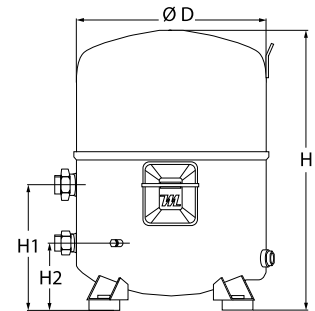


General Characteristics

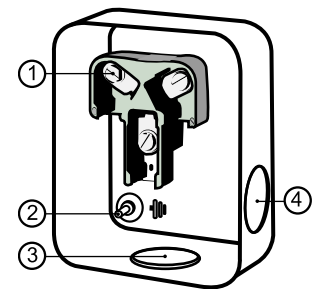
Model number (on compressor nameplate)		MT160HW4DVE
Code number for Singlepack*		MT160-4VI
Code number for Industrial pack**		MT160-4VM
Drawing number		8504011e
Suction and discharge connections		Rotolock
Suction connection		1-3/4 " Rotolock
Discharge connection		1-1/4 " Rotolock
Suction connection with supplied sleeve		1-1/8 " ODF
Discharge connection with supplied sleeve		3/4 " 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		4
Swept volume		16.57 in3/rev
Displacement @ Nominal speed		1669 cfh @ 2900 rpm - 2014 cfh @ 3500 rpm
Net weight		152 lbs
Oil charge		132 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		22 lbs
Approved refrigerants		R22, R417A-160PZ

Dimensions



D=13.9 inch, H=21.3 inch,
H1=9.2 inch, H2=4.9 inch

Terminal box



IP54 (with cable gland)

- 1: Screw connectors 10-32 UNF x 9.5
- 2: Earth M4-12
- 3: Knock-out Ø 29 mm (1.14")
- 4: Knock-out Ø 25.5 mm (1.00")

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 77°F	1.1 Ω
Maximum Continuous Current (MCC)	36 A
Locked Rotor Amps (LRA)	140 A
Motor protection	Internal overload protector

Recommended Installation torques

Oil sight glass	37 ft.lbs
Power connections / Earth connection	2 ft.lbs / 1 ft.lbs
Mounting bolts	37 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: 6 Unboxed compressors on pallet (order per multiples of 6)

Rotolock accessories, suction side
Code no.

Solder sleeve, P02 (1-3/4" Rotolock, 1-1/8" ODF)	8153004
Angle adapter, C02 (1-3/4" Rotolock, 1-1/8" ODF)	8168005
Rotolock valve, V02 (1-3/4" Rotolock, 1-1/8" ODF)	8168028
Gasket, 1-3/4"	8156132

Rotolock accessories, discharge side
Code no.

Solder sleeve, P04 (1-1/4" Rotolock, 3/4" ODF)	8153008
Angle adapter, C04 (1-1/4" Rotolock, 3/4" ODF)	8168006
Rotolock valve, V04 (1-1/4" Rotolock, 3/4" ODF)	8168029
Gasket, 1-1/4"	8156131

Rotolock accessories, sets
Code no.

Angle adapter set, C02 (1-3/4"~1-1/8"), C04 (1-1/4"~3/4")	7703014
Valve set, V02 (1-3/4"~1-1/8"), V04 (1-1/4"~3/4")	7703009
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.

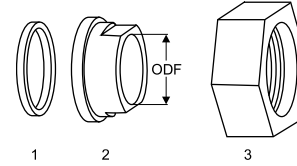
PTC heater 27W	120Z0459
Belt type crankcase heater, 75 W, 230 V, CE mark, UL	7773108
Belt type crankcase heater, 75 W, 400 V, CE mark, UL	7773118
Belt type crankcase heater, 75 W, 460 V, CE mark, UL	120Z0464

Miscellaneous accessories
Code no.

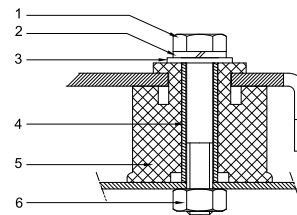
Electronic soft start kit, MCI 25 C	7705007
Soft start kit with statoric resistors, prewired box, SCRO3	7705001
Acoustic hood for 4 cylinder compressor	7755003
Oil equalisation nut	8153127

Spare parts
Code no.

Mounting kit for 4 cylinder compressor & MS, including 4 grommets, 4 bolts	8156007
Oil sight glass with gaskets (black & white)	8156019
Gasket for oil sight glass (black chloroprene)	8156145
Service kit for terminal box 96 x 115 mm, including 1 cover, 1 clamp, 1 T block connector 52 x 57 mm, 1 cable gland	8156135
T block connector 2.1" x 2.3"	8173230

Gaskets, sleeves and nuts


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

Mounting kit


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

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

Cooling capacity in Btu/h

90	51 479	69 734	92 235	119 601	152 447	191 390	213 341	237 048	262 587
100	46 043	63 409	84 767	110 733	141 925	178 958	199 858	222 451	246 812
110	41 055	57 364	77 410	101 808	131 176	166 132	185 897	207 290	230 389
120	-	51 669	70 234	92 896	120 273	152 982	171 528	191 638	213 390
130	-	-	63 309	84 067	109 284	139 577	156 820	175 564	195 884
140	-	-	-	75 390	98 279	125 989	141 844	159 136	177 941
150	-	-	-	-	87 328	112 285	126 669	142 425	159 631

Power input in W

90	7 847	8 798	9 685	10 466	11 097	11 536	11 670	11 741	11 742
100	8 247	9 276	10 264	11 166	11 941	12 546	12 772	12 940	13 044
110	8 574	9 696	10 798	11 838	12 772	13 559	13 884	14 156	14 370
120	-	10 045	11 277	12 469	13 578	14 561	14 993	15 377	15 709
130	-	-	11 690	13 049	14 347	15 543	16 088	16 592	17 049
140	-	-	-	13 565	15 069	16 491	17 158	17 789	18 379
150	-	-	-	-	15 730	17 394	18 191	18 957	19 687

Current consumption in A

90	13.38	14.24	15.08	15.86	16.51	16.98	17.12	17.19	17.19
100	13.75	14.69	15.65	16.57	17.40	18.06	18.32	18.52	18.64
110	14.05	15.10	16.19	17.28	18.30	19.19	19.58	19.90	20.17
120	-	15.44	16.70	17.97	19.21	20.35	20.87	21.33	21.75
130	-	-	17.14	18.63	20.11	21.52	22.18	22.80	23.37
140	-	-	-	19.23	20.97	22.67	23.49	24.28	25.03
150	-	-	-	-	21.79	23.81	24.79	25.76	26.69

Mass flow in lbs/h

90	689	922	1 201	1 534	1 927	2 388	2 647	2 924	3 222
100	639	869	1 146	1 475	1 865	2 322	2 577	2 853	3 148
110	595	820	1 091	1 414	1 796	2 246	2 497	2 768	3 060
120	-	774	1 036	1 349	1 722	2 160	2 407	2 672	2 957
130	-	-	981	1 281	1 641	2 066	2 305	2 563	2 841
140	-	-	-	1 211	1 554	1 961	2 192	2 441	2 710
150	-	-	-	-	1 460	1 848	2 068	2 307	2 565

Energy Efficiency Ratio (E.E.R.)

90	6.56	7.93	9.52	11.43	13.74	16.59	18.28	20.19	22.36
100	5.58	6.84	8.26	9.92	11.89	14.26	15.65	17.19	18.92
110	4.79	5.92	7.17	8.60	10.27	12.25	13.39	14.64	16.03
120	-	5.14	6.23	7.45	8.86	10.51	11.44	12.46	13.58
130	-	-	5.42	6.44	7.62	8.98	9.75	10.58	11.49
140	-	-	-	5.56	6.52	7.64	8.27	8.95	9.68
150	-	-	-	-	5.55	6.46	6.96	7.51	8.11

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

Cooling capacity	156 820	Btu/h	Current consumption	22.18	A
Power input	16 088	W	Mass flow	2 305	lbs/h
E.E.R.	9.75				

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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