

Type: Semi-hermetic piston compressors

Producer: Frascold

Series: D

Model: D 3 18.1 Y

Technical data

Nominal motor power [kW/HP]:	2,2 / 3
Cylinder count:	2
Displacement [m ³ /h]:	17,93
RPM [min ⁻¹]:	1450
Weight net [kg]:	49
Weight gross [kg]:	50
Oil charge [dm ³]:	1,2

Electrical data

Power supply [V/~/Hz]:	230V/3/50 Δ	400V/3/50 Y
Locked rotor current [A]:	75,9	43,7
Max. operating current [A]:	17,3	10

Connections

	<u>milimeters</u>	<u>inches</u>
Suction line:	28,6	1 1/8
Discharge line:	15,8	5/8

R22

Cooling capacity [W]

$t_c \setminus t_e$	-5	-10	-15	-20	-25	-30	-35	-40	-45
30	12 740	10 490	8 550	6 870	5 430	4 210	3 170	2 290	1 550
40	11 300	9 280	7 520	6 000	4 680	3 560	2 610	1 810	1 150
45	10 600	8 680	7 010	5 560	4 310	3 240	2 330	1 580	950
50	9 890	8 070	6 490	5 120	3 930	2 910	2 060	1 340	-

Power input [W]

$t_c \setminus t_e$	-10	-20	-30	-40
40	3 720	3 170	2 460	1 680

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
30	16 390	14 980	12 420	10 190	8 270	6 640	5 270	4 150
40	14 500	13 240	10 960	8 980	7 270	5 820	4 600	3 590
45	13 550	12 370	10 230	8 370	6 770	5 410	4 260	3 310
50	12 590	11 480	9 490	7 750	6 260	4 990	3 920	3 030

Power input [W]

$t_c \setminus t_e$	12.5	5	0	-10
40	3 270	3 060	2 890	2 480

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]

$t_c \setminus t_e$	-10	-15	-20	-25	-30	-35	-40	-45
30	11 540	9 480	7 690	6 160	4 850	3 750	2 830	2 080
40	9 760	8 000	6 480	5 170	4 060	3 120	2 340	1 690
45	8 900	7 280	5 880	4 690	3 680	2 830	2 110	-
50	8 040	6 570	5 310	4 230	3 310	2 540	1 890	-

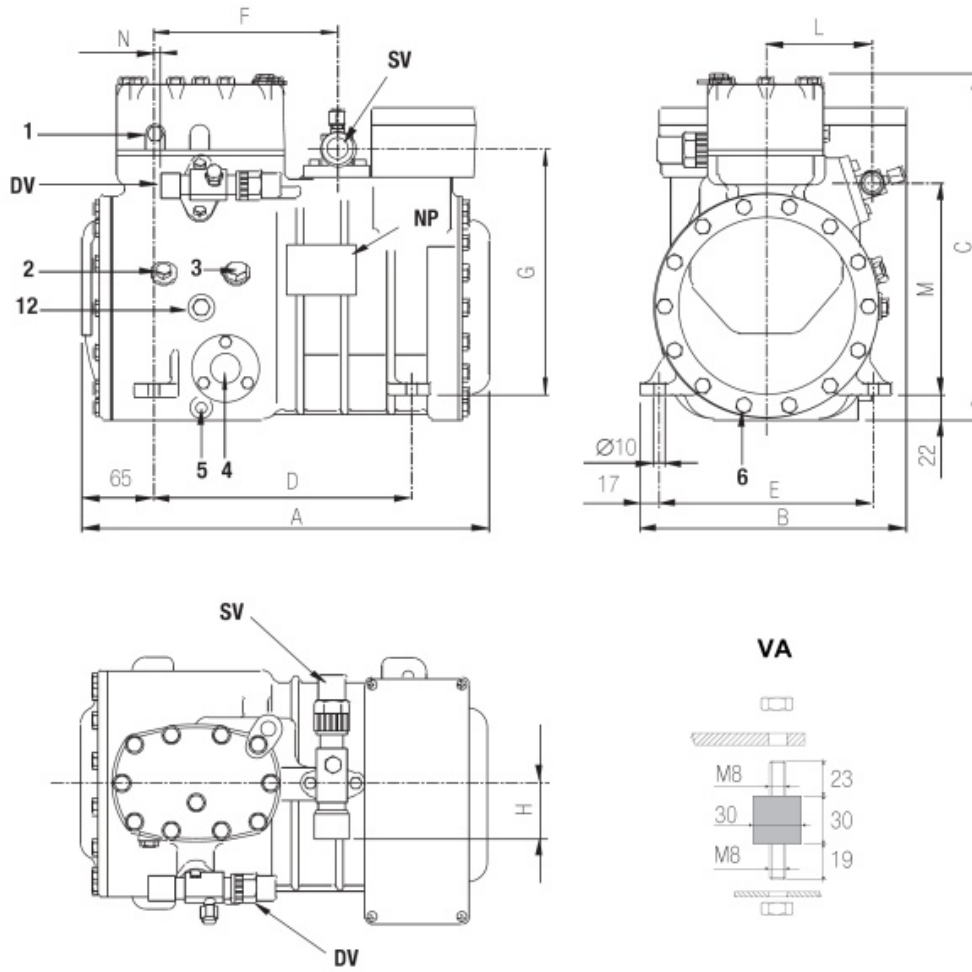
Power input [W]

$t_c \setminus t_e$	-10	-20	-30	-40
40	4 520	3 750	2 940	2 180

With head cooling

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

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



A	374 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	13 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

