

Type: Semi-hermetic piston compressors

Producer: Frascold

Series: Q

Model: Q 4 24.1 Y

Technical data

Nominal motor power [kW/HP]:	3 / 4
Cylinder count:	4
Displacement [m ³ /h]:	23,91
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]:	92,6	53,2
Max. operating current [A]:	20,3	11,7

Connections

	<u>milimeters</u>	<u>inches</u>
Suction line:	28,6	2 1/8"
Discharge line:	19	3/4"

R22

Cooling capacity [W]

$t_c \setminus t_e$	0	-5	-10	-15	-20	-25	-30	-35	-40	-45
30	20 850	17 160	13 970	11 270	8 940	7 000	5 360	3 970	2 820	1 870
40	18 510	15 190	12 320	9 860	7 740	5 980	4 480	3 220	2 190	1 340
45	17 370	14 210	11 500	9 150	7 140	5 470	4 050	2 860	1 880	1 090
50	16 190	13 230	10 660	8 440	6 540	4 960	3 610	2 490	1 580	-

Power input [W]

$t_c \setminus t_e$	-10	-20	-30	-40
40	4 860	3 920	2 910	1 830

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	21 740	19 790	16 260	13 180	10 530	8 290	6 410	4 880
40	19 070	15 720	14 200	11 480	9 130	7 130	5 470	4 090
45	17 740	14 600	13 180	10 630	8 430	6 570	5 000	3 710
50	16 420	13 490	12 170	9 790	7 750	6 010	4 540	3 330

Power input [W]

$t_c \setminus t_e$	12.5	5	0	-10
40	3 680	3 510	3 310	2 790

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	-10	-15	-20	-25	-30	-35	-40	-45
30	18 260	15 050	12 220	9 770	7 674	5 900	4 410	3 170	2 140
40	15 260	12 550	10 150	8 080	6 290	4 780	3 500	2 420	1 510
45	13 800	11 330	9 150	7 250	5 620	4 230	3 050	2 050	1 200
50	12 350	10 120	8 150	6 430	4 950	3 690	2 610	1 690	-

Power input [W]

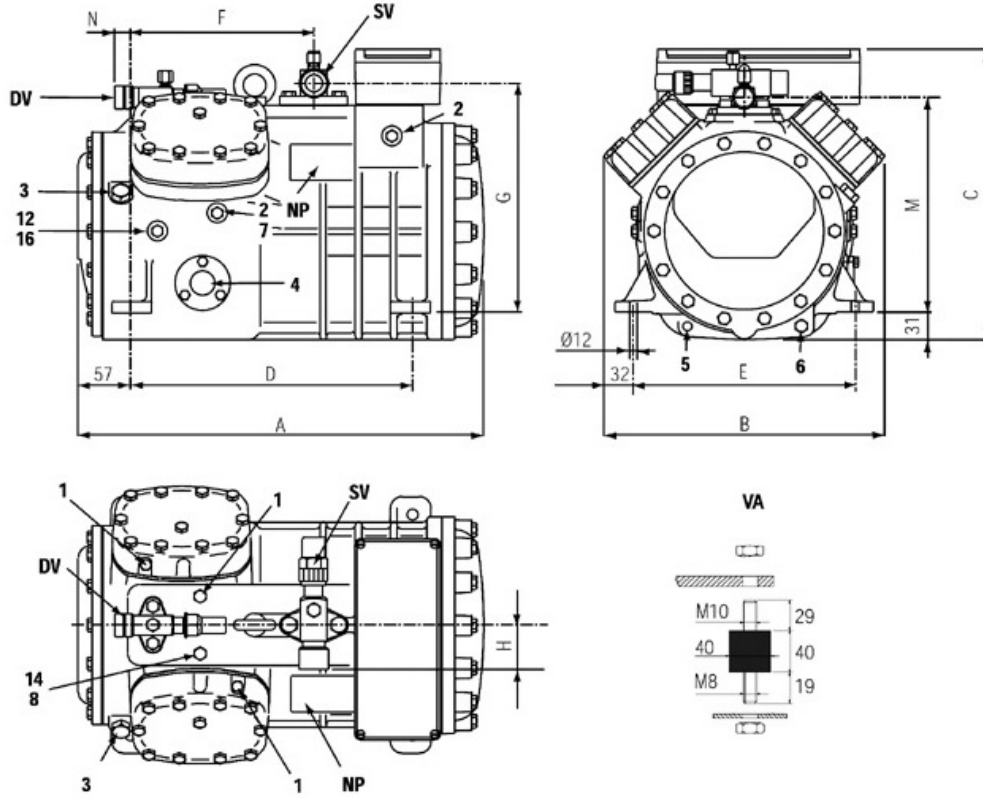
$t_c \setminus t_e$	-10	-20	-30	-40
40	5 160	4 210	3 230	2 280

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	315 mm
C	325 mm
D	312 mm
E	246 mm
F	203 mm
G	258 mm
H	53 mm
M	239 mm
N	12 mm

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|--------------------------------|--|
| 1: high pressure plug | 2: low pressure plug |
| 3: oil charge plug | 4: oil level sight glass |
| 5: crankcase heater seat | 6: oil drain plug |
| 7: liquid injection valve plug | 8: liquid injection sensor plug |
| 12: oil return plug | 14: max. discharge temperature sensor plug |
| 16: crankcase pressure plug | DV: discharge valve |
| NP: name plate | SV: suction valve |

