

Model: SZ185

Data

Type: Hermetic scroll compressors

Producer: Maneurop

Series: SZ

Model: SZ185

Technical data

Displacement [m ³ /h]:	43,5
:	249,9
RPM [min ⁻¹]:	2900
Weight [kg]:	100
Oil charge [dm ³]:	6,2
Oil type:	160SZ
Maximum system test pressure low side / high side:	25 / 32
Maximum number of starts without softstart [1/h]:	12
Refrigerant charge limit [dm ³]:	14
Refrigerant:	R407C, R134a, R404A/R507A

Connections

	<u>inches</u>
Suction Rotolock valve connection:	2 1/4"
Discharge Rotolock valve connection:	1 3/4"
Suction connection with supplied sleeve:	1 5/8"
Discharge connection with supplied sleeve:	1 1/8"

Approvals

CCC	-
CE	+
UL	+

Model: SZ185

Capacity

R407C

Cooling capacity [W]

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15
30	17 693	22 504	28 237	34 983	42 837	51 893	62 245	73 985
35	16 616	21 303	26 866	33 396	40 989	49 739	59 738	71 081
40	15 504	20 036	25 397	31 682	38 983	47 395	57 011	67 925
45	-	18 700	23 829	29 837	36 815	44 858	54 061	64 516
50	-	-	22 159	27 858	34 483	42 127	50 885	60 849
55	-	-	-	25 744	31 984	39 198	47 480	56 924
60	-	-	-	-	29 315	36 069	43 845	52 736
65	-	-	-	-	26 475	32 737	39 975	48 284

Power input [W]

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15
30	7 675	7 756	7 828	7 887	7 928	7 947	7 941	7 904
35	8 560	8 643	8 717	8 779	8 823	8 847	8 845	8 814
40	9 561	9 646	9 724	9 789	9 837	9 866	9 869	9 844
45	-	10 783	10 864	10 933	10 986	11 019	11 028	11 010
50	-	-	12 153	12 226	12 284	12 323	12 338	12 326
55	-	-	-	13 685	13 748	13 793	13 815	13 810
60	-	-	-	-	15 393	15 444	15 473	15 476
65	-	-	-	-	17 235	17 293	17 329	17 340

Current [A]

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15
30	16.77	16.89	17.00	17.09	17.14	17.16	17.14	17.07
35	17.72	17.85	17.97	18.06	18.12	18.15	18.14	18.08
40	18.87	19.00	19.12	19.22	19.30	19.33	19.33	19.28
45	-	20.38	20.50	20.61	20.69	20.74	20.75	20.71
50	-	-	22.13	22.24	22.33	22.39	22.42	22.40
55	-	-	-	24.15	24.26	24.33	24.37	24.36
60	-	-	-	-	26.49	26.57	26.62	26.63
65	-	-	-	-	29.05	29.15	29.22	29.25

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Capacity

Mass flow [kg/s]

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15
30	342.18	427.81	527.37	642.27	773.93	923.76	1 093.18	1 283.62
35	335.36	422.37	523.17	639.18	771.82	922.50	1 092.64	1 283.65
40	328.02	416.03	517.70	634.44	767.68	918.82	1 089.29	1 280.50
45	-	408.44	510.59	627.69	761.14	912.37	1 082.79	1 273.83
50	-	-	501.50	618.56	751.86	902.79	1 072.79	1 263.26
55	-	-	-	606.72	739.47	889.73	1 058.91	1 248.44
60	-	-	-	-	723.61	872.82	1 040.82	1 229.03
65	-	-	-	-	703.94	851.71	1 018.14	1 204.65

C.O.P. [W/W]

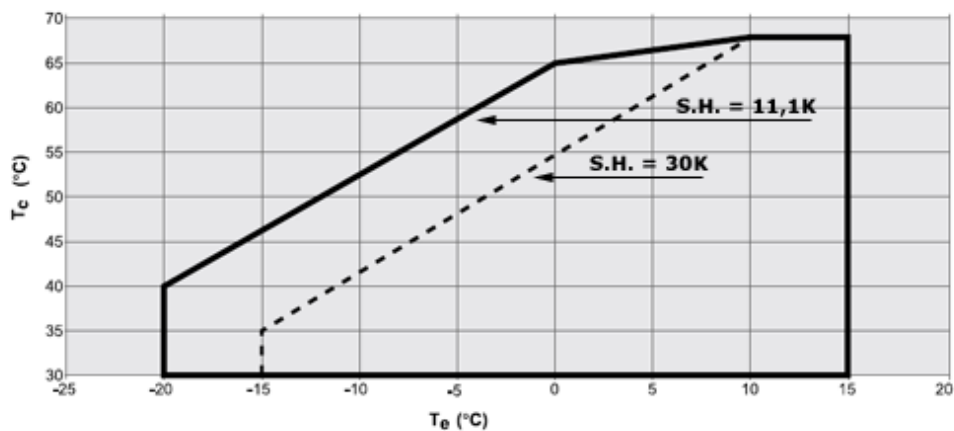
$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15
30	2.31	2.90	3.61	4.44	5.40	6.53	7.84	9.36
35	1.94	2.46	3.08	3.80	4.65	5.62	6.75	8.06
40	1.62	2.08	2.61	3.24	3.96	4.80	5.78	6.90
45	-	1.73	2.19	2.73	3.35	4.07	4.90	5.86
50	-	-	1.82	2.28	2.81	3.42	4.12	4.94
55	-	-	-	1.88	2.33	2.84	3.44	4.12
60	-	-	-	-	1.90	2.34	2.83	3.41
65	-	-	-	-	1.54	1.89	2.31	2.78

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

t_c - Condensing temperature [°C]

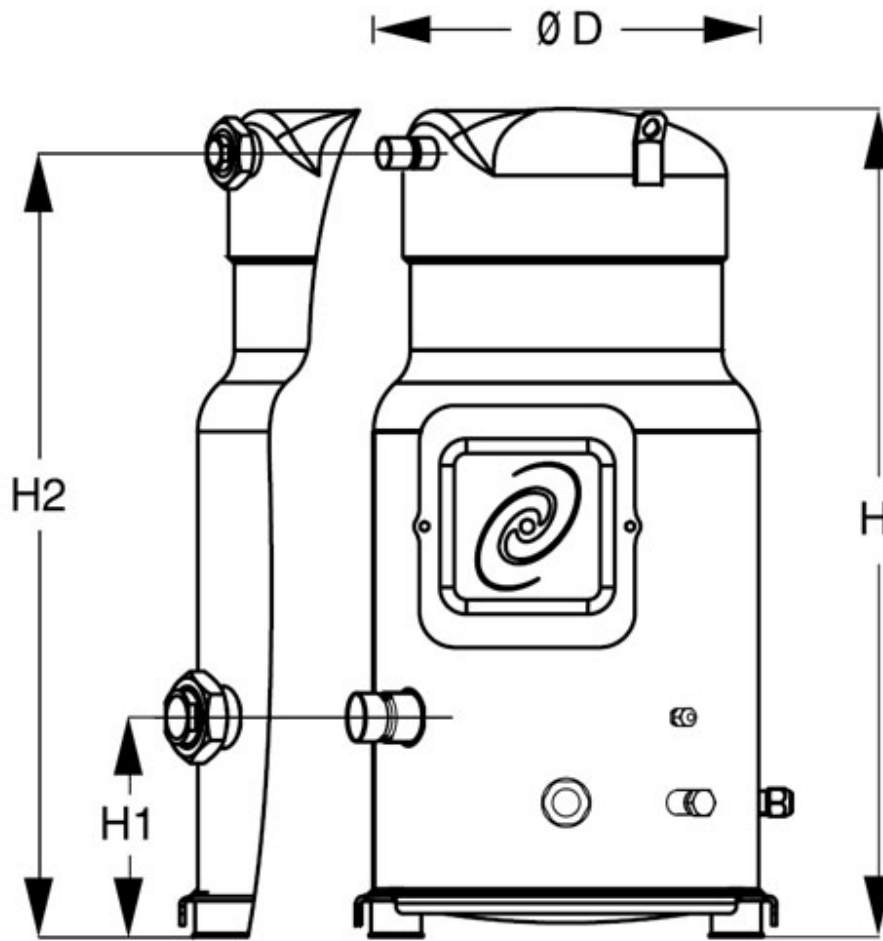
t_e - Evaporating temperature [°C]

Application range



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Dimensions



D	316 mm
H	678 mm
H1	180 mm
H2	641 mm

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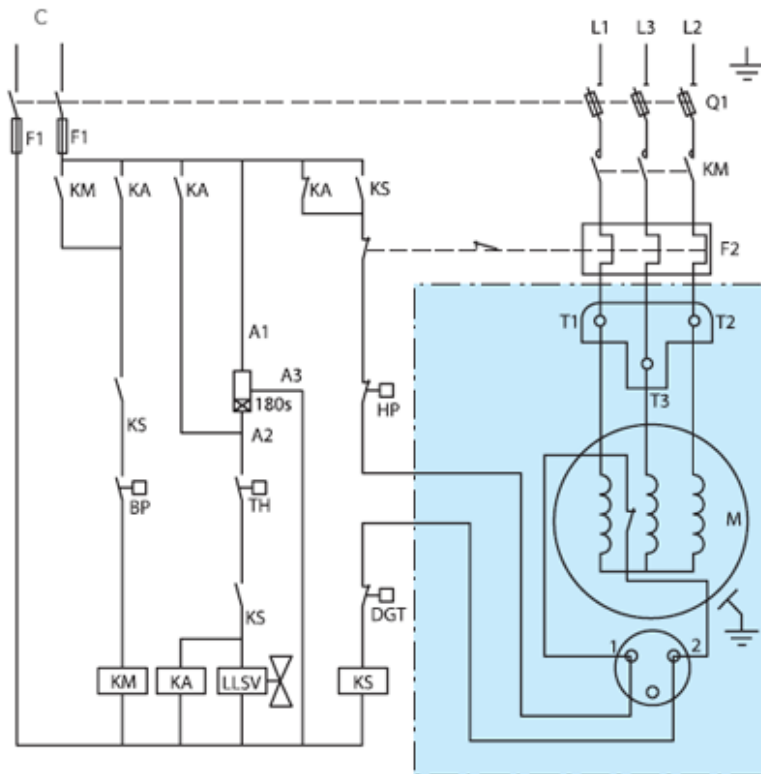
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Electrical data

Starting current [A]:	175
Maximum Continuous Current (MCC) [A]:	-
Winding resistance (between phases) [Ω]:	0,77

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 / S: Thermal relay TI
- F2: Thermal relay TI
- M: Compressor's engine
- DGT: Discharge gas thermostat