

Type: Semi-hermetic piston compressors

Producer: Frascold

Series: S

Model: S 20 56 Y

Technical data

Nominal motor power [kW/HP]:	15 / 20
Cylinder count:	4
Displacement [m ³ /h]:	56
RPM [min ⁻¹]:	1450
Weight net [kg]:	132
Weight gross [kg]:	146
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]:	136,2	87,5
Max. operating current [A]:	38,4	38,4

Connections

	<u>milimeters</u>	<u>inches</u>
Suction line:	42	1 5/8
Discharge line:	28,6	1 1/8

R22

Cooling capacity [W]

$t_c \setminus t_e$	12.5	7.5	5	0	-5	-10	-15	-20	-25	-30
30	77 820	64 870	59 120	49 360	40 890	33 530	27 160	21 670	16 970	13 000
40	69 680	58 010	52 820	44 120	36 520	29 870	24 090	19 080	14 780	11 140
45	65 630	54 600	46 960	41 500	34 320	28 030	22 530	17 760	13 670	10 210
50	61 530	51 120	46 500	38 830	32 080	26 140	20 940	16 420	12 540	9 270

Power input [W]

$t_c \setminus t_e$	5	-10	-20	-30
40	12 730	11 370	9 380	6 890

	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
50	41 230	34 130	30 950	25 250	20 340	16 130	12 550	9 490
60	35 520	29 340	26 560	21 550	17 230	13 510	10 330	7 620
70	29 690	24 460	22 110	17 810	14 090	10 870	8 120	5 760
80	23 730	19 480	17 540	14 020	10 930	8 250	5 950	3 970

Power input [W]

$t_c \setminus t_e$	12.5	5	0	-10
60	12 090	10 690	9 690	7 650

	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]

$t_c \setminus t_e$	7.5	5	0	-5	-10	-15	-20	-25	-30
30	69 600	63 830	53 590	44 710	37 170	30 500	24 800	19 860	15 730
40	60 490	55 440	46 480	38 680	32 040	26 160	21 120	16 750	13 100
45	55 710	51 050	42 760	35 530	29 370	23 910	19 220	15 160	11 750
50	50 440	46 210	38 680	32 090	26 470	21 470	17 180	13 460	10 330

Power input [W]

$t_c \setminus t_e$	5	-10	-20	-30
40	14 870	12 220	10 020	7 840

	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]

R407C

Cooling capacity [W]

$t_c \setminus t_e$	12.5	7.5	5	0	-5	-10	-15	-20	-25
30	78 460	65 230	59 380	48 950	40 020	32 400	25 910	20 390	15 740
40	69 410	57 690	52 480	43 210	35 180	28 310	22 450	17 460	13 230
45	64 730	53 790	48 920	40 190	32 700	26 210	20 670	15 950	11 950
50	60 030	49 800	45 280	37 140	30 110	24 040	18 850	14 410	10 640

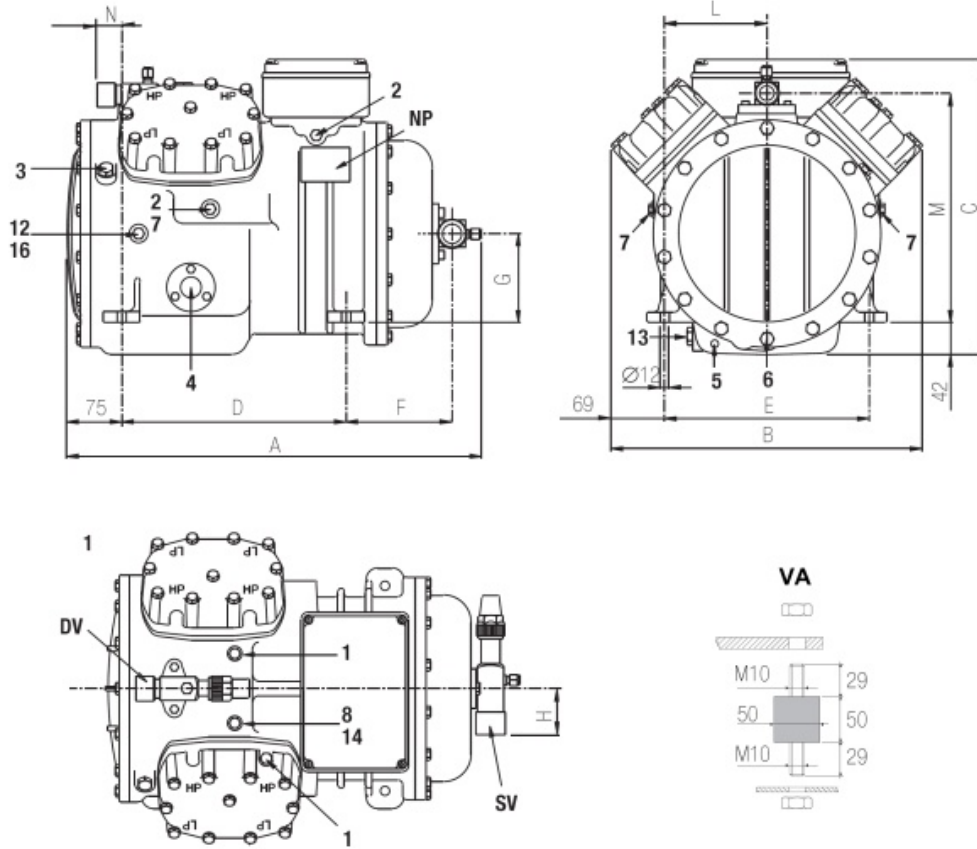
Power input [W]

$t_c \setminus t_e$	7.5	0	-10	-20
40	12 480	11 680	10 120	8 390

	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	61 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 | |

