



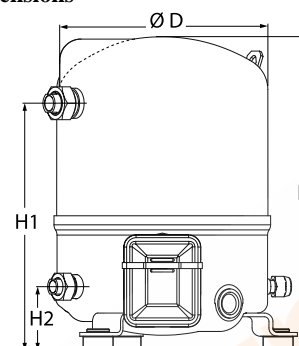
Datasheets

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

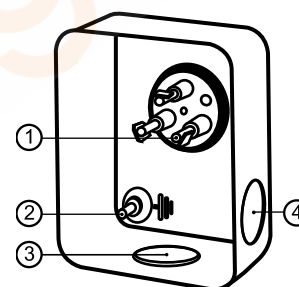


**General Characteristics**

Model number (on compressor nameplate)		<b>MTZ28JE4AVE</b>
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		30 bar / 8 bar
Cylinders		1
Swept volume		48,06 cm <sup>3</sup> /rev
Displacement @ Nominal speed		8.4 m <sup>3</sup> /h @ 2900 rpm - 10.1 m <sup>3</sup> /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

**Dimensions**


D=224 mm  
H=333 mm  
H1=263 mm  
H2=68 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	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	7.11 #
Maximum Continuous Current (MCC)	7.5 A
Locked Rotor Amps (LRA)	23 A
Motor protection	Internal overload protector

**Recommended Installation torques**

Oil sight glass	50 Nm
Power connections / Earth connection	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

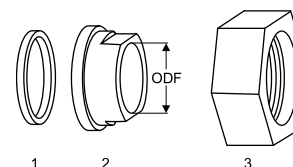
**Approvals :** CE certified, UL certified (file SA6873), CCC certified

\*Singlepack: Compressor in cardboard box

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

**Rotolock accessories, suction side**
**Code no.**

Solder sleeve, P06 (1" Rotolock, 1/2" ODF)	8153007
Angle adapter, C06 (1" Rotolock, 1/2" ODF)	8168007
Rotolock valve, V06 (1" Rotolock, 1/2" ODF)	8168031
Gasket, 1"	8156130

**Gaskets, sleeves and nuts**


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

**Rotolock accessories, discharge side**
**Code no.**

Solder sleeve, P01 (1" Rotolock, 3/8" ODF)	8153010
Angle adapter, C01 (1" Rotolock, 3/8" ODF)	8168004
Rotolock valve, V01 (1" Rotolock, 3/8" ODF)	8168027
Gasket, 1"	8156130

**Rotolock accessories, sets**
**Code no.**

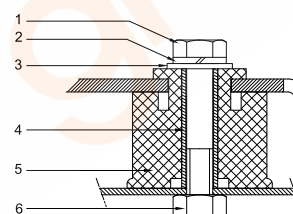
Angle adapter set, C06 (1"~1/2"), C01 (1"~3/8")	7703011
Valve set, V06 (1"~1/2"), V01 (1"~3/8")	7703004
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009

**Oil / lubricants**
**Code no.**

POE lubricant, 160PZ, 1 litre can	7754019
POE lubricant, 160PZ, 2 litre can	7754020

**Crankcase heaters**
**Code no.**

PTC heater 27W, CE mark, UL	120Z0459
Belt type crankcase heater, 54 W, 230 V, CE mark, UL	7773106
Belt type crankcase heater, 54 W, 400 V, UL	7773013

**Mounting kit**


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

**Miscellaneous accessories**
**Code no.**

Electronic soft start kit, MCI 15 C	7705006
Acoustic hood for 1 cylinder compressor	120Z0471
Oil equalisation nut	8153127

**Spare parts**
**Code no.**

Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts	8156001
Oil sight glass with gaskets (black & white)	8156019
Gasket for oil sight glass (black chloroprene)	8156145
Service kit for terminal box 80 x 96 mm, including 1 cover, 1 clamp	8156134

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	0.2	bar(g)
LP pump down setting	1.3	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

All performance data +/- 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	2 738	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	0.2	bar(g)
LP pump down setting	1.3	bar(g)

**Sound power data**

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

All performance data +/- 5%



Performance data at 50 Hz, EN 12900 rating conditions

R134a

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

Cooling capacity in W

35	1 522	2 090	2 811	3 708	4 805	6 125	7 692	9 527	-
40	1 369	1 899	2 574	3 417	4 450	5 696	7 179	8 923	-
45	1 234	1 723	2 346	3 128	4 091	5 259	6 654	8 299	-
50	1 120	1 560	2 127	2 844	3 732	4 815	6 116	7 658	-
55	1 026	1 414	1 919	2 564	3 372	4 366	5 568	7 001	-
60	-	1 284	1 722	2 292	3 014	3 913	5 010	6 329	-
65	-	-	-	2 027	2 659	3 458	4 445	5 645	-
70	-	-	-	-	-	3 002	3 874	4 949	-

Power input in W

35	850	942	1 030	1 112	1 185	1 246	1 293	1 323	-
40	883	983	1 081	1 174	1 260	1 336	1 400	1 449	-
45	911	1 020	1 129	1 235	1 335	1 428	1 510	1 579	-
50	935	1 054	1 174	1 294	1 410	1 520	1 622	1 712	-
55	951	1 081	1 215	1 350	1 483	1 612	1 734	1 847	-
60	-	1 102	1 251	1 402	1 553	1 702	1 846	1 982	-
65	-	-	-	1 448	1 619	1 789	1 956	2 117	-
70	-	-	-	-	-	1 871	2 063	2 250	-

Current consumption in A

35	2.70	2.76	2.82	2.88	2.94	2.99	3.04	3.08	-
40	2.73	2.80	2.87	2.95	3.02	3.09	3.16	3.23	-
45	2.75	2.83	2.92	3.01	3.10	3.19	3.28	3.38	-
50	2.76	2.85	2.96	3.06	3.18	3.29	3.41	3.53	-
55	2.76	2.87	2.99	3.12	3.25	3.39	3.53	3.68	-
60	-	2.88	3.02	3.17	3.32	3.48	3.66	3.83	-
65	-	-	-	3.21	3.39	3.58	3.78	3.99	-
70	-	-	-	-	-	3.67	3.90	4.14	-

Mass flow in kg/h

35	37	50	65	84	107	134	165	202	-
40	35	47	63	81	104	131	162	198	-
45	33	45	60	79	100	127	157	192	-
50	32	43	58	75	97	122	152	187	-
55	31	42	56	72	93	117	146	180	-
60	-	41	53	69	89	112	140	173	-
65	-	-	-	66	85	107	133	165	-
70	-	-	-	-	-	101	126	156	-

Coefficient of performance (C.O.P.)

35	1.79	2.22	2.73	3.33	4.05	4.92	5.95	7.20	-
40	1.55	1.93	2.38	2.91	3.53	4.26	5.13	6.16	-
45	1.35	1.69	2.08	2.53	3.06	3.68	4.41	5.26	-
50	1.20	1.48	1.81	2.20	2.65	3.17	3.77	4.47	-
55	1.08	1.31	1.58	1.90	2.27	2.71	3.21	3.79	-
60	-	1.16	1.38	1.63	1.94	2.30	2.71	3.19	-
65	-	-	-	1.40	1.64	1.93	2.27	2.67	-
70	-	-	-	-	-	1.60	1.88	2.20	-

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

Cooling capacity	3 732	W
Power input	1 410	W
Current consumption	3.18	A
Mass flow	97	kg/h
C.O.P.	2.65	

Pressure switch settings

Maximum HP switch setting	22.6	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)

Sound power data

Sound power level	0	dB(A)
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

All performance data +/- 5%

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**Performance data at 50 Hz, ARI rating conditions**
**R134a**

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

**Cooling capacity in W**

35	1 649	2 260	3 034	3 997	5 172	6 583	8 255	10 212	-
40	1 491	2 065	2 793	3 701	4 812	6 150	7 740	9 605	-
45	1 353	1 884	2 560	3 407	4 448	5 707	7 209	8 978	-
50	1 236	1 718	2 337	3 117	4 082	5 257	6 665	8 330	-
55	1 142	1 569	2 125	2 832	3 715	4 799	6 108	7 665	-
60	-	1 439	1 925	2 553	3 349	4 337	5 539	6 982	-
65	-	-	-	2 283	2 985	3 870	4 961	6 283	-
70	-	-	-	-	-	3 401	4 375	5 571	-

**Power input in W**

35	850	942	1 030	1 112	1 185	1 246	1 293	1 323	-
40	883	983	1 081	1 174	1 260	1 336	1 400	1 449	-
45	911	1 020	1 129	1 235	1 335	1 428	1 510	1 579	-
50	935	1 054	1 174	1 294	1 410	1 520	1 622	1 712	-
55	951	1 081	1 215	1 350	1 483	1 612	1 734	1 847	-
60	-	1 102	1 251	1 402	1 553	1 702	1 846	1 982	-
65	-	-	-	1 448	1 619	1 789	1 956	2 117	-
70	-	-	-	-	-	1 871	2 063	2 250	-

**Current consumption in A**

35	2.70	2.76	2.82	2.88	2.94	2.99	3.04	3.08	-
40	2.73	2.80	2.87	2.95	3.02	3.09	3.16	3.23	-
45	2.75	2.83	2.92	3.01	3.10	3.19	3.28	3.38	-
50	2.76	2.85	2.96	3.06	3.18	3.29	3.41	3.53	-
55	2.76	2.87	2.99	3.12	3.25	3.39	3.53	3.68	-
60	-	2.88	3.02	3.17	3.32	3.48	3.66	3.83	-
65	-	-	-	3.21	3.39	3.58	3.78	3.99	-
70	-	-	-	-	-	3.67	3.90	4.14	-

**Mass flow in kg/h**

35	37	49	65	84	107	133	164	201	-
40	35	47	62	81	103	130	161	196	-
45	33	45	60	78	100	126	156	191	-
50	32	43	57	75	96	121	151	186	-
55	31	42	55	72	92	117	145	179	-
60	-	41	53	69	88	112	139	172	-
65	-	-	-	66	84	106	133	164	-
70	-	-	-	-	-	101	126	155	-

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

35	1.94	2.40	2.94	3.59	4.36	5.28	6.38	7.72	-
40	1.69	2.10	2.58	3.15	3.82	4.60	5.53	6.63	-
45	1.48	1.85	2.27	2.76	3.33	4.00	4.77	5.69	-
50	1.32	1.63	1.99	2.41	2.89	3.46	4.11	4.87	-
55	1.20	1.45	1.75	2.10	2.50	2.98	3.52	4.15	-
60	-	1.31	1.54	1.82	2.16	2.55	3.00	3.52	-
65	-	-	-	1.58	1.84	2.16	2.54	2.97	-
70	-	-	-	-	-	1.82	2.12	2.48	-

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

Cooling capacity	4 215	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	22.6	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)

**Sound power data**

Sound power level	0	dB(A)
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

All performance data +/- 5%

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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	0.2	bar(g)
LP pump down setting	0.9	bar(g)

Sound power data

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

All performance data +/- 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	7 170	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	7 106

**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	

**Pressure switch settings**

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.9	bar(g)

**Sound power data**

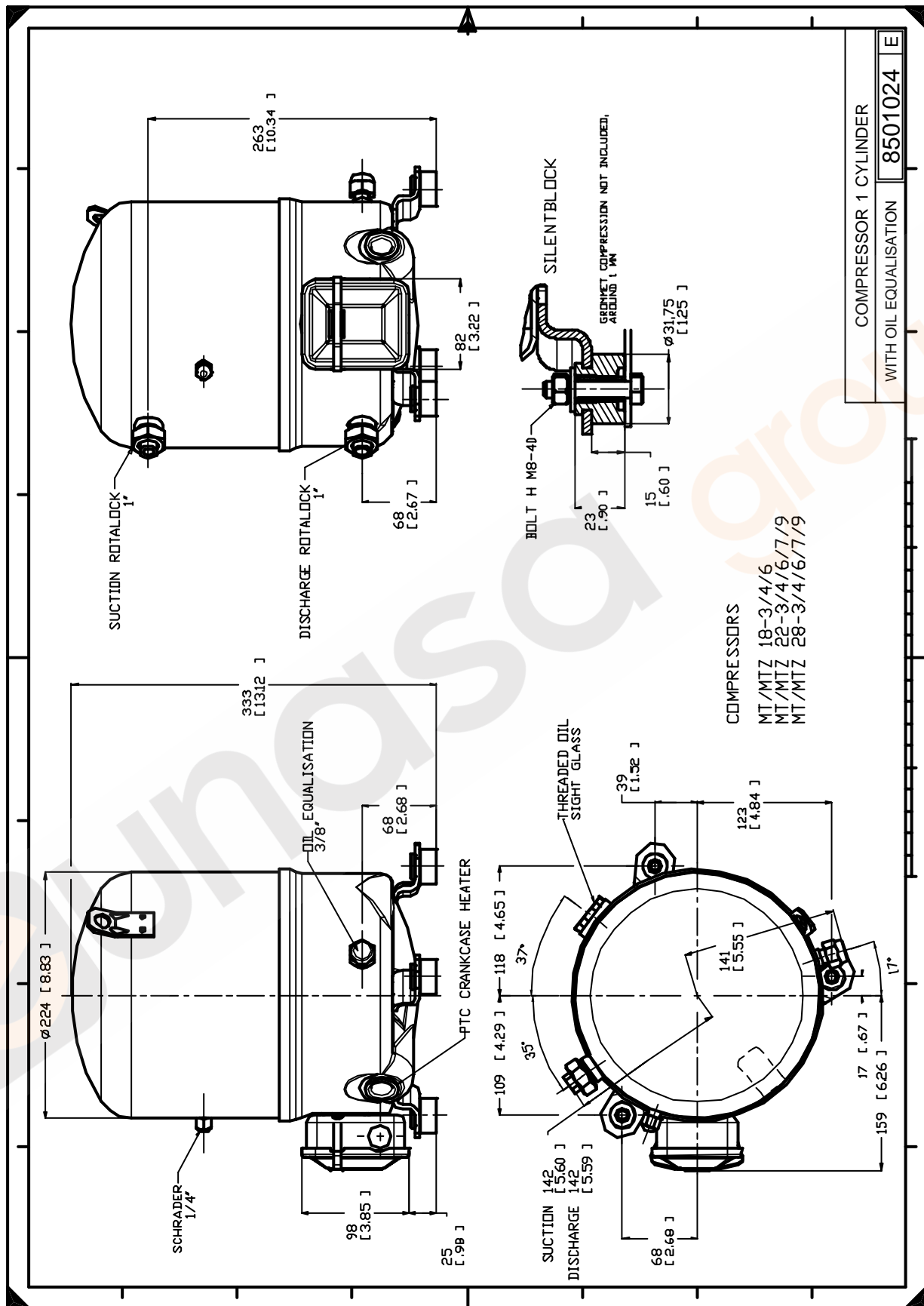
Sound power level	71	dB(A)
With acoustic hood	64	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

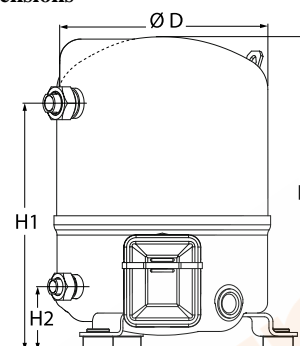
All performance data +/- 5%



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**General Characteristics**

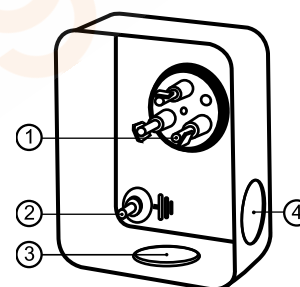
Model number (on compressor nameplate)		<b>MTZ28JE4A</b>
Code number for Industrial pack**		MTZ28-4M
Drawing number		8501031e
Suction and discharge connections		Rotolock
Suction connection		1 " Rotolock
Discharge connection		1 " Rotolock
Suction connection with supplied sleeve		1/2 " ODF
Discharge connection with supplied sleeve		3/8 " ODF
Oil sight glass		None
Oil equalisation connection		None
Oil drain connection		None
LP gauge port		Schrader
IPR valve		30 bar / 8 bar
Cylinders		1
Swept volume		48,06 cm <sup>3</sup> /rev
Displacement @ Nominal speed		8.4 m <sup>3</sup> /h @ 2900 rpm - 10.1 m <sup>3</sup> /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

**Dimensions**


D=224 mm  
H=333 mm  
H1=263 mm  
H2=68 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	7.11 #
Maximum Continuous Current (MCC)	7.5 A
Locked Rotor Amps (LRA)	23 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	0 Nm
Power connections / Earth connection	Nm / 2 Nm
Mounting bolts	15 Nm

**Parts shipped with compressor**

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

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

\*Singlepack: Compressor in cardboard box

\*\*Industrial pack: 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
Angle adapter, C06 (1" Rotolock, 1/2" ODF)	8168007
Rotolock valve, V06 (1" Rotolock, 1/2" ODF)	8168031
Gasket, 1"	8156130

**Rotolock accessories, discharge side**
**Code no.**

Solder sleeve, P01 (1" Rotolock, 3/8" ODF)	8153010
Angle adapter, C01 (1" Rotolock, 3/8" ODF)	8168004
Rotolock valve, V01 (1" Rotolock, 3/8" ODF)	8168027
Gasket, 1"	8156130

**Rotolock accessories, sets**
**Code no.**

Angle adapter set, C06 (1"~1/2"), C01 (1"~3/8")	7703011
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, 160PZ, 1 litre can	7754019
POE lubricant, 160PZ, 2 litre can	7754020

**Crankcase heaters**
**Code no.**

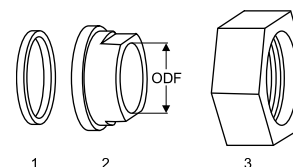
PTC heater 27W, CE mark, UL	120Z0459
Belt type crankcase heater, 54 W, 230 V, CE mark, UL	7773106
Belt type crankcase heater, 54 W, 400 V, UL	7773013

**Miscellaneous accessories**
**Code no.**

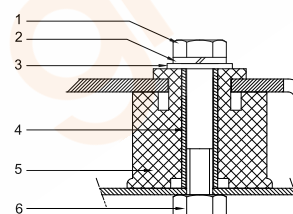
Electronic soft start kit, MCI 15 C	7705006
Acoustic hood for 1 cylinder compressor	120Z0471

**Spare parts**
**Code no.**

Mounting kit for 1 and 2 cylinder compressor, including 3 grommets, 3 bolts	8156001
Service kit for terminal box 80 x 96 mm, including 1 cover, 1 clamp	8156134

**Gaskets, sleeves and nuts**


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

**Mounting kit**


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

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	0.2	bar(g)
LP pump down setting	1.3	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

All performance data +/- 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	2 738	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	0.2	bar(g)
LP pump down setting	1.3	bar(g)

**Sound power data**

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

All performance data +/- 5%



Performance data at 50 Hz, EN 12900 rating conditions

R134a

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

Cooling capacity in W

35	1 522	2 090	2 811	3 708	4 805	6 125	7 692	9 527	-
40	1 369	1 899	2 574	3 417	4 450	5 696	7 179	8 923	-
45	1 234	1 723	2 346	3 128	4 091	5 259	6 654	8 299	-
50	1 120	1 560	2 127	2 844	3 732	4 815	6 116	7 658	-
55	1 026	1 414	1 919	2 564	3 372	4 366	5 568	7 001	-
60	-	1 284	1 722	2 292	3 014	3 913	5 010	6 329	-
65	-	-	-	2 027	2 659	3 458	4 445	5 645	-
70	-	-	-	-	-	3 002	3 874	4 949	-

Power input in W

35	850	942	1 030	1 112	1 185	1 246	1 293	1 323	-
40	883	983	1 081	1 174	1 260	1 336	1 400	1 449	-
45	911	1 020	1 129	1 235	1 335	1 428	1 510	1 579	-
50	935	1 054	1 174	1 294	1 410	1 520	1 622	1 712	-
55	951	1 081	1 215	1 350	1 483	1 612	1 734	1 847	-
60	-	1 102	1 251	1 402	1 553	1 702	1 846	1 982	-
65	-	-	-	1 448	1 619	1 789	1 956	2 117	-
70	-	-	-	-	-	1 871	2 063	2 250	-

Current consumption in A

35	2.70	2.76	2.82	2.88	2.94	2.99	3.04	3.08	-
40	2.73	2.80	2.87	2.95	3.02	3.09	3.16	3.23	-
45	2.75	2.83	2.92	3.01	3.10	3.19	3.28	3.38	-
50	2.76	2.85	2.96	3.06	3.18	3.29	3.41	3.53	-
55	2.76	2.87	2.99	3.12	3.25	3.39	3.53	3.68	-
60	-	2.88	3.02	3.17	3.32	3.48	3.66	3.83	-
65	-	-	-	3.21	3.39	3.58	3.78	3.99	-
70	-	-	-	-	-	3.67	3.90	4.14	-

Mass flow in kg/h

35	37	50	65	84	107	134	165	202	-
40	35	47	63	81	104	131	162	198	-
45	33	45	60	79	100	127	157	192	-
50	32	43	58	75	97	122	152	187	-
55	31	42	56	72	93	117	146	180	-
60	-	41	53	69	89	112	140	173	-
65	-	-	-	66	85	107	133	165	-
70	-	-	-	-	-	101	126	156	-

Coefficient of performance (C.O.P.)

35	1.79	2.22	2.73	3.33	4.05	4.92	5.95	7.20	-
40	1.55	1.93	2.38	2.91	3.53	4.26	5.13	6.16	-
45	1.35	1.69	2.08	2.53	3.06	3.68	4.41	5.26	-
50	1.20	1.48	1.81	2.20	2.65	3.17	3.77	4.47	-
55	1.08	1.31	1.58	1.90	2.27	2.71	3.21	3.79	-
60	-	1.16	1.38	1.63	1.94	2.30	2.71	3.19	-
65	-	-	-	1.40	1.64	1.93	2.27	2.67	-
70	-	-	-	-	-	1.60	1.88	2.20	-

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

Cooling capacity	3 732	W
Power input	1 410	W
Current consumption	3.18	A
Mass flow	97	kg/h
C.O.P.	2.65	

Pressure switch settings

Maximum HP switch setting	22.6	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)

Sound power data

Sound power level	0	dB(A)
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

All performance data +/- 5%

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**Performance data at 50 Hz, ARI rating conditions**
**R134a**

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

**Cooling capacity in W**

35	1 649	2 260	3 034	3 997	5 172	6 583	8 255	10 212	-
40	1 491	2 065	2 793	3 701	4 812	6 150	7 740	9 605	-
45	1 353	1 884	2 560	3 407	4 448	5 707	7 209	8 978	-
50	1 236	1 718	2 337	3 117	4 082	5 257	6 665	8 330	-
55	1 142	1 569	2 125	2 832	3 715	4 799	6 108	7 665	-
60	-	1 439	1 925	2 553	3 349	4 337	5 539	6 982	-
65	-	-	-	2 283	2 985	3 870	4 961	6 283	-
70	-	-	-	-	-	3 401	4 375	5 571	-

**Power input in W**

35	850	942	1 030	1 112	1 185	1 246	1 293	1 323	-
40	883	983	1 081	1 174	1 260	1 336	1 400	1 449	-
45	911	1 020	1 129	1 235	1 335	1 428	1 510	1 579	-
50	935	1 054	1 174	1 294	1 410	1 520	1 622	1 712	-
55	951	1 081	1 215	1 350	1 483	1 612	1 734	1 847	-
60	-	1 102	1 251	1 402	1 553	1 702	1 846	1 982	-
65	-	-	-	1 448	1 619	1 789	1 956	2 117	-
70	-	-	-	-	-	1 871	2 063	2 250	-

**Current consumption in A**

35	2.70	2.76	2.82	2.88	2.94	2.99	3.04	3.08	-
40	2.73	2.80	2.87	2.95	3.02	3.09	3.16	3.23	-
45	2.75	2.83	2.92	3.01	3.10	3.19	3.28	3.38	-
50	2.76	2.85	2.96	3.06	3.18	3.29	3.41	3.53	-
55	2.76	2.87	2.99	3.12	3.25	3.39	3.53	3.68	-
60	-	2.88	3.02	3.17	3.32	3.48	3.66	3.83	-
65	-	-	-	3.21	3.39	3.58	3.78	3.99	-
70	-	-	-	-	-	3.67	3.90	4.14	-

**Mass flow in kg/h**

35	37	49	65	84	107	133	164	201	-
40	35	47	62	81	103	130	161	196	-
45	33	45	60	78	100	126	156	191	-
50	32	43	57	75	96	121	151	186	-
55	31	42	55	72	92	117	145	179	-
60	-	41	53	69	88	112	139	172	-
65	-	-	-	66	84	106	133	164	-
70	-	-	-	-	-	101	126	155	-

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

35	1.94	2.40	2.94	3.59	4.36	5.28	6.38	7.72	-
40	1.69	2.10	2.58	3.15	3.82	4.60	5.53	6.63	-
45	1.48	1.85	2.27	2.76	3.33	4.00	4.77	5.69	-
50	1.32	1.63	1.99	2.41	2.89	3.46	4.11	4.87	-
55	1.20	1.45	1.75	2.10	2.50	2.98	3.52	4.15	-
60	-	1.31	1.54	1.82	2.16	2.55	3.00	3.52	-
65	-	-	-	1.58	1.84	2.16	2.54	2.97	-
70	-	-	-	-	-	1.82	2.12	2.48	-

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

Cooling capacity	4 215	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	22.6	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.5	bar(g)

**Sound power data**

Sound power level	0	dB(A)
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

All performance data +/- 5%

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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	0.2	bar(g)
LP pump down setting	0.9	bar(g)

Sound power data

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

All performance data +/- 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	7 170	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	7 106

**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	

**Pressure switch settings**

Maximum HP switch setting	27.7	bar(g)
Minimum LP switch setting	0.2	bar(g)
LP pump down setting	0.9	bar(g)

**Sound power data**

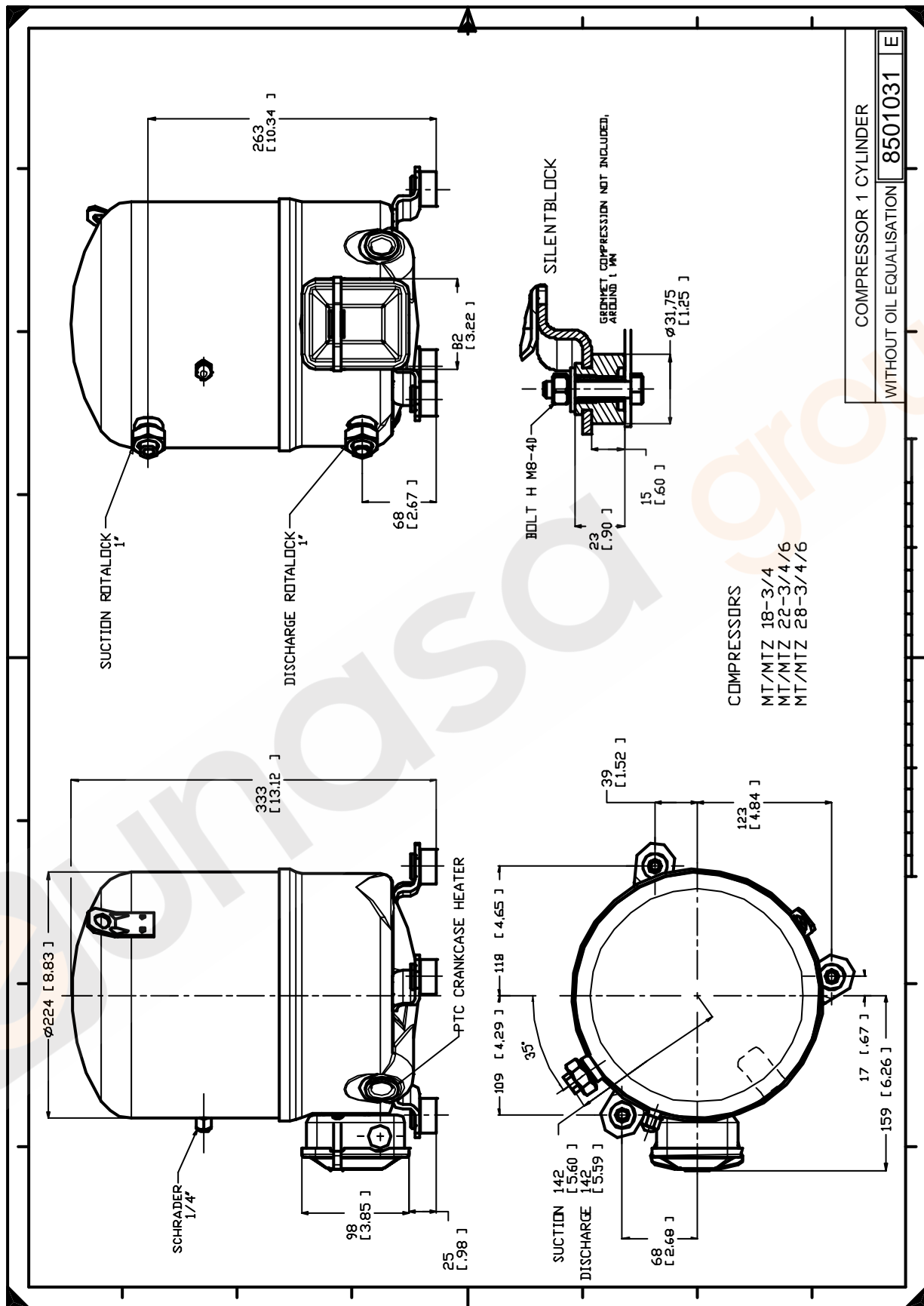
Sound power level	71	dB(A)
With acoustic hood	64	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

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

All performance data +/- 5%



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