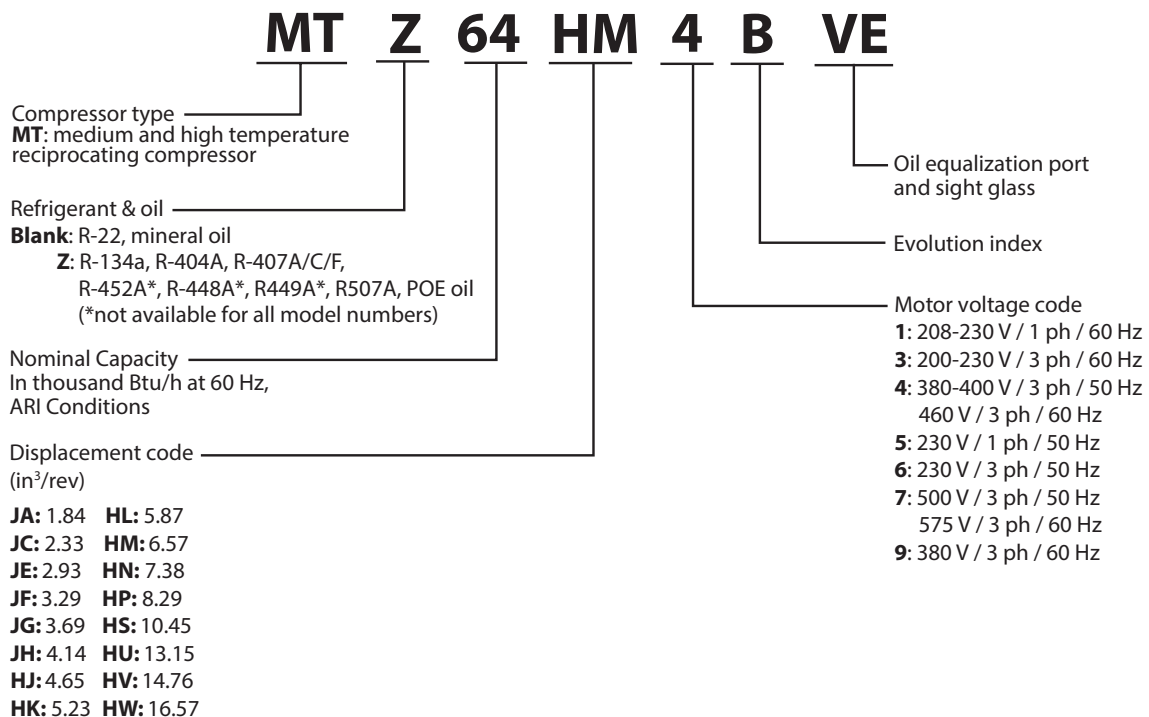


MT/MTZ - Medium/High Temperature Reciprocating Compressors

Known for their legendary durability, Maneurop® reciprocating compressors from Danfoss cover a wide range of operating conditions. Maneurop MT and MTZ series hermetic reciprocating compressors are designed for high and medium temperature applications. These compressors have a large internal free volume that protects against the risk of liquid hammering when liquid refrigerant enters the compressor.

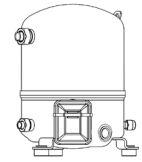


Nomenclature / Model No.



Technical data and ordering

MT/MTZ -Medium/High Temperature Reciprocating Compressors



Nominal capacity (Btu/h) ²			Connection type Rotolock (in.)	Connection with supplied sleeve (in. ODF)	No. of cylinders	Weight (lbs.)	208–230/1/60		200–230/3/60		460/3/60	
R-22 ³	R-134a ³	R-404A ⁴ R-507A ⁴					Danfoss Model No. ¹	Danfoss Code No.	Danfoss Model No. ¹	Danfoss Code No.	Danfoss Model No. ¹	Danfoss Code No.
15903			1 × 1	½ × ¾	1	46	MT18JA1*VE	MT18-1VI	MT18JA3*VE	MT18-3VI	MT18JA4*VE	MT18-4VI
21975			1 × 1 ⁽⁵⁾	½ × ¾ ⁽⁵⁾	1	46	MT22JC1*VE	MT22-1VI⁵	MT22JC3*VE	MT22-3VI	MT22JC4*VE	MT22-4VI
30231			1 × 1 ⁽⁵⁾	½ × ¾ ⁽⁵⁾	1	51	MT28JE1*VE	MT28-1VI⁵	MT28JE3*VE	MT28-3VI	MT28JE4*VE	MT28-4VI
33044			1 ¼ × 1	¾ × ½	1	53	MT32JF1*VE	MT32-1VI	MT32JF3*VE	MT32-3VI	MT32JF4*VE	MT32-4VI
37992			1 ¼ × 1	¾ × ½	1	55	MT36JG1*VE	MT36-1VI	MT36JG3*VE	MT36-3VI	MT36JG4*VE	MT36-4VI
42930			1 ¼ × 1	¾ × ½	1	57	MT40JH1*VE	MT40-1VI	MT40JH3*VE	MT40-3VI	MT40JH4*VE	MT40-4VI
43999			1 ¾ × 1 ¼	¾ × ¾	2	82	MT44HJ1*VE	MT44-1VI	MT44HJ3*VE	MT44-3VI	MT44HJ4*VE	MT44-4VI
50160			1 ¾ × 1 ¼	¾ × ¾	2	82	MT50HK1*VE	MT50-1VI	MT50HK3*VE	MT50-3VI	MT50HK4*VE	MT50-4VI
56420			1 ¾ × 1 ¼	¾ × ¾	2	86	MT56HL1*VE	MT56-1VI	MT56HL3*VE	MT56-3VI	MT56HL4*VE	MT56-4VI
64366			1 ¾ × 1 ¼	¾ × ¾	2	86	MT64HM1*VE	MT64-1VI	MT64HM3*VE	MT64-3VI	MT64HM4*VE	MT64-4VI
74561			1 ¾ × 1 ¼	¾ × ¾	2	88			MT72HN3*VE	MT72-3VI	MT72HN4*VE	MT72-4VI
84977			1 ¾ × 1 ¼	1 ½ × ¾	2	88			MT80HP3*VE	MT80-3VI	MT80HP4*VE	MT80-4VI
95898			1 ¾ × 1 ¼	1 ½ × ¾	4	132			MT100HS3*VE	MT100-3VI	MT100HS4*VE	MT100-4VI
124678			1 ¾ × 1 ¼	1 ½ × ¾	4	141			MT125HU3*VE	MT125-3VI	MT125HU4*VE	MT125-4VI
140697			1 ¾ × 1 ¼	1 ½ × ¾	4	148			MT144HV3*VE	MT144-3VI	MT144HV4*VE	MT144-4VI
156820			1 ¾ × 1 ¼	1 ½ × ¾	4	152			MT160HW3*VE	MT160-3VI	MT160HW4*VE	MT160-4VI
11200	8980		1 × 1	½ × ¾	1	46	MTZ18JA1*VE	MTZ18-1VI	MTZ18JA3*VE	MTZ18-3VI	MTZ18JA4*VE	MTZ18-4VI
14849	12306		1 × 1 ⁽⁵⁾	½ × ¾ ⁽⁵⁾	1	46	MTZ22JC1*VE	MTZ22-1VI⁵	MTZ22JC3*VE	MTZ22-3VI	MTZ22JC4*VE	MTZ22-4VI
19276	15986		1 × 1 ⁽⁵⁾	½ × ¾ ⁽⁵⁾	1	51	MTZ28JE1*VE	MTZ28-1VI⁵	MTZ28JE3*VE	MTZ28-3VI	MTZ28JE4*VE	MTZ28-4VI
20949	17480		1 ¼ × 1	¾ × ½	1	53	MTZ32JF1*VE	MTZ32-1VI	MTZ32JF3*VE	MTZ32-3VI	MTZ32JF4*VE	MTZ32-4VI
24482	20189		1 ¼ × 1	¾ × ½	1	55	MTZ36JG1*VE	MTZ36-1VI	MTZ36JG3*VE	MTZ36-3VI	MTZ36JG4*VE	MTZ36-4VI
27864	23031		1 ¼ × 1	¾ × ½	1	57	MTZ40JH1*VE	MTZ40-1VI	MTZ40JH3*VE	MTZ40-3VI	MTZ40JH4*VE	MTZ40-4VI
30110	24323		1 ¾ × 1 ¼	¾ × ¾	2	82	MTZ44HJ1*VE	MTZ44-1VI	MTZ44HJ3*VE	MTZ44-3VI	MTZ44HJ4*VE	MTZ44-4VI
34538	28590		1 ¾ × 1 ¼	¾ × ¾	2	82	MTZ50HK1*VE	MTZ50-1VI	MTZ50HK3*VE	MTZ50-3VI	MTZ50HK4*VE	MTZ50-4VI
38881	32451		1 ¾ × 1 ¼	¾ × ¾	2	86					MTZ56HL4*VE	MTZ56-4VI
44404	36056		1 ¾ × 1 ¼	¾ × ¾	2	86	MTZ64HM1*VE	MTZ64-1VI	MTZ64HM3*VE	MTZ64-3VI	MTZ64HM4*VE	MTZ64-4VI
50000	40894		1 ¾ × 1 ¼	¾ × ¾	2	88			MTZ72HN3*VE	MTZ72-3VI	MTZ72HN4*VE	MTZ72-4VI
56336	46521		1 ¾ × 1 ¼	1 ½ × ¾	2	88			MTZ80HP3*VE	MTZ80-3VI	MTZ80HP4*VE	MTZ80-4VI
63963	52953		1 ¾ × 1 ¼	1 ½ × ¾	4	132			MTZ100HS3*VE	MTZ100-3VI	MTZ100HS4*VE	MTZ100-4VI
78906	68297		1 ¾ × 1 ¼	1 ½ × ¾	4	141			MTZ125HU3*VE	MTZ125-3VI	MTZ125HU4*VE	MTZ125-4VI
96936	80472		1 ¾ × 1 ¼	1 ½ × ¾	4	148			MTZ144HV3*VE	MTZ144-3VI	MTZ144HV4*VE	MTZ144-4VI
107631	87421		1 ¾ × 1 ¼	1 ½ × ¾	4	152			MTZ160HW3*VE	MTZ160-3VI	MTZ160HW4*VE	MTZ160-4VI

¹ These compressor models have threaded sight glass and ¾ in. flare oil equalization line.

² To determine the nominal capacity for R-407A/C/F, R-452A, R-448A, R-449A, check Coolselector

³ Evaporator temperature = 45 °F, condensing temperature = 130 °F, superheat = 20 °F, subcooling = 15 °F

⁴ Evaporator temperature = 20 °F, condensing temperature = 120 °F, superheat = 20 °F, subcooling = 0 °F

⁵ Actual connection for MT and MTZ 22–28 (208–230/1/60) is rotolock 1 ¼ in. × 1 in. and connection with supplied sleeve is ¾ in. × ½ in. ODF. Capacitor values and relays for 1 phase compressors are available on page 62.

Spare Parts and Accessories

Description	Type(s) applied to	Danfoss Code No.
Belt type crankcase heater; 54W, 230V	MT(Z) 018–040	7773106
Belt type crankcase heater; 65W, 110V		7773109
Belt type crankcase heater; 65W, 230V		7773107
Belt type crankcase heater; 65W, 400V	MT(Z) 044–081	7773117
Belt type crankcase heater; 65W, 460V		120Z0466
Belt type crankcase heater; 75W, 110V		7773110
Belt type crankcase heater; 75W, 230V		7773108
Belt type crankcase heater; 75W, 400V	MT(Z) 100–160	7773118
Belt type crankcase heater; 75W, 460V		120Z0464
PTC heater	all	PTC
Mounting kit—1 and 2 cylinder compressors	MT(Z) 18–81	8156001
Mounting kit—4 cylinder compressors	MT(Z) 100–160	8156007
Mineral oil, 160P; 2 liter can	all MT	7754001
Mineral oil, 160P; 5 liter can	all MT	7754002
POE lubricant, 160PZ; 1 liter can	all MTZ	120Z0638
Oil sight glass and gasket	all	8156019
Terminal box; include cover and clamp	MT(Z) 18–44 for 208–230/1/60 18–72 for 200–230/3/60 18–80 for 460/3/60	8156134
Terminal box; include cover and clamp	MT(Z) 50–64 for 208–230/1/60 80–160 for 200–230/3/60 100–160 for 460/3/60	8156135
Blue spray paint	all	8154001
Gasket Set; 1 of each size gasket for the MT(Z) line	all—need 2 for: MT(Z)18 for 208–230 and 460 MT(Z)22–28 for 208–230/3 and 460	8156009
Rotolock Service Valve Set (no gaskets) Suction and Discharge	MT(Z)18 for 208–230 and 460 MT(Z)22–28 for 208–230/3 and 460	7703004
Rotolock Service Valve Set (no gaskets) Suction and Discharge	MT(Z) 22–40 for 208–230/1 MT(Z) 32–40 for 208–230/3 and 460	7703005
Rotolock Service Valve Set (no gaskets) Suction and Discharge	MT(Z) 44–64 for 208–230/1 MT(Z) 44–72 for 208–230/3 and 460	7703006
Rotolock Service Valve Set (no gaskets) Suction and Discharge	MT(Z) 80–160 for 208–230/3 and 460	7703009
Solder Sleeve P02 (1 ¾ in. rotolock, 1 ½ in. ODF)	Suction: MT(Z) 80–160 for 208–230/3 and 460	8153004
Solder Sleeve P06 (1 in. rotolock, ½ in. ODF)	Suction: MT(Z) 18 for 208–230/1 MT(Z) 18–28 for 208–230/3 and 460 Discharge: MT(Z) 22–40 for 208–230/1 MT(Z) 32–40 for 208–230/3 and 460	8153007
Solder Sleeve P04 (1 ¼ in. rotolock, ¾ in. ODF)	Discharge: MT(Z) 44–64 for 208–230/1 MT(Z) 44–160 for 208–230/3 and 460	8153008
Solder Sleeve P01 (1 in. rotolock, ⅝ in. ODF)	Discharge: MT(Z) 18 for 208–230/1 MT(Z) 18–28 for 208–230/3 and 460	8153010
Solder Sleeve P09 (1 ¼ in. rotolock, ⅝ in. ODF)	Suction: MT(Z) 22–40 for 208–230/1 MT(Z) 32–40 for 208–230/8 and 460	8153011
Solder Sleeve P02 (1 ¾ in. rotolock, ⅞ in. ODF)	Suction: MT(Z) 44–64 for 208–230/1 MT(Z) 44–72 for 208–230/3 and 460	8153013
Rotolock Nut, 1 in.	Suction: MT(Z) 18 for 208–230/1 MT(Z) 18–28 for 208–230/3 and 460 Discharge: MT(Z) 18–40 for 208–230/1 MT(Z) 18–40 for 208–230/3 and 460	8153122
Rotolock Nut, 1 ¼ in.	Suction: MT(Z) 22–40 for 208–230/1 MT(Z) 32–40 for 208–230/3 and 460 Discharge: MT(Z) 44–64 for 208–230/1 MT(Z) 44–160 for 208–230/3 and 460	8153123
Rotolock Nut, 1 ¾ in.	Suction: MT(Z) 44–64 for 208–230/1 MT(Z) 44–160 for 208–230/3 and 460	8153124