

Type: Semi-hermetic piston compressors

Producer: Frascold

Series: S

Model: S 10 51 Y

Technical data

Nominal motor power [kW/HP]:	7,5 / 10
Cylinder count:	4
Displacement [m ³ /h]:	50,43
RPM [min ⁻¹]:	1450
Weight net [kg]:	120
Weight gross [kg]:	134
Oil charge [dm ³]:	3,3

Electrical data

	<u>DOL Y Y</u>	<u>PWS Y / Y</u>
Power supply [V/~ / Hz]:	400V/3/50	400V/3/50
Locked rotor current [A]:	87,6	53,9
Max. operating current [A]:	24,2	24,2

Connections

	<u>milimeters</u>	<u>inches</u>
Suction line:	35	1 3/8
Discharge line:	28,6	1 1/8

R22

Cooling capacity [W]

$t_c \setminus t_e$	-5	-10	-15	-20	-25	-30	-35	-40	-45
30	35 840	29 080	23 350	18 510	14 450	11 070	8 290	6 020	4 250
40	31 870	25 680	20 430	16 020	12 340	9 300	6 820	4 820	3 290
45	29 920	24 010	19 000	14 820	11 330	8 450	6 120	4 260	2 850
50	27 940	22 330	17 580	13 620	10 330	7 630	5 450	3 720	-

Power input [W]

$t_c \setminus t_e$	-10	-20	-30	-40
40	9 680	7 940	5 910	3 920

	With head cooling
	With liquid injection or oil cooler

Operating conditions: suction gas temperature 20°C, 0K subcooling

 t_c - Condensing temperature [°C] t_e - Evaporating temperature [°C]

R134a

Cooling capacity [W]

$t_c \setminus t_e$	12.5	7.5	5	0	-5	-10	-15	-20
30	46 010	38 180	34 700	28 540	23 240	18 720	14 880	11 610
40	40 970	34 000	30 900	25 330	20 550	16 460	12 970	9 990
45	38 440	31 900	28 970	23 720	19 190	15 310	11 990	9 160
50	39 540	29 780	27 030	22 090	17 820	14 140	11 010	8 330

Power input [W]

$t_c \setminus t_e$	12.5	5	0	-10
40	8 540	7 810	7 260	5 970

	With head cooling
	With liquid injection or oil cooler

Operating conditions: suction gas temperature 20°C, 0K subcooling

 t_c - Condensing temperature [°C] t_e - Evaporating temperature [°C]

R404A/R507

Cooling capacity [W]

$t_c \setminus t_e$	-5	-10	-15	-20	-25	-30	-35	-40	-45
30	39 490	32 790	26 960	21 960	17 630	13 930	10 770	8 090	5 840
40	33 930	28 160	23 130	18 740	14 940	11 670	8 880	6 500	4 500
45	-	25 810	21 170	17 120	13 580	10 530	7 930	5 710	3 840
50	-	-	19 180	15 460	12 200	9 390	6 970	4 920	-

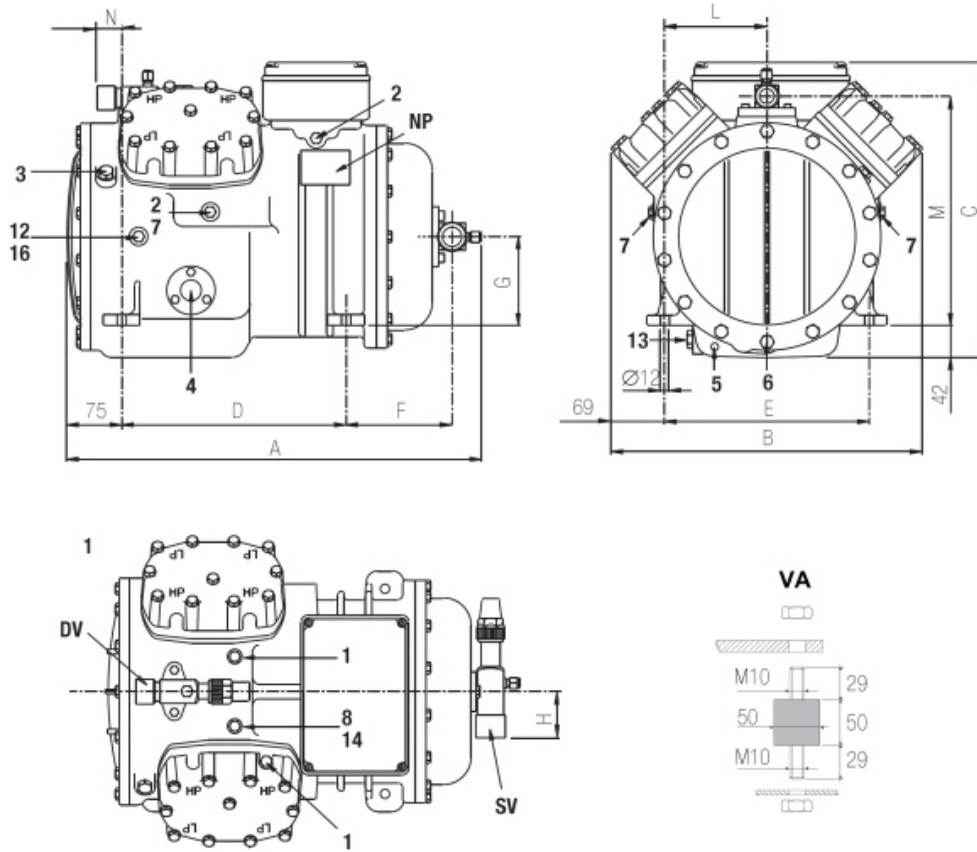
Power input [W]

$t_c \setminus t_e$	-10	-20	-30	-40
40	11 310	9 260	7 180	5 180

	With head cooling
	With liquid injection or oil cooler

Operating conditions: suction gas temperature 20°C, 0K subcooling

 t_c - Condensing temperature [°C] t_e - Evaporating temperature [°C]



A	550 mm
B	405 mm
C	382 mm
D	292 mm
E	266 mm
F	147 mm
G	115 mm
H	58 mm
L	133 mm
M	298 mm
N	23 mm

- | | |
|--|---------------------------------|
| 1: high pressure plug | 2: low pressure plug |
| 3: oil charge plug | 4: oil level sight glass |
| 5: crankcase heater seat | 6: oil drain plug |
| 7: liquid injection valve plug | 8: liquid injection sensor plug |
| 12: oil return plug | 13: magnetic plug |
| 14: max. discharge temperature sensor plug | 16: crankcase pressure plug |
| DV: discharge valve | NP: name plate |
| SV: suction valve | |

