

Model: MTZ44

Data

Type: Hermetic piston compressors
Producer: Danfoss-Maneurop
Series: MTZ

Model: MTZ44

Technical data

Cylinder count:	2
Displacement [m ³ /h]:	13,26
Cylinder capacity [cm ³]:	76,2
RPM [min ⁻¹]:	2900
Weight [kg]:	35
Oil charge [dm ³]:	2
Oil type:	160PZ
Crankcase heater type:	PTC 35 W
Maximum system test pressure low side / high side:	25 / 30
Maximum number of starts without softstart [1/h]:	12
Refrigerant charge limit [dm ³]:	5
Refrigerant:	R134a, 404A/R507, R407C
Sound power [dB]:	80
Sound power with acoustic hood [dB]:	74

Connections

	<u>inches</u>
Suction Rotolock valve connection:	1 3/4"
Discharge Rotolock valve connection:	1 1/4"
Suction connection with supplied sleeve:	7/8"
Discharge connection with supplied sleeve:	3/4"

Approvals

CCC	-
CE	+
UL	+

Model: MTZ44

Capacity

R404A/R507

Cooling capacity [W]

$t_c \setminus t_e$	-30	-25	-20	-15	-10	-5	0	5	10
30	2 863	3 762	4 931	6 415	8 256	10 497	13 182	16 352	20 052
35	2 334	3 196	4 306	5 707	7 441	9 552	12 082	15 075	18 573
40	1 890	2 700	3 734	5 035	6 645	8 609	10 968	13 767	17 046
45	1 534	2 275	3 216	4 401	5 872	7 672	9 844	12 431	15 477
50	1 270	1 926	2 758	3 810	5 125	6 745	8 713	11 073	13 867
55	-	1 656	2 363	3 266	4 408	5 831	7 579	9 695	12 222
60	-	1 469	2 034	2 771	3 724	4 934	6 446	8 301	10 543

Power input [W]

$t_c \setminus t_e$	-30	-25	-20	-15	-10	-5	0	5	10
30	1 861	2 118	2 364	2 589	2 785	2 942	3 051	3 103	3 089
35	1 934	2 199	2 459	2 703	2 923	3 109	3 253	3 346	3 378
40	1 979	2 256	2 533	2 799	3 047	3 267	3 450	3 587	3 669
45	1 995	2 288	2 585	2 878	3 158	3 415	3 641	3 825	3 960
50	1 981	2 293	2 615	2 938	3 253	3 551	3 823	4 060	4 251
55	-	2 270	2 621	2 978	3 332	3 675	3 997	4 289	4 541
60	-	2 219	2 602	2 996	3 394	3 785	4 160	4 511	4 829

Current [A]

$t_c \setminus t_e$	-30	-25	-20	-15	-10	-5	0	5	10
30	5.08	5.33	5.56	5.77	5.96	6.11	6.22	6.28	6.28
35	5.15	5.40	5.65	5.89	6.11	6.30	6.45	6.56	6.62
40	5.19	5.46	5.73	5.99	6.24	6.47	6.68	6.84	6.96
45	5.19	5.48	5.78	6.08	6.37	6.64	6.90	7.13	7.32
50	5.17	5.48	5.81	6.14	6.48	6.81	7.12	7.41	7.67
55	-	5.44	5.80	6.18	6.57	6.95	7.33	7.69	8.03
60	-	5.37	5.77	6.20	6.64	7.08	7.53	7.96	8.38

Model: MTZ44

Capacity

Mass flow [kg/s]

$t_c \setminus t_e$	-30	-25	-20	-15	-10	-5	0	5	10
30	78.52	103.15	133.20	169.48	212.79	263.93	323.70	392.91	472.36
35	68.66	93.36	123.51	159.92	203.39	254.72	314.71	384.16	463.89
40	60.68	84.90	114.61	150.60	193.68	244.65	304.31	373.46	452.92
45	54.81	78.01	106.73	141.75	183.90	233.96	292.74	361.04	439.67
50	51.29	72.92	100.09	133.61	174.26	222.87	280.22	347.13	424.39
55	-	69.86	94.94	126.40	165.02	211.62	267.00	331.96	407.30
60	-	69.06	91.51	120.35	156.39	200.44	253.30	315.76	388.64

C.O.P. [W/W]

$t_c \setminus t_e$	-30	-25	-20	-15	-10	-5	0	5	10
30	1.54	1.78	2.09	2.48	2.96	3.57	4.32	5.27	6.49
35	1.21	1.45	1.75	2.11	2.55	3.07	3.71	4.51	5.50
40	0.95	1.20	1.47	1.80	2.18	2.63	3.18	3.84	4.65
45	0.77	0.99	1.24	1.53	1.86	2.25	2.70	3.25	3.91
50	0.64	0.84	1.05	1.30	1.58	1.90	2.28	2.73	3.26
55	-	0.73	0.90	1.10	1.32	1.59	1.90	2.26	2.69
60	-	0.66	0.78	0.92	1.10	1.30	1.55	1.84	2.18

Operating conditions: suction superheat: 11.1 K, subcooling: 8.3 K

t_c - Condensing temperature [°C]

t_e - Evaporating temperature [°C]

Application range

