

Type: Semi-hermetic piston compressors

Producer: Frascold

Series: D

Model: D 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]:	51
Weight gross [kg]:	52
Oil charge [dm ³]:	1,2

Electrical data

Power supply [V/~/Hz]:	230V/3/50 Δ	400V/3/50 Y
Locked rotor current [A]:	90,3	52
Max. operating current [A]:	20,1	11,6

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	21 980	18 390	16 790	14 030	11 640	9 570	7 780	6 250	4 920	3 800
40	19 450	16 280	14 860	12 430	10 310	8 460	6 860	5 460	4 260	3 230
45	18 250	15 270	13 940	11 650	9 650	7 910	6 390	5 070	3 930	2 950
50	17 020	14 240	12 990	10 870	9 000	7 360	5 920	4 670	3 590	2 660

Power input [W]

$t_c \setminus t_e$	5	-10	-20	-30
40	3 640	3 420	2 950	2 320

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	11 390	10 380	8 560	6 970	5 610	4 450	3 470	2 640
60	9 710	8 840	7 260	5 900	4 730	3 740	2 890	2 170
70	8 060	7 330	6 000	4 860	3 890	3 060	2 350	1 740
80	6 450	5 850	4 780	3 860	3 070	2 410	-	-

Power input [W]

$t_c \setminus t_e$	12.5	5	0	-10
60	4 020	3 630	3 340	2 730

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	20 540	18 820	15 720	13 030	10 700	8 680	6 940	5 450	4 180
40	17 610	16 140	13 480	11 160	9 140	7 390	5 880	4 580	3 470
45	16 120	14 770	12 340	10 210	8 360	6 750	5 360	4 160	3 140
50	14 600	13 390	11 190	9 260	7 580	6 110	4 840	3 750	2 810

Power input [W]

$t_c \setminus t_e$	5	-10	-20	-30
40	4 670	3 990	3 330	2 590

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	22 110	18 340	16 680	13 710	11 180	9 010	7 160	5 580	4 250
40	19 400	16 090	14 620	11 980	9 720	7 770	6 100	4 680	3 470
45	18 010	14 940	13 570	11 110	8 970	7 140	5 570	4 220	3 070
50	16 600	13 760	12 500	10 210	8 210	6 500	5 020	3 750	2 670

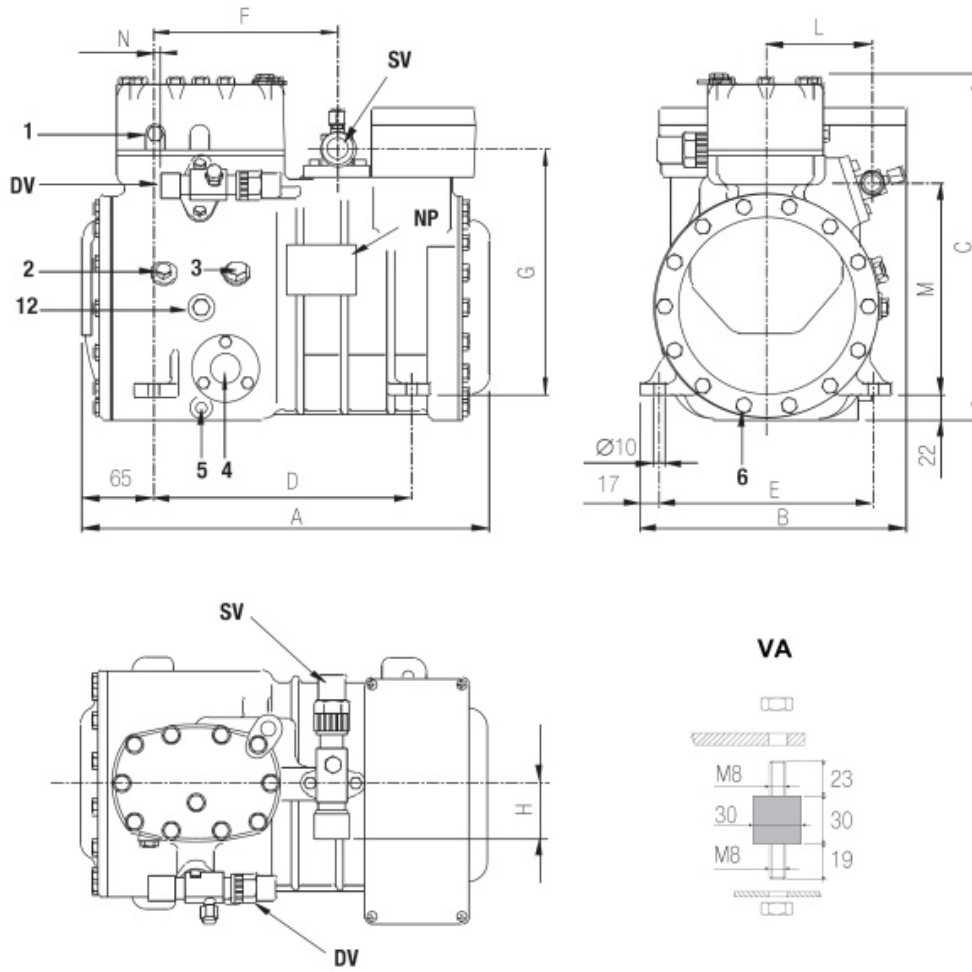
Power input [W]

$t_c \setminus t_e$	7.5	0	-10	-20
40	4 090	3 750	3 190	2 580

With head cooling

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

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



A	401 mm
B	242 mm
C	317 mm
D	234 mm
E	194 mm
F	165 mm
G	220 mm
H	53 mm
L	94 mm
M	192 mm
N	5 mm

1: high pressure plug
 2: low pressure plug
 3: oil charge plug
 4: oil level sight glass
 5: crankcase heater seat
 12: oil return plug
 NP: name plate

6: oil drain plug
 DV: discharge valve
 SV: suction valve

