

Type: Semi-hermetic piston compressors
Producer: Frascold
Series: V

Model: V 30 84 Y

Technical data

Nominal motor power [kW/HP]:	22 / 30
Cylinder count:	4
Displacement [m ³ /h]:	83,81
RPM [min ⁻¹]:	1450
Weight net [kg]:	187
Weight gross [kg]:	201
Oil charge [dm ³]:	4,5

Electrical data

	<u>DOL Y Y</u>	<u>PWS Y / Y</u>
Power supply [V/~/Hz]:	400V/3/50	400V/3/50
Locked rotor current [A]:	186,2	118,3
Max. operating current [A]:	49,2	49,2

Connections

	<u>milimeters</u>	<u>inches</u>
Suction line:	54	2 1/8
Discharge line:	35	1 3/8

R22

Cooling capacity [W]

$t_c \setminus t_e$	12.5	7.5	5	0	-5	-10	-15	-20	-25	-30
30	116 520	98 460	90 350	74 210	60 560	49 010	39 300	31 180	24 430	18 870
40	105 940	89 450	82 040	66 980	54 280	43 600	34 650	27 220	21 080	16 060
45	100 570	84 890	77 830	63 340	51 150	40 910	32 370	25 280	19 460	14 710
50	95 140	80 270	73 570	59 680	48 010	38 240	30 100	23 380	17 870	13 400

Power input [W]

$t_c \setminus t_e$	5	-10	-20	-30
40	18 510	15 890	12 890	9 670

- With head cooling
- With liquid injection or oil cooler

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	57 000	47 150	42 680	34 630	27 650	21 670	16 580	12 280
60	48 770	40 100	36 180	29 140	23 060	17 850	13 410	9 650
70	40 610	33 140	29 770	23 740	18 560	14 130	10 360	7 150
80	32 580	26 300	23 500	18 490	14 210	10 560	7 460	4 810

Power input [W]

$t_c \setminus t_e$	12.5	5	0	-10
60	17 920	15 820	14 320	11 190

	With head cooling
	With liquid injection or oil cooler

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	-35	-40
30	105 570	97 010	81 350	67 540	55 450	44 960	35 930	28 250	21 780	16 390	11 970
40	89 890	82 440	68 860	56 940	46 560	37 580	29 870	23 320	17 790	13 160	9 300
45	82 070	75 180	62 660	51 690	42 170	33 950	26 920	20 940	15 890	11 640	8 070
50	74 290	67 970	56 490	46 490	37 830	30 380	24 020	18 620	14 050	-	-

Power input [W]

$t_c \setminus t_e$	5	-10	-20	-30	-40
40	21 620	18 250	15 090	11 670	8 391

- With head cooling
- With liquid injection or oil cooler

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	115 530	96 570	87 990	72 520	59 130	47 650	37 890	29 650	22 740
40	102 010	84 980	77 290	63 450	51 490	41 240	32 500	25 075	18 790
45	95 200	79 150	71 910	58 890	47 650	38 020	29 790	22 790	16 820
50	88 380	73 300	66 510	54 320	43 810	34 800	27 100	20 520	14 870

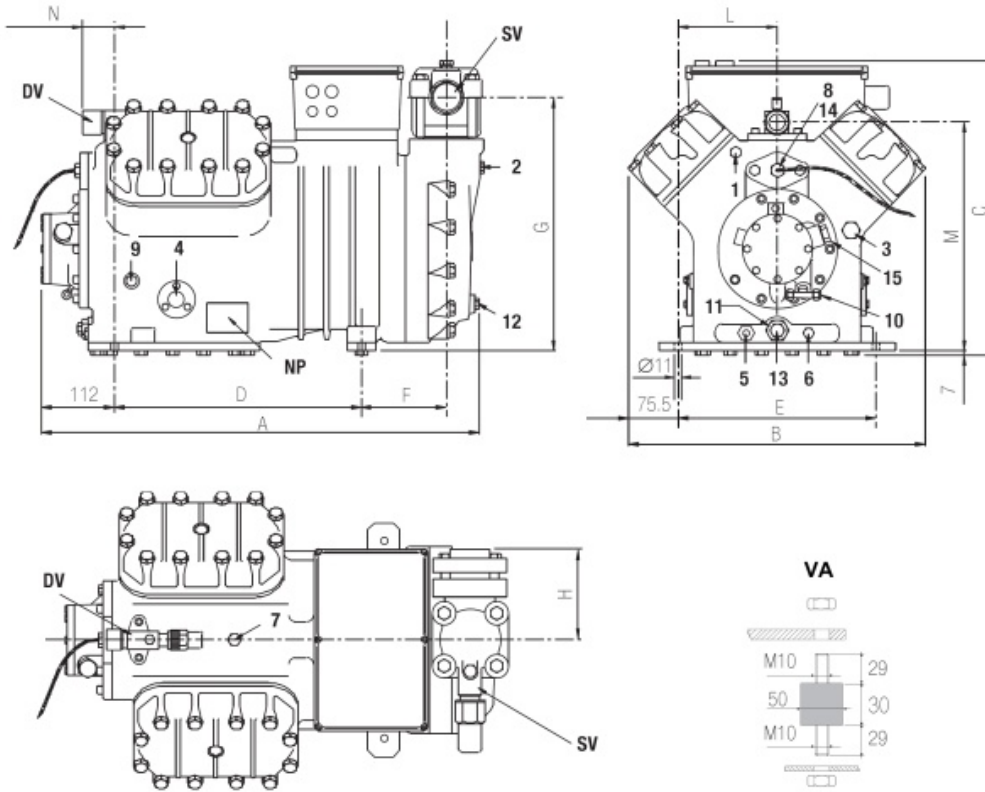
Power input [W]

$t_c \setminus t_e$	7.5	0	-10	-20
40	18 290	17 100	14 740	11 860

	With head cooling
	With liquid injection or oil cooler

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

 t_c - Condensing temperature [°C] t_e - Evaporating temperature [°C]



A	700 mm
B	454 mm
C	463 mm
D	381 mm
E	305 mm
F	133 mm
G	389 mm
H	130 mm
L	152 mm
M	356 mm
N	40 mm

- | | |
|---|--|
| 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 |
| 9: oil pressure switch connection (l.p.) | 10: oil pressure switch connection (h.p.) |
| 11: oil filter | 12: oil return plug |
| 13: magnetic plug | 14: max. discharge temperature sensor plug |
| 15: electronic oil pressure switch connection | DV: discharge valve |
| NP: name plate | SD: oil pressure switch mounting bracket |
| SV: suction valve | |

