

Model: Z 50 154 Y

Data

Type: Semi-hermetic piston compressors

Producer: Frascold

Series: Z

Model: Z 50 154 Y

Technical data

Nominal motor power [kW/HP]:	37 / 50
Cylinder count:	6
Displacement [m ³ /h]:	154,38
RPM [min ⁻¹]:	1450
Weight net [kg]:	244
Weight gross [kg]:	266
Oil charge [dm ³]:	7,5

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]:	321,4	188,6
Max. operating current [A]:	90,4	90,4

Connections

	<u>milimeters</u>	<u>inches</u>
Suction line:	67	2 5/8
Discharge line:	42	1 5/8

Model: Z 50 154 Y

Capacity



R22

Cooling capacity [W]

$t_c \setminus t_e$	12.5	7.5	5	0	-5	-10	-15	-20
30	202 090	169 770	155 470	128 610	105 870	86 590	70 240	56 430
40	180 740	152 250	139 550	115 360	94 800	77 320	62 430	49 900
45	175 200	143 710	131 750	108 860	89 370	72 760	58 600	46 710
50	160 060	135 030	123 840	102 260	83 870	68 170	54 820	43 510

Power input [W]

$t_c \setminus t_e$	5	-10	-20
40	33 740	29 600	24 420

-  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]

Model: Z 50 154 Y

Capacity



R134a

Cooling capacity [W]

$t_c \setminus t_e$	12.5	7.5	5	0	-5	-10	-15	-20
50	108 380	89 350	80 760	65 300	51 990	40 650	31 100	23 150
60	91 620	75 090	67 660	54 350	42 970	33 320	25 240	18 540
70	74 980	61 000	54 760	43 660	34 250	26 360	19 800	-
80	58 640	47 260	42 230	33 390	26 020	19 930	-	-

Power input [W]

$t_c \setminus t_e$	12.5	5	0	-10
60	32 010	27 970	25 100	19 260

-  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]

Model: Z 50 154 Y

Capacity

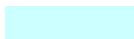

R404A/R507

Cooling capacity [W]

$t_c \setminus t_e$	7.5	5	0	-5	-10	-15	-20	-25	-30	-35	-40
30	190 470	175 070	146 650	121 440	99 400	80 360	69 090	50 310	38 670	28 840	20 430
40	162 270	149 070	124 650	102 950	83 950	67 520	53 490	41 610	31 590	23 120	15 860
45	147 960	135 880	113 510	93 600	76 150	61 060	48 170	37 260	28 060	20 290	13 630
50	133 470	122 550	102 280	84 190	68 330	54 600	42 880	32 950	24 580	-	-

Power input [W]

$t_c \setminus t_e$	5	-10	-20	-30	-40
40	40 260	32 680	26 350	19 740	13 400

-  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]

Model: Z 50 154 Y

Capacity



R407C

Cooling capacity [W]

$t_c \setminus t_e$	12.5	7.5	5	0	-5	-10	-15	-20	-25
30	209 560	191 550	158 870	130 390	105 740	84 600	66 600	51 420	38 690
40	182 690	166 720	137 820	112 710	91 030	72 440	56 590	43 140	31 750
45	169 610	154 650	127 630	104 190	83 980	66 660	51 880	39 290	28 550
50	156 530	129 970	117 870	96 030	77 160	61 030	47 320	35 670	25 680

Power input [W]

$t_c \setminus t_e$	7.5	0	-10	-20
40	38 610	31 510	26 480	20 620

-  With head cooling
-  With liquid injection or oil cooler

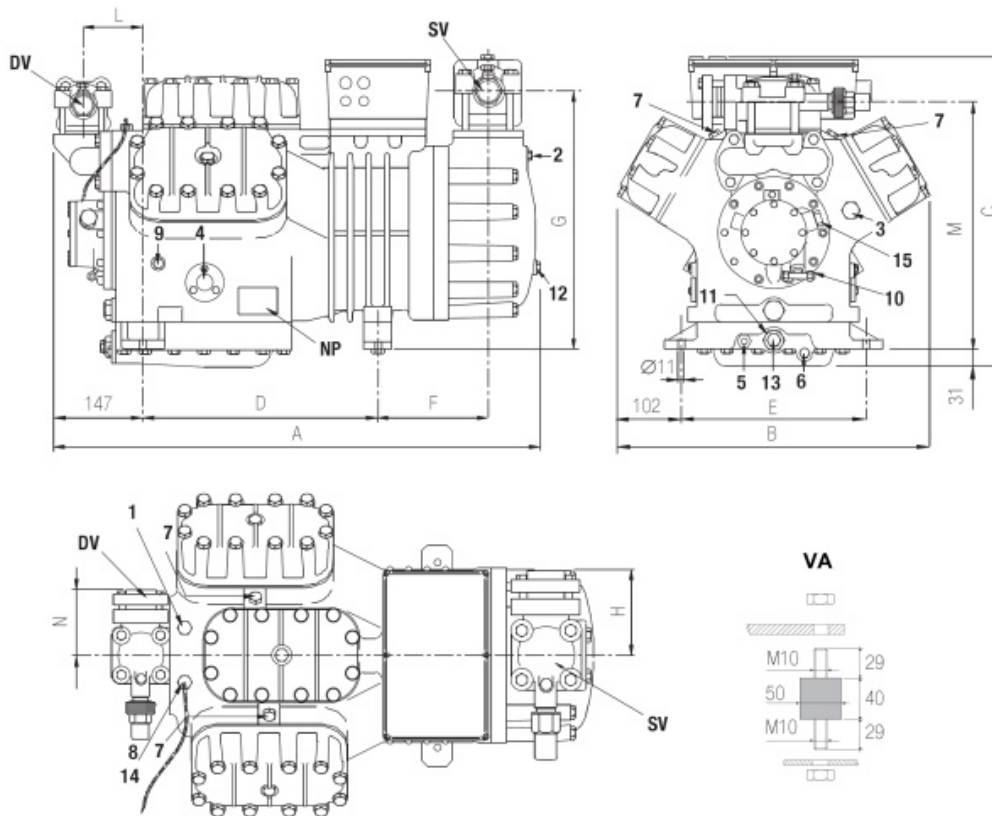
Operating conditions: suction gas temperature 20°C, 0K subcooling

t_c - Condensing temperature [°C]

t_e - Evaporating temperature [°C]

Model: Z 50 154 Y

Dimensions



A	794 mm
B	509 mm
C	536 mm
D	381 mm
E	305 mm
F	180 mm
G	433 mm
H	130 mm
L	98 mm
M	411 mm
N	95 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 | SV: suction valve |
| SV: suction valve | SD: oil pressure switch mounting bracket |

Model: Z 50 154 Y

Image

