Type: Semi-hermetic piston compressors
Producer: Frascold
Series: S

Model: S 15 51 Y

Technical data

Nominal motor power [kW/HP]:	11 / 15
Cylinder count:	4
Displacement [m³/h]:	50,43
Cylinder capacity [cm³]:	144,92
Cylinder bore [mm]:	62
Cylinder stroke [mm]:	48
RPM [min^{-1}]:	1450
Weight net [kg]:	126
Weight gross [kg]:	140
Oil charge [dm³]:	3,3

Electrical data

	DOL Y Y	PWS Y / Y
Power supply [V/~/Hz]:	400V/3/50	400V/3/50
Locked rotor current [A]:	117	77,8
Max. operating current [A]:	31	31

Connections

	milimeters	inches
Suction linie:	42	1 5/8
Discharge line:	28,6	1 1/8

R22

Cooling capacity [W]

t_c \ t_e	12.5	7.5	5	0	-5	-10	-15	-20	-25	-30
30	70 010	58 200	53 030	43 590	35 600	28 800	23 040	18 150	14 030	10 600
40	62 320	51 880	47 230	38 700	31 430	25 240	19 990	15 570	11 860	8 780
45	58 730	48 870	44 430	36 310	29 390	23 500	18 510	14 320	10 800	7 910
50	55 040	45 770	41 630	33 930	27 340	21 760	17 030	13 080	9 770	7 060

Power input [W]

t_c \ t_e	5	-10	-20	-30
40	11 290	9 450	7 490	5 370

With head cooling
With liquid injection or oil cooler

Operating conditions: suction gas temperature 20ºC, 0K subcooling
t_c - Condensing temperature [ºC]
t_e - Evaporating temperature [ºC]

R134a

Cooling capacity [W]

t_c \ t_e	12.5	7.5	5	0	-5	-10	-15	-20
50	35 940	29 750	26 980	22 000	17 720	14 040	10 900	8 220
60	30 850	25 460	23 030	18 700	14 950	11 710	8 940	6 560
70	25 720	21 150	19 090	15 370	12 170	9 380	6 980	4 920
80	20 530	16 790	15 110	12 050	9 400	7 080	5 080	3 340

Power input [W]

t_c \ t_e	12.5	5	0	-10
60	9 780	8 810	8 090	6 490

With head cooling
With liquid injection or oil cooler

Operating conditions: suction gas temperature 20ºC, 0K subcooling
t_c - Condensing temperature [ºC]
t_e - Evaporating temperature [ºC]

R404A/R507

Cooling capacity [W]

t_c \ t_e	7.5	5	0	-5	-10	-15	-20	-25	-30
30	61 220	56 160	47 090	39 260	32 490	26 640	21 610	17 250	13 520
40	52 580	48 270	40 460	33 710	27 830	22 720	18 280	14 480	11 190
45	48 180	44 260	37 160	30 920	25 470	20 740	16 630	13 070	10 010
50	43 700	40 160	33 750	28 080	23 070	18 730	14 940	11 660	8 830

Power input [W]

t_c \ t_e	5	-10	-20	-30
40	12 720	10 600	8 750	6 890

With head cooling
With liquid injection or oil cooler

Operating conditions: suction gas temperature 20ºC, 0K subcooling
t_c - Condensing temperature [ºC]
t_e - Evaporating temperature [ºC]

R407C

Cooling capacity [W]

t_c \ t_e	12.5	7.5	5	0	-5	-10	-15	-20	-25
30	69 610	57 700	52 460	43 140	35 190	28 400	22 610	17 680	13 500
40	61 090	50 640	46 010	37 720	30 610	24 510	19 320	14 880	11 100
45	56 890	47 120	42 740	34 970	28 280	22 540	17 630	13 440	9 870
50	52 560	43 520	39 470	32 180	25 920	20 540	15 920	11 990	8 630

Power input [W]

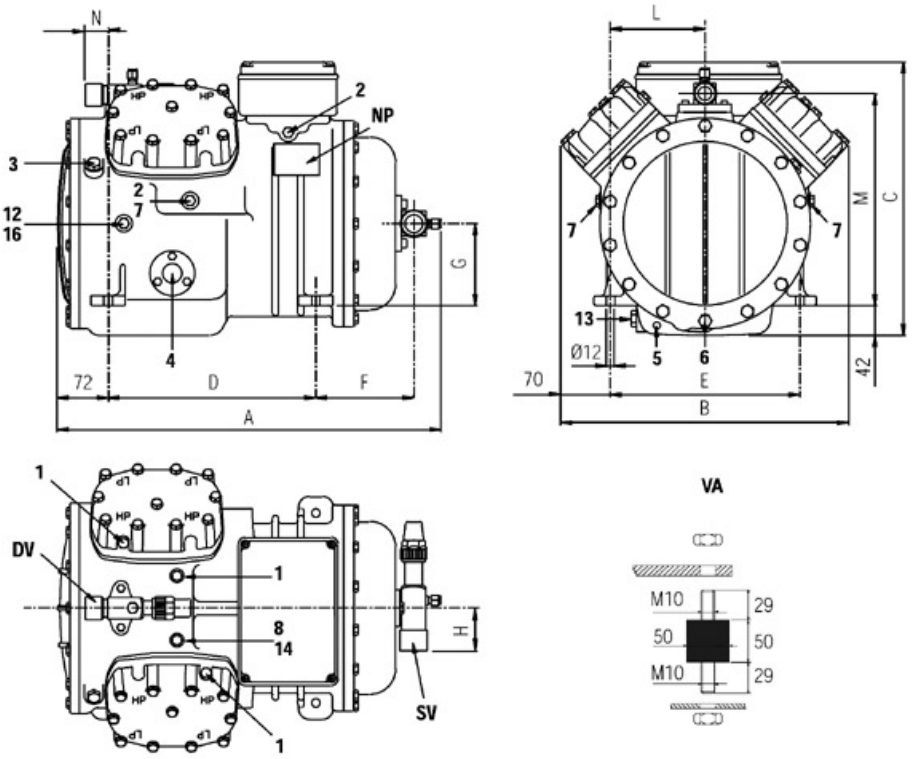
t_c \ t_e	7.5	0	-10	-20
40	11 090	10 330	8 850	7 230

With head cooling
With liquid injection or oil cooler

Operating conditions: suction gas temperature 20ºC, 0K subcooling
t_c - Condensing temperature [ºC]
t_e - Evaporating temperature [ºC]

Model: S 15 51 Y

Dimensions



A	550	mm
B	405	mm
C	384	mm
D	292	mm
E	266	mm
F	138	mm
G	115	mm
H	123	mm
L	133	mm
M	298	mm
N	20	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

Model: S 15 51 Y

Image