

Type: Semi-hermetic piston compressors

Producer: Frascold

Series: Q

Model: Q 7 28.1 Y

Technical data

Nominal motor power [kW/HP]:	5,5 / 7,5
Cylinder count:	4
Displacement [m ³ /h]:	28,02
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]:	30,7	17,6

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	39 420	32 970	30 100	25 010	20 630	16 850	13 600	10 820	8 420	6 410
40	35 200	29 410	26 830	22 270	18 280	14 860	11 910	9 370	7 180	5 350
45	33 130	27 660	25 220	20 880	17 120	13 870	11 060	8 640	6 570	4 820
50	31 040	25 890	23 590	19 500	15 940	12 870	10 200	7 920	5 950	4 300

Power input [W]

$t_c \setminus t_e$	5	-10	-20	-30
40	6 000	5 430	4 520	3 350

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	19 580	17 740	14 440	11 600	9 180	7 150	5 450	4 050
60	16 640	15 030	12 160	9 710	7 630	5 880	4 410	3 200
70	13 680	12 310	9 880	7 820	6 080	4 630	3 410	2 390
80	10 710	9 590	7 610	5 950	4 570	3 410	-	-

Power input [W]

$t_c \setminus t_e$	12.5	5	0	-10
60	6 020	5 290	4 780	3 740

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	31 960	26 820	22 280	18 310	14 870	11 910	9 370	7 230
40	27 130	22 730	18 860	15 480	12 550	10 020	7 860	6 000
45	24 710	20 680	17 140	14 060	11 380	9 080	7 090	5 380
50	22 280	18 620	15 410	12 620	10 210	8 120	6 310	4 740

Power input [W]

$t_c \setminus t_e$	5	-10	-20	-30
40	7 510	6 290	5 290	4 180

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	37 380	34 120	28 220	23 090	18 680	14 920	11 740	9 080	6 890
40	32 610	29 740	24 570	20 090	16 240	12 960	10 170	7 820	5 850
45	30 280	27 610	22 800	18 630	15 060	12 000	9 410	7 210	5 340
50	27 980	25 500	21 050	17 200	13 890	11 070	8 660	6 600	4 830

Power input [W]

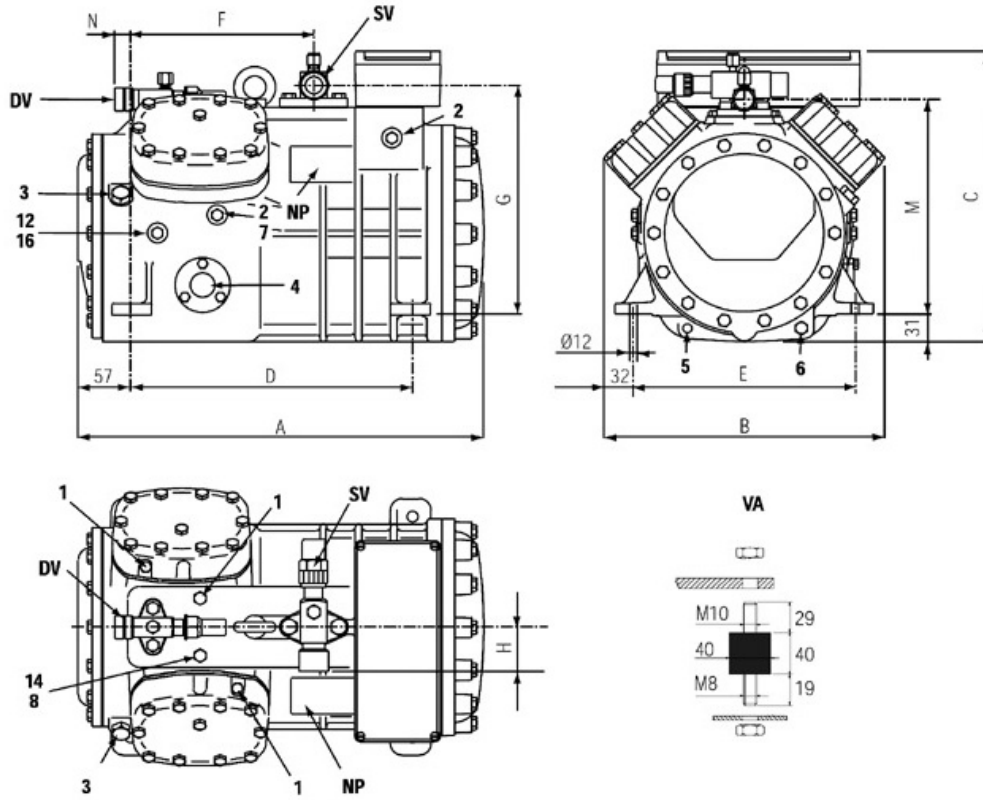
$t_c \setminus t_e$	7.5	0	-10	-20
40	6 680	5 870	5 090	4 110

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	261 mm
H	58 mm
M	243 mm
N	28 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 |

