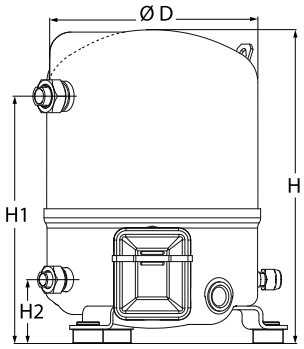
General Characteristics

Model number (on compressor nameplate)		**MT40JH4EVE**
Code number for Singlepack*		MT40-4VI
Code number for Industrial pack**		MT40-4VM
Drawing number		8501025f
Suction and discharge connections		Rotolock
Suction connection		1-1/4 " Rotolock
Discharge connection		1 " Rotolock
Suction connection with supplied sleeve		5/8 " ODF
Discharge connection with supplied sleeve		1/2 " ODF
Oil sight glass		Threaded
Oil equalisation connection		3/8" flare SAE
Oil drain connection		None
LP gauge port		Schrader
IPR valve		None
Cylinders	1	
Swept volume	67.89 cm3/rev	
Displacement @ Nominal speed	11.8 m3/h @ 2900 rpm - 14.3 m3/h @ 3500 rpm	
Net weight	26 kg	
Oil charge	0.95 litre, Mineral - 160P	
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	R22, R417A-160PZ	

Dimensions

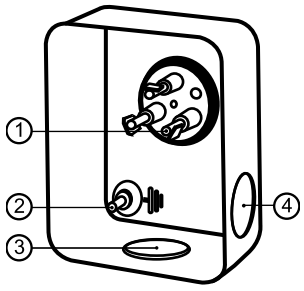


D=224 mm
H=356 mm
H1=263 mm
H2=68 mm
H3=- mm

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 25ºC	4.05 Ω
Maximum Continuous Current (MCC)	10 A
Locked Rotor Amps (LRA)	38 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	50 Nm
Power connections / Earth connection	2 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)

Performance data at 50 Hz, EN 12900 rating conditions

R22

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-25	-20	-15	-10	-5	0	5	10	15
Cooling capacity in W									
30	3 005	4 020	5 184	6 508	8 006	9 689	11 571	13 665	15 982
35	2 639	3 640	4 785	6 086	7 557	9 210	11 058	13 112	15 387
40	2 273	3 256	4 379	5 655	7 097	8 716	10 526	12 540	14 769
45	1 907	2 870	3 969	5 217	6 626	8 210	9 979	11 948	14 129
50	-	2 484	3 556	4 773	6 147	7 691	9 418	11 339	13 468
55	-	-	3 142	4 325	5 661	7 163	8 843	10 714	12 788
60	-	-	-	3 876	5 170	6 627	8 257	10 073	12 088
65	-	-	-	-	4 675	6 082	7 659	9 417	11 369
Power input in W									
30	1 537	1 796	2 036	2 244	2 410	2 523	2 570	2 542	2 426
35	1 635	1 909	2 167	2 398	2 592	2 737	2 821	2 834	2 764
40	1 714	2 005	2 285	2 542	2 767	2 947	3 071	3 128	3 107
45	1 770	2 081	2 386	2 673	2 932	3 150	3 317	3 422	3 452
50	-	2 136	2 469	2 789	3 084	3 344	3 557	3 711	3 797
55	-	-	2 530	2 886	3 221	3 525	3 787	3 995	4 138
60	-	-	-	2 961	3 339	3 691	4 005	4 270	4 474
65	-	-	-	-	3 437	3 840	4 209	4 533	4 801
Current consumption in A									
30	3.66	3.89	4.13	4.36	4.55	4.68	4.74	4.70	4.54
35	3.76	4.01	4.27	4.53	4.76	4.94	5.05	5.07	4.97
40	3.83	4.11	4.40	4.69	4.97	5.20	5.37	5.45	5.43
45	3.89	4.19	4.52	4.86	5.18	5.47	5.70	5.85	5.91
50	-	4.25	4.62	5.00	5.38	5.73	6.04	6.27	6.40
55	-	-	4.69	5.13	5.57	5.99	6.37	6.68	6.90
60	-	-	-	5.24	5.74	6.24	6.69	7.09	7.41
65	-	-	-	-	5.89	6.46	7.00	7.49	7.91
Mass flow in kg/h									
30	65	86	110	136	166	198	234	274	317
35	60	81	106	133	163	196	232	272	316
40	54	76	101	128	159	193	230	271	315
45	47	70	95	124	155	189	227	269	314
50	-	64	90	118	150	185	224	266	313
55	-	-	83	113	145	181	221	264	311
60	-	-	-	107	140	177	217	261	309
65	-	-	-	-	134	172	213	258	307
Coefficient of performance (C.O.P.)									
30	1.95	2.24	2.55	2.90	3.32	3.84	4.50	5.38	6.59
35	1.61	1.91	2.21	2.54	2.92	3.37	3.92	4.63	5.57
40	1.33	1.62	1.92	2.22	2.56	2.96	3.43	4.01	4.75
45	1.08	1.38	1.66	1.95	2.26	2.61	3.01	3.49	4.09
50	-	1.16	1.44	1.71	1.99	2.30	2.65	3.06	3.55
55	-	-	1.24	1.50	1.76	2.03	2.34	2.68	3.09
60	-	-	-	1.31	1.55	1.80	2.06	2.36	2.70
65	-	-	-	-	1.36	1.58	1.82	2.08	2.37

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

Cooling capacity	9 418	W
Power input	3 557	W
Current consumption	6.04	A
Mass flow	224	kg/h
C.O.P.	2.65	

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	27.9	bar(g)
Minimum LP switch setting	0.7	bar(g)
LP pump down setting	0.9	bar(g)

Sound power data

Sound power level	67	dB(A)
With accoustic hood	62	dB(A)

Tolerance according EN12900

Performance data at 50 Hz, ARI rating conditions

R22

Cond. temp. in °C (tc)	Evaporating temperature in °C (to)								
	-25	-20	-15	-10	-5	0	5	10	15
Cooling capacity in W									
30	3 192	4 267	5 497	6 896	8 476	10 252	12 235	14 439	16 877
35	2 813	3 876	5 091	6 470	8 028	9 776	11 729	13 898	16 298
40	2 432	3 481	4 677	6 035	7 567	9 286	11 205	13 338	15 697
45	2 050	3 082	4 258	5 591	7 095	8 782	10 666	12 759	15 076
50	-	2 681	3 834	5 141	6 614	8 267	10 113	12 164	14 435
55	-	-	3 408	4 686	6 126	7 742	9 547	11 555	13 778
60	-	-	-	4 227	5 632	7 209	8 971	10 932	13 105
65	-	-	-	-	5 135	6 670	8 387	10 298	12 418
Power input in W									
30	1 537	1 796	2 036	2 244	2 410	2 523	2 570	2 542	2 426
35	1 635	1 909	2 167	2 398	2 592	2 737	2 821	2 834	2 764
40	1 714	2 005	2 285	2 542	2 767	2 947	3 071	3 128	3 107
45	1 770	2 081	2 386	2 673	2 932	3 150	3 317	3 422	3 452
50	-	2 136	2 469	2 789	3 084	3 344	3 557	3 711	3 797
55	-	-	2 530	2 886	3 221	3 525	3 787	3 995	4 138
60	-	-	-	2 961	3 339	3 691	4 005	4 270	4 474
65	-	-	-	-	3 437	3 840	4 209	4 533	4 801
Current consumption in A									
30	3.66	3.89	4.13	4.36	4.55	4.68	4.74	4.70	4.54
35	3.76	4.01	4.27	4.53	4.76	4.94	5.05	5.07	4.97
40	3.83	4.11	4.40	4.69	4.97	5.20	5.37	5.45	5.43
45	3.89	4.19	4.52	4.86	5.18	5.47	5.70	5.85	5.91
50	-	4.25	4.62	5.00	5.38	5.73	6.04	6.27	6.40
55	-	-	4.69	5.13	5.57	5.99	6.37	6.68	6.90
60	-	-	-	5.24	5.74	6.24	6.69	7.09	7.41
65	-	-	-	-	5.89	6.46	7.00	7.49	7.91
Mass flow in kg/h									
30	65	86	109	136	165	197	233	272	315
35	59	81	105	132	162	195	231	271	314
40	54	76	100	128	158	192	229	269	314
45	47	70	95	123	154	188	226	267	312
50	-	63	89	118	149	184	223	265	311
55	-	-	83	112	145	180	220	263	309
60	-	-	-	106	139	176	216	260	308
65	-	-	-	-	134	171	212	257	305
Coefficient of performance (C.O.P.)									
30	2.08	2.37	2.70	3.07	3.52	4.06	4.76	5.68	6.96
35	1.72	2.03	2.35	2.70	3.10	3.57	4.16	4.90	5.90
40	1.42	1.74	2.05	2.37	2.73	3.15	3.65	4.26	5.05
45	1.16	1.48	1.78	2.09	2.42	2.79	3.22	3.73	4.37
50	-	1.26	1.55	1.84	2.14	2.47	2.84	3.28	3.80
55	-	-	1.35	1.62	1.90	2.20	2.52	2.89	3.33
60	-	-	-	1.43	1.69	1.95	2.24	2.56	2.93
65	-	-	-	-	1.49	1.74	1.99	2.27	2.59

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

Cooling capacity	10 475	W
Power input	3 856	W
Current consumption	6.47	A
Mass flow	238	kg/h
C.O.P.	2.72	

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	27.9	bar(g)
Minimum LP switch setting	0.7	bar(g)
LP pump down setting	0.9	bar(g)

Sound power data

Sound power level	67	dB(A)
With accoustic hood	62	dB(A)

Tolerance according EN12900