

Type: Semi-hermetic piston compressors

Producer: Frascold

Series: Q

Model: Q 5 24.1 Y

Technical data

Nominal motor power [kW/HP]:	3,7 / 5
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]:	109,7	63,1
Max. operating current [A]:	23,9	13,8

Connections

	<u>milimeters</u>	<u>inches</u>
Suction line:	28,6	3 1/8"
Discharge line:	22,2	7/8"

R22

Cooling capacity [W]

$t_c \setminus t_e$	12.5	7.5	5	0	-5	-10	-15	-20	-25	-30
30	32 430	27 120	24 760	20 520	16 890	13 760	11 080	8 790	6 840	5 200
40	29 070	24 310	22 180	18 360	15 060	12 210	9 770	7 670	5 890	4 390
45	27 390	22 900	20 890	17 270	14 140	11 450	9 110	7 110	5 410	3 980
50	25 670	21 460	19 570	16 160	13 210	10 650	8 440	6 540	4 920	3 570

Power input [W]

$t_c \setminus t_e$	5	0	-10	-20
40	5 170	4 580	3 770	3 070

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	16 800	13 720	12 330	9 840	7 720	5 920	4 410	3 170
60	14 190	11 500	10 300	8 140	6 310	4 750	3 450	2 370
70	11 550	9 270	8 250	6 440	4 900	3 610	2 530	1 620
80	8 900	7 060	6 220	4 770	3 540	2 520	-	-

Power input [W]

$t_c \setminus t_e$	12.5	5	0	-10
60	4 910	4 300	3 870	3 000

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	27 060	22 550	18 610	15 210	12 300	9 800	7 640	5 750
40	22 870	19 040	15 690	12 790	10 300	8 160	6 300	4 660
45	20 750	17 280	14 230	11 590	9 320	7 360	5 670	4 170
50	18 580	15 460	12 720	10 350	8 300	6 540	5 010	3 650

Power input [W]

$t_c \setminus t_e$	5	-10	-20	-30
40	6 110	5 140	4 240	3 260

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	31 970	29 140	24 000	19 560	15 750	12 550	9 870	7 640	5 790
40	27 690	25 210	20 730	16 850	13 540	10 750	8 420	6 480	4 870
45	25 610	23 320	19 150	15 550	12 480	9 890	7 730	5 940	4 440
50	23 580	21 460	17 620	14 290	11 450	9 060	7 070	5 420	4 030

Power input [W]

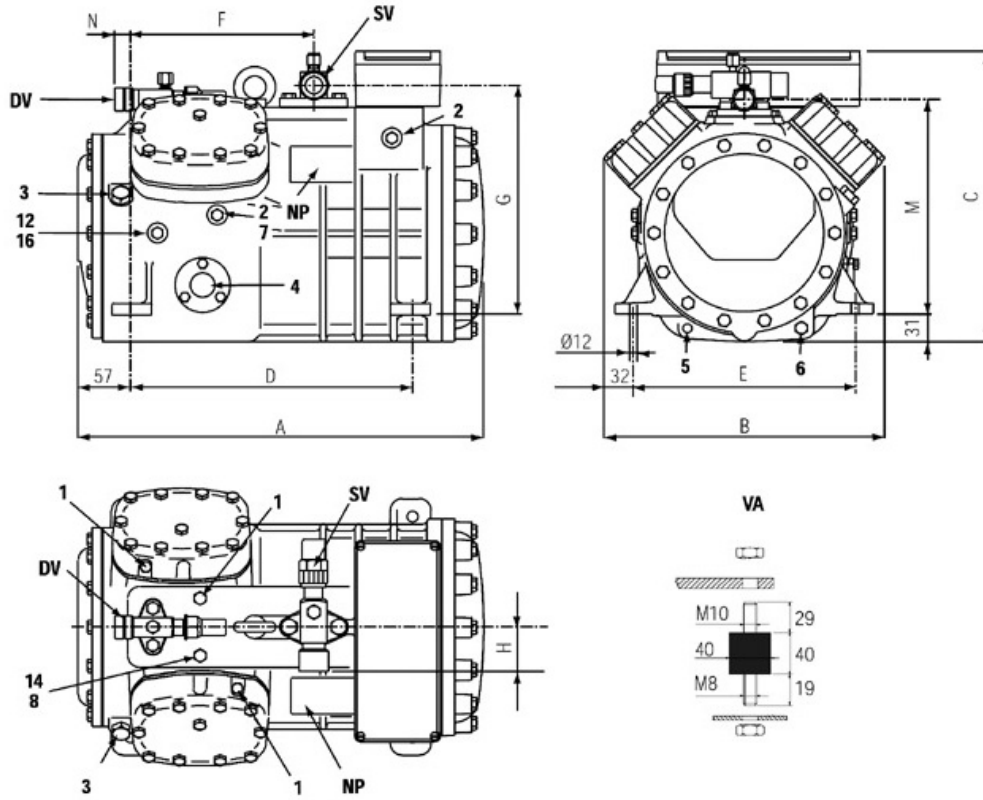
$t_c \setminus t_e$	7.5	0	-10	-20
40	5 100	4 860	4 160	3 310

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	243 mm
N	15 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 |

