

Type: Semi-hermetic piston compressors

Producer: Frascold

Series: F

Model: F 5 19.1 Y

Technical data

Nominal motor power [kW/HP]:	3,7 / 5
Cylinder count:	2
Displacement [m ³ /h]:	19,12
RPM [min ⁻¹]:	1450
Weight net [kg]:	76
Weight gross [kg]:	79
Oil charge [dm ³]:	2,1

Electrical data

Power supply [V/~/Hz]:	230V/3/50 Δ	400V/3/50 Y
Locked rotor current [A]:	109,7	63,1
Max. operating current [A]:	20,8	12

Connections

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

R22

Cooling capacity [W]

$t_c \setminus t_e$	12.5	7.5	5	0	-5	-10	-15	-20	-25	-30
30	26 670	22 260	20 290	16 760	13 750	11 160	8 960	7 080	5 530	4 220
40	24 070	20 010	18 220	15 010	12 270	9 890	7 880	6 160	4 740	3 540
45	22 690	18 870	17 160	14 110	11 500	9 260	7 330	5 690	4 340	3 200
50	21 300	17 690	16 080	13 200	10 730	8 600	6 780	5 230	3 940	2 860

Power input [W]

$t_c \setminus t_e$	5	-10	-20	-30
40	4 260	3 870	3 240	2 440

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	13 560	12 320	10 090	8 160	6 520	5 130	3 960	3 010
60	11 530	10 450	8 510	6 840	5 420	4 230	3 230	2 410
70	9 500	8 580	6 930	5 530	4 350	3 360	2 540	1 860
80	7 480	6 720	5 380	4 260	3 320	2 540	-	-

Power input [W]

$t_c \setminus t_e$	12.5	5	0	-10
60	4 350	3 830	3 470	2 770

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]

$t_c \setminus t_e$	7.5	5	0	-5	-10	-15	-20	-25	-30
30	23 880	21 950	18 410	15 300	12 570	10 200	8 150	6 390	4 890
40	20 350	18 680	15 650	12 980	10 650	8 620	6 860	5 340	4 010
45	18 530	17 010	14 240	11 810	9 680	7 830	6 220	4 820	3 600
50	16 700	15 320	12 810	10 620	8 700	7 040	5 590	4 320	3 200

Power input [W]

$t_c \setminus t_e$	5	-10	-20	-30
40	5 240	4 360	3 590	2 770

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	26 000	23 700	19 570	15 990	12 930	10 340	8 160	6 360	4 880
40	22 780	20 750	17 120	13 990	11 310	9 040	7 130	5 540	4 200
45	21 180	19 300	15 910	12 990	10 510	8 400	6 620	5 120	3 870
50	19 600	17 850	14 700	12 010	9 710	7 760	6 110	4 710	3 520

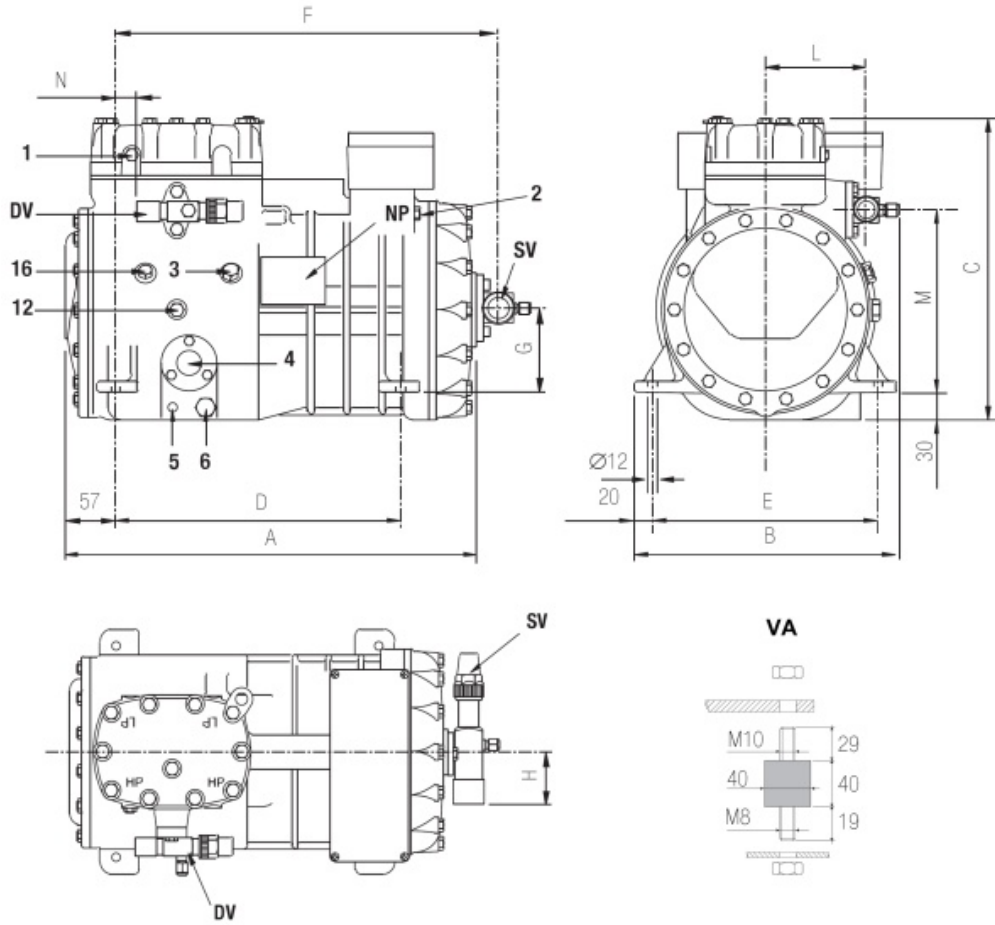
Power input [W]

$t_c \setminus t_e$	7.5	0	-10	-20
40	4 290	4 160	3 590	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

