

# Model: SZ120

## Data

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Type: Hermetic scroll compressors

Producer: Maneurop

Series: SZ

## Model: SZ120

### Technical data

Displacement [m <sup>3</sup> /h]:	29
Cylinder capacity [cm <sup>3</sup> ]:	166,6
RPM [min <sup>-1</sup> ]:	2900
Weight [kg]:	80
Oil charge [dm <sup>3</sup> ]:	3
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 <sup>3</sup> ]:	10
Refrigerant:	R407C, R134a, R404A/R507A

### Connections

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

### Approvals

CCC	-
CE	+
UL	+

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## Capacity

R134a

### Cooling capacity [W]

$t_c \setminus t_e$	-15	-10	-5	0	5	10	15
30	9 958	12 622	15 770	19 448	23 704	28 586	34 141
35	9 439	12 035	15 094	18 665	22 795	27 532	32 923
40	8 890	11 405	14 364	17 816	21 808	26 388	31 603
45	8 312	10 734	13 581	16 902	20 744	25 155	30 182
50	7 705	10 022	12 746	15 924	19 604	23 834	28 660
55	-	9 272	11 859	14 883	18 389	22 425	27 039
60	-	-	10 922	13 779	17 098	20 930	25 320
65	-	-	-	12 613	15 735	19 349	23 502
70	-	-	-	11 386	14 298	17 683	21 588

### Power input [W]

$t_c \setminus t_e$	-15	-10	-5	0	5	10	15
30	3 613	3 641	3 661	3 671	3 668	3 652	3 618
35	4 013	4 041	4 061	4 071	4 069	4 053	4 020
40	4 468	4 495	4 516	4 526	4 525	4 509	4 476
45	4 981	5 009	5 030	5 041	5 039	5 024	4 991
50	5 559	5 587	5 608	5 619	5 618	5 603	5 571
55	-	6 233	6 255	6 266	6 266	6 251	6 219
60	-	-	6 975	6 987	6 987	6 973	6 942
65	-	-	-	7 787	7 787	7 773	7 743
70	-	-	-	8 670	8 671	8 657	8 627

### Current [A]

$t_c \setminus t_e$	-15	-10	-5	0	5	10	15
30	10.72	10.76	10.78	10.79	10.77	10.73	10.67
35	11.07	11.11	11.13	11.13	11.12	11.09	11.02
40	11.49	11.52	11.55	11.55	11.54	11.51	11.45
45	11.98	12.02	12.04	12.05	12.04	12.01	11.95
50	12.56	12.60	12.63	12.64	12.63	12.60	12.54
55	-	13.28	13.30	13.31	13.31	13.28	13.22
60	-	-	14.08	14.09	14.09	14.06	14.01
65	-	-	-	14.98	14.98	14.96	14.91
70	-	-	-	15.99	15.99	15.97	15.92

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## Capacity

### Mass flow [kg/s]

$t_c \setminus t_e$	-15	-10	-5	0	5	10	15
30	213.10	264.68	324.16	392.27	469.69	557.13	655.29
35	210.29	262.66	322.88	391.65	469.68	557.66	656.30
40	207.00	260.02	320.81	390.09	468.57	556.93	655.89
45	203.07	256.57	317.78	387.42	466.18	554.77	653.89
50	198.32	252.14	313.62	383.46	462.35	551.01	650.13
55	-	246.58	308.17	378.04	456.91	545.48	644.45
60	-	-	301.24	371.00	449.69	538.01	636.67
65	-	-	-	362.16	440.52	528.44	626.63
70	-	-	-	351.36	429.22	516.58	614.15

### C.O.P. [W/W]

$t_c \setminus t_e$	-15	-10	-5	0	5	10	15
30	2.76	3.47	4.31	5.30	6.46	7.83	9.44
35	2.35	2.98	3.72	4.58	5.60	6.79	8.19
40	1.99	2.54	3.18	3.94	4.82	5.85	7.06
45	1.67	2.14	2.70	3.35	4.12	5.01	6.05
50	1.39	1.79	2.27	2.83	3.49	4.25	5.14
55	-	1.49	1.90	2.38	2.93	3.59	4.35
60	-	-	1.57	1.97	2.45	3.00	3.65
65	-	-	-	1.62	2.02	2.49	3.04
70	-	-	-	1.31	1.65	2.04	2.50

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

$t_c$  - Condensing temperature [°C]

$t_e$  - Evaporating temperature [°C]

### Application range

