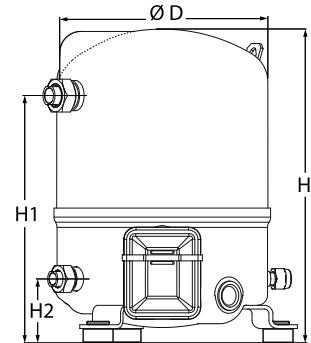


General Characteristics

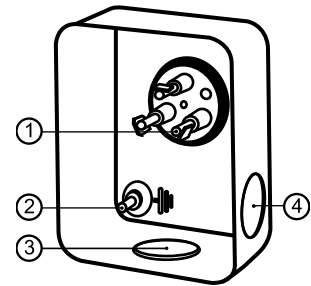
Model number (on compressor nameplate)		MT18JA1PVE
Code number for Singlepack*		MT18-1VI
Code number for Industrial pack**		MT18-1VM
Drawing number		8501021e
Suction and discharge connections		Rotolock
Suction connection		1 " Rotolock
Discharge connection		1 " Rotolock
Suction connection with supplied sleeve		1/2 " ODF
Discharge connection with supplied sleeve		3/8 " ODF
Oil sight glass		Threaded
Oil equalization connection		3/8" flare SAE
Oil drain connection		None
LP gauge port		Schrader
IPR valve		435 psi / 115 psi
Cylinders		1
Swept volume		1.84 in3/rev
Displacement @ Nominal speed		224 cfh @ 3500 rpm
Net weight		46 lbs
Oil charge		32 oz, Mineral - 160P
Maximum system test pressure Low Side / High side		363 psi / 435 psi
Maximum differential test pressure		435 psi
Maximum number of starts per hour		12
Refrigerant charge limit		6 lbs
Approved refrigerants		R22, R417A-160PZ

Dimensions



D=8.8 inch, H=13.1 inch,
H1=10.4 inch, H2=2.7 inch

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	208-230V/1/60Hz
Voltage range	187-253 V
Winding resistance (main / start) at 25°C	1,36 Ω / 4,82 Ω
Run capacitors A + C	15 uF + 10 uF
Start capacitor B	100 uF
Start relay	RVA-6AMKL
Maximum Continuous Current (MCC)	13 A
Locked Rotor Amps (LRA)	51 A
Motor protection	Internal overload protector

Recommended Installation torques

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

Parts shipped with compressor

Mounting kit with grommets, bolts, nuts, sleeves and washers
Suction & Discharge solder sleeves, rotolock nuts and gaskets (shipped with rotolock version only)
Initial oil charge
Installation instructions

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

*Singlepack: Compressor in cardboard box

**Industrial pack: 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.

Mineral oil, 160P, 2 liter can	7754001
Mineral oil, 160P, 5 liter can	7754002

Crankcase heaters
Code no.

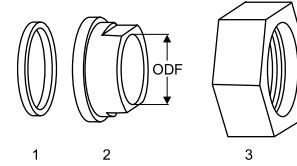
PTC heater 27W	120Z0459
Belt type crankcase heater, 54 W, 230 V, CE mark, UL	7773106

Miscellaneous accessories
Code no.

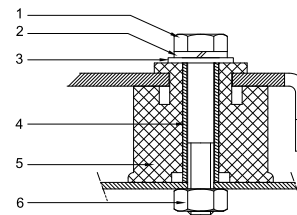
PSC starting kit, 15 µF, 10 µF	7701025
CSR starting kit, 15 µF, 10 µF, 98 µF	7701021
Acoustic hood for 1 cylinder compressor	7755001
Oil equalisation nut	8153127

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

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 60 Hz, ARI rating conditions

R22

Cond. temp. in °F (tc)	Evaporating temperature in °F (to)								
	-10	0	10	20	30	40	45	50	55

Cooling capacity in Btu/h

90	3 766	5 683	8 163	11 303	15 199	19 950	22 676	25 652	28 890
100	3 290	5 085	7 408	10 355	14 025	18 513	21 095	23 917	26 993
110	2 863	4 513	6 655	9 387	12 806	17 009	19 435	22 093	24 995
120	-	3 972	5 911	8 405	11 550	15 444	17 702	20 184	22 901
130	-	-	5 181	7 413	10 262	13 824	15 903	18 196	20 717
140	-	-	-	6 418	8 947	12 154	14 042	16 136	18 448
150	-	-	-	-	7 611	10 440	12 125	14 009	16 101

Power input in W

90	760	899	1 027	1 138	1 224	1 280	1 294	1 298	1 290
100	790	938	1 077	1 201	1 303	1 377	1 401	1 415	1 419
110	815	972	1 124	1 263	1 383	1 476	1 511	1 537	1 553
120	-	1 002	1 168	1 323	1 462	1 577	1 623	1 661	1 690
130	-	-	1 207	1 381	1 540	1 678	1 737	1 788	1 831
140	-	-	-	1 435	1 617	1 780	1 852	1 917	1 973
150	-	-	-	-	1 691	1 880	1 966	2 046	2 118

Current consumption in A

90	5.40	5.61	5.83	6.03	6.21	6.32	6.35	6.35	6.33
100	5.45	5.68	5.92	6.15	6.36	6.52	6.58	6.61	6.63
110	5.49	5.74	6.01	6.28	6.53	6.75	6.84	6.90	6.95
120	-	5.79	6.09	6.41	6.72	6.99	7.11	7.21	7.30
130	-	-	6.17	6.54	6.91	7.25	7.40	7.54	7.67
140	-	-	-	6.67	7.10	7.51	7.71	7.89	8.06
150	-	-	-	-	7.30	7.79	8.03	8.25	8.47

Mass flow in lbs/h

90	50	75	106	145	192	249	281	316	354
100	46	70	100	138	184	240	272	307	344
110	41	65	94	130	175	230	261	295	332
120	-	59	87	122	165	218	248	281	317
130	-	-	80	113	154	205	234	266	300
140	-	-	-	103	141	189	217	247	281
150	-	-	-	-	127	172	198	227	259

Energy Efficiency Ratio (E.E.R.)

90	4.96	6.32	7.95	9.93	12.41	15.59	17.52	19.77	22.39
100	4.16	5.42	6.88	8.62	10.76	13.44	15.06	16.90	19.02
110	3.51	4.64	5.92	7.43	9.26	11.52	12.86	14.38	16.10
120	-	3.97	5.06	6.35	7.90	9.79	10.90	12.15	13.55
130	-	-	4.29	5.37	6.66	8.24	9.15	10.18	11.32
140	-	-	-	4.47	5.53	6.83	7.58	8.42	9.35
150	-	-	-	-	4.50	5.55	6.17	6.85	7.60

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

Cooling capacity	15 903	Btu/h	Current consumption	7.40	A
Power input	1 737	W	Mass flow	234	lbs/h
E.E.R.	9.15				

Pressure switch settings

Maximum HP switch setting	402	psi(g)
Minimum LP switch setting	3	psi(g)
LP pump down setting	13	psi(g)

T 0 : Evaporating temperature at dew point

T C : Condensing temperature at dew point

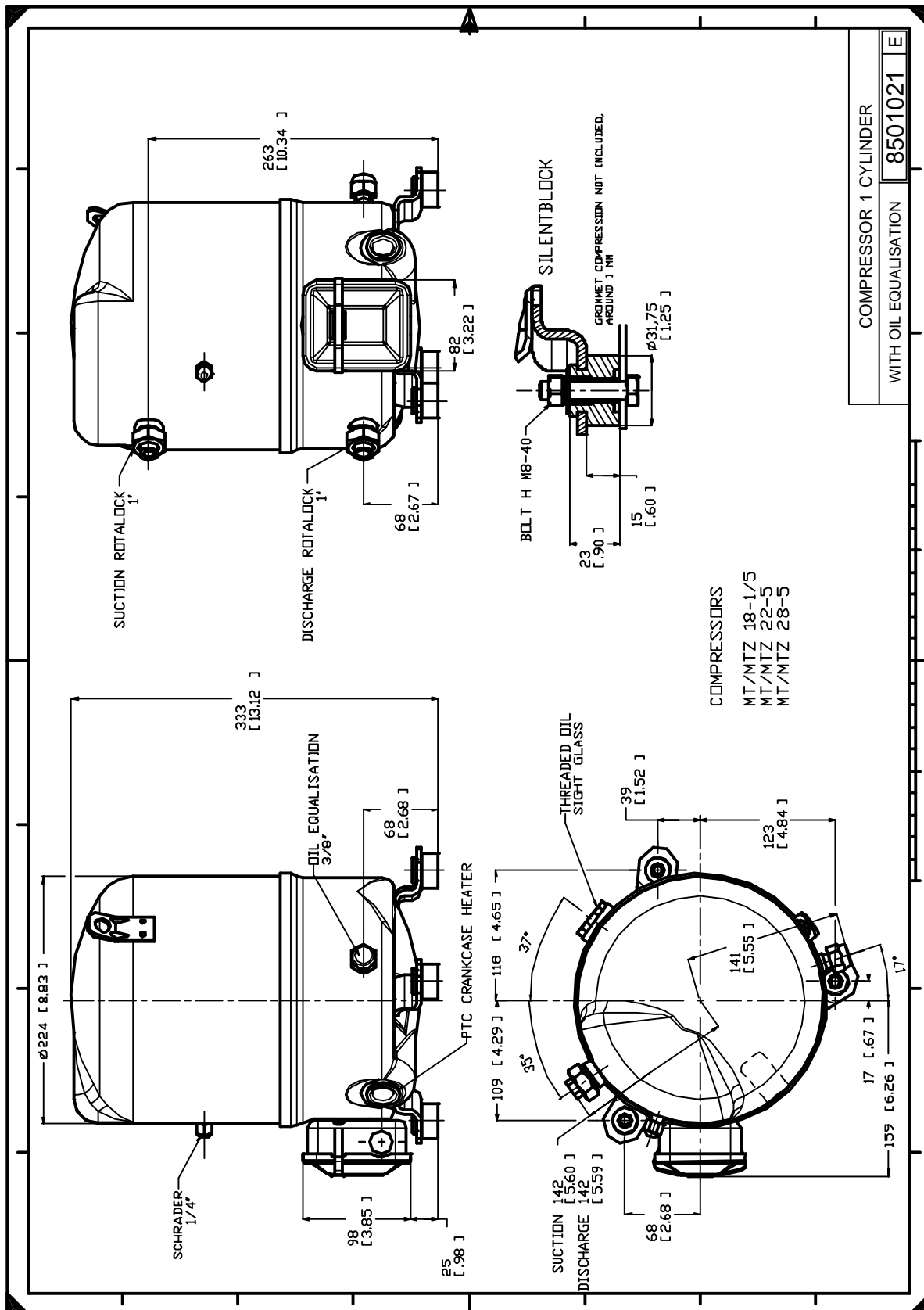
Rating conditions : Superheat = 20 °F , Subcooling = 15 °F

All performance data +/- 5%

Sound power data

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

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