

Type: Semi-hermetic piston compressors

Producer: Frascold

Series: F

Model: F 4 19.1 Y

Technical data

Nominal motor power [kW/HP]:	3 / 4
Cylinder count:	2
Displacement [m ³ /h]:	19,12
RPM [min ⁻¹]:	1450
Weight net [kg]:	74
Weight gross [kg]:	77
Oil charge [dm ³]:	2,1

Electrical data

Power supply [V/~/Hz]:	230V/3/50 Δ	400V/3/50 Y
Locked rotor current [A]:	92,6	53,2
Max. operating current [A]:	17,2	9,9

Connections

	<u>milimeters</u>	<u>inches</u>
Suction line:	28,6	1 1/8
Discharge line:	19	3/4

R22

Cooling capacity [W]

$t_c \setminus t_e$	7.5	5	0	-5	-10	-15	-20	-25	-30	-35	-40
30	22 290	20 330	16 830	13 840	11 290	9 090	7 230	5 660	4 340	3 240	2 320
40	19 980	18 220	15 060	12 350	10 020	8 030	6 320	4 890	3 680	2 670	1 830
45	18 840	17 170	14 180	11 610	9 390	7 490	5 880	4 500	3 350	2 390	1 590
50	17 680	16 100	13 290	10 850	8 750	6 950	5 410	4 110	3 020	2 100	1 360

Power input [W]

$t_c \setminus t_e$	5	-10	-20	-30	-40
40	4 350	3 970	3 330	2 500	1 650

With head cooling

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	13 770	11 320	10 220	8 260	6 570	5 140	3 920	2 890
60	11 820	9 670	8 710	6 980	5 500	4 230	3 160	2 250
70	9 840	8 010	7 190	5 710	4 440	3 340	2 420	1 630
80	7 830	6 340	5 660	4 440	3 390	2 480	1 710	-

Power input [W]

$t_c \setminus t_e$	12.5	5	0	-10
60	4 460	3 950	3 580	2 850

With head cooling

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	14 890	12 330	10 080	8 120	6 430	4 970	3 740	2 710	1 870
40	12 690	10 460	8 500	6 790	5 320	4 050	2 980	2 070	1 310
45	11 550	9 480	7 680	6 100	4 750	3 580	2 590	1 750	1 050
50	10 370	8 480	6 830	5 390	4 160	3 100	2 200	1 430	-

Power input [W]

$t_c \setminus t_e$	-10	-20	-30	-40
40	4 340	3 600	2 800	2 010

With head cooling

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	26 720	22 180	20 170	16 570	13 500	10 880	8 640	6 750	5 150
40	23 530	19 500	17 710	14 510	11 760	9 400	7 390	5 680	4 220
45	21 920	18 130	16 450	13 450	10 870	8 650	6 750	5 130	3 750
50	20 240	16 750	15 190	12 380	9 960	7 880	6 100	4 570	3 280

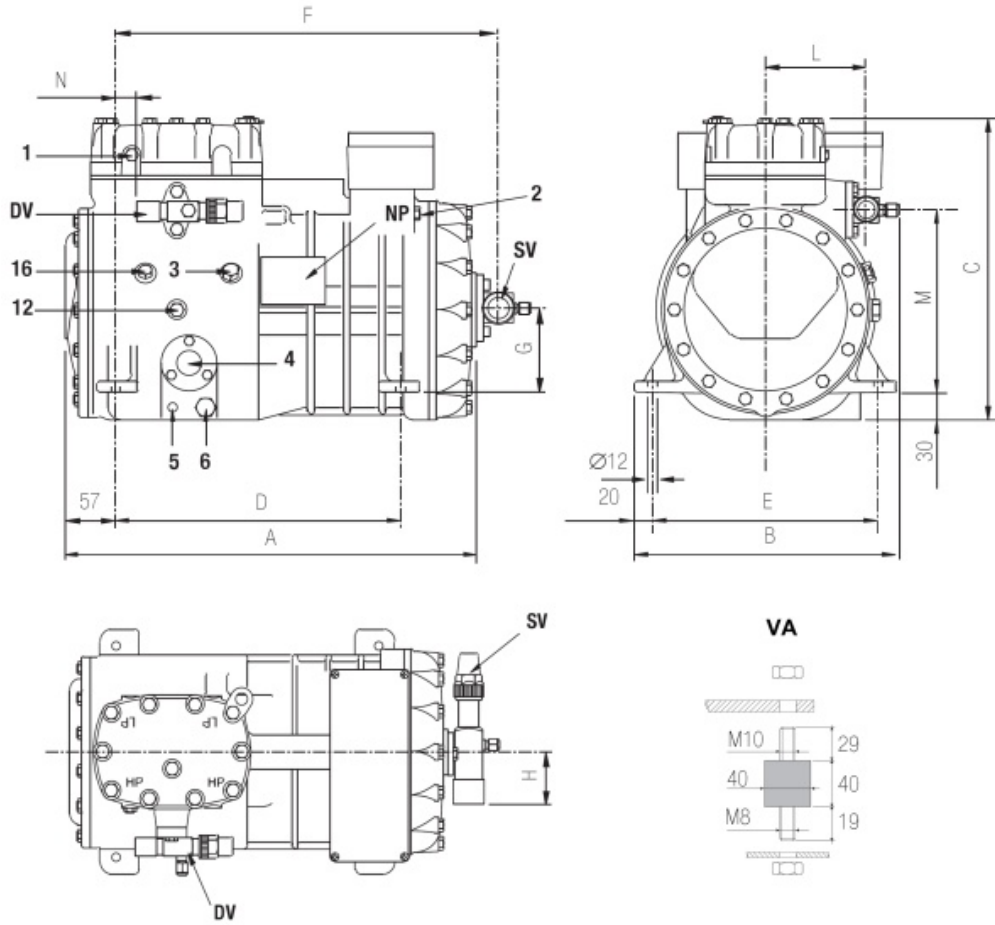
Power input [W]

$t_c \setminus t_e$	7.5	0	-10	-20
40	4 300	4 040	3 510	2 920

With head cooling

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

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



A	517 mm
B	286 mm
C	336 mm
D	312 mm
E	246 mm
F	426 mm
G	91 mm
H	53 mm
L	108 mm
M	199 mm
N	29 mm

1: high pressure plug
3: oil charge plug
5: crankcase heater seat
12: oil return plug
DV: discharge valve
SV: suction valve

2: low pressure plug
4: oil level sight glass
6: oil drain plug
16: crankcase pressure plug
NP: name plate

