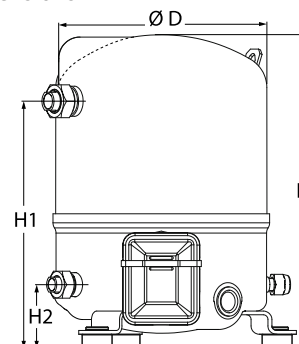


General Characteristics

Model number (on compressor nameplate)		MTZ28JE4AVE
Code number for Singlepack*		MTZ28-4VI
Code number for Industrial pack**		MTZ28-4VM
Drawing number		8501024e
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 cm3/rev	
Displacement @ Nominal speed	8.4 m3/h @ 2900 rpm - 10.1 m3/h @ 3500 rpm	
Net weight	23 kg	
Oil charge	0.95 litre, POE - 160PZ	
Maximum system test pressure Low Side / High side	25 bar(g) / 30 bar(g)	
Maximum differential test pressure	30 bar	
Maximum number of starts per hour	12	
Refrigerant charge limit	2.5 kg	
Approved refrigerants	R404A, R507A, R134a, R407C, R407A, R407F	

Dimensions


D=224 mm

H=333 mm

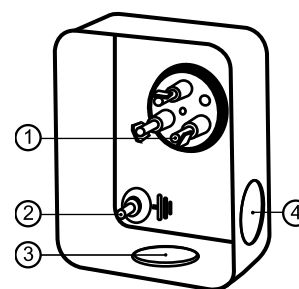
H1=263 mm

H2=68 mm

H3= mm

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	6.23 Ω
Maximum Continuous Current (MCC)	7.5 A
Locked Rotor Amps (LRA)	29 A
Motor protection	Internal overload protector

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")

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, UL certified (file SA6873), CCC certified

*Singlepack: Compressor in cardboard box

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

Datasheet, performance data

Maneurop reciprocating compressor. MTZ028-4

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	2 544	3 518	4 673	6 032	7 616	9 449	11 550	-	-
40	2 262	3 187	4 278	5 558	7 049	8 772	10 751	-	-
45	1 975	2 849	3 875	5 075	6 470	8 084	9 938	-	-
50	-	2 509	3 467	4 585	5 885	7 387	9 115	-	-
55	-	-	3 058	4 093	5 294	6 684	8 284	-	-
60	-	-	-	3 601	4 703	5 978	7 450	-	-
65	-	-	-	3 112	4 113	5 273	6 614	-	-

Power input in W

35	1 262	1 422	1 555	1 660	1 735	1 778	1 789	-	-
40	1 289	1 480	1 644	1 779	1 883	1 956	1 995	-	-
45	1 297	1 523	1 721	1 890	2 028	2 133	2 206	-	-
50	-	1 548	1 784	1 990	2 165	2 308	2 417	-	-
55	-	-	1 830	2 077	2 294	2 477	2 626	-	-
60	-	-	-	2 148	2 409	2 636	2 829	-	-
65	-	-	-	2 199	2 508	2 784	3 025	-	-

Current consumption in A

35	3.22	3.38	3.53	3.65	3.74	3.82	3.88	-	-
40	3.25	3.46	3.64	3.79	3.92	4.02	4.10	-	-
45	3.25	3.51	3.74	3.94	4.11	4.25	4.36	-	-
50	-	3.54	3.83	4.08	4.30	4.48	4.64	-	-
55	-	-	3.89	4.21	4.49	4.73	4.94	-	-
60	-	-	-	4.31	4.66	4.97	5.24	-	-
65	-	-	-	4.39	4.82	5.20	5.55	-	-

Mass flow in kg/h

35	55	75	98	125	155	190	229	-	-
40	52	71	94	120	150	184	223	-	-
45	48	67	90	116	145	179	216	-	-
50	-	63	85	111	140	172	209	-	-
55	-	-	80	105	134	166	202	-	-
60	-	-	-	99	127	158	194	-	-
65	-	-	-	93	120	150	185	-	-

Coefficient of performance (C.O.P.)

35	2.02	2.47	3.00	3.63	4.39	5.31	6.46	-	-
40	1.76	2.15	2.60	3.12	3.74	4.49	5.39	-	-
45	1.52	1.87	2.25	2.69	3.19	3.79	4.51	-	-
50	-	1.62	1.94	2.30	2.72	3.20	3.77	-	-
55	-	-	1.67	1.97	2.31	2.70	3.16	-	-
60	-	-	-	1.68	1.95	2.27	2.63	-	-
65	-	-	-	1.42	1.64	1.89	2.19	-	-

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

Cooling capacity	5 885	W
Power input	2 165	W
Current consumption	4.30	A
Mass flow	140	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 = 10 K , Subcooling = 0 K

Tolerance according EN12900

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	2 738	3 782	5 018	6 470	8 160	10 112	12 350	-	-
40	2 448	3 444	4 617	5 991	7 589	9 434	11 549	-	-
45	2 151	3 098	4 208	5 502	7 006	8 742	10 734	-	-
50	-	2 748	3 792	5 006	6 415	8 041	9 909	-	-
55	-	-	3 373	4 506	5 818	7 334	9 075	-	-
60	-	-	-	4 005	5 220	6 623	8 238	-	-
65	-	-	-	3 506	4 623	5 914	7 402	-	-

Power input in W

35	1 262	1 422	1 555	1 660	1 735	1 778	1 789	-	-
40	1 289	1 480	1 644	1 779	1 883	1 956	1 995	-	-
45	1 297	1 523	1 721	1 890	2 028	2 133	2 206	-	-
50	-	1 548	1 784	1 990	2 165	2 308	2 417	-	-
55	-	-	1 830	2 077	2 294	2 477	2 626	-	-
60	-	-	-	2 148	2 409	2 636	2 829	-	-
65	-	-	-	2 199	2 508	2 784	3 025	-	-

Current consumption in A

35	3.22	3.38	3.53	3.65	3.74	3.82	3.88	-	-
40	3.25	3.46	3.64	3.79	3.92	4.02	4.10	-	-
45	3.25	3.51	3.74	3.94	4.11	4.25	4.36	-	-
50	-	3.54	3.83	4.08	4.30	4.48	4.64	-	-
55	-	-	3.89	4.21	4.49	4.73	4.94	-	-
60	-	-	-	4.31	4.66	4.97	5.24	-	-
65	-	-	-	4.39	4.82	5.20	5.55	-	-

Mass flow in kg/h

35	55	75	98	124	154	188	227	-	-
40	51	71	94	120	150	183	222	-	-
45	47	67	89	115	144	178	215	-	-
50	-	63	85	110	139	171	208	-	-
55	-	-	80	105	133	165	201	-	-
60	-	-	-	99	126	157	193	-	-
65	-	-	-	92	119	150	184	-	-

Coefficient of performance (C.O.P.)

35	2.17	2.66	3.23	3.90	4.70	5.69	6.90	-	-
40	1.90	2.33	2.81	3.37	4.03	4.82	5.79	-	-
45	1.66	2.03	2.44	2.91	3.46	4.10	4.87	-	-
50	-	1.78	2.13	2.52	2.96	3.48	4.10	-	-
55	-	-	1.84	2.17	2.54	2.96	3.46	-	-
60	-	-	-	1.86	2.17	2.51	2.91	-	-
65	-	-	-	1.59	1.84	2.12	2.45	-	-

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

Cooling capacity	6 536	W
Power input	2 361	W
Current consumption	4.57	A
Mass flow	147	kg/h
C.O.P.	2.77	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	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

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	20

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	664	756	942	1 030	1 112	1 185	1 246	1 293	1 323
40	687	783	983	1 081	1 174	1 260	1 336	1 400	1 449
45	703	805	1 020	1 129	1 235	1 335	1 428	1 510	1 579
50	712	820	1 054	1 174	1 294	1 410	1 520	1 622	1 712
55	-	-	1 081	1 215	1 350	1 483	1 612	1 734	1 847
60	-	-	-	1 251	1 402	1 553	1 702	1 846	1 982
65	-	-	-	-	1 448	1 619	1 789	1 956	2 117
75	-	-	-	-	-	-	1 948	2 165	2 380

Current consumption in A

35	2.58	2.64	2.76	2.82	2.88	2.94	2.99	3.04	3.08
40	2.59	2.66	2.80	2.87	2.95	3.02	3.09	3.16	3.23
45	2.60	2.67	2.83	2.92	3.01	3.10	3.19	3.28	3.38
50	2.59	2.67	2.85	2.96	3.06	3.18	3.29	3.41	3.53
55	-	-	2.87	2.99	3.12	3.25	3.39	3.53	3.68
60	-	-	-	3.02	3.17	3.32	3.48	3.66	3.83
65	-	-	-	-	3.21	3.39	3.58	3.78	3.99
75	-	-	-	-	-	-	3.76	4.02	4.30

Mass flow in kg/h

35	21	30	53	68	86	108	134	164	200
40	19	28	51	65	83	105	130	161	196
45	17	26	48	63	80	102	127	156	191
50	14	23	45	60	77	98	122	151	185
55	-	-	42	56	73	93	117	146	179
60	-	-	-	52	69	89	112	140	172
65	-	-	-	-	64	83	106	133	164
75	-	-	-	-	-	-	92	118	148

Coefficient of performance (C.O.P.)

35	1.28	1.59	2.35	2.83	3.40	4.09	4.91	5.91	7.12
40	1.06	1.36	2.06	2.48	2.98	3.56	4.26	5.09	6.08
45	0.85	1.15	1.79	2.16	2.59	3.09	3.68	4.37	5.18
50	0.66	0.96	1.54	1.86	2.24	2.66	3.16	3.74	4.41
55	-	-	1.31	1.60	1.92	2.28	2.70	3.18	3.74
60	-	-	-	1.35	1.63	1.94	2.29	2.70	3.16
65	-	-	-	-	1.36	1.63	1.93	2.27	2.66
75	-	-	-	-	-	-	1.31	1.55	1.83

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

Cooling capacity	3 757	W
Power input	1 410	W
Current consumption	3.18	A
Mass flow	98	kg/h
C.O.P.	2.66	

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 accoustic 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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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	664	756	942	1 030	1 112	1 185	1 246	1 293	1 323
40	687	783	983	1 081	1 174	1 260	1 336	1 400	1 449
45	703	805	1 020	1 129	1 235	1 335	1 428	1 510	1 579
50	-	820	1 054	1 174	1 294	1 410	1 520	1 622	1 712
55	-	-	1 081	1 215	1 350	1 483	1 612	1 734	1 847
60	-	-	-	1 251	1 402	1 553	1 702	1 846	1 982
65	-	-	-	-	-	1 619	1 789	1 956	2 117
75	-	-	-	-	-	-	1 948	2 165	2 380

Current consumption in A

35	2.58	2.64	2.76	2.82	2.88	2.94	2.99	3.04	3.08
40	2.59	2.66	2.80	2.87	2.95	3.02	3.09	3.16	3.23
45	2.60	2.67	2.83	2.92	3.01	3.10	3.19	3.28	3.38
50	-	2.67	2.85	2.96	3.06	3.18	3.29	3.41	3.53
55	-	-	2.87	2.99	3.12	3.25	3.39	3.53	3.68
60	-	-	-	3.02	3.17	3.32	3.48	3.66	3.83
65	-	-	-	-	-	3.39	3.58	3.78	3.99
75	-	-	-	-	-	-	3.76	4.02	4.30

Mass flow in kg/h

35	21	30	52	67	86	107	133	164	199
40	19	28	50	65	83	104	130	160	195
45	17	26	48	63	80	101	126	155	189
50	-	23	45	59	77	97	122	150	184
55	-	-	42	56	73	93	117	145	178
60	-	-	-	52	69	88	111	139	171
65	-	-	-	-	-	83	105	132	163
75	-	-	-	-	-	-	92	117	147

Coefficient of performance (C.O.P.)

35	1.39	1.73	2.54	3.05	3.67	4.40	5.28	6.34	7.63
40	1.16	1.49	2.24	2.69	3.23	3.85	4.60	5.48	6.54
45	0.94	1.27	1.95	2.36	2.82	3.36	3.99	4.73	5.61
50	-	1.06	1.69	2.05	2.45	2.91	3.45	4.07	4.80
55	-	-	1.45	1.77	2.12	2.51	2.97	3.49	4.10
60	-	-	-	1.51	1.81	2.15	2.54	2.98	3.49
65	-	-	-	-	-	1.82	2.15	2.53	2.96
75	-	-	-	-	-	-	1.50	1.78	2.09

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

Cooling capacity	4 218	W
Power input	1 531	W
Current consumption	3.30	A
Mass flow	103	kg/h
C.O.P.	2.75	

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 accoustic 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. MTZ028-4

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	10

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	3.07	3.24	3.42	3.60	3.77	3.92	4.05	4.13	4.17
35	3.08	3.26	3.46	3.65	3.84	4.02	4.16	4.27	4.33
40	3.07	3.28	3.50	3.72	3.94	4.14	4.31	4.45	4.54
45	3.04	3.28	3.53	3.79	4.04	4.28	4.49	4.67	4.80
50	2.97	3.25	3.54	3.84	4.14	4.42	4.68	4.91	5.09
55	-	3.18	3.52	3.87	4.22	4.56	4.87	5.16	5.39
60	-	3.05	3.46	3.87	4.28	4.68	5.05	5.40	5.70

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	159	196	238	285
45	31	49	70	94	121	153	189	230	277
50	26	43	64	88	115	147	182	223	268
55	-	38	59	82	109	140	176	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	4.04	A
Mass flow	121	kg/h
C.O.P.	1.75	



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	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)

Tolerance according EN12900

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	10

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	3.07	3.24	3.42	3.60	3.77	3.92	4.05	4.13	4.17
35	3.08	3.26	3.46	3.65	3.84	4.02	4.16	4.27	4.33
40	3.07	3.28	3.50	3.72	3.94	4.14	4.31	4.45	4.54
45	3.04	3.28	3.53	3.79	4.04	4.28	4.49	4.67	4.80
50	2.97	3.25	3.54	3.84	4.14	4.42	4.68	4.91	5.09
55	-	3.18	3.52	3.87	4.22	4.56	4.87	5.16	5.39
60	-	3.05	3.46	3.87	4.28	4.68	5.05	5.40	5.70

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	25	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	4.04	A
Mass flow	121	kg/h
C.O.P.	2.00	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	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)

Tolerance according EN12900

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	20

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	664	756	942	1 030	1 112	1 185	1 246	1 293	1 323
40	687	783	983	1 081	1 174	1 260	1 336	1 400	1 449
45	703	805	1 020	1 129	1 235	1 335	1 428	1 510	1 579
50	712	820	1 054	1 174	1 294	1 410	1 520	1 622	1 712
55	-	-	1 081	1 215	1 350	1 483	1 612	1 734	1 847
60	-	-	-	1 251	1 402	1 553	1 702	1 846	1 982
65	-	-	-	-	1 448	1 619	1 789	1 956	2 117
75	-	-	-	-	-	-	1 948	2 165	2 380

Current consumption in A

35	2.58	2.64	2.76	2.82	2.88	2.94	2.99	3.04	3.08
40	2.59	2.66	2.80	2.87	2.95	3.02	3.09	3.16	3.23
45	2.60	2.67	2.83	2.92	3.01	3.10	3.19	3.28	3.38
50	2.59	2.67	2.85	2.96	3.06	3.18	3.29	3.41	3.53
55	-	-	2.87	2.99	3.12	3.25	3.39	3.53	3.68
60	-	-	-	3.02	3.17	3.32	3.48	3.66	3.83
65	-	-	-	-	3.21	3.39	3.58	3.78	3.99
75	-	-	-	-	-	-	3.76	4.02	4.30

Mass flow in kg/h

35	21	30	53	68	86	108	134	164	200
40	19	28	51	65	83	105	130	161	196
45	17	26	48	63	80	102	127	156	191
50	14	23	45	60	77	98	122	151	185
55	-	-	42	56	73	93	117	146	179
60	-	-	-	52	69	89	112	140	172
65	-	-	-	-	64	83	106	133	164
75	-	-	-	-	-	-	92	118	148

Coefficient of performance (C.O.P.)

35	1.28	1.59	2.35	2.83	3.40	4.09	4.91	5.91	7.12
40	1.06	1.36	2.06	2.48	2.98	3.56	4.26	5.09	6.08
45	0.85	1.15	1.79	2.16	2.59	3.09	3.68	4.37	5.18
50	0.66	0.96	1.54	1.86	2.24	2.66	3.16	3.74	4.41
55	-	-	1.31	1.60	1.92	2.28	2.70	3.18	3.74
60	-	-	-	1.35	1.63	1.94	2.29	2.70	3.16
65	-	-	-	-	1.36	1.63	1.93	2.27	2.66
75	-	-	-	-	-	-	1.31	1.55	1.83

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

Cooling capacity	3 757	W
Power input	1 410	W
Current consumption	3.18	A
Mass flow	98	kg/h
C.O.P.	2.66	

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 accoustic 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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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	664	756	942	1 030	1 112	1 185	1 246	1 293	1 323
40	687	783	983	1 081	1 174	1 260	1 336	1 400	1 449
45	703	805	1 020	1 129	1 235	1 335	1 428	1 510	1 579
50	-	820	1 054	1 174	1 294	1 410	1 520	1 622	1 712
55	-	-	1 081	1 215	1 350	1 483	1 612	1 734	1 847
60	-	-	-	1 251	1 402	1 553	1 702	1 846	1 982
65	-	-	-	-	-	1 619	1 789	1 956	2 117
75	-	-	-	-	-	-	1 948	2 165	2 380

Current consumption in A

35	2.58	2.64	2.76	2.82	2.88	2.94	2.99	3.04	3.08
40	2.59	2.66	2.80	2.87	2.95	3.02	3.09	3.16	3.23
45	2.60	2.67	2.83	2.92	3.01	3.10	3.19	3.28	3.38
50	-	2.67	2.85	2.96	3.06	3.18	3.29	3.41	3.53
55	-	-	2.87	2.99	3.12	3.25	3.39	3.53	3.68
60	-	-	-	3.02	3.17	3.32	3.48	3.66	3.83
65	-	-	-	-	-	3.39	3.58	3.78	3.99
75	-	-	-	-	-	-	3.76	4.02	4.30

Mass flow in kg/h

35	21	30	52	67	86	107	133	164	199
40	19	28	50	65	83	104	130	160	195
45	17	26	48	63	80	101	126	155	189
50	-	23	45	59	77	97	122	150	184
55	-	-	42	56	73	93	117	145	178
60	-	-	-	52	69	88	111	139	171
65	-	-	-	-	-	83	105	132	163
75	-	-	-	-	-	-	92	117	147

Coefficient of performance (C.O.P.)

35	1.39	1.73	2.54	3.05	3.67	4.40	5.28	6.34	7.63
40	1.16	1.49	2.24	2.69	3.23	3.85	4.60	5.48	6.54
45	0.94	1.27	1.95	2.36	2.82	3.36	3.99	4.73	5.61
50	-	1.06	1.69	2.05	2.45	2.91	3.45	4.07	4.80
55	-	-	1.45	1.77	2.12	2.51	2.97	3.49	4.10
60	-	-	-	1.51	1.81	2.15	2.54	2.98	3.49
65	-	-	-	-	-	1.82	2.15	2.53	2.96
75	-	-	-	-	-	-	1.50	1.78	2.09

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

Cooling capacity	4 218	W
Power input	1 531	W
Current consumption	3.30	A
Mass flow	103	kg/h
C.O.P.	2.75	

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 accoustic 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. MTZ028-4

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	2 544	3 518	4 673	6 032	7 616	9 449	11 550	-	-
40	2 262	3 187	4 278	5 558	7 049	8 772	10 751	-	-
45	1 975	2 849	3 875	5 075	6 470	8 084	9 938	-	-
50	-	2 509	3 467	4 585	5 885	7 387	9 115	-	-
55	-	-	3 058	4 093	5 294	6 684	8 284	-	-
60	-	-	-	3 601	4 703	5 978	7 450	-	-
65	-	-	-	3 112	4 113	5 273	6 614	-	-

Power input in W

35	1 262	1 422	1 555	1 660	1 735	1 778	1 789	-	-
40	1 289	1 480	1 644	1 779	1 883	1 956	1 995	-	-
45	1 297	1 523	1 721	1 890	2 028	2 133	2 206	-	-
50	-	1 548	1 784	1 990	2 165	2 308	2 417	-	-
55	-	-	1 830	2 077	2 294	2 477	2 626	-	-
60	-	-	-	2 148	2 409	2 636	2 829	-	-
65	-	-	-	2 199	2 508	2 784	3 025	-	-

Current consumption in A

35	3.22	3.38	3.53	3.65	3.74	3.82	3.88	-	-
40	3.25	3.46	3.64	3.79	3.92	4.02	4.10	-	-
45	3.25	3.51	3.74	3.94	4.11	4.25	4.36	-	-
50	-	3.54	3.83	4.08	4.30	4.48	4.64	-	-
55	-	-	3.89	4.21	4.49	4.73	4.94	-	-
60	-	-	-	4.31	4.66	4.97	5.24	-	-
65	-	-	-	4.39	4.82	5.20	5.55	-	-

Mass flow in kg/h

35	55	75	98	125	155	190	229	-	-
40	52	71	94	120	150	184	223	-	-
45	48	67	90	116	145	179	216	-	-
50	-	63	85	111	140	172	209	-	-
55	-	-	80	105	134	166	202	-	-
60	-	-	-	99	127	158	194	-	-
65	-	-	-	93	120	150	185	-	-

Coefficient of performance (C.O.P.)

35	2.02	2.47	3.00	3.63	4.39	5.31	6.46	-	-
40	1.76	2.15	2.60	3.12	3.74	4.49	5.39	-	-
45	1.52	1.87	2.25	2.69	3.19	3.79	4.51	-	-
50	-	1.62	1.94	2.30	2.72	3.20	3.77	-	-
55	-	-	1.67	1.97	2.31	2.70	3.16	-	-
60	-	-	-	1.68	1.95	2.27	2.63	-	-
65	-	-	-	1.42	1.64	1.89	2.19	-	-

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

Cooling capacity	5 885	W
Power input	2 165	W
Current consumption	4.30	A
Mass flow	140	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 = 10 K , Subcooling = 0 K

Tolerance according EN12900

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	2 738	3 782	5 018	6 470	8 160	10 112	12 350	-	-
40	2 448	3 444	4 617	5 991	7 589	9 434	11 549	-	-
45	2 151	3 098	4 208	5 502	7 006	8 742	10 734	-	-
50	-	2 748	3 792	5 006	6 415	8 041	9 909	-	-
55	-	-	3 373	4 506	5 818	7 334	9 075	-	-
60	-	-	-	4 005	5 220	6 623	8 238	-	-
65	-	-	-	3 506	4 623	5 914	7 402	-	-

Power input in W

35	1 262	1 422	1 555	1 660	1 735	1 778	1 789	-	-
40	1 289	1 480	1 644	1 779	1 883	1 956	1 995	-	-
45	1 297	1 523	1 721	1 890	2 028	2 133	2 206	-	-
50	-	1 548	1 784	1 990	2 165	2 308	2 417	-	-
55	-	-	1 830	2 077	2 294	2 477	2 626	-	-
60	-	-	-	2 148	2 409	2 636	2 829	-	-
65	-	-	-	2 199	2 508	2 784	3 025	-	-

Current consumption in A

35	3.22	3.38	3.53	3.65	3.74	3.82	3.88	-	-
40	3.25	3.46	3.64	3.79	3.92	4.02	4.10	-	-
45	3.25	3.51	3.74	3.94	4.11	4.25	4.36	-	-
50	-	3.54	3.83	4.08	4.30	4.48	4.64	-	-
55	-	-	3.89	4.21	4.49	4.73	4.94	-	-
60	-	-	-	4.31	4.66	4.97	5.24	-	-
65	-	-	-	4.39	4.82	5.20	5.55	-	-

Mass flow in kg/h

35	55	75	98	124	154	188	227	-	-
40	51	71	94	120	150	183	222	-	-
45	47	67	89	115	144	178	215	-	-
50	-	63	85	110	139	171	208	-	-
55	-	-	80	105	133	165	201	-	-
60	-	-	-	99	126	157	193	-	-
65	-	-	-	92	119	150	184	-	-

Coefficient of performance (C.O.P.)

35	2.17	2.66	3.23	3.90	4.70	5.69	6.90	-	-
40	1.90	2.33	2.81	3.37	4.03	4.82	5.79	-	-
45	1.66	2.03	2.44	2.91	3.46	4.10	4.87	-	-
50	-	1.78	2.13	2.52	2.96	3.48	4.10	-	-
55	-	-	1.84	2.17	2.54	2.96	3.46	-	-
60	-	-	-	1.86	2.17	2.51	2.91	-	-
65	-	-	-	1.59	1.84	2.12	2.45	-	-

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

Cooling capacity	6 536	W
Power input	2 361	W
Current consumption	4.57	A
Mass flow	147	kg/h
C.O.P.	2.77	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

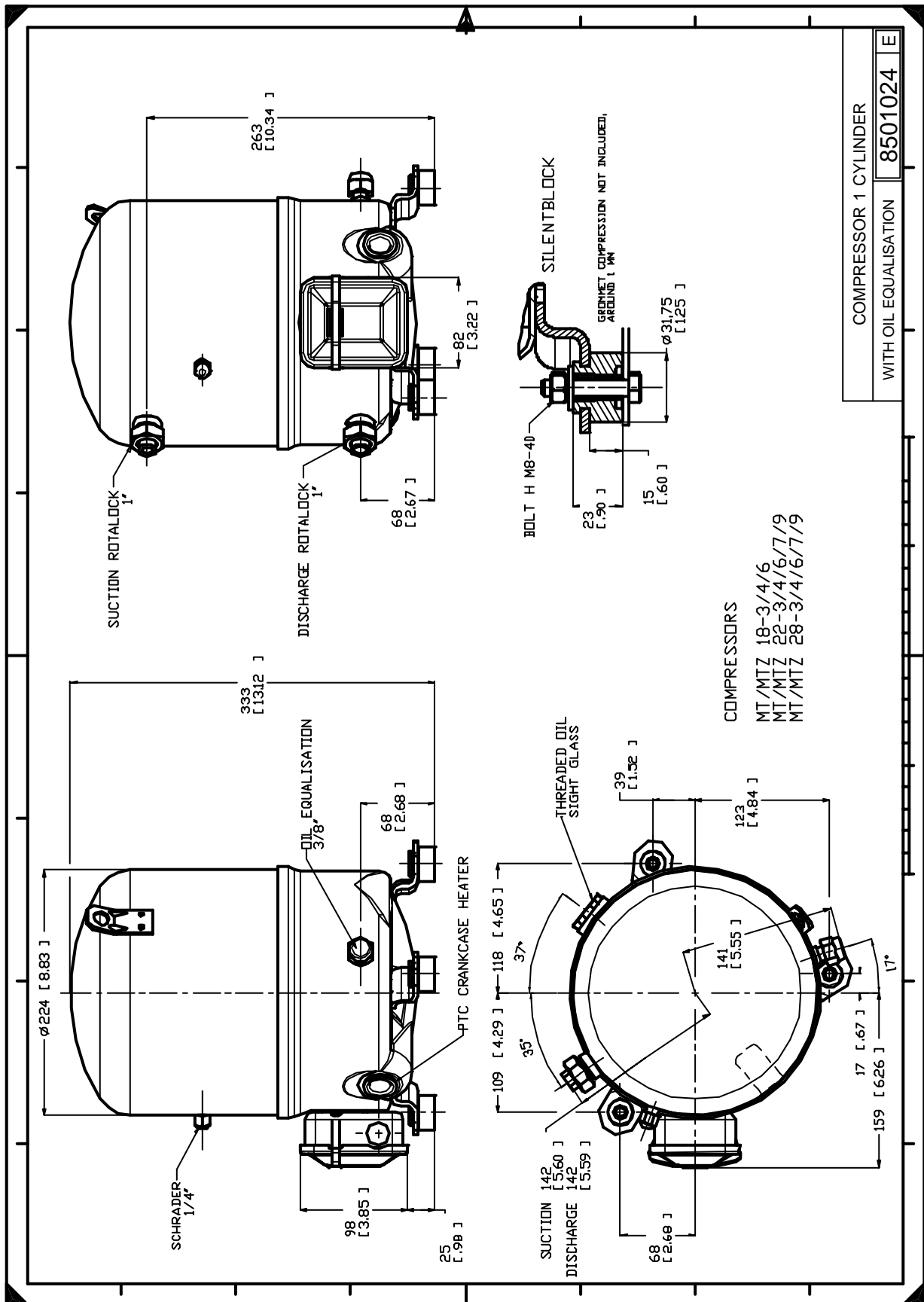
Pressure switch settings

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

Sound power data

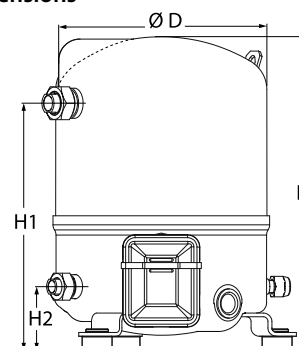
Sound power level	73	dB(A)
With acoustic hood	66	dB(A)

Tolerance according EN12900



General Characteristics

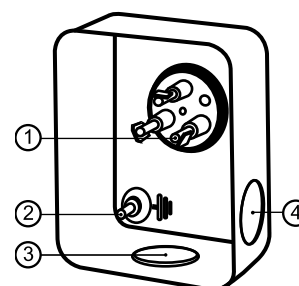
Model number (on compressor nameplate)		MTZ28JE5AVE
Code number for Singlepack*		MTZ28-5VI
Code number for Industrial pack**		MTZ28-5VM
Drawing number		8501021e
Suction and discharge connections		Rotolock
Suction connection		1 " Rotolock
Discharge connection		1 " Rotolock
Suction connection with supplied 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 ³ /rev	
Displacement @ Nominal speed	8.4 m ³ /h @ 2900 rpm	
Net weight	23 kg	
Oil charge	0.95 litre, POE - 160PZ	
Maximum system test pressure Low Side / High side	25 bar(g) / 30 bar(g)	
Maximum differential test pressure	30 bar	
Maximum number of starts per hour	12	
Refrigerant charge limit	2.5 kg	
Approved refrigerants	R404A, R507A, R134a, R407C, R407A, R407F	

Dimensions


D=224 mm
 H=333 mm
 H1=263 mm
 H2=68 mm
 H3= mm

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

Terminal box

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)

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")

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	9.98	10.11	-	-
40	8.55	8.93	9.36	9.78	10.18	10.50	10.71	-	-
45	8.61	9.09	9.62	10.15	10.65	11.08	11.41	-	-
50	-	9.23	9.87	10.53	11.15	11.71	12.17	-	-
55	-	-	10.12	10.91	11.68	12.39	13.00	-	-
60	-	-	-	11.29	12.22	13.10	13.88	-	-
65	-	-	-	11.65	12.76	13.82	14.78	-	-

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	11.15	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

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	9.98	10.11	-	-
40	8.55	8.93	9.36	9.78	10.18	10.50	10.71	-	-
45	8.61	9.09	9.62	10.15	10.65	11.08	11.41	-	-
50	-	9.23	9.87	10.53	11.15	11.71	12.17	-	-
55	-	-	10.12	10.91	11.68	12.39	13.00	-	-
60	-	-	-	11.29	12.22	13.10	13.88	-	-
65	-	-	-	11.65	12.76	13.82	14.78	-	-

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	196	-	-
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	11.93	A
Mass flow	146	kg/h
C.O.P.	2.72	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	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

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	20

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	8.10	8.35	8.59	8.83
50	6.78	6.99	7.47	7.73	8.01	8.31	8.61	8.91	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	9.56	10.03
65	-	-	-	-	8.39	8.87	9.36	9.89	10.43
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	161	196
45	17	26	48	63	80	102	127	156	191
50	14	23	45	60	77	98	122	151	185
55	-	-	42	56	73	93	117	146	179
60	-	-	-	52	69	89	112	140	172
65	-	-	-	-	64	83	106	133	164
75	-	-	-	-	-	-	92	118	148

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 accoustic 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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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	8.10	8.35	8.59	8.83
50	-	6.99	7.47	7.73	8.01	8.31	8.61	8.91	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	9.56	10.03
65	-	-	-	-	-	8.87	9.36	9.89	10.43
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	195
45	17	26	48	63	80	101	126	155	189
50	-	23	45	59	77	97	122	150	184
55	-	-	42	56	73	93	117	145	178
60	-	-	-	52	69	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 accoustic 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	10

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	9.36	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	8.34	8.99	9.68	10.38	11.08	11.73	12.31	12.80	13.15
50	8.15	8.91	9.71	10.54	11.35	12.13	12.84	13.45	13.94
55	-	8.71	9.65	10.62	11.58	12.50	13.36	14.13	14.78
60	-	8.37	9.47	10.60	11.72	12.82	13.85	14.80	15.63

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	159	196	238	285
45	31	49	70	94	121	153	189	230	277
50	26	43	64	88	115	147	182	223	268
55	-	38	59	82	109	140	176	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	

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	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)

Tolerance according EN12900

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	10

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	9.36	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	8.34	8.99	9.68	10.38	11.08	11.73	12.31	12.80	13.15
50	8.15	8.91	9.71	10.54	11.35	12.13	12.84	13.45	13.94
55	-	8.71	9.65	10.62	11.58	12.50	13.36	14.13	14.78
60	-	8.37	9.47	10.60	11.72	12.82	13.85	14.80	15.63

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	25	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	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	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)

Tolerance according EN12900

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	20

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	8.10	8.35	8.59	8.83
50	6.78	6.99	7.47	7.73	8.01	8.31	8.61	8.91	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	9.56	10.03
65	-	-	-	-	8.39	8.87	9.36	9.89	10.43
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	161	196
45	17	26	48	63	80	102	127	156	191
50	14	23	45	60	77	98	122	151	185
55	-	-	42	56	73	93	117	146	179
60	-	-	-	52	69	89	112	140	172
65	-	-	-	-	64	83	106	133	164
75	-	-	-	-	-	-	92	118	148

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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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	8.10	8.35	8.59	8.83
50	-	6.99	7.47	7.73	8.01	8.31	8.61	8.91	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	9.56	10.03
65	-	-	-	-	-	8.87	9.36	9.89	10.43
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	195
45	17	26	48	63	80	101	126	155	189
50	-	23	45	59	77	97	122	150	184
55	-	-	42	56	73	93	117	145	178
60	-	-	-	52	69	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 accoustic 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	9.98	10.11	-	-
40	8.55	8.93	9.36	9.78	10.18	10.50	10.71	-	-
45	8.61	9.09	9.62	10.15	10.65	11.08	11.41	-	-
50	-	9.23	9.87	10.53	11.15	11.71	12.17	-	-
55	-	-	10.12	10.91	11.68	12.39	13.00	-	-
60	-	-	-	11.29	12.22	13.10	13.88	-	-
65	-	-	-	11.65	12.76	13.82	14.78	-	-

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	11.15	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

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	9.98	10.11	-	-
40	8.55	8.93	9.36	9.78	10.18	10.50	10.71	-	-
45	8.61	9.09	9.62	10.15	10.65	11.08	11.41	-	-
50	-	9.23	9.87	10.53	11.15	11.71	12.17	-	-
55	-	-	10.12	10.91	11.68	12.39	13.00	-	-
60	-	-	-	11.29	12.22	13.10	13.88	-	-
65	-	-	-	11.65	12.76	13.82	14.78	-	-

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	196	-	-
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	11.93	A
Mass flow	146	kg/h
C.O.P.	2.72	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

Pressure switch settings

Maximum HP switch setting	29.4	bar(g)
Minimum LP switch setting	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

