

Type: Semi-hermetic piston compressors

Producer: Frascold

Series: F

Model: F 5 24.1 Y

Technical data

Nominal motor power [kW/HP]:	3,7 / 5
Cylinder count:	2
Displacement [m ³ /h]:	23,6
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]:	22,3	12,8

Connections

	<u>milimeters</u>	<u>inches</u>
Suction line:	28,6	1 1/8
Discharge line:	22,2	7/8

R22

Cooling capacity [W]

$t_c \setminus t_e$	12.5	7.5	5	0	-5	-10	-15	-20	-25	-30
30	31 890	26 700	24 410	20 300	16 720	13 660	11 030	8 780	6 830	5 190
40	28 580	23 900	21 820	18 090	14 870	12 100	9 710	7 660	5 930	4 470
45	26 920	22 510	20 550	17 010	13 950	11 320	9 050	7 090	5 470	4 090
50	25 180	21 060	19 220	15 900	13 030	10 530	8 380	6 520	5 010	3 710

Power input [W]

$t_c \setminus t_e$	5	-10	-20	-30
40	5 150	4 650	3 840	2 840

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	16 570	13 690	12 390	10 090	8 100	6 390	4 950	3 710
60	14 220	11 730	10 600	8 580	6 820	5 320	4 030	2 940
70	11 850	9 730	8 770	7 050	5 540	4 240	3 130	2 180
80	9 420	7 700	6 920	5 500	4 260	3 180	2 240	1 450

Power input [W]

$t_c \setminus t_e$	12.5	5	0	-10
60	4 820	4 320	3 950	3 160

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	-35	-40
30	28 880	26 520	22 200	18 400	15 070	12 170	9 680	7 550	5 740	4 230	2 980
40	24 450	22 420	18 730	15 480	12 650	10 190	8 080	6 270	4 740	3 440	2 330
45	22 190	20 330	16 950	13 990	11 410	9 190	7 280	5 640	4 250	3 060	2 040
50	19 900	18 210	15 160	12 490	10 180	8 190	6 480	5 030	3 880	-	-

Power input [W]

$t_c \setminus t_e$	5	-10	-20	-30	-40
40	6 210	5 100	4 160	3 170	2 210

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	32 480	26 980	24 510	20 150	16 420	13 240	10 520	8 230	6 280
40	28 560	23 670	21 500	17 630	14 310	11 470	9 030	6 950	5 190
45	26 560	22 010	19 980	16 360	13 320	10 550	8 260	6 290	4 630
50	24 470	20 270	18 400	15 040	12 130	9 620	7 470	5 630	4 060

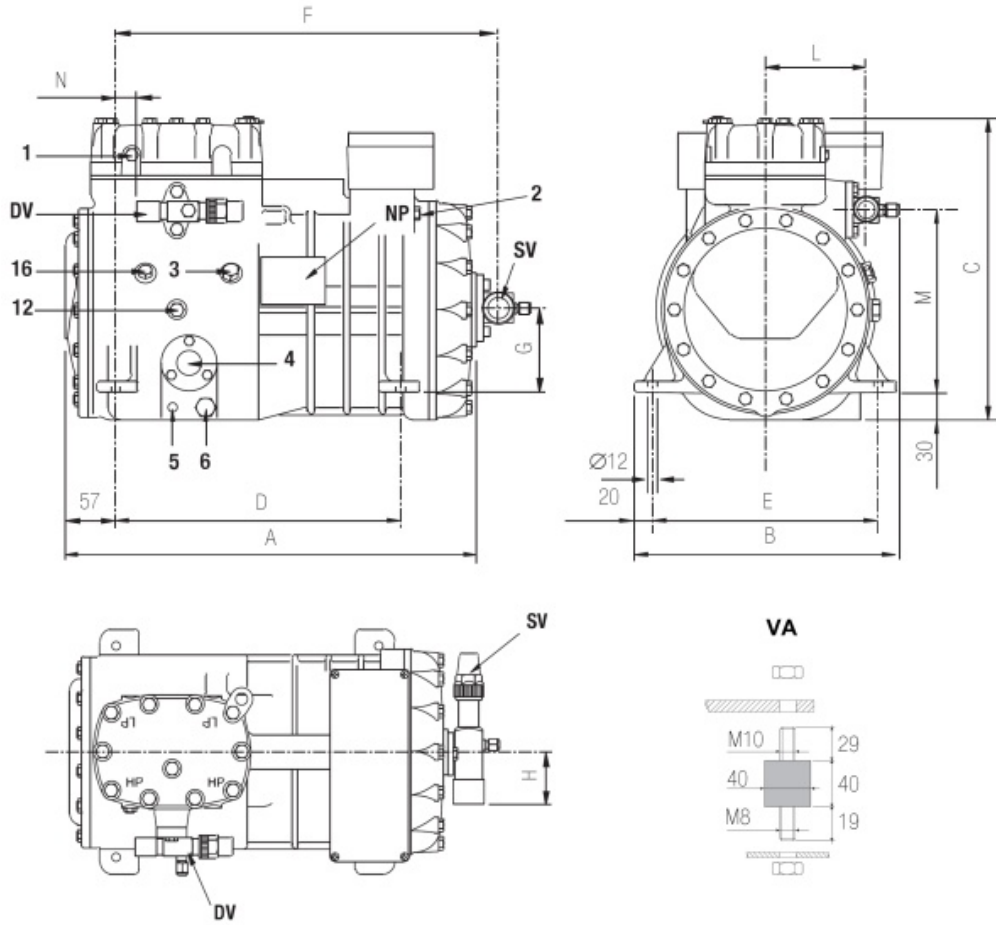
Power input [W]

$t_c \setminus t_e$	7.5	0	-10	-20
40	5 300	5 050	4 460	3 730

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	43 mm
L	112 mm
M	199 mm
N	24 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

