
GACO SARL

28, Rue Bencharif Madani

25000 BELLEVUE/CONSTANTINE - ALGERIE

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

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**Type: Hermetic scroll compressors****Producer: Maneurop****Series: SM****Model: SM161****Model: SM161****Data****Technical data**

Displacement [m ³ /h]:	37,69
:	216,6
RPM [min ⁻¹]:	2900
Weight [kg]:	88
Oil charge [dm ³]:	3,6
Oil type:	160P
Maximum system test pressure low side / high side:	25 / 32
Maximum number of starts without softstart [1/h]:	12
Refrigerant charge limit [dm ³]:	12,5
Refrigerant:	R22

Connections

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

Approvals

CCC	-
CE	+
UL	+

R22

Model: SM161**Cooling capacity [W]**

Capacity

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15
30	16 887	21 015	25 811	31 356	37 726	45 002	53 260	62 580
35	16 038	20 064	24 733	30 122	36 312	43 379	51 403	60 462
40	15 143	19 053	23 580	28 800	34 794	41 639	49 414	58 197
45	-	17 993	22 363	27 400	33 183	39 791	47 302	55 795
50	-	-	21 092	25 931	31 489	37 846	45 079	53 267
55	-	-	-	24 403	29 722	35 813	42 753	50 622
60	-	-	-	-	27 892	33 702	40 335	47 870
65	-	-	-	-	26 009	31 524	37 835	45 022

Power input [W]

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15
30	6 751	6 798	6 849	6 900	6 949	6 991	7 024	7 043
35	7 517	7 555	7 600	7 650	7 700	7 748	7 789	7 822
40	8 385	8 409	8 444	8 486	8 533	8 581	8 627	8 666
45	-	9 378	9 397	9 428	9 466	9 510	9 554	9 596
50	-	-	10 480	10 493	10 518	10 551	10 589	10 628
55	-	-	-	11 699	11 706	11 724	11 750	11 782
60	-	-	-	-	13 047	13 045	13 055	13 074
65	-	-	-	-	14 562	14 534	14 522	14 523

Current [A]

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15
30	14.74	14.82	14.86	14.86	14.86	14.86	14.90	14.99
35	15.54	15.64	15.68	15.69	15.69	15.70	15.73	15.81
40	16.47	16.58	16.64	16.66	16.66	16.66	16.69	16.76
45	-	17.68	17.75	17.78	17.78	17.79	17.81	17.88
50	-	-	19.04	19.08	19.09	19.10	19.12	19.18
55	-	-	-	20.58	20.60	20.61	20.63	20.69
60	-	-	-	-	22.35	22.36	22.38	22.43
65	-	-	-	-	24.35	24.37	24.39	24.44

Model: SM161

Capacity

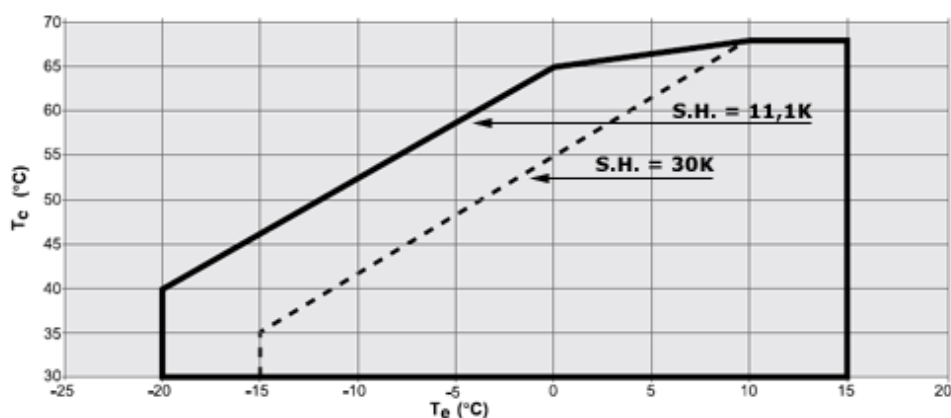
Mass flow [kg/s]

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15
30	339.83	418.05	507.39	609.13	724.57	854.98	1 001.65	1 165.88
35	334.54	413.29	503.14	605.39	721.32	852.22	999.38	1 164.07
40	328.20	407.27	497.45	600.00	716.23	847.42	994.86	1 159.83
45	-	400.03	490.32	592.98	709.31	840.59	988.11	1 153.15
50	-	-	481.77	584.34	700.57	831.74	979.14	1 144.06
55	-	-	-	574.09	690.02	820.89	967.97	1 132.56
60	-	-	-	-	677.68	808.04	954.61	1 118.67
65	-	-	-	-	663.56	793.21	939.06	1 102.40

C.O.P. [W/W]

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15
30	2.50	3.09	3.77	4.54	5.43	6.44	7.58	8.88
35	2.13	2.66	3.25	3.94	4.72	5.60	6.60	7.73
40	1.81	2.27	2.79	3.39	4.08	4.85	5.73	6.72
45	-	1.92	2.38	2.91	3.51	4.18	4.95	5.81
50	-	-	2.01	2.47	2.99	3.59	4.26	5.01
55	-	-	-	2.09	2.54	3.05	3.64	4.30
60	-	-	-	-	2.14	2.58	3.09	3.66
65	-	-	-	-	1.79	2.17	2.61	3.10

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

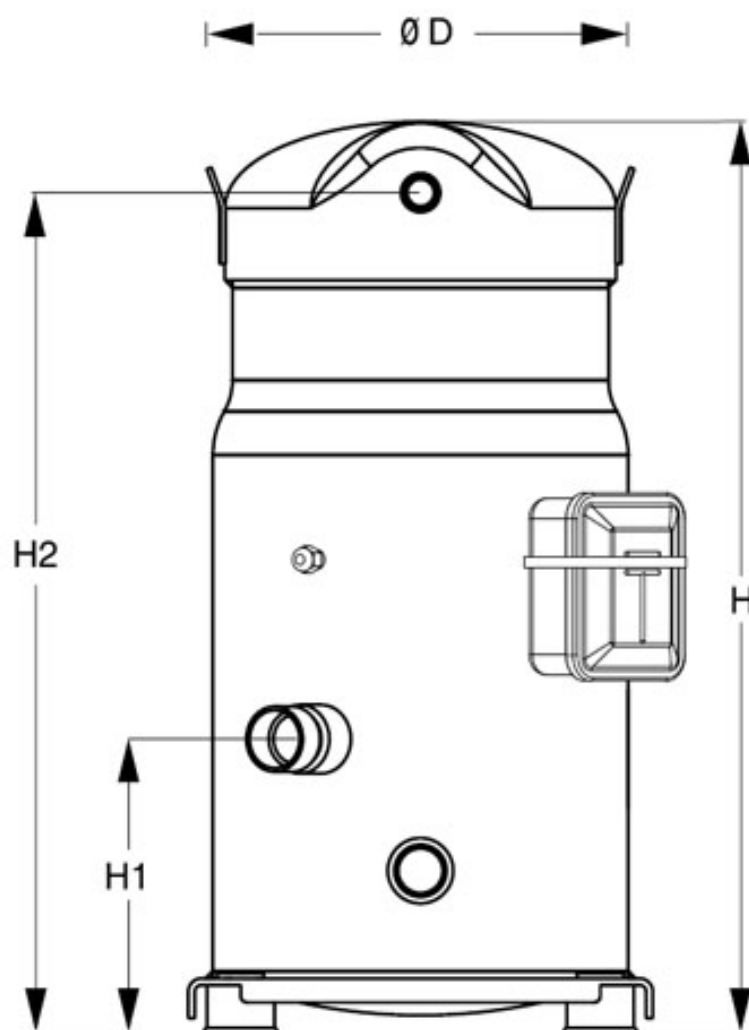
 t_c - Condensing temperature [°C] t_e - Evaporating temperature [°C]**Application range**

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Email : gacosarl@gmail.com / benkobbi_fares@yahoo.fr**Model: SM161****Dimensions**

D	266
H	591
H1	180 mm
H2	556 mm

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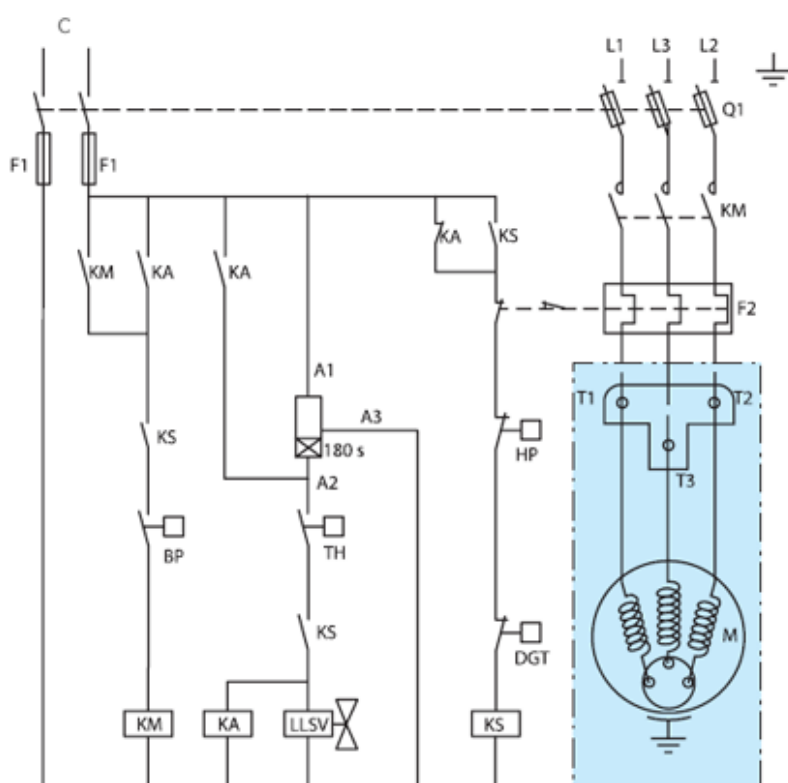
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Model: SM161

Image



Model: SM161**Electrical****Connection diagram for systems with refrigerant suction**

TH: Thermostat

180 s: ATI electronic timer

KA: Control transmitter CI 4-2

LLSV: Electromagnetic liquid valve

KM: Main contactor CI

KS: Fuses' switch

BP: Low pressure switch

HP: High pressure switch

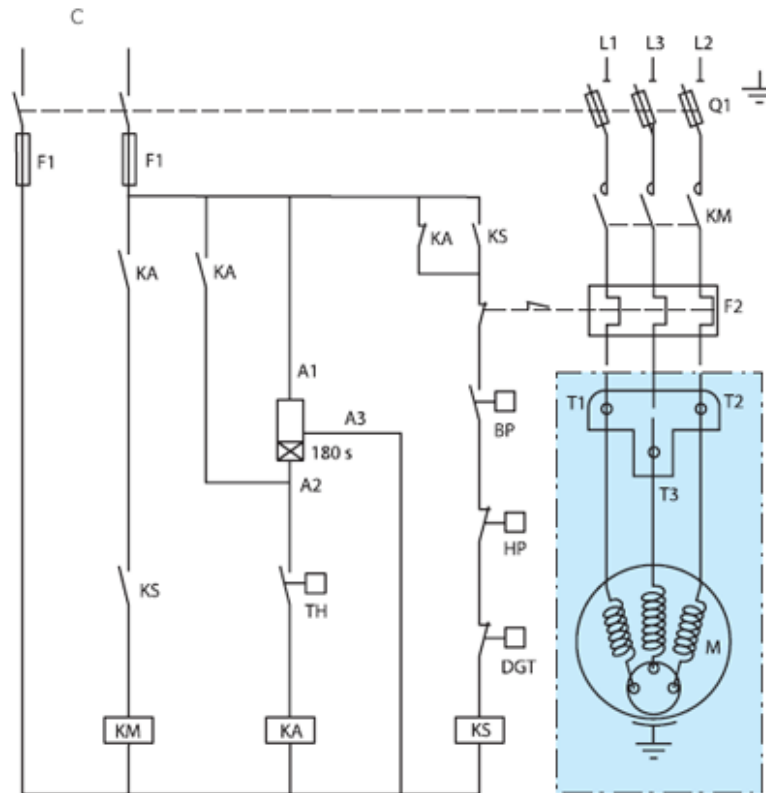
Q1: Safety switch

F1: Fuses

F2: Thermal relay TI

M: Compressor's engine

DGT: Discharge gas thermostat

Model: SM161**Electrical****Connection diagram for systems without refrigerant suction**

- TH: Thermostat
180 s: ATI electronic timer
KA: Control transmitter CI 4-2
KM: Main contactor CI
KS: Fuses' switch
BP: Low pressure switch
HP: High pressure switch
Q1: Safety switch
F1: Fuses
F2: Thermal relay TI
M: Compressor's engine
DGT: Discharge gas thermostat

Equipment

- ▶ oil equalization - thread adapter 3/8"
- ▶ belt type heater - crankcase heater 65W, 230V
- ▶ soft-start kit - electronic softstart MCI 25C
- ▶ accoustic hood - acoustic shield of Danfoss catalogue number 7755017
- ▶ discharge thermostatic protection - discharge temperature protection accessory - Danfoss catalogue number 7750009

Model: SM161

Equipment