

Type: Semi-hermetic piston compressors

Producer: Frascold

Series: Q

Model: Q 5 19.1 Y

Technical data

Nominal motor power [kW/HP]:	3,7 / 5
Cylinder count:	4
Displacement [m ³ /h]:	19,13
RPM [min ⁻¹]:	1450
Weight net [kg]:	74
Weight gross [kg]:	77
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]:	18,6	10,7

Connections

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

R22

Cooling capacity [W]

$t_c \setminus t_e$	12.5	7.5	5	0	-5	-10	-15	-20	-25	-30
30	26 640	22 300	20 360	16 890	13 900	11 320	9 120	7 230	5 630	4 290
40	23 830	19 930	18 190	15 050	12 340	10 000	7 990	6 270	4 810	3 580
45	22 440	18 750	17 100	14 130	11 560	9 340	7 430	5 790	4 400	3 230
50	21 020	17 550	16 000	13 190	10 770	8 670	6 860	5 310	3 990	2 890

Power input [W]

$t_c \setminus t_e$	5	-10	-20	-30
40	4 080	3 800	3 210	2 350

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	12 960	10 480	9 370	7 400	5 740	4 380	3 260	2 360
60	10 750	8 630	7 690	6 020	4 620	3 470	2 540	1 800
70	8 630	6 880	6 100	4 720	3 570	2 640	1 904	1 330
80	6 590	5 210	4 600	3 520	2 630	1 910	-	-

Power input [W]

$t_c \setminus t_e$	12.5	5	0	-10
60	3 710	3 270	2 960	2 310

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]

$t_c \setminus t_e$	7.5	5	0	-5	-10	-15	-20	-25	-30
30	23 550	21 580	17 990	14 830	12 080	9 690	7 630	5 880	4 400
40	19 880	18 180	15 090	12 380	10 020	7 980	6 210	4 700	3 390
45	18 050	16 490	13 660	11 180	9 020	7 140	5 530	4 130	2 920
50	16 250	14 820	12 240	9 990	8 030	6 330	4 860	3 580	2 470

Power input [W]

$t_c \setminus t_e$	5	0	-10	-20
40	4 540	3 860	3 150	2 330

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	24 730	22 560	18 580	15 100	12 100	9 540	7 370	5 530	3 970
40	21 770	19 830	16 280	13 170	10 480	8 080	6 220	4 560	3 150
45	20 200	18 380	15 060	12 140	9 620	7 470	5 630	4 070	2 750
50	18 590	16 900	13 810	11 100	8 750	6 750	5 040	3 590	2 360

Power input [W]

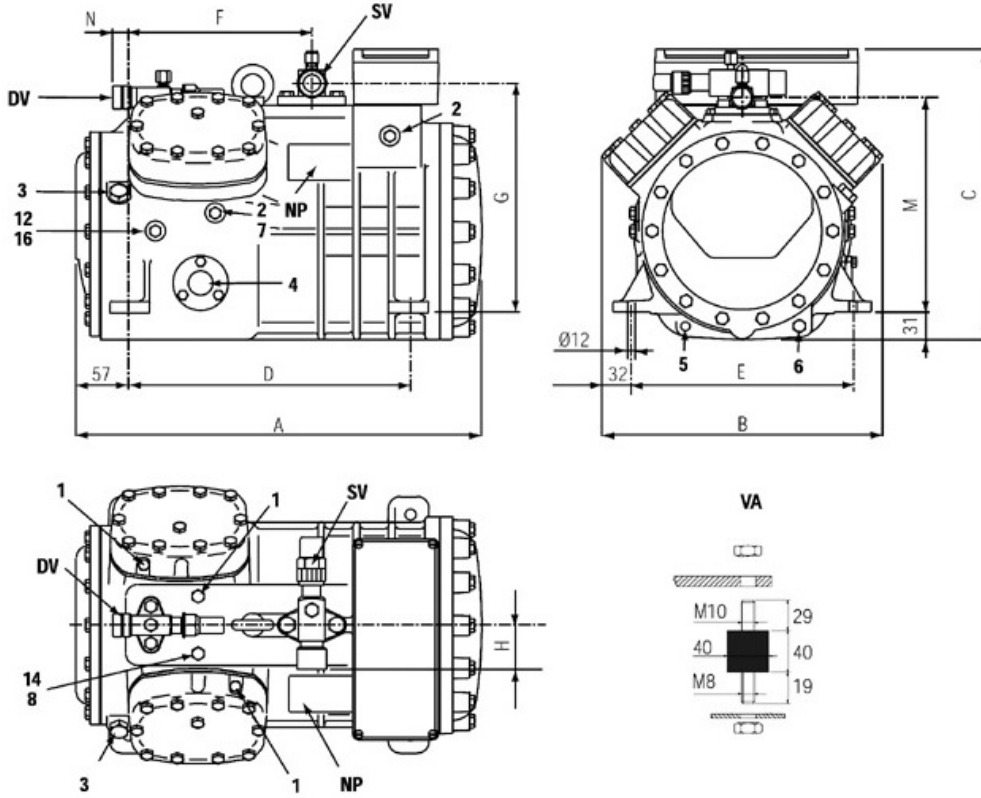
$t_c \setminus t_e$	7.5	0	-10	-20
40	3 940	3 720	3 200	2 500

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 |

