass flow	98	kg/h
C.O.P.	2.56	

Pressure switch settings

Maximum HP switch setting	20.2	bar(g)
Minimum LP switch setting	0.1	bar(g)
LP pump down setting	0.4	bar(g)

Sound power data

Sound power level	0	dB(A)
With acoustic hood	0	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Tolerance according EN12900

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Datasheet, performance data

Maneurop reciprocating compressor. MTZ028-5

Performance data at 50 Hz, ARI rating conditions

R134a

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-25	-20	-10	-5	0	5	10	15	20

Cooling capacity in W

35	921	1 305	2 391	3 147	4 079	5 214	6 578	8 196	10 095
40	794	1 166	2 197	2 908	3 786	4 856	6 145	7 678	9 481
45	661	1 021	1 993	2 660	3 483	4 487	5 700	7 146	8 853
50	-	871	1 784	2 405	3 172	4 110	5 245	6 605	8 215
55	-	-	1 572	2 147	2 856	3 727	4 785	6 057	7 569
60	-	-	-	1 886	2 538	3 340	4 320	5 504	6 919
65	-	-	-	-	-	2 954	3 855	4 950	6 266
75	-	-	-	-	-	-	2 931	3 848	4 967

Power input in W

35	690	786	980	1 072	1 157	1 233	1 296	1 345	1 376
40	714	814	1 022	1 124	1 221	1 310	1 390	1 456	1 507
45	731	837	1 061	1 174	1 284	1 389	1 485	1 570	1 642
50	-	853	1 096	1 221	1 346	1 467	1 581	1 687	1 780
55	-	-	1 125	1 264	1 404	1 543	1 677	1 804	1 921
60	-	-	-	1 301	1 458	1 615	1 770	1 920	2 062
65	-	-	-	-	-	1 683	1 860	2 034	2 202
75	-	-	-	-	-	-	2 026	2 251	2 475

Current consumption in A

35	6.75	6.90	7.22	7.38	7.54	7.69	7.83	7.95	8.07
40	6.78	6.95	7.32	7.51	7.71	7.90	8.09	8.27	8.45
45	6.79	6.98	7.40	7.63	7.86	8.11	8.35	8.59	8.83
50	-	6.99	7.47	7.73	8.01	8.31	8.61	8.92	9.23
55	-	-	7.51	7.82	8.15	8.50	8.86	9.24	9.63
60	-	-	-	7.90	8.28	8.69	9.12	9.57	10.03
65	-	-	-	-	-	8.87	9.37	9.89	10.44
75	-	-	-	-	-	-	9.84	10.53	11.25

Mass flow in kg/h

35	21	30	52	67	86	107	133	164	199
40	19	28	50	65	83	104	130	160	194
45	17	26	48	62	80	101	126	155	189
50	-	23	45	59	77	97	122	150	184
55	-	-	42	56	73	93	117	145	177
60	-	-	-	52	68	88	111	139	171
65	-	-	-	-	-	83	105	132	163
75	-	-	-	-	-	-	92	117	147

Coefficient of performance (C.O.P.)

35	1.33	1.66	2.44	2.94	3.53	4.23	5.08	6.10	7.34
40	1.11	1.43	2.15	2.59	3.10	3.71	4.42	5.27	6.29
45	0.90	1.22	1.88	2.27	2.71	3.23	3.84	4.55	5.39
50	-	1.02	1.63	1.97	2.36	2.80	3.32	3.92	4.61
55	-	-	1.40	1.70	2.03	2.42	2.85	3.36	3.94
60	-	-	-	1.45	1.74	2.07	2.44	2.87	3.36
65	-	-	-	-	-	1.75	2.07	2.43	2.85
75	-	-	-	-	-	-	1.45	1.71	2.01

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

Cooling capacity	4 218	W
Power input	1 592	W
Current consumption	8.63	A
Mass flow	103	kg/h
C.O.P.	2.65	

Pressure switch settings

Maximum HP switch setting	20.2	bar(g)
Minimum LP switch setting	0.1	bar(g)
LP pump down setting	0.4	bar(g)

Sound power data

Sound power level	0	dB(A)
With acoustic hood	0	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Tolerance according EN12900

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Datasheet, performance data

Maneurop reciprocating compressor. MTZ028-5

Performance data at 50 Hz, EN 12900 rating conditions

R404A

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
	-30	-25	-20	-15	-10	-5	0	5

Cooling capacity in W

30	1 417	2 050	2 825	3 757	4 866	6 168	7 683	9 428	11 421
35	1 182	1 769	2 485	3 348	4 375	5 585	6 995	8 624	10 488
40	963	1 503	2 159	2 951	3 896	5 011	6 315	7 826	9 562
45	759	1 250	1 846	2 566	3 427	4 447	5 644	7 037	8 642
50	570	1 012	1 546	2 193	2 969	3 892	4 982	6 254	7 728
55	-	787	1 260	1 832	2 522	3 348	4 328	5 480	6 821
60	-	578	986	1 483	2 086	2 813	3 682	4 712	5 920

Power input in W

30	1 106	1 291	1 462	1 614	1 747	1 856	1 940	1 996	2 020
35	1 094	1 298	1 488	1 663	1 818	1 952	2 062	2 144	2 197
40	1 076	1 300	1 511	1 708	1 888	2 047	2 184	2 295	2 378
45	1 050	1 295	1 529	1 750	1 955	2 141	2 306	2 446	2 560
50	1 016	1 283	1 541	1 787	2 019	2 232	2 426	2 598	2 743
55	-	1 263	1 546	1 818	2 077	2 320	2 545	2 748	2 927
60	-	1 234	1 543	1 842	2 130	2 403	2 659	2 895	3 109

Current consumption in A

30	8.42	8.88	9.37	9.86	10.33	10.75	11.09	11.33	11.42
35	8.44	8.94	9.47	10.01	10.54	11.01	11.41	11.70	11.86
40	8.43	8.99	9.59	10.20	10.80	11.35	11.83	12.20	12.45
45	8.35	8.99	9.68	10.39	11.08	11.73	12.32	12.80	13.16
50	8.16	8.91	9.72	10.54	11.35	12.13	12.84	13.45	13.95
55	-	8.72	9.66	10.62	11.58	12.51	13.37	14.14	14.78
60	-	8.38	9.48	10.61	11.73	12.83	13.86	14.81	15.64

Mass flow in kg/h

30	45	63	85	110	139	172	210	252	300
35	40	58	80	105	133	166	203	245	292
40	35	54	75	99	127	160	196	238	285
45	31	49	70	94	121	153	189	230	277
50	26	44	64	88	115	147	182	223	268
55	-	38	59	82	109	140	175	215	260
60	-	33	53	76	103	134	168	208	252

Coefficient of performance (C.O.P.)

30	1.28	1.59	1.93	2.33	2.79	3.32	3.96	4.72	5.65
35	1.08	1.36	1.67	2.01	2.41	2.86	3.39	4.02	4.77
40	0.90	1.16	1.43	1.73	2.06	2.45	2.89	3.41	4.02
45	0.72	0.97	1.21	1.47	1.75	2.08	2.45	2.88	3.38
50	0.56	0.79	1.00	1.23	1.47	1.74	2.05	2.41	2.82
55	-	0.62	0.81	1.01	1.21	1.44	1.70	1.99	2.33
60	-	0.47	0.64	0.80	0.98	1.17	1.38	1.63	1.90

Nominal performance at to = -10 °C, tc = 45 °C

Cooling capacity	3 427	W
Power input	1 955	W
Current consumption	11.08	A
Mass flow	121	kg/h
C.O.P.	1.75	

Pressure switch settings

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	1	bar(g)
LP pump down setting	1.3	bar(g)

Sound power data

Sound power level	71	dB(A)
With acoustic hood	64	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Tolerance according EN12900

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Datasheet, performance data

Maneurop reciprocating compressor. MTZ028-5

Performance data at 50 Hz, ARI rating conditions

R404A

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
	-30	-25	-20	-15	-10	-5	0	5

Cooling capacity in W

30	1 577	2 276	3 128	4 150	5 362	6 783	8 431	10 326	12 485
35	1 330	1 984	2 779	3 733	4 866	6 195	7 741	9 522	11 557
40	1 098	1 706	2 444	3 328	4 380	5 618	7 061	8 727	10 637
45	880	1 442	2 121	2 936	3 906	5 051	6 390	7 943	9 727
50	676	1 191	1 811	2 556	3 445	4 497	5 733	7 171	8 830
55	-	954	1 516	2 190	2 997	3 958	5 091	6 416	7 952
60	-	730	1 235	1 840	2 569	3 439	4 472	5 688	7 107

Power input in W

30	1 106	1 291	1 462	1 614	1 747	1 856	1 940	1 996	2 020
35	1 094	1 298	1 488	1 663	1 818	1 952	2 062	2 144	2 197
40	1 076	1 300	1 511	1 708	1 888	2 047	2 184	2 295	2 378
45	1 050	1 295	1 529	1 750	1 955	2 141	2 306	2 446	2 560
50	1 016	1 283	1 541	1 787	2 019	2 232	2 426	2 598	2 743
55	-	1 263	1 546	1 818	2 077	2 320	2 545	2 748	2 927
60	-	1 234	1 543	1 842	2 130	2 403	2 659	2 895	3 109

Current consumption in A

30	8.42	8.88	9.37	9.86	10.33	10.75	11.09	11.33	11.42
35	8.44	8.94	9.47	10.01	10.54	11.01	11.41	11.70	11.86
40	8.43	8.99	9.59	10.20	10.80	11.35	11.83	12.20	12.45
45	8.35	8.99	9.68	10.39	11.08	11.73	12.32	12.80	13.16
50	8.16	8.91	9.72	10.54	11.35	12.13	12.84	13.45	13.95
55	-	8.72	9.66	10.62	11.58	12.51	13.37	14.14	14.78
60	-	8.38	9.48	10.61	11.73	12.83	13.86	14.81	15.64

Mass flow in kg/h

30	44	63	84	109	138	171	208	251	298
35	40	58	79	104	132	165	202	243	290
40	35	53	74	99	127	159	195	236	283
45	30	48	69	93	121	152	188	229	275
50	26	43	64	88	115	146	181	221	267
55	-	38	58	82	109	139	174	214	259
60	-	32	53	76	102	133	167	206	250

Coefficient of performance (C.O.P.)

30	1.43	1.76	2.14	2.57	3.07	3.65	4.35	5.17	6.18
35	1.22	1.53	1.87	2.25	2.68	3.17	3.75	4.44	5.26
40	1.02	1.31	1.62	1.95	2.32	2.74	3.23	3.80	4.47
45	0.84	1.11	1.39	1.68	2.00	2.36	2.77	3.25	3.80
50	0.67	0.93	1.18	1.43	1.71	2.01	2.36	2.76	3.22
55	-	0.76	0.98	1.20	1.44	1.71	2.00	2.34	2.72
60	-	0.59	0.80	1.00	1.21	1.43	1.68	1.96	2.29

Nominal performance at to = -10 °C, tc = 45 °C

Cooling capacity	3 906	W
Power input	1 955	W
Current consumption	11.08	A
Mass flow	121	kg/h
C.O.P.	2.00	

Pressure switch settings

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	1	bar(g)
LP pump down setting	1.3	bar(g)

Sound power data

Sound power level	71	dB(A)
With acoustic hood	64	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Tolerance according EN12900

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Datasheet, performance data

Maneurop reciprocating compressor. MTZ028-5

Performance data at 50 Hz, EN 12900 rating conditions

R407A

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-30	-25	-20	-15	-10	-5	0	5	10

Cooling capacity in W

30	1 014	1 586	2 295	3 158	4 196	5 425	6 866	8 536	10 455
35	845	1 386	2 054	2 866	3 842	4 999	6 357	7 935	9 751
40	677	1 187	1 813	2 572	3 485	4 570	5 845	7 330	9 042
45	513	990	1 573	2 280	3 129	4 140	5 332	6 722	8 329
50	-	798	1 337	1 990	2 775	3 712	4 818	6 113	7 615
55	-	-	1 107	1 705	2 425	3 287	4 307	5 507	6 903
60	-	-	-	1 427	2 081	2 866	3 801	4 903	6 192

Power input in W

30	865	1 059	1 238	1 400	1 545	1 668	1 770	1 847	1 898
35	845	1 059	1 260	1 445	1 613	1 761	1 887	1 990	2 068
40	813	1 050	1 274	1 483	1 675	1 849	2 002	2 132	2 238
45	770	1 031	1 280	1 515	1 734	1 934	2 115	2 275	2 410
50	-	1 003	1 279	1 541	1 787	2 017	2 228	2 417	2 584
55	-	-	1 270	1 560	1 837	2 097	2 339	2 560	2 760
60	-	-	-	1 575	1 882	2 175	2 449	2 704	2 938

Current consumption in A

30	7.19	7.62	8.09	8.56	9.03	9.44	9.78	10.02	10.13
35	7.20	7.64	8.13	8.64	9.14	9.61	10.01	10.32	10.51
40	7.18	7.65	8.18	8.75	9.31	9.85	10.34	10.74	11.03
45	7.10	7.63	8.22	8.86	9.51	10.14	10.73	11.25	11.66
50	-	7.53	8.21	8.94	9.69	10.44	11.15	11.80	12.36
55	-	-	8.11	8.95	9.83	10.71	11.56	12.37	13.09
60	-	-	-	8.86	9.88	10.91	11.94	12.91	13.82

Mass flow in kg/h

30	24	37	53	71	93	118	147	180	217
35	21	34	50	68	89	114	143	175	212
40	18	31	46	64	85	110	138	170	207
45	14	27	43	60	81	105	133	165	201
50	-	24	39	56	77	101	128	160	195
55	-	-	34	52	72	96	123	154	189
60	-	-	-	47	67	90	117	147	182

Coefficient of performance (C.O.P.)

30	1.17	1.50	1.85	2.26	2.72	3.25	3.88	4.62	5.51
35	1.00	1.31	1.63	1.98	2.38	2.84	3.37	3.99	4.72
40	0.83	1.13	1.42	1.73	2.08	2.47	2.92	3.44	4.04
45	0.67	0.96	1.23	1.50	1.81	2.14	2.52	2.96	3.46
50	-	0.80	1.05	1.29	1.55	1.84	2.16	2.53	2.95
55	-	-	0.87	1.09	1.32	1.57	1.84	2.15	2.50
60	-	-	-	0.91	1.11	1.32	1.55	1.81	2.11

Nominal performance at to = -10 °C, tc = 45 °C

Cooling capacity	3 129	W
Power input	1 734	W
Current consumption	9.51	A
Mass flow	81	kg/h
C.O.P.	1.81	

Pressure switch settings

Maximum HP switch setting	25.8	bar(g)
Minimum LP switch setting	0.9	bar(g)
LP pump down setting	1.2	bar(g)

Sound power data

Sound power level	70	dB(A)
With acoustic hood	63	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Tolerance according EN12900

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**Datasheet, performance data**

**Maneurop reciprocating compressor. MTZ028-5**

**Performance data at 50 Hz, ARI rating conditions**

**R407A**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
	-30	-25	-20	-15	-10	-5	0	5

**Cooling capacity in W**

30	1 096	1 713	2 475	3 401	4 513	5 828	7 367	9 149	11 193
35	919	1 506	2 227	3 103	4 154	5 398	6 855	8 546	10 489
40	742	1 298	1 978	2 803	3 792	4 964	6 340	7 938	9 779
45	567	1 091	1 730	2 503	3 429	4 529	5 822	7 328	9 067
50	-	888	1 484	2 204	3 067	4 094	5 304	6 718	8 354
55	-	-	1 243	1 910	2 710	3 663	4 790	6 111	7 645
60	-	-	-	1 621	2 358	3 238	4 282	5 510	6 942

**Power input in W**

30	865	1 059	1 238	1 400	1 545	1 668	1 770	1 847	1 898
35	845	1 059	1 260	1 445	1 613	1 761	1 887	1 990	2 068
40	813	1 050	1 274	1 483	1 675	1 849	2 002	2 132	2 238
45	770	1 031	1 280	1 515	1 734	1 934	2 115	2 275	2 410
50	-	1 003	1 279	1 541	1 787	2 017	2 228	2 417	2 584
55	-	-	1 270	1 560	1 837	2 097	2 339	2 560	2 760
60	-	-	-	1 575	1 882	2 175	2 449	2 704	2 938

**Current consumption in A**

30	7.19	7.62	8.09	8.56	9.03	9.44	9.78	10.02	10.13
35	7.20	7.64	8.13	8.64	9.14	9.61	10.01	10.32	10.51
40	7.18	7.65	8.18	8.75	9.31	9.85	10.34	10.74	11.03
45	7.10	7.63	8.22	8.86	9.51	10.14	10.73	11.25	11.66
50	-	7.53	8.21	8.94	9.69	10.44	11.15	11.80	12.36
55	-	-	8.11	8.95	9.83	10.71	11.56	12.37	13.09
60	-	-	-	8.86	9.88	10.91	11.94	12.91	13.82

**Mass flow in kg/h**

30	24	37	52	71	92	117	146	179	216
35	21	34	49	67	89	113	142	174	211
40	18	31	46	64	85	109	137	169	206
45	14	27	42	60	81	105	133	164	200
50	-	23	38	56	76	100	127	159	194
55	-	-	34	52	72	95	122	153	188
60	-	-	-	47	67	90	116	146	181

**Coefficient of performance (C.O.P.)**

30	1.27	1.62	2.00	2.43	2.92	3.49	4.16	4.95	5.90
35	1.09	1.42	1.77	2.15	2.58	3.07	3.63	4.29	5.07
40	0.91	1.24	1.55	1.89	2.26	2.68	3.17	3.72	4.37
45	0.74	1.06	1.35	1.65	1.98	2.34	2.75	3.22	3.76
50	-	0.88	1.16	1.43	1.72	2.03	2.38	2.78	3.23
55	-	-	0.98	1.22	1.48	1.75	2.05	2.39	2.77
60	-	-	-	1.03	1.25	1.49	1.75	2.04	2.36

**Nominal performance at to = -10 °C, tc = 45 °C**

Cooling capacity	3 429	W
Power input	1 734	W
Current consumption	9.51	A
Mass flow	81	kg/h
C.O.P.	1.98	

**Pressure switch settings**

Maximum HP switch setting	25.8	bar(g)
Minimum LP switch setting	0.9	bar(g)
LP pump down setting	1.2	bar(g)

**Sound power data**

Sound power level	70	dB(A)
With acoustic hood	63	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Tolerance according EN12900

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Datasheet, performance data

Maneurop reciprocating compressor. MTZ028-5

Performance data at 50 Hz, EN 12900 rating conditions

R407F

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-30	-25	-20	-15	-10	-5	0	5	10

Cooling capacity in W

30	-	1 692	2 337	3 154	4 172	5 421	6 930	8 730	10 850
35	-	1 542	2 144	2 899	3 838	4 991	6 386	8 055	10 026
40	-	1 393	1 954	2 653	3 517	4 577	5 863	7 405	9 231
45	-	1 240	1 766	2 411	3 205	4 177	5 358	6 776	8 463
50	-	-	1 575	2 171	2 898	3 787	4 866	6 166	7 716
55	-	-	-	1 928	2 593	3 402	4 384	5 569	6 987
60	-	-	-	-	-	-	-	-	-

Power input in W

30	-	1 133	1 262	1 379	1 481	1 566	1 632	1 676	1 697
35	-	1 168	1 317	1 454	1 578	1 687	1 778	1 849	1 898
40	-	1 194	1 363	1 522	1 670	1 804	1 922	2 021	2 100
45	-	1 210	1 402	1 585	1 758	1 918	2 064	2 193	2 304
50	-	-	1 434	1 642	1 841	2 030	2 206	2 366	2 509
55	-	-	-	1 694	1 922	2 140	2 347	2 540	2 717
60	-	-	-	-	-	-	-	-	-

Current consumption in A

30	-	8.18	8.46	8.75	9.03	9.28	9.46	9.55	9.53
35	-	8.23	8.59	8.98	9.37	9.74	10.05	10.29	10.42
40	-	8.26	8.70	9.18	9.68	10.16	10.60	10.98	11.27
45	-	8.28	8.80	9.38	9.97	10.57	11.14	11.66	12.11
50	-	-	8.92	9.58	10.28	10.99	11.69	12.35	12.94
55	-	-	-	9.83	10.62	11.45	12.27	13.06	13.80
60	-	-	-	-	-	-	-	-	-

Mass flow in kg/h

30	-	35	48	63	82	106	133	166	204
35	-	33	46	61	79	102	128	160	197
40	-	32	44	58	76	98	124	154	190
45	-	30	42	56	73	94	119	148	183
50	-	-	39	53	70	90	114	143	176
55	-	-	-	51	67	86	110	137	169
60	-	-	-	-	-	-	-	-	-

Coefficient of performance (C.O.P.)

30	-	1.49	1.85	2.29	2.82	3.46	4.25	5.21	6.40
35	-	1.32	1.63	1.99	2.43	2.96	3.59	4.36	5.28
40	-	1.17	1.43	1.74	2.11	2.54	3.05	3.66	4.40
45	-	1.02	1.26	1.52	1.82	2.18	2.60	3.09	3.67
50	-	-	1.10	1.32	1.57	1.87	2.21	2.61	3.08
55	-	-	-	1.14	1.35	1.59	1.87	2.19	2.57
60	-	-	-	-	-	-	-	-	-

Nominal performance at to = -10 °C, tc = 45 °C

Cooling capacity	3 205	W
Power input	1 758	W
Current consumption	9.97	A
Mass flow	73	kg/h
C.O.P.	1.82	

Pressure switch settings

Maximum HP switch setting	24	bar(g)
Minimum LP switch setting	1	bar(g)
LP pump down setting	1.26	bar(g)

Sound power data

Sound power level	70	dB(A)
With acoustic hood	63	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Tolerance according EN12900

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Datasheet, performance data

Maneurop reciprocating compressor. MTZ028-5

Performance data at 50 Hz, ARI rating conditions

R407F

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-30	-25	-20	-15	-10	-5	0	5	10

Cooling capacity in W

30	-	1 813	2 503	3 374	4 458	5 787	7 392	9 304	11 553
35	-	1 661	2 306	3 115	4 119	5 350	6 840	8 619	10 719
40	-	1 508	2 113	2 864	3 793	4 931	6 310	7 961	9 915
45	-	1 351	1 921	2 619	3 477	4 526	5 799	7 326	9 138
50	-	-	1 726	2 376	3 167	4 132	5 303	6 710	8 387
55	-	-	-	2 130	2 860	3 746	4 819	6 113	7 658
60	-	-	-	-	-	-	-	-	-

Power input in W

30	-	1 133	1 262	1 379	1 481	1 566	1 632	1 676	1 697
35	-	1 168	1 317	1 454	1 578	1 687	1 778	1 849	1 898
40	-	1 194	1 363	1 522	1 670	1 804	1 922	2 021	2 100
45	-	1 210	1 402	1 585	1 758	1 918	2 064	2 193	2 304
50	-	-	1 434	1 642	1 841	2 030	2 206	2 366	2 509
55	-	-	-	1 694	1 922	2 140	2 347	2 540	2 717
60	-	-	-	-	-	-	-	-	-

Current consumption in A

30	-	8.18	8.46	8.75	9.03	9.28	9.46	9.55	9.53
35	-	8.23	8.59	8.98	9.37	9.74	10.05	10.29	10.42
40	-	8.26	8.70	9.18	9.68	10.16	10.60	10.98	11.27
45	-	8.28	8.80	9.38	9.97	10.57	11.14	11.66	12.11
50	-	-	8.92	9.58	10.28	10.99	11.69	12.35	12.94
55	-	-	-	9.83	10.62	11.45	12.27	13.06	13.80
60	-	-	-	-	-	-	-	-	-

Mass flow in kg/h

30	-	35	47	63	82	105	132	165	203
35	-	33	45	61	79	101	128	159	196
40	-	31	43	58	76	97	123	153	189
45	-	30	41	56	73	94	118	147	182
50	-	-	39	53	70	90	114	142	175
55	-	-	-	50	67	86	109	136	168
60	-	-	-	-	-	-	-	-	-

Coefficient of performance (C.O.P.)

30	-	1.60	1.98	2.45	3.01	3.70	4.53	5.55	6.81
35	-	1.42	1.75	2.14	2.61	3.17	3.85	4.66	5.65
40	-	1.26	1.55	1.88	2.27	2.73	3.28	3.94	4.72
45	-	1.12	1.37	1.65	1.98	2.36	2.81	3.34	3.97
50	-	-	1.20	1.45	1.72	2.04	2.40	2.84	3.34
55	-	-	-	1.26	1.49	1.75	2.05	2.41	2.82
60	-	-	-	-	-	-	-	-	-

Nominal performance at to = -10 °C, tc = 45 °C

Cooling capacity	3 477	W
Power input	1 758	W
Current consumption	9.97	A
Mass flow	73	kg/h
C.O.P.	1.98	

Pressure switch settings

Maximum HP switch setting	24	bar(g)
Minimum LP switch setting	1	bar(g)
LP pump down setting	1.26	bar(g)

Sound power data

Sound power level	70	dB(A)
With acoustic hood	63	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Tolerance according EN12900

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Datasheet, performance data

Maneurop reciprocating compressor. MTZ028-5

Performance data at 50 Hz, EN 12900 rating conditions

R134a

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
	-25	-20	-10	-5	0	5	10	15

Cooling capacity in W

35	847	1 202	2 211	2 915	3 785	4 845	6 121	7 637	9 419
40	727	1 069	2 021	2 680	3 496	4 491	5 692	7 122	8 808
45	601	929	1 823	2 438	3 198	4 128	5 252	6 596	8 185
50	473	787	1 621	2 190	2 894	3 757	4 805	6 062	7 553
55	-	-	1 416	1 939	2 586	3 383	4 353	5 522	6 915
60	-	-	-	1 688	2 278	3 007	3 899	4 979	6 273
65	-	-	-	-	1 971	2 631	3 445	4 436	5 630
75	-	-	-	-	-	-	2 547	3 357	4 350

Power input in W

35	690	786	980	1 072	1 157	1 233	1 296	1 345	1 376
40	714	814	1 022	1 124	1 221	1 310	1 390	1 456	1 507
45	731	837	1 061	1 174	1 284	1 389	1 485	1 570	1 642
50	740	853	1 096	1 221	1 346	1 467	1 581	1 687	1 780
55	-	-	1 125	1 264	1 404	1 543	1 677	1 804	1 921
60	-	-	-	1 301	1 458	1 615	1 770	1 920	2 062
65	-	-	-	-	1 506	1 683	1 860	2 034	2 202
75	-	-	-	-	-	-	2 026	2 251	2 475

Current consumption in A

35	6.75	6.90	7.22	7.38	7.54	7.69	7.83	7.95	8.07
40	6.78	6.95	7.32	7.51	7.71	7.90	8.09	8.27	8.45
45	6.79	6.98	7.40	7.63	7.86	8.11	8.35	8.59	8.83
50	6.77	6.99	7.47	7.73	8.01	8.31	8.61	8.92	9.23
55	-	-	7.51	7.82	8.15	8.50	8.86	9.24	9.63
60	-	-	-	7.90	8.28	8.69	9.12	9.57	10.03
65	-	-	-	-	8.40	8.87	9.37	9.89	10.44
75	-	-	-	-	-	-	9.84	10.53	11.25

Mass flow in kg/h

35	21	30	53	68	86	108	134	164	200
40	19	28	51	65	83	105	130	160	196
45	17	26	48	63	80	102	127	156	190
50	14	23	45	60	77	98	122	151	185
55	-	-	42	56	73	93	117	146	178
60	-	-	-	52	69	89	112	139	172
65	-	-	-	-	64	83	106	133	164
75	-	-	-	-	-	-	92	118	147

Coefficient of performance (C.O.P.)

35	1.23	1.53	2.26	2.72	3.27	3.93	4.72	5.68	6.85
40	1.02	1.31	1.98	2.39	2.86	3.43	4.10	4.89	5.85
45	0.82	1.11	1.72	2.08	2.49	2.97	3.54	4.20	4.99
50	0.64	0.92	1.48	1.79	2.15	2.56	3.04	3.59	4.24
55	-	-	1.26	1.53	1.84	2.19	2.60	3.06	3.60
60	-	-	-	1.30	1.56	1.86	2.20	2.59	3.04
65	-	-	-	-	1.31	1.56	1.85	2.18	2.56
75	-	-	-	-	-	-	1.26	1.49	1.76

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

Cooling capacity	3 757	W
Power input	1 467	W
Current consumption	8.31	A
Mass flow	98	kg/h
C.O.P.	2.56	

Pressure switch settings

Maximum HP switch setting	20.2	bar(g)
Minimum LP switch setting	0.1	bar(g)
LP pump down setting	0.4	bar(g)

Sound power data

Sound power level	0	dB(A)
With acoustic hood	0	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Tolerance according EN12900

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Datasheet, performance data

Maneurop reciprocating compressor. MTZ028-5

Performance data at 50 Hz, ARI rating conditions

R134a

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-25	-20	-10	-5	0	5	10	15	20

Cooling capacity in W

35	921	1 305	2 391	3 147	4 079	5 214	6 578	8 196	10 095
40	794	1 166	2 197	2 908	3 786	4 856	6 145	7 678	9 481
45	661	1 021	1 993	2 660	3 483	4 487	5 700	7 146	8 853
50	-	871	1 784	2 405	3 172	4 110	5 245	6 605	8 215
55	-	-	1 572	2 147	2 856	3 727	4 785	6 057	7 569
60	-	-	-	1 886	2 538	3 340	4 320	5 504	6 919
65	-	-	-	-	-	2 954	3 855	4 950	6 266
75	-	-	-	-	-	-	2 931	3 848	4 967

Power input in W

35	690	786	980	1 072	1 157	1 233	1 296	1 345	1 376
40	714	814	1 022	1 124	1 221	1 310	1 390	1 456	1 507
45	731	837	1 061	1 174	1 284	1 389	1 485	1 570	1 642
50	-	853	1 096	1 221	1 346	1 467	1 581	1 687	1 780
55	-	-	1 125	1 264	1 404	1 543	1 677	1 804	1 921
60	-	-	-	1 301	1 458	1 615	1 770	1 920	2 062
65	-	-	-	-	-	1 683	1 860	2 034	2 202
75	-	-	-	-	-	-	2 026	2 251	2 475

Current consumption in A

35	6.75	6.90	7.22	7.38	7.54	7.69	7.83	7.95	8.07
40	6.78	6.95	7.32	7.51	7.71	7.90	8.09	8.27	8.45
45	6.79	6.98	7.40	7.63	7.86	8.11	8.35	8.59	8.83
50	-	6.99	7.47	7.73	8.01	8.31	8.61	8.92	9.23
55	-	-	7.51	7.82	8.15	8.50	8.86	9.24	9.63
60	-	-	-	7.90	8.28	8.69	9.12	9.57	10.03
65	-	-	-	-	-	8.87	9.37	9.89	10.44
75	-	-	-	-	-	-	9.84	10.53	11.25

Mass flow in kg/h

35	21	30	52	67	86	107	133	164	199
40	19	28	50	65	83	104	130	160	194
45	17	26	48	62	80	101	126	155	189
50	-	23	45	59	77	97	122	150	184
55	-	-	42	56	73	93	117	145	177
60	-	-	-	52	68	88	111	139	171
65	-	-	-	-	-	83	105	132	163
75	-	-	-	-	-	-	92	117	147

Coefficient of performance (C.O.P.)

35	1.33	1.66	2.44	2.94	3.53	4.23	5.08	6.10	7.34
40	1.11	1.43	2.15	2.59	3.10	3.71	4.42	5.27	6.29
45	0.90	1.22	1.88	2.27	2.71	3.23	3.84	4.55	5.39
50	-	1.02	1.63	1.97	2.36	2.80	3.32	3.92	4.61
55	-	-	1.40	1.70	2.03	2.42	2.85	3.36	3.94
60	-	-	-	1.45	1.74	2.07	2.44	2.87	3.36
65	-	-	-	-	-	1.75	2.07	2.43	2.85
75	-	-	-	-	-	-	1.45	1.71	2.01

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

Cooling capacity	4 218	W
Power input	1 592	W
Current consumption	8.63	A
Mass flow	103	kg/h
C.O.P.	2.65	

Pressure switch settings

Maximum HP switch setting	20.2	bar(g)
Minimum LP switch setting	0.1	bar(g)
LP pump down setting	0.4	bar(g)

Sound power data

Sound power level	0	dB(A)
With acoustic hood	0	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Tolerance according EN12900

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Datasheet, performance data

Maneurop reciprocating compressor. MTZ028-5

Performance data at 50 Hz, EN 12900 rating conditions

R407C

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
	-15	-10	-5	0	5	10	15	

Cooling capacity in W

35	2 485	3 478	4 654	6 036	7 643	9 497	11 616	-	-
40	2 217	3 156	4 258	5 544	7 034	8 749	10 708	-	-
45	1 939	2 831	3 864	5 060	6 438	8 020	9 824	-	-
50	-	2 497	3 468	4 579	5 851	7 305	8 961	-	-
55	-	-	3 064	4 097	5 268	6 600	8 113	-	-
60	-	-	-	3 609	4 686	5 902	7 277	-	-
65	-	-	-	3 113	4 101	5 206	6 449	-	-

Power input in W

35	1 308	1 461	1 590	1 693	1 771	1 824	1 850	-	-
40	1 335	1 515	1 671	1 802	1 907	1 988	2 043	-	-
45	1 355	1 563	1 748	1 908	2 044	2 155	2 240	-	-
50	-	1 605	1 821	2 013	2 181	2 324	2 443	-	-
55	-	-	1 889	2 115	2 318	2 496	2 649	-	-
60	-	-	-	2 215	2 454	2 669	2 860	-	-
65	-	-	-	2 312	2 589	2 844	3 074	-	-

Current consumption in A

35	8.47	8.77	9.11	9.45	9.75	9.99	10.11	-	-
40	8.55	8.94	9.36	9.78	10.18	10.50	10.72	-	-
45	8.61	9.09	9.62	10.15	10.65	11.08	11.41	-	-
50	-	9.23	9.88	10.53	11.16	11.72	12.18	-	-
55	-	-	10.12	10.92	11.69	12.40	13.01	-	-
60	-	-	-	11.30	12.23	13.10	13.88	-	-
65	-	-	-	11.66	12.77	13.83	14.79	-	-

Mass flow in kg/h

35	54	74	98	125	156	191	230	-	-
40	51	71	94	120	150	184	222	-	-
45	47	67	90	116	145	177	214	-	-
50	-	63	85	111	139	171	206	-	-
55	-	-	80	105	133	164	198	-	-
60	-	-	-	99	126	156	189	-	-
65	-	-	-	93	119	149	181	-	-

Coefficient of performance (C.O.P.)

35	1.90	2.38	2.93	3.56	4.31	5.21	6.28	-	-
40	1.66	2.08	2.55	3.08	3.69	4.40	5.24	-	-
45	1.43	1.81	2.21	2.65	3.15	3.72	4.39	-	-
50	-	1.56	1.90	2.27	2.68	3.14	3.67	-	-
55	-	-	1.62	1.94	2.27	2.64	3.06	-	-
60	-	-	-	1.63	1.91	2.21	2.54	-	-
65	-	-	-	1.35	1.58	1.83	2.10	-	-

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

Cooling capacity	5 851	W
Power input	2 181	W
Current consumption	11.16	A
Mass flow	139	kg/h
C.O.P.	2.68	



to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	1.4	bar(g)
LP pump down setting	1.7	bar(g)

Sound power data

Sound power level	73	dB(A)
With acoustic hood	66	dB(A)

Tolerance according EN12900

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**Datasheet, performance data**

**Maneurop reciprocating compressor. MTZ028-5**

**Performance data at 50 Hz, ARI rating conditions**

**R407C**

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)							
	-15	-10	-5	0	5	10	15	

**Cooling capacity in W**

35	2 675	3 738	4 998	6 474	8 189	10 164	12 420	-	-
40	2 399	3 411	4 596	5 977	7 574	9 409	11 503	-	-
45	2 111	3 078	4 196	5 487	6 972	8 673	10 612	-	-
50	-	2 735	3 792	4 999	6 379	7 952	9 741	-	-
55	-	-	3 380	4 510	5 790	7 242	8 887	-	-
60	-	-	-	4 014	5 202	6 539	8 047	-	-
65	-	-	-	3 508	4 610	5 839	7 217	-	-

**Power input in W**

35	1 308	1 461	1 590	1 693	1 771	1 824	1 850	-	-
40	1 335	1 515	1 671	1 802	1 907	1 988	2 043	-	-
45	1 355	1 563	1 748	1 908	2 044	2 155	2 240	-	-
50	-	1 605	1 821	2 013	2 181	2 324	2 443	-	-
55	-	-	1 889	2 115	2 318	2 496	2 649	-	-
60	-	-	-	2 215	2 454	2 669	2 860	-	-
65	-	-	-	2 312	2 589	2 844	3 074	-	-

**Current consumption in A**

35	8.47	8.77	9.11	9.45	9.75	9.99	10.11	-	-
40	8.55	8.94	9.36	9.78	10.18	10.50	10.72	-	-
45	8.61	9.09	9.62	10.15	10.65	11.08	11.41	-	-
50	-	9.23	9.88	10.53	11.16	11.72	12.18	-	-
55	-	-	10.12	10.92	11.69	12.40	13.01	-	-
60	-	-	-	11.30	12.23	13.10	13.88	-	-
65	-	-	-	11.66	12.77	13.83	14.79	-	-

**Mass flow in kg/h**

35	54	74	97	124	155	190	229	-	-
40	50	70	93	120	149	183	221	-	-
45	46	67	89	115	144	176	213	-	-
50	-	62	85	110	138	170	205	-	-
55	-	-	80	105	132	163	197	-	-
60	-	-	-	99	126	155	188	-	-
65	-	-	-	92	119	148	179	-	-

**Coefficient of performance (C.O.P.)**

35	2.05	2.56	3.14	3.82	4.62	5.57	6.71	-	-
40	1.80	2.25	2.75	3.32	3.97	4.73	5.63	-	-
45	1.56	1.97	2.40	2.87	3.41	4.02	4.74	-	-
50	-	1.70	2.08	2.48	2.92	3.42	3.99	-	-
55	-	-	1.79	2.13	2.50	2.90	3.35	-	-
60	-	-	-	1.81	2.12	2.45	2.81	-	-
65	-	-	-	1.52	1.78	2.05	2.35	-	-

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

Cooling capacity	6 483	W
Power input	2 381	W
Current consumption	11.94	A
Mass flow	146	kg/h
C.O.P.	2.72	

**Pressure switch settings**

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	1.4	bar(g)
LP pump down setting	1.7	bar(g)

**Sound power data**

Sound power level	73	dB(A)
With acoustic hood	66	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Tolerance according EN12900

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Datasheet, performance data

Maneurop reciprocating compressor. MTZ028-5

Performance data at 50 Hz, EN 12900 rating conditions, Suction temp. = 20 °C

R448A

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-30	-25	-20	-15	-10	-5	0	5	10

Cooling capacity in W

10	-	2 704	3 581	4 644	5 912	-	-	-	-
20	-	2 359	3 172	4 151	5 313	6 676	8 260	-	-
30	-	1 996	2 742	3 631	4 682	5 910	7 334	8 976	10 860
40	-	-	2 296	3 091	4 025	5 113	6 373	7 824	9 486
50	-	-	-	2 537	3 349	4 292	5 383	6 637	8 073
60	-	-	-	-	2 660	3 455	4 371	5 425	6 629

Power input in W

10	-	989	1 054	1 100	1 126	-	-	-	-
20	-	1 098	1 200	1 282	1 345	1 389	1 412	-	-
30	-	1 177	1 318	1 441	1 545	1 629	1 695	1 740	1 766
40	-	-	1 405	1 571	1 719	1 848	1 958	2 049	2 121
50	-	-	-	1 669	1 863	2 040	2 198	2 338	2 459
60	-	-	-	-	1 974	2 201	2 411	2 603	2 777

Current consumption in A

10	-	4.19	4.55	4.87	5.09	-	-	-	-
20	-	5.63	6.13	6.60	6.99	7.27	7.36	-	-
30	-	6.37	7.01	7.65	8.23	8.71	9.04	9.15	9.02
40	-	-	7.42	8.24	9.02	9.72	10.28	10.66	10.80
50	-	-	-	8.58	9.57	10.50	11.32	11.97	12.40
60	-	-	-	-	10.10	11.27	12.35	13.28	14.01

Mass flow in kg/h

10	-	44	59	77	98	-	-	-	-
20	-	42	56	74	95	120	149	-	-
30	-	38	52	70	90	115	144	178	219
40	-	-	48	65	85	109	137	171	210
50	-	-	-	59	79	102	130	162	200
60	-	-	-	-	72	94	121	152	189

Coefficient of performance (C.O.P.)

10	-	2.73	3.40	4.22	5.25	-	-	-	-
20	-	2.15	2.64	3.24	3.95	4.81	5.85	-	-
30	-	1.70	2.08	2.52	3.03	3.63	4.33	5.16	6.15
40	-	-	1.63	1.97	2.34	2.77	3.26	3.82	4.47
50	-	-	-	1.52	1.80	2.10	2.45	2.84	3.28
60	-	-	-	-	1.35	1.57	1.81	2.08	2.39

Nominal performance at to = -10 °C, tc = 45 °C

Cooling capacity	3 689	W
Power input	1 795	W
Current consumption	9.31	A
Mass flow	82	kg/h
C.O.P.	2.06	

Pressure switch settings

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	1	bar(g)
LP pump down setting	1.3	bar(g)

Sound power data

Sound power level	72	dB(A)
With accoustic hood	65	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Suction gas temp. = 20 °C , Subcooling = 0 K

Tolerance according EN12900



Datasheet, performance data

Maneurop reciprocating compressor. MTZ028-5

Performance data at 50 Hz, EN 12900 rating conditions, Superheat = 10 K

R448A

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-30	-25	-20	-15	-10	-5	0	5	10

Cooling capacity in W

10	2 005	2 717	3 601	4 672	5 950	-	-	-	-
20	1 679	2 343	3 159	4 143	5 312	6 683	8 275	-	-
30	1 344	1 956	2 698	3 588	4 643	5 880	7 317	8 972	10 860
40	1 010	1 562	2 225	3 015	3 951	5 048	6 325	7 798	9 486
50	-	1 170	1 748	2 433	3 243	4 194	5 305	6 592	8 073
60	-	-	1 275	1 849	2 527	3 327	4 265	5 360	6 629

Power input in W

10	905	989	1 054	1 100	1 126	-	-	-	-
20	978	1 098	1 200	1 282	1 345	1 389	1 412	-	-
30	1 018	1 177	1 318	1 441	1 545	1 629	1 695	1 740	1 766
40	1 021	1 222	1 405	1 571	1 719	1 848	1 958	2 049	2 121
50	-	1 227	1 456	1 669	1 863	2 040	2 198	2 338	2 459
60	-	-	1 467	1 729	1 974	2 201	2 411	2 603	2 777

Current consumption in A

10	3.84	4.19	4.55	4.87	5.09	-	-	-	-
20	5.16	5.63	6.13	6.60	6.99	7.27	7.36	-	-
30	5.77	6.37	7.01	7.65	8.23	8.71	9.04	9.15	9.02
40	5.88	6.62	7.42	8.24	9.02	9.72	10.28	10.66	10.80
50	-	6.59	7.57	8.58	9.57	10.50	11.32	11.97	12.40
60	-	-	7.67	8.88	10.10	11.27	12.35	13.28	14.01

Mass flow in kg/h

10	39	52	67	86	108	-	-	-	-
20	35	48	64	82	104	129	157	-	-
30	31	44	60	78	99	124	151	183	219
40	26	39	55	73	93	117	144	175	210
50	-	33	49	66	87	110	136	166	200
60	-	-	42	59	79	101	127	156	189

Coefficient of performance (C.O.P.)

10	2.22	2.75	3.42	4.25	5.29	-	-	-	-
20	1.72	2.13	2.63	3.23	3.95	4.81	5.86	-	-
30	1.32	1.66	2.05	2.49	3.01	3.61	4.32	5.16	6.15
40	0.99	1.28	1.58	1.92	2.30	2.73	3.23	3.81	4.47
50	-	0.95	1.20	1.46	1.74	2.06	2.41	2.82	3.28
60	-	-	0.87	1.07	1.28	1.51	1.77	2.06	2.39

Nominal performance at to = -10 °C, tc = 45 °C

Cooling capacity	3 598	W
Power input	1 795	W
Current consumption	9.31	A
Mass flow	90	kg/h
C.O.P.	2.00	

Pressure switch settings

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	1	bar(g)
LP pump down setting	1.3	bar(g)

Sound power data

Sound power level	72	dB(A)
With accoustic hood	65	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Tolerance according EN12900

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Datasheet, performance data

Maneurop reciprocating compressor. MTZ028-5

Performance data at 50 Hz, EN 12900 rating conditions, Suction temp. = 20 °C

R449A

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-30	-25	-20	-15	-10	-5	0	5	10

Cooling capacity in W

10	-	2 709	3 586	4 649	5 917	-	-	-	-
20	-	2 364	3 178	4 157	5 319	6 681	8 264	-	-
30	-	2 001	2 748	3 638	4 688	5 916	7 339	8 979	10 860
40	-	-	2 302	3 098	4 031	5 119	6 378	7 827	9 486
50	-	-	-	2 543	3 356	4 299	5 388	6 640	8 073
60	-	-	-	-	2 667	3 461	4 376	5 428	6 629

Power input in W

10	-	989	1 054	1 100	1 126	-	-	-	-
20	-	1 098	1 200	1 282	1 345	1 389	1 412	-	-
30	-	1 177	1 318	1 441	1 545	1 629	1 695	1 740	1 766
40	-	-	1 405	1 571	1 719	1 848	1 958	2 049	2 121
50	-	-	-	1 669	1 863	2 040	2 198	2 338	2 459
60	-	-	-	-	1 974	2 201	2 411	2 603	2 777

Current consumption in A

10	-	4.19	4.55	4.87	5.09	-	-	-	-
20	-	5.63	6.13	6.60	6.99	7.27	7.36	-	-
30	-	6.37	7.01	7.65	8.23	8.71	9.04	9.15	9.02
40	-	-	7.42	8.24	9.02	9.72	10.28	10.66	10.80
50	-	-	-	8.58	9.57	10.50	11.32	11.97	12.40
60	-	-	-	-	10.10	11.27	12.35	13.28	14.01

Mass flow in kg/h

10	-	45	60	78	100	-	-	-	-
20	-	42	57	75	96	122	152	-	-
30	-	39	54	71	92	117	147	182	223
40	-	-	49	66	87	111	140	174	214
50	-	-	-	61	81	105	132	165	204
60	-	-	-	-	74	96	123	155	193

Coefficient of performance (C.O.P.)

10	-	2.74	3.40	4.23	5.26	-	-	-	-
20	-	2.15	2.65	3.24	3.95	4.81	5.85	-	-
30	-	1.70	2.08	2.52	3.04	3.63	4.33	5.16	6.15
40	-	-	1.64	1.97	2.35	2.77	3.26	3.82	4.47
50	-	-	-	1.52	1.80	2.11	2.45	2.84	3.28
60	-	-	-	-	1.35	1.57	1.81	2.09	2.39

Nominal performance at to = -10 °C, tc = 45 °C

Cooling capacity	3 696	W
Power input	1 795	W
Current consumption	9.31	A
Mass flow	84	kg/h
C.O.P.	2.06	

Pressure switch settings

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	1	bar(g)
LP pump down setting	1.3	bar(g)

Sound power data

Sound power level	73	dB(A)
With accoustic hood	66	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Suction gas temp. = 20 °C , Subcooling = 0 K

Tolerance according EN12900



Datasheet, performance data

Maneurop reciprocating compressor. MTZ028-5

Performance data at 50 Hz, EN 12900 rating conditions, Superheat = 10 K

R449A

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-30	-25	-20	-15	-10	-5	0	5	10

Cooling capacity in W

10	2 005	2 717	3 601	4 672	5 950	-	-	-	-
20	1 679	2 343	3 159	4 143	5 312	6 683	8 275	-	-
30	1 344	1 956	2 698	3 588	4 643	5 880	7 317	8 972	10 860
40	1 010	1 562	2 225	3 015	3 951	5 048	6 325	7 798	9 486
50	-	1 170	1 748	2 433	3 243	4 194	5 305	6 592	8 073
60	-	-	1 275	1 849	2 527	3 327	4 265	5 360	6 629

Power input in W

10	905	989	1 054	1 100	1 126	-	-	-	-
20	978	1 098	1 200	1 282	1 345	1 389	1 412	-	-
30	1 018	1 177	1 318	1 441	1 545	1 629	1 695	1 740	1 766
40	1 021	1 222	1 405	1 571	1 719	1 848	1 958	2 049	2 121
50	-	1 227	1 456	1 669	1 863	2 040	2 198	2 338	2 459
60	-	-	1 467	1 729	1 974	2 201	2 411	2 603	2 777

Current consumption in A

10	3.84	4.19	4.55	4.87	5.09	-	-	-	-
20	5.16	5.63	6.13	6.60	6.99	7.27	7.36	-	-
30	5.77	6.37	7.01	7.65	8.23	8.71	9.04	9.15	9.02
40	5.88	6.62	7.42	8.24	9.02	9.72	10.28	10.66	10.80
50	-	6.59	7.57	8.58	9.57	10.50	11.32	11.97	12.40
60	-	-	7.67	8.88	10.10	11.27	12.35	13.28	14.01

Mass flow in kg/h

10	39	53	69	88	110	-	-	-	-
20	36	49	65	84	106	131	160	-	-
30	32	45	61	80	101	126	154	187	223
40	26	40	56	74	95	120	147	179	214
50	-	34	50	68	89	112	139	170	204
60	-	-	43	60	81	104	130	159	193

Coefficient of performance (C.O.P.)

10	2.22	2.75	3.42	4.25	5.29	-	-	-	-
20	1.72	2.13	2.63	3.23	3.95	4.81	5.86	-	-
30	1.32	1.66	2.05	2.49	3.01	3.61	4.32	5.16	6.15
40	0.99	1.28	1.58	1.92	2.30	2.73	3.23	3.81	4.47
50	-	0.95	1.20	1.46	1.74	2.06	2.41	2.82	3.28
60	-	-	0.87	1.07	1.28	1.51	1.77	2.06	2.39

Nominal performance at to = -10 °C, tc = 45 °C

Cooling capacity	3 598	W
Power input	1 795	W
Current consumption	9.31	A
Mass flow	92	kg/h
C.O.P.	2.00	

Pressure switch settings

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	1	bar(g)
LP pump down setting	1.3	bar(g)

Sound power data

Sound power level	73	dB(A)
With accoustic hood	66	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Tolerance according EN12900

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Datasheet, performance data

Maneurop reciprocating compressor. MTZ028-5

Performance data at 50 Hz, EN 12900 rating conditions, Suction temp. = 20 °C

R452A

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-30	-25	-20	-15	-10	-5	0	5	10

Cooling capacity in W

10	-	2 796	3 620	4 645	5 888	-	-	-	-
20	-	2 359	3 163	4 139	5 306	6 680	8 284	-	-
30	-	1 870	2 634	3 543	4 613	5 861	7 306	8 968	10 872
40	-	1 351	2 057	2 878	3 832	4 933	6 200	7 651	9 304
50	-	-	1 451	2 167	2 985	3 922	4 992	6 211	7 595
60	-	-	-	1 431	2 097	2 850	3 706	4 676	5 772

Power input in W

10	-	1 087	1 144	1 176	1 189	-	-	-	-
20	-	1 185	1 283	1 353	1 399	1 423	1 430	-	-
30	-	1 230	1 379	1 496	1 584	1 648	1 689	1 711	1 718
40	-	1 209	1 418	1 591	1 731	1 842	1 928	1 990	2 033
50	-	-	1 384	1 622	1 824	1 993	2 131	2 243	2 331
60	-	-	-	1 576	1 849	2 084	2 285	2 456	2 598

Current consumption in A

10	-	6.66	7.28	7.70	7.92	-	-	-	-
20	-	6.55	7.14	7.57	7.84	7.96	7.93	-	-
30	-	6.82	7.43	7.92	8.29	8.55	8.70	8.75	8.69
40	-	7.07	7.75	8.36	8.88	9.33	9.71	10.03	10.29
50	-	-	7.71	8.48	9.21	9.90	10.57	11.21	11.83
60	-	-	-	7.88	8.87	9.86	10.86	11.87	12.91

Mass flow in kg/h

10	-	56	74	96	123	-	-	-	-
20	-	51	70	93	119	152	190	-	-
30	-	45	64	87	114	146	184	228	281
40	-	36	56	79	106	137	174	218	270
50	-	-	45	68	94	125	161	203	254
60	-	-	-	53	79	109	143	184	232

Coefficient of performance (C.O.P.)

10	-	2.57	3.17	3.95	4.95	-	-	-	-
20	-	1.99	2.47	3.06	3.79	4.69	5.79	-	-
30	-	1.52	1.91	2.37	2.91	3.56	4.33	5.24	6.33
40	-	1.12	1.45	1.81	2.21	2.68	3.22	3.84	4.58
50	-	-	1.05	1.34	1.64	1.97	2.34	2.77	3.26
60	-	-	-	0.91	1.13	1.37	1.62	1.90	2.22

Nominal performance at to = -10 °C, tc = 45 °C

Cooling capacity	3 415	W
Power input	1 785	W
Current consumption	9.10	A
Mass flow	100	kg/h
C.O.P.	1.91	

Pressure switch settings

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	1	bar(g)
LP pump down setting	1.3	bar(g)

Sound power data

Sound power level	73	dB(A)
With accoustic hood	66	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Suction gas temp. = 20 °C , Subcooling = 0 K

Tolerance according EN12900





Datasheet, performance data

Maneurop reciprocating compressor. MTZ028-5

Performance data at 50 Hz, EN 12900 rating conditions, Superheat = 10 K

R452A

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-30	-25	-20	-15	-10	-5	0	5	10

Cooling capacity in W

10	2 084	2 721	3 544	4 573	5 826	-	-	-	-
20	1 623	2 258	3 052	4 026	5 199	6 590	8 220	-	-
30	1 142	1 752	2 496	3 394	4 465	5 728	7 204	8 912	10 872
40	666	1 230	1 902	2 702	3 650	4 764	6 064	7 571	9 304
50	222	719	1 298	1 979	2 781	3 724	4 827	6 111	7 595
60	-	245	709	1 248	1 884	2 634	3 519	4 558	5 772

Power input in W

10	1 004	1 087	1 144	1 176	1 189	-	-	-	-
20	1 056	1 185	1 283	1 353	1 399	1 423	1 430	-	-
30	1 046	1 230	1 379	1 496	1 584	1 648	1 689	1 711	1 718
40	961	1 209	1 418	1 591	1 731	1 842	1 928	1 990	2 033
50	784	1 106	1 384	1 622	1 824	1 993	2 131	2 243	2 331
60	-	906	1 263	1 576	1 849	2 084	2 285	2 456	2 598

Current consumption in A

10	5.83	6.66	7.28	7.70	7.92	-	-	-	-
20	5.79	6.55	7.14	7.57	7.84	7.96	7.93	-	-
30	6.08	6.82	7.43	7.92	8.29	8.55	8.70	8.75	8.69
40	6.29	7.07	7.75	8.36	8.88	9.33	9.71	10.03	10.29
50	6.04	6.90	7.71	8.48	9.21	9.90	10.57	11.21	11.83
60	-	5.91	6.90	7.88	8.87	9.86	10.86	11.87	12.91

Mass flow in kg/h

10	49	66	85	108	135	-	-	-	-
20	42	60	80	104	131	163	200	-	-
30	34	52	73	98	125	157	193	235	281
40	23	42	64	88	116	148	184	224	270
50	10	29	51	76	103	134	170	209	254
60	-	13	35	60	87	117	151	189	232

Coefficient of performance (C.O.P.)

10	2.08	2.50	3.10	3.89	4.90	-	-	-	-
20	1.54	1.91	2.38	2.98	3.72	4.63	5.75	-	-
30	1.09	1.42	1.81	2.27	2.82	3.48	4.27	5.21	6.33
40	0.69	1.02	1.34	1.70	2.11	2.59	3.15	3.81	4.58
50	0.28	0.65	0.94	1.22	1.52	1.87	2.26	2.72	3.26
60	-	0.27	0.56	0.79	1.02	1.26	1.54	1.86	2.22

Nominal performance at to = -10 °C, tc = 45 °C

Cooling capacity	3 220	W
Power input	1 785	W
Current consumption	9.10	A
Mass flow	110	kg/h
C.O.P.	1.80	

Pressure switch settings

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	1	bar(g)
LP pump down setting	1.3	bar(g)

Sound power data

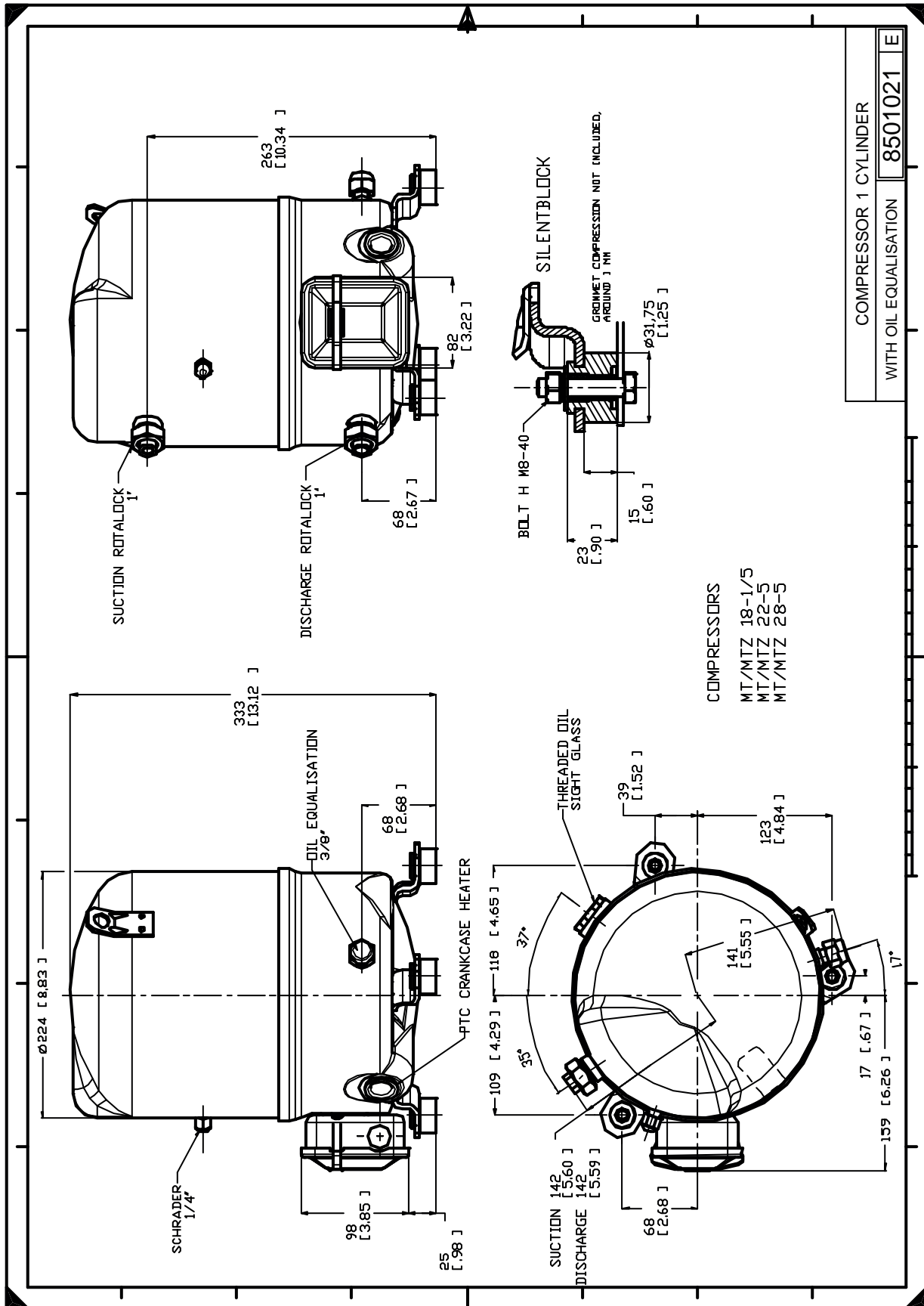
Sound power level	73	dB(A)
With accoustic hood	66	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Tolerance according EN12900



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