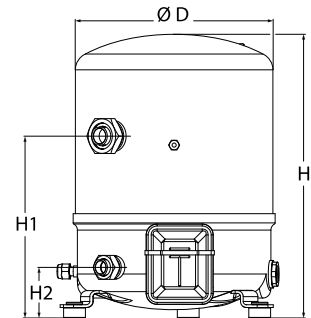


General Characteristics

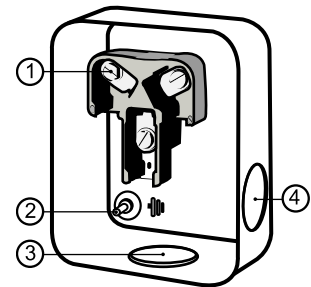
Model number (on compressor nameplate)		MT80HP3CVE
Code number for Singlepack*		MT80-3VI
Code number for Industrial pack**		MT80-3VM
Drawing number		8502011e
Suction and discharge connections		Rotolock
Suction connection		1-3/4 " Rotolock
Discharge connection		1-1/4 " Rotolock
Suction connection with 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		2
Swept volume		8.29 in3/rev
Displacement @ Nominal speed		1007 cfm @ 3500 rpm
Net weight		88 lbs
Oil charge		61 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		11 lbs
Approved refrigerants		R22, R417A-160PZ

Dimensions



D=11.3 inch, H=16.3 inch,
H1=10.4 inch, H2=2.9 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	200-230V/3/60Hz
Voltage range	180-253 V
Winding resistance (between phases) +/- 7% at 77°F	0.49 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	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: 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.

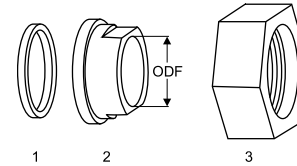
PTC heater 27W	120Z0459
Belt type crankcase heater, 65 W, 110 V, CE mark, UL	7773109
Belt type crankcase heater, 65 W, 230 V, CE mark, UL	7773107

Miscellaneous accessories
Code no.

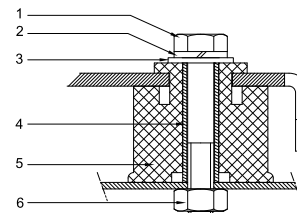
Acoustic hood for 2 cylinder compressor	7755002
Oil equalisation nut	8153127

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 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 (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	24 135	34 090	45 968	59 996	76 400	95 405	105 954	117 238	129 286
100	21 462	31 000	42 343	55 716	71 346	89 459	99 517	110 280	121 778
110	19 155	28 198	38 926	51 565	66 342	83 483	93 011	103 215	114 122
120	-	25 744	35 779	47 606	61 451	77 542	86 500	96 103	106 382
130	-	-	32 963	43 899	56 734	71 695	80 044	89 009	98 618
140	-	-	-	40 507	52 253	66 006	73 706	81 992	90 893
150	-	-	-	-	48 069	60 535	67 547	75 115	83 269

Power input in W

90	3 771	4 320	4 864	5 385	5 867	6 292	6 478	6 644	6 787
100	4 000	4 573	5 148	5 707	6 233	6 710	6 925	7 120	7 295
110	4 250	4 852	5 463	6 064	6 640	7 173	7 418	7 647	7 856
120	-	5 160	5 811	6 460	7 090	7 684	7 962	8 225	8 471
130	-	-	6 195	6 896	7 585	8 245	8 558	8 859	9 143
140	-	-	-	7 376	8 128	8 859	9 210	9 550	9 875
150	-	-	-	-	8 723	9 528	9 920	10 301	10 671

Current consumption in A

90	13.91	15.02	16.20	17.41	18.57	19.64	20.12	20.55	20.94
100	14.37	15.56	16.85	18.18	19.49	20.72	21.30	21.84	22.33
110	14.88	16.17	17.59	19.06	20.54	21.97	22.65	23.30	23.90
120	-	16.87	18.43	20.07	21.75	23.39	24.19	24.95	25.69
130	-	-	19.40	21.23	23.12	25.00	25.92	26.82	27.69
140	-	-	-	22.55	24.67	26.81	27.86	28.91	29.92
150	-	-	-	-	26.41	28.83	30.03	31.23	32.41

Mass flow in lbs/h

90	322	449	597	768	964	1 189	1 313	1 445	1 585
100	298	425	572	742	938	1 161	1 284	1 414	1 553
110	278	404	549	717	909	1 129	1 250	1 379	1 516
120	-	386	528	691	880	1 095	1 214	1 340	1 474
130	-	-	510	669	851	1 061	1 176	1 299	1 430
140	-	-	-	650	826	1 027	1 138	1 257	1 384
150	-	-	-	-	804	996	1 103	1 217	1 339

Energy Efficiency Ratio (E.E.R.)

90	6.40	7.89	9.45	11.14	13.02	15.16	16.36	17.65	19.05
100	5.37	6.78	8.23	9.76	11.45	13.33	14.37	15.49	16.69
110	4.51	5.81	7.13	8.50	9.99	11.64	12.54	13.50	14.53
120	-	4.99	6.16	7.37	8.67	10.09	10.86	11.68	12.56
130	-	-	5.32	6.37	7.48	8.70	9.35	10.05	10.79
140	-	-	-	5.49	6.43	7.45	8.00	8.59	9.20
150	-	-	-	-	5.51	6.35	6.81	7.29	7.80

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

Cooling capacity	80 044	Btu/h	Current consumption	25.92	A
Power input	8 558	W	Mass flow	1 176	lbs/h
E.E.R.	9.35				

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)

Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alternations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss, the Danfoss logotype and Maneurop are trademarks of Danfoss A/S. All rights reserved.