

Type: Semi-hermetic piston compressors

Producer: Frascold

Series: Q

Model: Q 7 33.1 Y

Technical data

Nominal motor power [kW/HP]:	5,5 / 7,5
Cylinder count:	4
Displacement [m ³ /h]:	32,66
RPM [min ⁻¹]:	1450
Weight net [kg]:	79
Weight gross [kg]:	82
Oil charge [dm ³]:	1,8

Electrical data

Power supply [V/~ /Hz]:	230V/3/50 Δ	400V/3/50 Y
Locked rotor current [A]:	151,8	87,3
Max. operating current [A]:	34,7	20

Connections

	<u>milimeters</u>	<u>inches</u>
Suction line:	35	1 3/8"
Discharge line:	28,6	1 1/8"

R22

Cooling capacity [W]

$t_c \setminus t_e$	12.5	7.5	5	0	-5	-10	-15	-20	-25	-30
30	42 940	36 080	33 030	27 570	22 880	18 980	15 590	12 670	10 160	8 020
40	38 810	32 640	29 880	24 930	20 660	17 090	13 990	11 320	9 010	7 040
45	36 790	30 940	28 320	23 610	19 550	16 150	13 190	10 630	8 430	6 550
50	34 710	29 200	26 720	22 270	18 410	15 180	12 370	9 940	7 840	6 050

Power input [W]

$t_c \setminus t_e$	5	-10	-20	-30
40	6 490	6 070	5 400	4 410

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	22 790	20 740	17 040	13 820	11 040	8 670	6 660	4 980
60	19 420	17 650	14 450	11 680	9 300	7 260	5 530	4 060
70	16 020	14 530	11 860	9 560	7 580	5 900	4 460	3 230
80	12 600	11 410	9 280	7 470	5 920	4 610	-	-

Power input [W]

$t_c \setminus t_e$	12.5	5	0	-10
60	7 260	6 470	5 870	4 640

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	36 970	30 970	25 710	21 120	17 162	13 770	10 910	8 500
40	31 370	26 250	21 770	17 870	14 500	11 600	9 130	7 030
45	28 540	23 870	19 780	16 230	13 160	10 510	8 240	6 290
50	25 700	21 470	17 780	14 570	11 800	9 410	7 340	5 550

Power input [W]

$t_c \setminus t_e$	5	-10	-20	-30
40	8 840	7 330	6 040	4 790

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	43 660	39 910	33 060	27 070	21 890	17 470	13 760	10 740	8 340
40	37 660	34 450	28 600	23 490	19 070	15 300	12 140	9 530	7 450
45	34 870	31 910	26 520	21 810	17 740	14 270	11 340	8 910	6 940
50	32 200	29 480	24 530	20 200	16 450	13 240	10 520	8 250	6 370

Power input [W]

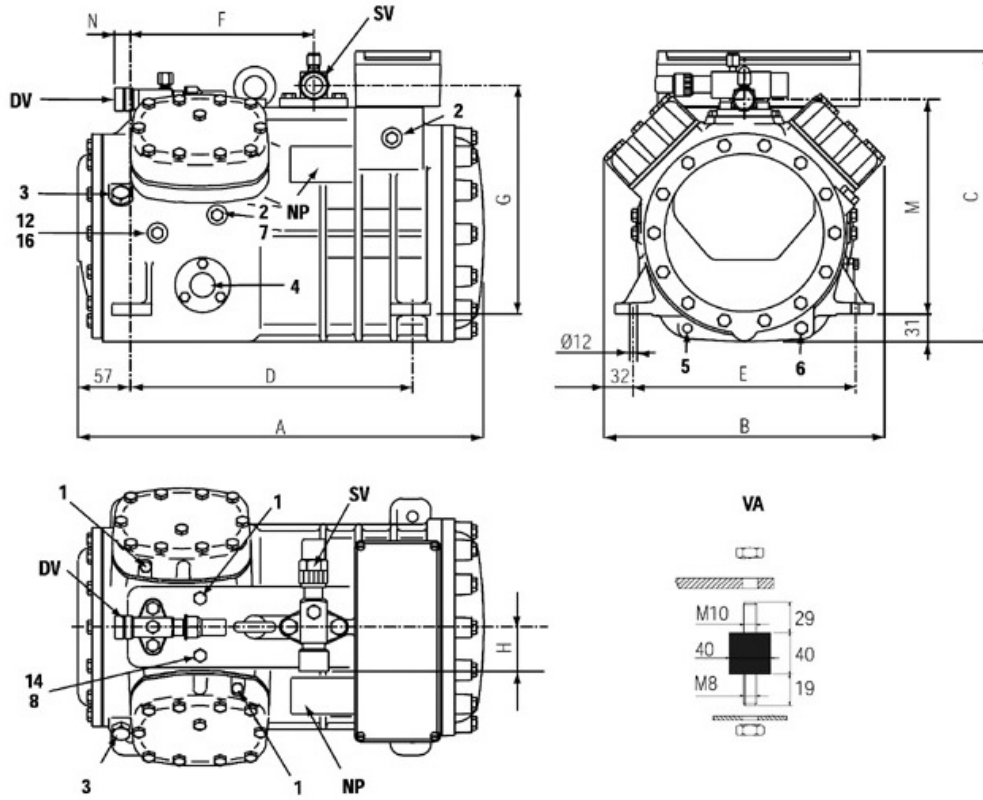
$t_c \setminus t_e$	7.5	0	-10	-20
40	7 150	7 045	6 055	4 927

With head cooling

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

t_c - Condensing temperature [°C]

t_e - Evaporating temperature [°C]



A	449 mm
B	310 mm
C	325 mm
D	312 mm
E	246 mm
F	203 mm
G	261 mm
H	58 mm
M	244 mm
N	28 mm

1: high pressure plug
3: oil charge plug
5: crankcase heater seat
7: liquid injection valve plug
12: oil return plug
16: crankcase pressure plug
NP: name plate

2: low pressure plug
4: oil level sight glass
6: oil drain plug
8: liquid injection sensor plug
14: max. discharge temperature sensor plug
DV: discharge valve
SV: suction valve

