
GACO SARL

28, Rue Bencharif Madani

25000 BELLEVUE/CONSTANTINE - ALGERIE

Tel. : 031 92 54 56 / 031 93 22 23 - Fax : 031 92 13 45

Email : gacosarl@gmail.com / benkobbi_fares@yahoo.fr

**Type: Hermetic piston compressors****Producer: Maneurop****Series: MT****Model: MT160****Technical data**

Cylinder count:	4
Displacement [m ³ /h]:	47,25
Cylinder capacity [cm ³]:	271,6
RPM [min ⁻¹]:	2900
Weight [kg]:	69
Oil charge [dm ³]:	4
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]:	10
Refrigerant:	R22
Sound power [dB]:	83
Sound power with accoustic hood [dB]:	77

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:		1 1/8"
Discharge connection with supplied sleeve:		3/4"

Approvals

CCC	+
CE	+
UL	+

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**R22****Cooling capacity [W]**

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10	15
30	11 949	15 724	20 310	25 818	32 355	40 034	48 962	59 251	71 010
35	10 758	14 390	18 787	24 060	30 319	37 672	46 230	56 103	67 401
40	9 658	13 117	17 296	22 305	28 254	35 253	43 411	52 838	63 644
45	8 663	11 919	15 849	20 565	26 174	32 788	40 515	49 467	59 751
50	-	10 807	14 459	18 850	24 091	30 289	37 557	46 002	55 736
55	-	-	13 138	17 175	22 016	27 770	34 547	42 457	51 610
60	-	-	-	15 552	19 963	25 243	31 500	38 844	47 385
65	-	-	-	-	17 945	22 719	28 426	35 175	43 075

Power input [W]

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10	15
30	6 153	6 858	7 525	8 129	8 643	9 042	9 300	9 391	9 289
35	6 462	7 210	7 934	8 607	9 205	9 700	10 067	10 281	10 316
40	6 723	7 523	8 312	9 064	9 753	10 354	10 841	11 187	11 368
45	6 928	7 789	8 652	9 492	10 283	10 999	11 614	12 102	12 438
50	-	8 000	8 948	9 885	10 786	11 626	12 378	13 017	13 518
55	-	-	9 191	10 235	11 256	12 229	13 128	13 927	14 601
60	-	-	-	10 535	11 685	12 801	13 856	14 824	15 681
65	-	-	-	-	12 067	13 334	14 554	15 702	16 750

Current [A]

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10	15
30	12.97	13.71	14.46	15.16	15.77	16.26	16.58	16.69	16.54
35	13.32	14.11	14.92	15.72	16.45	17.08	17.56	17.85	17.90
40	13.60	14.46	15.37	16.27	17.14	17.92	18.58	19.06	19.34
45	13.82	14.77	15.78	16.81	17.83	18.78	19.63	20.33	20.84
50	-	15.01	16.14	17.32	18.50	19.64	20.70	21.63	22.39
55	-	-	16.45	17.78	19.15	20.49	21.77	22.95	23.97
60	-	-	-	18.20	19.76	21.32	22.84	24.28	25.59
65	-	-	-	-	20.32	22.11	23.89	25.61	27.22

Mass flow [kg/s]

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10	15
30	244.95	319.02	406.57	509.54	629.85	769.44	930.24	1 114.17	1 323.18
35	227.37	301.28	388.53	491.03	610.73	749.56	909.44	1 092.31	1 300.10
40	211.71	284.60	370.67	471.84	590.06	727.25	885.35	1 066.28	1 271.98
45	198.10	269.09	353.11	452.08	567.95	702.63	858.07	1 036.19	1 238.92
50	-	254.85	335.95	431.85	544.49	675.80	827.70	1 002.14	1 201.04
55	-	-	319.31	411.27	519.81	646.87	794.37	964.25	1 158.45
60	-	-	-	390.43	494.01	615.94	758.18	922.63	1 111.25
65	-	-	-	-	467.20	583.14	719.23	877.39	1 059.56

C.O.P. [W/W]

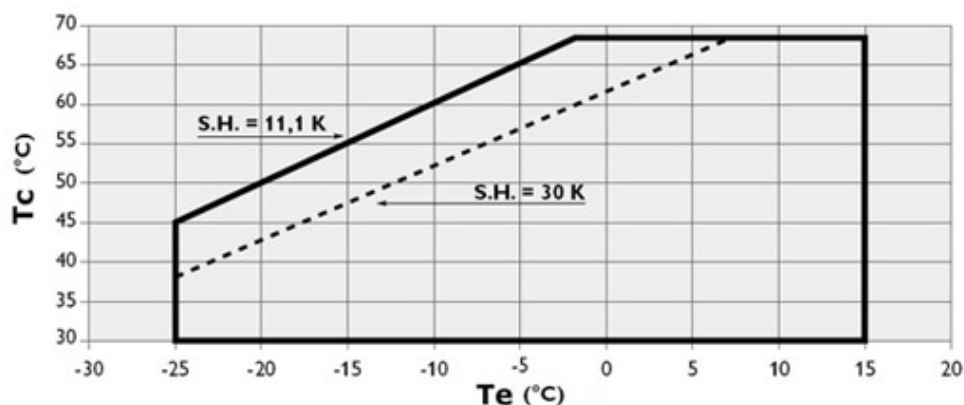
$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10	15
30	1.94	2.29	2.70	3.18	3.74	4.43	5.26	6.31	7.64
35	1.66	2.00	2.37	2.80	3.29	3.88	4.59	5.46	6.53
40	1.44	1.74	2.08	2.46	2.90	3.40	4.00	4.72	5.60
45	1.25	1.53	1.83	2.17	2.55	2.98	3.49	4.09	4.80
50	-	1.35	1.62	1.91	2.23	2.61	3.03	3.53	4.12
55	-	-	1.43	1.68	1.96	2.27	2.63	3.05	3.53
60	-	-	-	1.48	1.71	1.97	2.27	2.62	3.02
65	-	-	-	-	1.49	1.70	1.95	2.24	2.57

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

t_c - Condensing temperature [°C]

t_e - Evaporating temperature [°C]

Application range



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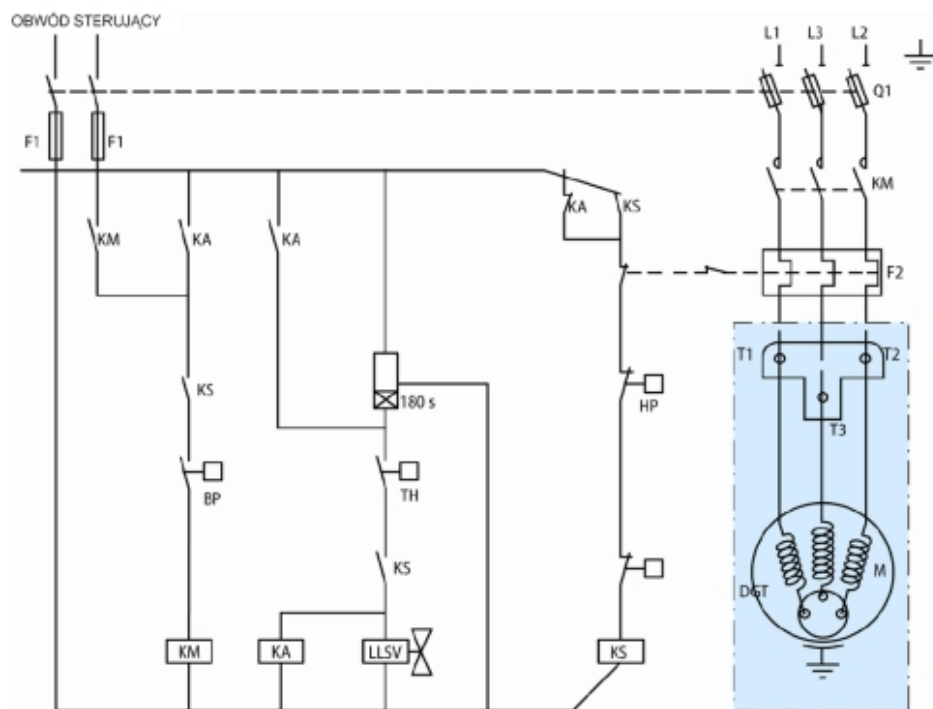


Three-phase power supply

Electrical data

Motor voltage code:	3	4	6	7	9
Starting current [A]:	259	140	208	99	165
Maximum Continuous	70	36	208	29	46
Current (MCC) [A]:					
Winding resistance	0,27	1,1	0,37	1,76	1,1
(between phases) [Ω]:					

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

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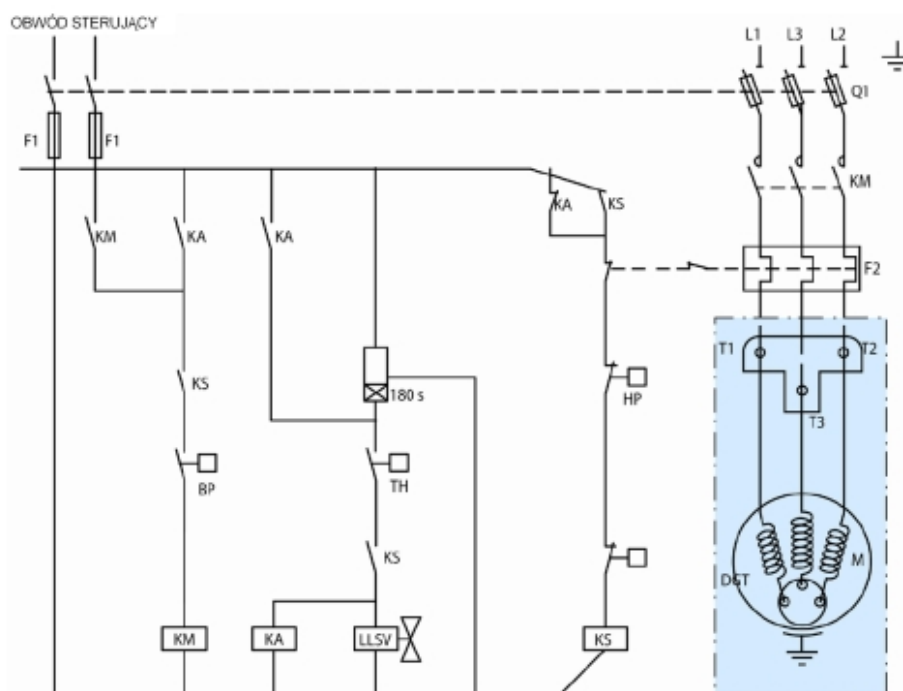
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DGT: Discharge gas thermostat

Connection diagram for systems with refrigerant suction

TH: Thermostat

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LLSV: Liquid Solenoid valve

KM: Compressor contactor

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Equipment

- ▶ crankcase heater - PTC 35 W
- ▶ belt type heater - crankcase heater 75W, 230V
- ▶ Rotolock valves
 - suction: Rotolock valve connection 1 3/4", connection with supplied sleeve 1 1/8"
 - discharge: Rotolock valve connection 1 1/4", connection with supplied sleeve 3/4"
- ▶ soft-start kit - electronic softstart MCI 25C
- ▶ accoustic hood - acoustic shield of Danfoss catalogue number 7755003