

Type: Hermetic piston compressors**Producer: Maneurop****Series: MT**

Model: MT57

Technical data

Cylinder count:	2
Displacement [m ³ /h]:	16,73
Cylinder capacity [cm ³]:	96,1
RPM [min ⁻¹]:	2900
Weight [kg]:	39
Oil charge [dm ³]:	2
Oil type:	160P
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:	R22
Sound power [dB]:	81
Sound power with acoustic hood [dB]:	74

Connections

	<u>milimeters</u>	<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	+

R22

Cooling capacity [W]

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10	15
30	3 254	4 579	6 238	8 261	10 682	13 530	16 839	20 639	24 962
35	2 967	4 195	5 741	7 638	9 915	12 606	15 742	19 355	23 476
40	2 712	3 837	5 266	7 030	9 160	11 688	14 646	18 066	21 980
45	2 496	3 513	4 819	6 445	8 422	10 782	13 558	16 780	20 480
50	-	3 229	4 407	5 890	7 709	9 897	12 484	15 503	18 985
55	-	-	4 037	5 372	7 028	9 038	11 432	14 243	17 502
60	-	-	-	4 898	6 386	8 213	10 409	13 006	16 037
65	-	-	-	-	5 791	7 429	9 421	11 801	14 598

Power input [W]

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10	15
30	2 019	2 270	2 495	2 695	2 871	3 025	3 158	3 273	3 369
35	2 093	2 376	2 632	2 864	3 073	3 259	3 426	3 573	3 702
40	2 154	2 470	2 761	3 027	3 270	3 492	3 693	3 875	4 040
45	2 199	2 551	2 878	3 181	3 461	3 720	3 959	4 179	4 382
50	-	2 618	2 984	3 326	3 645	3 943	4 222	4 482	4 725
55	-	-	3 076	3 459	3 820	4 160	4 480	4 783	5 068
60	-	-	-	3 579	3 984	4 368	4 733	5 080	5 410
65	-	-	-	-	4 136	4 566	4 978	5 372	5 750

Current [A]

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10	15
30	5.09	5.34	5.59	5.84	6.07	6.26	6.42	6.52	6.56
35	5.20	5.46	5.74	6.01	6.26	6.49	6.69	6.83	6.91
40	5.30	5.59	5.89	6.20	6.49	6.76	7.00	7.19	7.33
45	5.37	5.70	6.04	6.39	6.73	7.05	7.34	7.59	7.79
50	-	5.78	6.17	6.57	6.97	7.35	7.70	8.02	8.29
55	-	-	6.27	6.73	7.19	7.64	8.06	8.46	8.80
60	-	-	-	6.85	7.38	7.91	8.41	8.89	9.33
65	-	-	-	-	7.53	8.14	8.73	9.30	9.84

Mass flow [kg/s]

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10	15
30	70.77	98.48	132.37	172.94	220.71	276.17	339.83	412.20	493.78
35	67.12	93.72	126.52	166.02	212.73	267.15	329.79	401.16	481.75
40	64.05	89.33	120.82	159.03	204.47	257.64	319.05	389.20	468.59
45	61.75	85.49	115.46	152.17	196.13	247.83	307.79	376.51	454.49
50	-	82.39	110.62	145.62	187.87	237.90	296.19	363.26	439.61
55	-	-	106.48	139.55	179.89	228.02	284.43	349.64	424.16
60	-	-	-	134.14	172.36	218.37	272.70	335.84	408.29
65	-	-	-	-	165.46	209.15	261.17	322.02	392.20

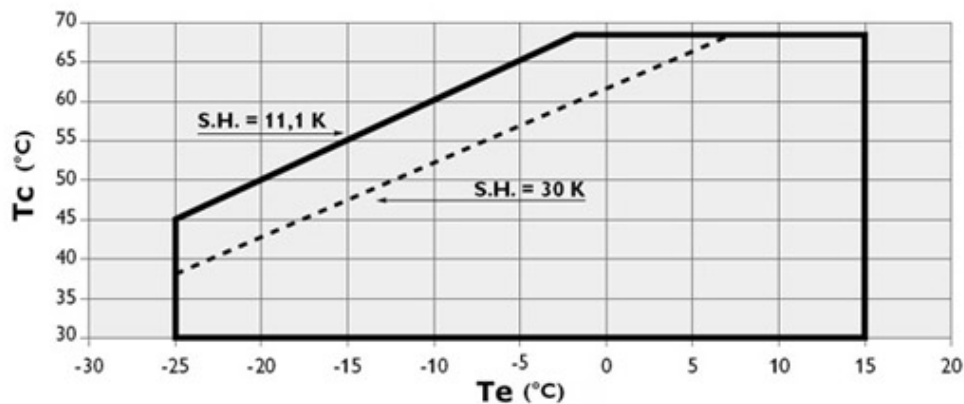
C.O.P. [W/W]

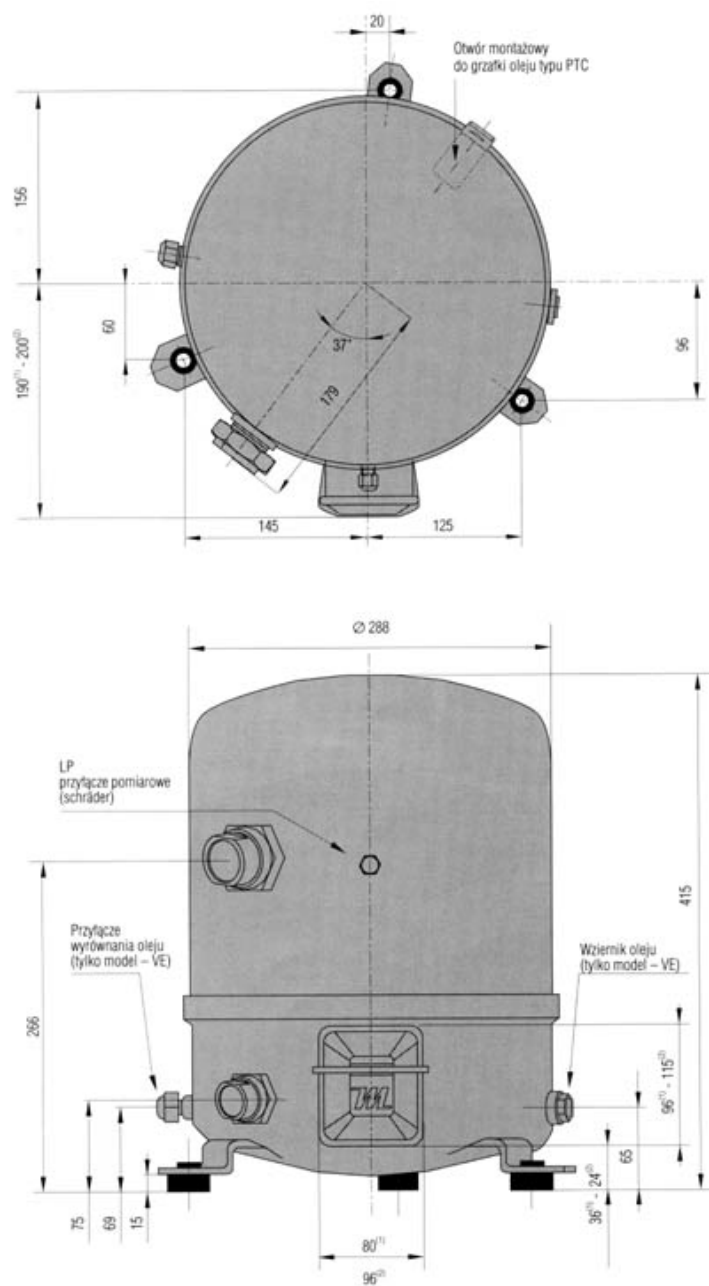
$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10	15
30	1.61	2.02	2.50	3.07	3.72	4.47	5.33	6.31	7.41
35	1.42	1.77	2.18	2.67	3.23	3.87	4.60	5.42	6.34
40	1.26	1.55	1.91	2.32	2.80	3.35	3.97	4.66	5.44
45	1.14	1.38	1.67	2.03	2.43	2.90	3.42	4.02	4.67
50	-	1.23	1.48	1.77	2.11	2.51	2.96	3.46	4.02
55	-	-	1.31	1.55	1.84	2.17	2.55	2.98	3.45
60	-	-	-	1.37	1.60	1.88	2.20	2.56	2.96
65	-	-	-	-	1.40	1.63	1.89	2.20	2.54

Operating conditions: suction superheat: 10 K, subcooling: 0 K

t_c - Condensing temperature [°C]

t_e - Evaporating temperature [°C]

Application range




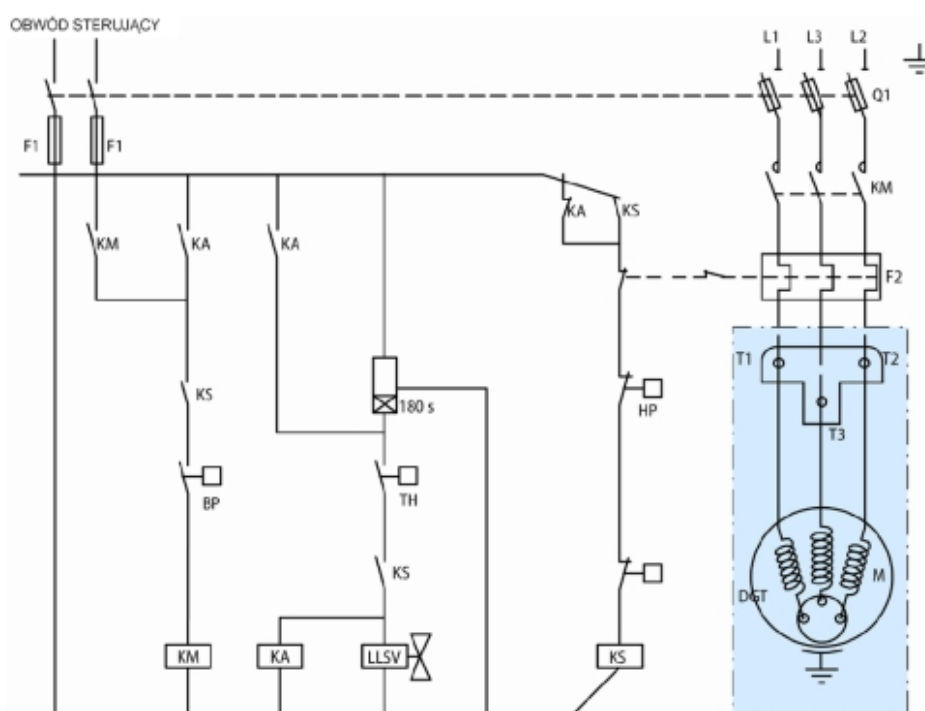


Three-phase power supply

Electrical data

Motor voltage code:	3	4	6	7	9
Starting current [A]:	130	64			
Maximum Continuous Current (MCC) [A]:	24	12			
Winding resistance (between phases) [Ω]:	0,55	2,39			

Connection diagram for systems without refrigerant suction



TH: Thermostat

180 s: Optional short cycle timer (3min) 5 pts

KA: Control relay

LLSV: Liquid Solenoid valve

KM: Compressor contactor

KS: Safety lock out relay

BP: Low pressure switch

HP: High pressure switch

Q1: Fused disconnect

F1: Fuses

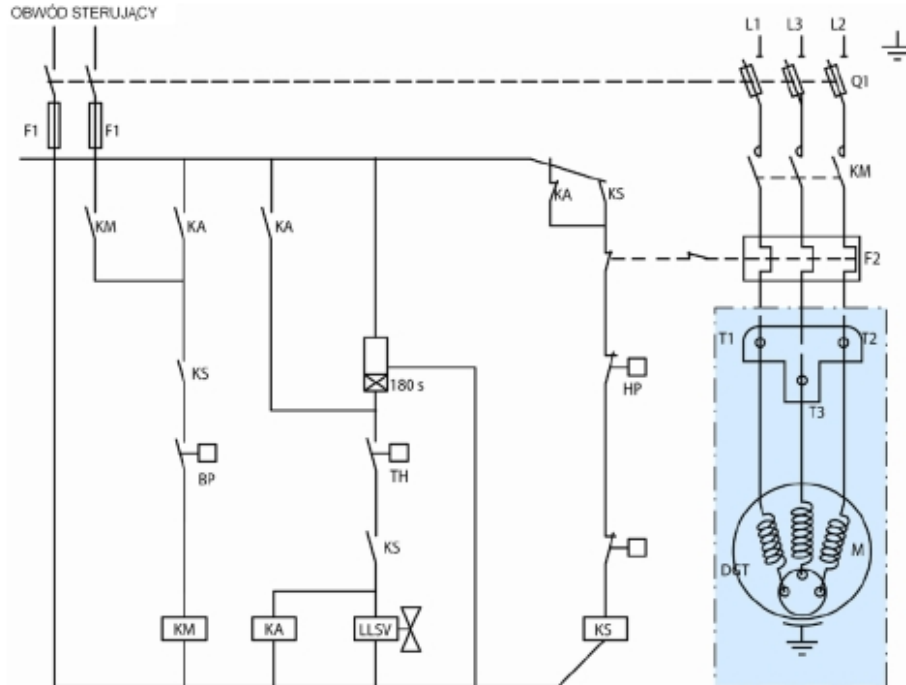
F2: External overload protection

M: Compressor's engine

thM: Motor safety thermostat

DGT: Discharge gas thermostat

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F1: Fuses

F2: External overload protection

M: Compressor's engine

thM: Motor safety thermostat

DGT: Discharge gas thermostat

Equipment

- ▶ crankcase heater - PTC 35 W
- ▶ belt type heater - crankcase heater 65W, 230V
- ▶ Rotolock valves
 - suction: Rotolock valve connection 1 3/4", connection with supplied sleeve 7/8"
 - discharge: Rotolock valve connection 1 1/4", connection with supplied sleeve 3/4"
- ▶ soft-start kit - electronic softstart MCI 15C
- ▶ acoustic hood - acoustic shield of Danfoss catalogue number 7755002