

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

Model: D 4 18.1 Y

Technical data

Nominal motor power [kW/HP]:	3 / 4
Cylinder count:	2
Displacement [m ³ /h]:	17,93
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]:	21,7	12,5

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	24 750	20 700	18 900	15 700	12 950	10 670	8 690	6 980	5 520	4 260
40	22 110	18 520	16 910	14 020	11 530	9 460	7 660	6 100	4 760	3 610
45	20 850	17 450	15 930	13 200	10 840	8 860	7 140	5 660	4 380	3 280
50	19 520	16 340	14 910	12 350	10 130	8 250	6 620	5 210	3 990	2 960

Power input [W]

$t_c \setminus t_e$	5	-10	-20	-30
40	3 910	3 590	3 140	2 490

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	13 420	11 060	10 000	8 090	6 450	5 030	3 820	2 790
60	11 440	9 380	8 460	6 790	5 340	4 090	3 020	2 100
70	9 450	7 700	6 910	5 480	4 230	3 150	2 220	1 420
80	7 430	6 010	5 360	4 180	3 150	2 240	1 460	790

Power input [W]

$t_c \setminus t_e$	12.5	5	0	-10
60	3 760	3 300	2 980	2 330

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	0	-5	-10	-15	-20	-25	-30
30	19 830	16 750	14 010	11 610	9 510	7 690	6 130	4 790
40	16 920	14 270	11 940	9 890	8 100	6 550	5 220	4 070
45	15 420	13 010	10 880	9 020	7 400	5 990	4 780	3 740
50	13 910	11 730	9 820	8 150	6 710	5 450	4 370	3 430

Power input [W]

$t_c \setminus t_e$	5	-10	-20	-30
40	5 160	4 350	3 670	3 000

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	24 520	20 360	18 530	15 270	12 480	10 100	8 070	6 350	4 890
40	21 560	17 910	16 290	13 400	10 910	8 780	6 960	5 400	4 080
45	20 030	16 650	15 140	12 440	10 110	8 100	6 380	4 910	3 660
50	18 490	15 360	13 970	11 460	9 290	7 410	5 800	4 420	3 240

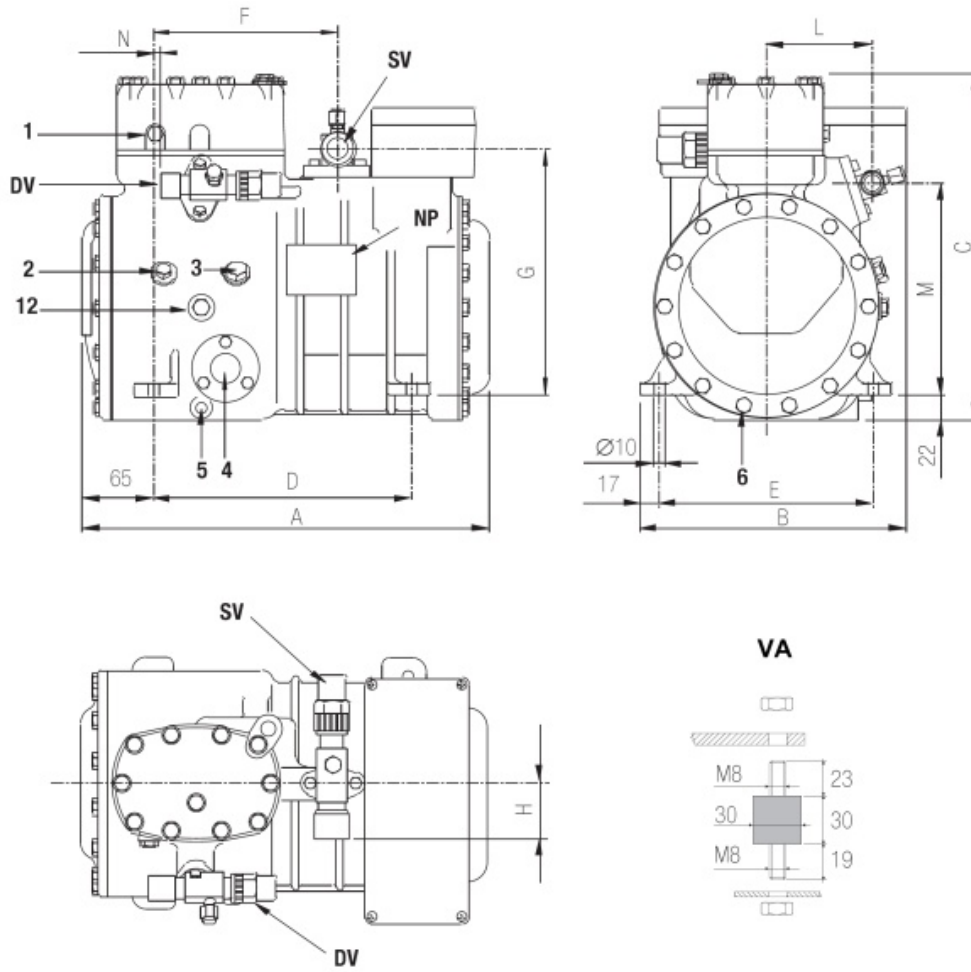
Power input [W]

$t_c \setminus t_e$	7.5	0	-10	-20
40	4 130	3 890	3 410	2 880

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

