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

Model: F 4 16.1 Y

Technical data

Nominal motor power [kW/HP]:	3 / 4
Cylinder count:	2
Displacement [m ³ /h]:	16,4
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]:	18,1	10,4

Connections

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

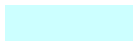
R22

Cooling capacity [W]

t_c \ t_e	12.5	7.5	5	0	-5	-10	-15	-20	-25	-30
30	22 720	19 010	17 360	14 400	11 860	9 670	7 800	6 190	4 830	3 680
40	20 200	16 900	15 430	12 780	10 490	8 520	6 820	5 370	4 130	3 080
45	18 960	15 860	14 480	11 980	9 820	7 940	6 330	4 950	3 770	2 780
50	17 720	14 820	13 520	11 170	9 130	7 370	5 840	4 540	3 420	2 490

Power input [W]

t_c \ t_e	5	-10	-20	-30
40	3 510	3 160	2 640	2 000

 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 \ t_e	12.5	7.5	5	0	-5	-10	-15	-20
50	11 540	9 460	8 530	6 860	5 420	4 200	3 150	2 270
60	9 800	7 990	7 180	5 720	4 470	3 390	2 480	1 710
70	8 070	6 540	5 850	4 620	3 550	2 630	1 850	1 190
80	6 360	5 120	4 560	3 550	2 670	1 920	1 270	-

Power input [W]

t_c \ t_e	12.5	5	0	-10
60	3 670	3 320	3 040	2 370

With head cooling

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

t_c - Condensing temperature [°C]

t_e - Evaporating temperature [°C]

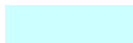
R404A/R507

Cooling capacity [W]

t_c \ t_e	7.5	5	0	-5	-10	-15	-20	-25	-30
30	20 360	18 640	15 550	12 870	10 540	8 530	6 800	5 310	4 040
40	17 410	15 940	13 280	10 960	8 950	7 210	5 700	4 400	3 300
45	15 930	14 590	12 150	10 020	8 170	6 560	5 170	3 970	2 950
50	14 440	13 230	11 020	9 080	7 390	5 920	4 650	3 550	2 610

Power input [W]

t_c \ t_e	5	-10	-20	-30
40	4 490	3 780	3 080	2 370

 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 \ t_e	12.5	7.5	5	0	-5	-10	-15	-20	-25
30	23 000	19 080	17 340	14 250	11 600	9 340	7 410	5 780	4 390
40	20 270	16 790	15 250	12 480	10 100	8 070	6 330	4 850	3 590
45	18 870	15 620	14 170	11 580	9 340	7 420	5 770	4 370	3 180
50	17 450	14 430	13 080	10 650	8 560	6 750	5 210	3 890	2 770

Power input [W]

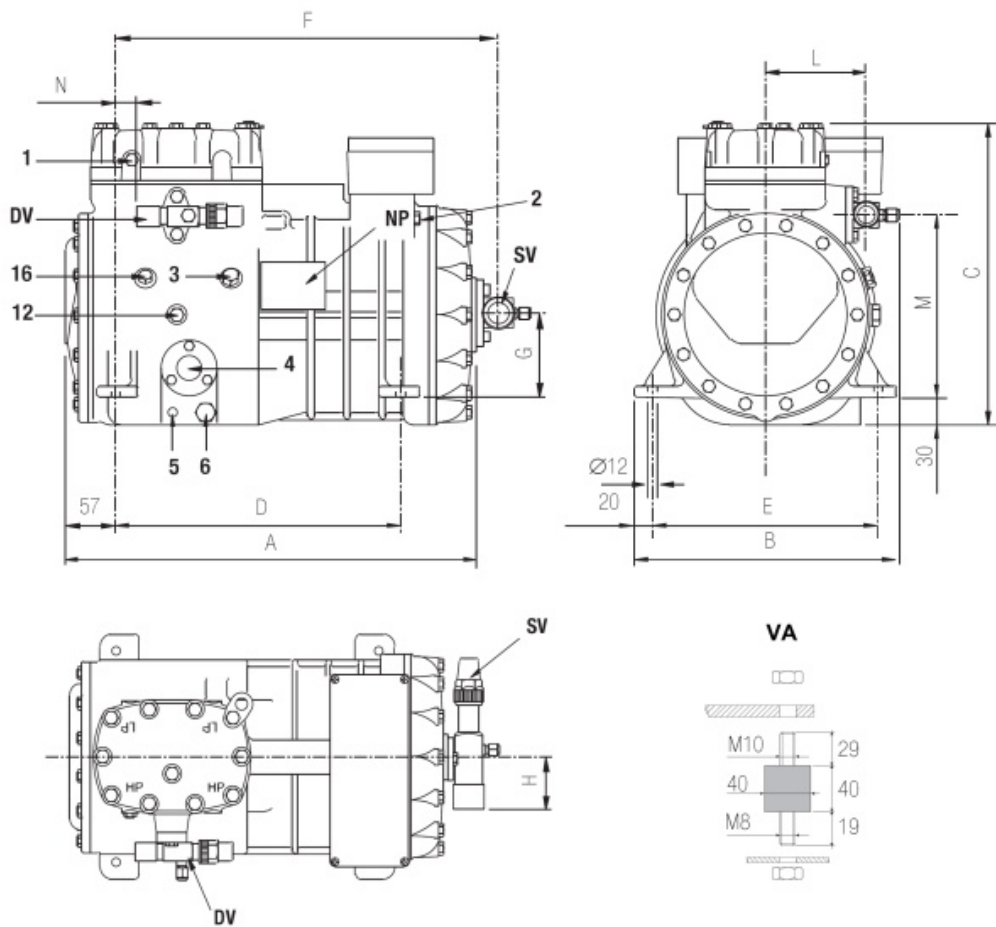
t_c \ t_e	7.5	0	-10	-20
40	3 850	3 570	3 060	2 500

 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

