
GACO SARL

28, Rue Bencharif Madani

25000 BELLEVUE/CONSTANTINE - ALGERIE

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**Type: Hermetic scroll compressors****Producer: Danfoss-Maneurop****Series: SH****Model: SH161****Data****Model: SH161****Technical data**

Displacement [m ³ /h]:	26,4
Swept volume [cm ³ /rev]:	151,7
RPM [min ⁻¹]:	2900
Weight [kg]:	69
Oil charge [dm ³]:	3,3
Oil type:	160SZ
Maximum system test pressure low side / high side:	33/45
Maximum number of starts without softstart [1/h]:	12
Refrigerant charge limit [dm ³]:	7,9
Sound power [dB]:	73,5
Refrigerant:	R410A

Connections

	<u>milimeters</u>	<u>inches</u>
Suction connection with supplied sleeve:	35	1 3/8"
Discharge connection with supplied sleeve:	22	7/8"

R410A**Model: SH161****Capacity****Cooling capacity [W]**

t_c \ t_e	-25	-20	-15	-10	-5	0	5	10	15
20	16 404	20 167	24 628	29 874	35 991	43 064	51 182	-	-
25	15 595	19 320	23 707	28 842	34 812	41 702	49 601	58 593	-
30	14 715	18 374	22 658	27 655	33 449	40 129	47 780	56 489	66 342
35	13 774	17 339	21 493	26 323	31 915	38 356	45 731	54 129	63 634
40	-	16 229	20 225	24 860	30 221	36 395	43 467	51 525	60 655
45	-	15 053	18 863	23 276	28 379	34 258	40 999	48 690	57 416
50	-	-	17 422	21 584	26 401	31 956	38 339	45 634	53 929
55	-	-	-	19 796	24 297	29 503	35 498	42 370	50 206
60	-	-	-	-	22 081	26 908	32 489	38 910	46 258
65	-	-	-	-	-	24 185	29 323	35 265	42 098

Power input [W]

t_c \ t_e	-25	-20	-15	-10	-5	0	5	10	15
20	5 509	5 580	5 663	5 748	5 827	5 890	5 928	-	-
25	6 222	6 268	6 335	6 416	6 499	6 577	6 639	6 676	-
30	6 997	7 009	7 053	7 120	7 199	7 283	7 361	7 424	7 464
35	7 866	7 837	7 848	7 893	7 960	8 041	8 127	8 208	8 275
40	-	8 782	8 754	8 767	8 814	8 884	8 969	9 059	9 145
45	-	9 879	9 801	9 776	9 793	9 845	9 920	10 011	10 107
50	-	-	11 024	10 951	10 931	10 954	11 012	11 095	11 193
55	-	-	-	12 324	12 258	12 246	12 278	12 344	12 436
60	-	-	-	-	13 809	13 752	13 749	13 791	13 868
65	-	-	-	-	-	15 504	15 459	15 467	15 522

Current [A]

t_c \ t_e	-25	-20	-15	-10	-5	0	5	10	15
20	12.99	13.00	13.01	13.05	13.11	13.18	13.27	-	-
25	13.68	13.68	13.71	13.74	13.80	13.87	13.97	14.08	-
30	14.45	14.45	14.48	14.51	14.56	14.63	14.72	14.83	14.95
35	15.35	15.35	15.37	15.40	15.44	15.50	15.58	15.67	15.79
40	-	16.42	16.42	16.44	16.47	16.52	16.58	16.66	16.76
45	-	17.69	17.68	17.68	17.70	17.72	17.77	17.83	17.90
50	-	-	19.18	19.16	19.16	19.16	19.18	19.22	19.27
55	-	-	-	20.93	20.90	20.88	20.87	20.88	20.90
60	-	-	-	-	22.96	22.91	22.87	22.84	22.83
65	-	-	-	-	-	25.29	25.22	25.15	25.10

Model: SH161

Mass flow [kg/h]

Capacity

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10	15
20	288.18	352.63	426.75	512.08	610.19	722.61	850.89	-	-
25	285.53	351.27	426.68	513.30	612.69	726.39	855.95	1 002.91	-
30	281.61	348.33	424.71	512.30	612.64	727.30	857.81	1 005.72	1 172.58
35	276.45	343.82	420.84	509.08	610.06	725.35	856.49	1 005.03	1 172.52
40	-	337.75	415.10	503.65	604.96	720.56	852.01	1 000.85	1 168.64
45	-	330.14	407.49	496.04	597.34	712.94	844.37	993.20	1 160.96
50	-	-	398.02	486.25	587.23	702.49	833.59	982.07	1 149.49
55	-	-	-	474.30	574.62	689.23	819.67	967.50	1 134.25
60	-	-	-	-	559.54	673.18	802.64	949.48	1 115.24
65	-	-	-	-	-	654.33	782.49	928.03	1 092.48

C.O.P. [W/W]

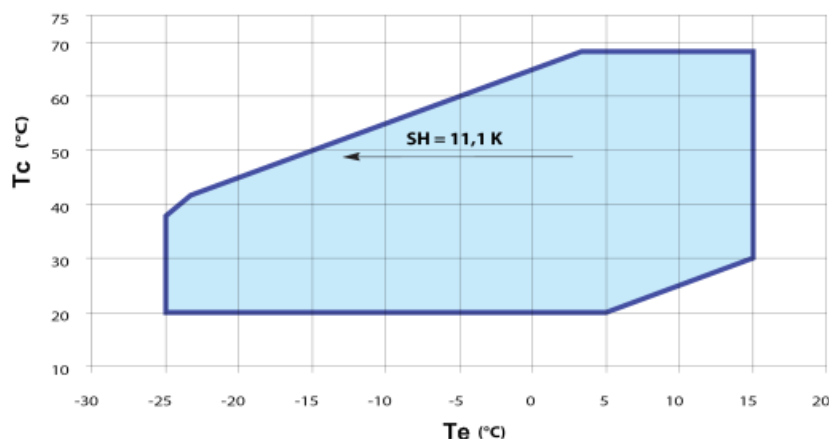
$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10	15
20	2.98	3.61	4.35	5.20	6.18	7.31	8.63	-	-
25	2.51	3.08	3.74	4.50	5.36	6.34	7.47	8.78	-
30	2.10	2.62	3.21	3.88	4.65	5.51	6.49	7.61	8.89
35	1.75	2.21	2.74	3.34	4.01	4.77	5.63	6.59	7.69
40	-	1.85	2.31	2.84	3.43	4.10	4.85	5.69	6.63
45	-	1.52	1.92	2.38	2.90	3.48	4.13	4.86	5.68
50	-	-	1.58	1.97	2.42	2.92	3.48	4.11	4.82
55	-	-	-	1.61	1.98	2.41	2.89	3.43	4.04
60	-	-	-	-	1.60	1.96	2.36	2.82	3.34
65	-	-	-	-	-	1.56	1.90	2.28	2.71

Operating conditions: superheating: 11.1 K, subcooling: 8.3 K

t_c - Condensing temperature [°C]

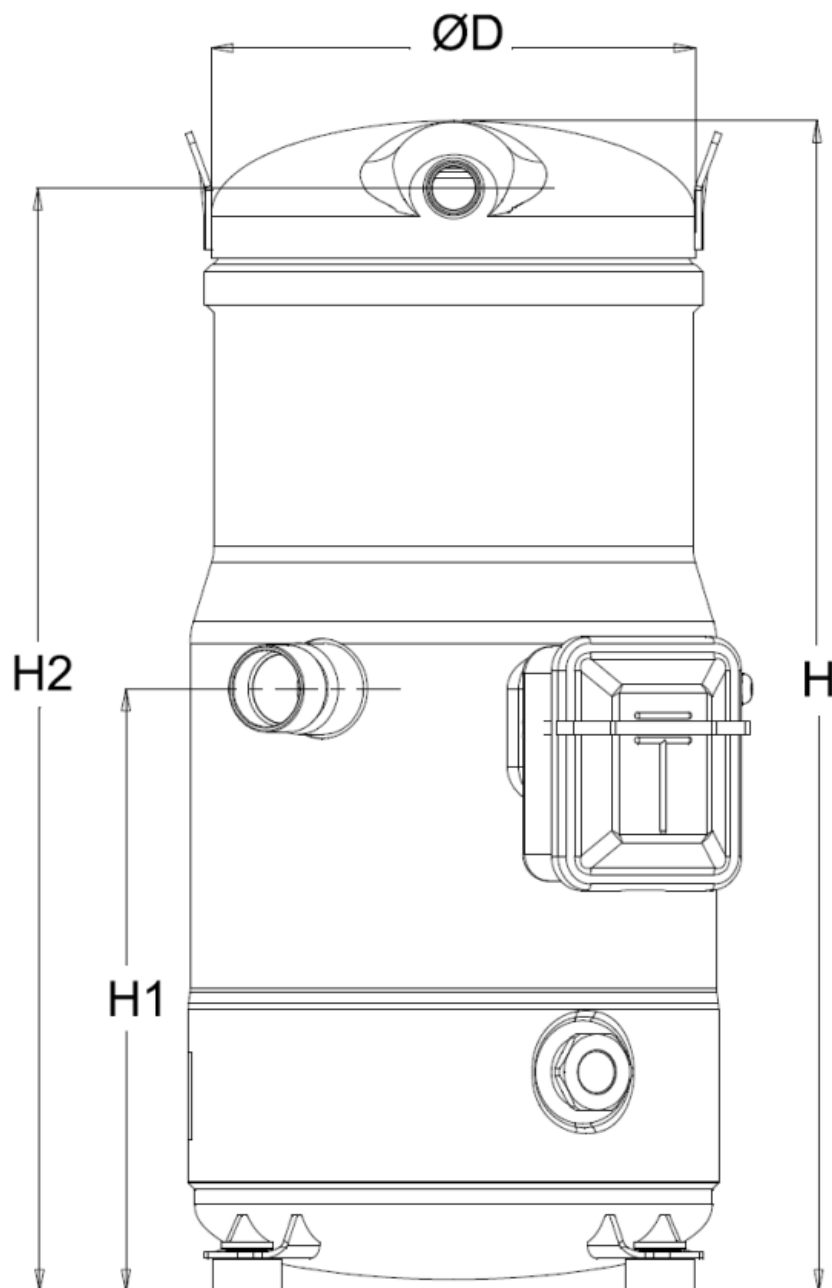
t_e - Evaporating temperature [°C]

Application range



Model: SH161

Dimensions



D [mm]: 243

H [mm]: 540

H1 [mm]: 278

H2 [mm]: 509

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Model: SH161

Image



Single phase power supply

Model: SH161
Electrical

Motor voltage code:

4

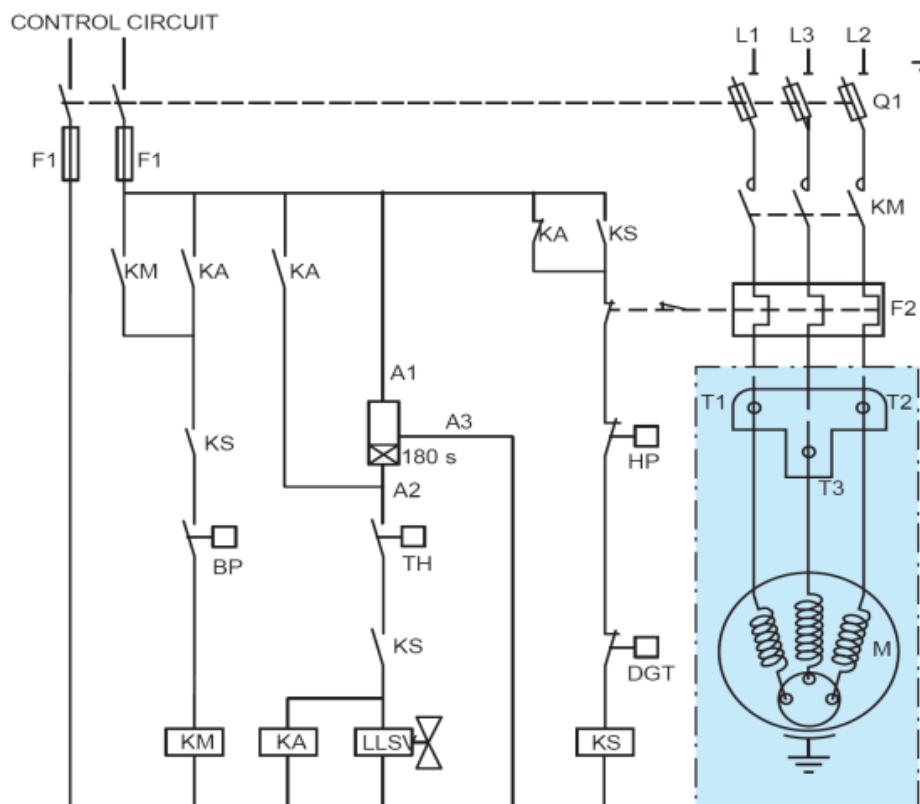
Power supply:

400V/3/50Hz

Maximum Continuous Current (MCC) [A]:

26,7

Wiring diagram with pump-down cycle



TH: Control device

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

KA: Control relay

LLSV: Liquid Line Solenoid valve

KM: Compressor contactor

KS: Safety lock out relay

BP: Pump-down control and low pressure switch

HP: High pressure safety switch

Q1: Fused disconnect

F1: Fuses / S: External overload protection

F2: External overload protection

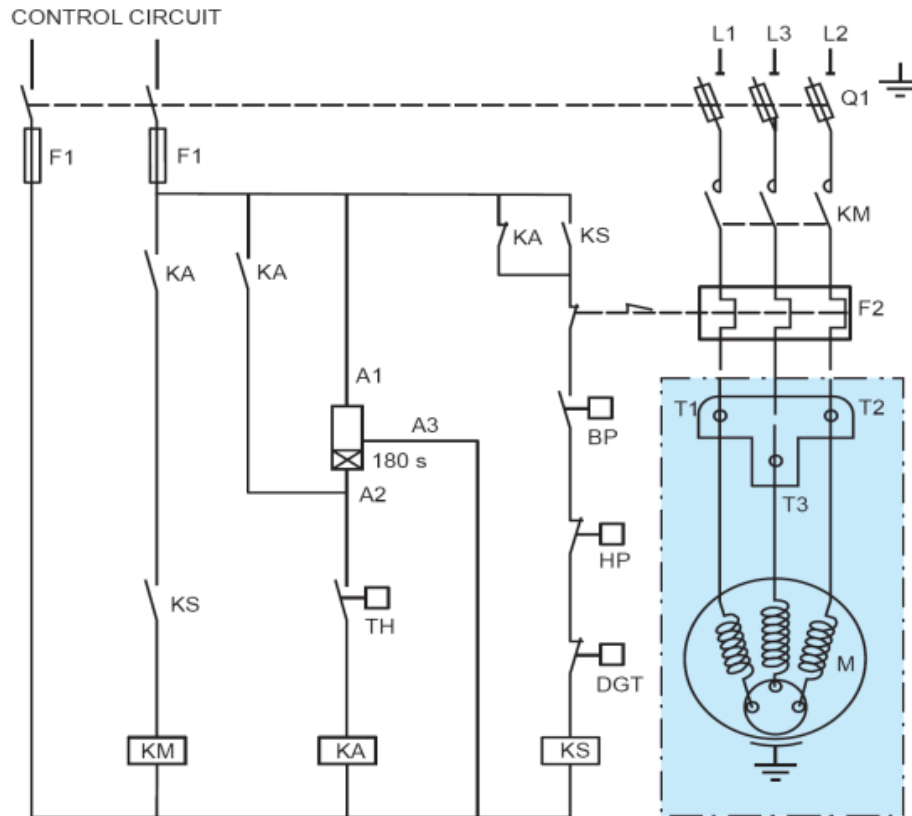
M: Compressor's engine

thM: Motor safety thermostat

DGT: Discharge gas thermostat

MPM: Motor Protection Module

S: Thermistor chain

Model: SH161**Electrical****Wiring diagram without pump-down cycle**

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