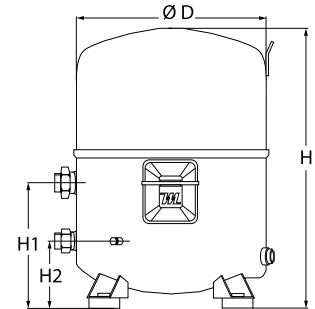


**General Characteristics**

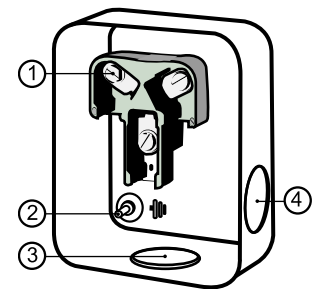
Model number (on compressor nameplate)		<b>MT144HV4VE</b>
Code number for Singlepack*		MT144-4VI
Code number for Industrial pack**		MT144-4VM
Drawing number		8504011e
Suction and discharge connections		Rotolock
Suction connection		1-3/4 " Rotolock
Discharge connection		1-1/4 " Rotolock
Suction connection 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		14.76 in3/rev
Displacement @ Nominal speed		1486 cfh @ 2900 rpm - 1794 cfh @ 3500 rpm
Net weight		148 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	1.19 Ω
Maximum Continuous Current (MCC)	30 A
Locked Rotor Amps (LRA)	115 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.**

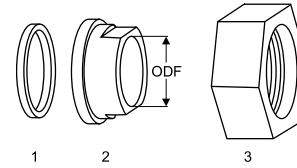
PTC heater 27W	120Z0459
Belt type crankcase heater, 75 W, 230 V, CE mark, UL	7773108
Belt type crankcase heater, 75 W, 400 V, CE mark, UL	7773118
Belt type crankcase heater, 75 W, 460 V, CE mark, UL	120Z0464

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

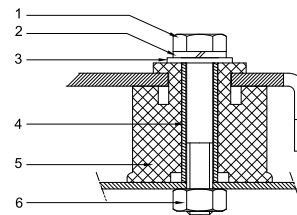
Electronic soft start kit, MCI 25 C	7705007
Soft start kit with statoric resistors, prewired box, SCRO3	7705001
Acoustic hood for 4 cylinder compressor	7755003
Oil equalisation nut	8153127

**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	46 441	63 151	83 725	108 720	138 690	174 191	194 188	215 777	239 025
100	41 296	57 157	76 638	100 296	128 685	162 361	181 355	201 878	224 001
110	36 624	51 474	69 701	91 861	118 508	150 197	168 106	187 484	208 401
120	-	46 185	62 997	83 497	108 240	137 783	154 527	172 679	192 308
130	-	-	56 606	75 285	97 965	125 199	140 697	157 543	175 804
140	-	-	-	67 308	87 762	112 527	126 699	142 157	158 971
150	-	-	-	-	77 714	99 848	112 614	126 605	141 890

Power input in W

90	6 958	7 816	8 615	9 318	9 886	10 280	10 400	10 462	10 462
100	7 325	8 252	9 140	9 950	10 646	11 187	11 388	11 536	11 627
110	7 626	8 635	9 625	10 558	11 394	12 096	12 385	12 626	12 814
120	-	8 955	10 060	11 128	12 119	12 996	13 379	13 719	14 011
130	-	-	10 433	11 649	12 809	13 873	14 357	14 804	15 207
140	-	-	-	12 110	13 451	14 717	15 309	15 868	16 389
150	-	-	-	-	14 034	15 515	16 222	16 900	17 546

Current consumption in A

90	13.53	14.43	15.30	16.09	16.75	17.22	17.37	17.45	17.45
100	13.94	14.90	15.88	16.81	17.66	18.34	18.61	18.83	18.97
110	14.26	15.32	16.43	17.54	18.59	19.53	19.94	20.30	20.60
120	-	15.67	16.94	18.26	19.55	20.76	21.32	21.85	22.32
130	-	-	17.41	18.95	20.51	22.04	22.77	23.46	24.13
140	-	-	-	19.62	21.48	23.34	24.25	25.14	26.00
150	-	-	-	-	22.42	24.65	25.76	26.86	27.93

Mass flow in lbs/h

90	620	833	1 088	1 392	1 751	2 171	2 406	2 659	2 930
100	573	784	1 036	1 337	1 691	2 107	2 339	2 589	2 857
110	531	737	983	1 277	1 624	2 031	2 259	2 505	2 769
120	-	692	929	1 213	1 550	1 946	2 168	2 408	2 665
130	-	-	876	1 147	1 470	1 852	2 067	2 299	2 549
140	-	-	-	1 080	1 387	1 751	1 957	2 180	2 420
150	-	-	-	-	1 300	1 644	1 840	2 052	2 281

Energy Efficiency Ratio (E.E.R.)

90	6.67	8.08	9.72	11.67	14.03	16.94	18.67	20.62	22.85
100	5.64	6.93	8.39	10.08	12.09	14.51	15.92	17.50	19.27
110	4.80	5.96	7.24	8.70	10.40	12.42	13.57	14.85	16.26
120	-	5.16	6.26	7.50	8.93	10.60	11.55	12.59	13.73
130	-	-	5.43	6.46	7.65	9.02	9.80	10.64	11.56
140	-	-	-	5.56	6.52	7.65	8.28	8.96	9.70
150	-	-	-	-	5.54	6.44	6.94	7.49	8.09

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

Cooling capacity	140 697	Btu/h	Current consumption	22.77	A
Power input	14 357	W	Mass flow	2 067	lbs/h
E.E.R.	9.80				

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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