



Producer: **Frascold**

Line: **W**

Model: **W50-168Y**

Cooling capacity [kW]: **80.41**

Displacement [m³/h]: **167.6**

Refrigerant: **R22, R134a, R404A, R407A, R407C, R407F, R448A, R449A, R450A, R452A, R507, R513A**

Capacity control: **None, Step (option), Inverter (option)**

Power supply: **400V/3Ph/50Hz**

Data

Technical data

Displacement	[m ³ /h]	167.6
Cylinders quantity		8
Oil charge	[l]	7.70
Oil type		POE68
Type of lubrication		Oil pump
Net weight	[kg]	305.00

Electrical data

Power supply		400V/3Ph/50Hz
Maximum continuous current	[A]	94.8
Locked rotor amperage	[A]	258.0
Locked rotor amperage, DOL	[A]	367.0
Maximum motor frequency	[Hz]	70
Minimum motor frequency	[Hz]	30
Nominal motor power for 50 Hz	[kW]	37.29
Nominal motor power for 50 Hz	[HP]	50.00
Motor connection		PWS

Dimensions

Suction valve diameter (SV)	[inch]	3 1/8
Suction valve diameter (SV)	[mm]	80.0
Discharge valve diameter (DV)	[inch]	1 5/8
Discharge valve diameter (DV)	[mm]	42.0
Length	[mm]	838
Height	[mm]	588
Width	[mm]	511

Other

Approved refrigerants	R22, R134a, R404A, R407A, R407C, R407F, R448A, R449A, R450A, R452A, R507, R513A
Capacity control	None, Step (option), Inverter (option)

Performance

Nominal conditions: refrigerant: R404A, evaporation: -10°C (dew point), condensation: 45°C (dew point), superheating: 10K, subcooling: 0°C

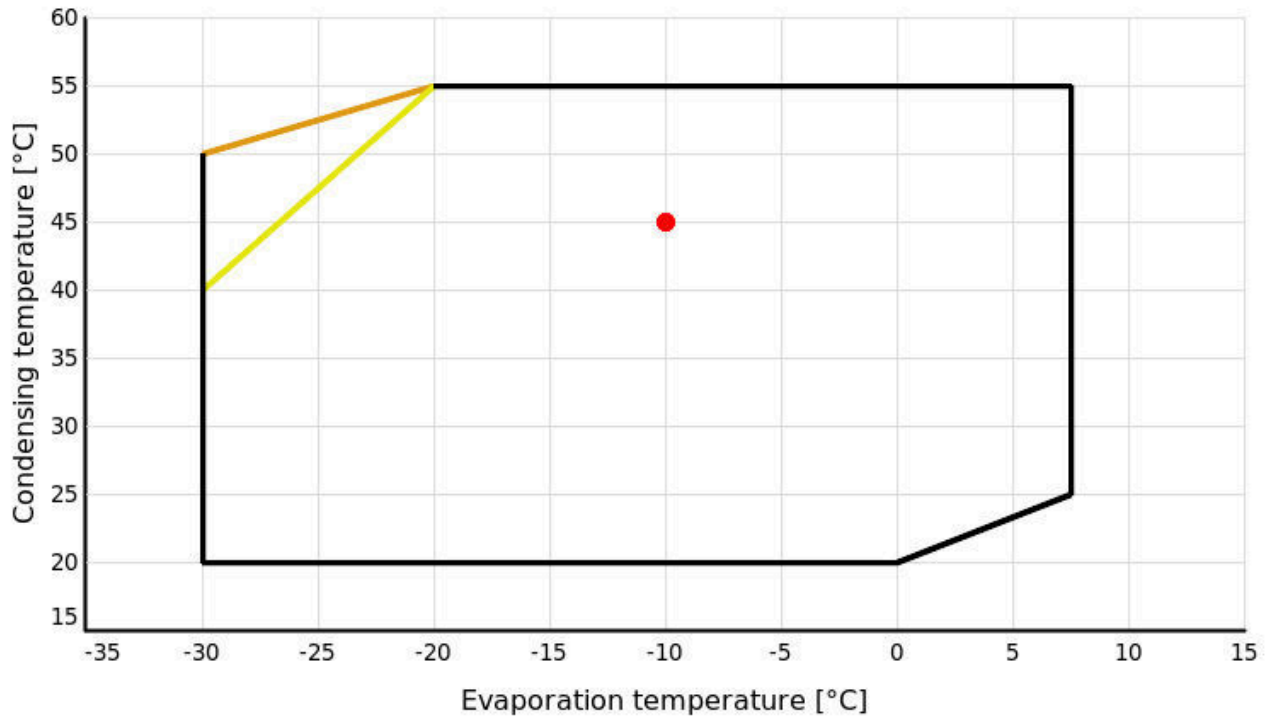
Cooling capacity

		Evaporation temperature [°C]								
		-30	-25	-20	-15	-10	-5	0	5	7.5
Condensation temperature [°C]	55			36.94	48.04	61.42	77.48	96.67	119.42	132.27
	50	23.88	32.63	43.16	55.81	70.97	89.02	110.38	135.45	149.50
	45	27.77	37.58	49.39	63.54	80.41	100.39	123.85	151.16	166.38
	40	31.77	42.58	55.60	71.19	89.72	111.55	137.04	166.54	182.88
	35	35.84	47.59	61.77	78.74	98.85	122.47	149.93	181.53	198.96
	30	39.96	52.58	67.86	86.15	107.79	133.12	162.48	196.12	214.61
	25	44.09	57.53	73.84	93.38	116.48	143.47	174.65	210.26	229.78
	20	48.21	62.39	79.67	100.40	124.89	153.47	186.42		

Power consumption

		Evaporation temperature [°C]								
		-30	-25	-20	-15	-10	-5	0	5	7.5
Condensation temperature [°C]	55			31.55	35.68	39.80	43.79	47.57	51.02	52.60
	50	23.48	27.17	30.98	34.81	38.55	42.10	45.37	48.26	49.52
	45	23.21	26.69	30.22	33.71	37.04	40.13	42.87	45.15	46.09
	40	22.81	26.05	29.28	32.39	35.29	37.88	40.05	41.70	42.31
	35	22.28	25.25	28.15	30.86	33.30	35.35	36.93	37.92	38.17
	30	21.63	24.30	26.83	29.12	31.06	32.55	33.50	33.80	33.68
	25	20.87	23.21	25.34	27.16	28.58	29.48	29.77	29.35	28.85
	20	19.98	21.96	23.67	25.00	25.86	26.14	25.75		

Application range

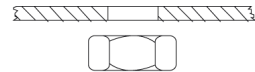
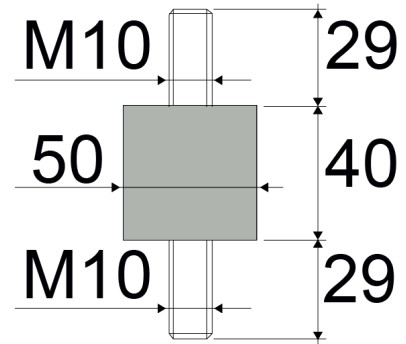
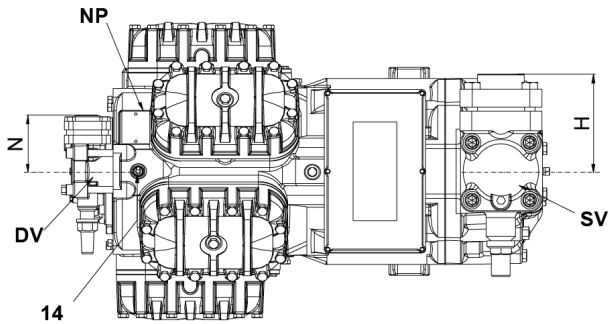
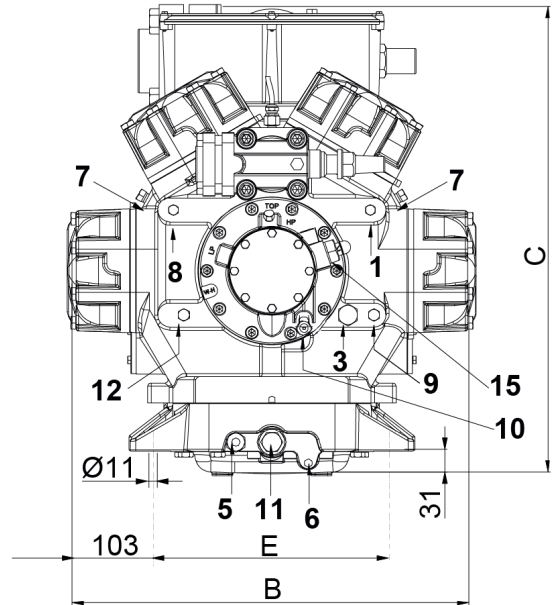
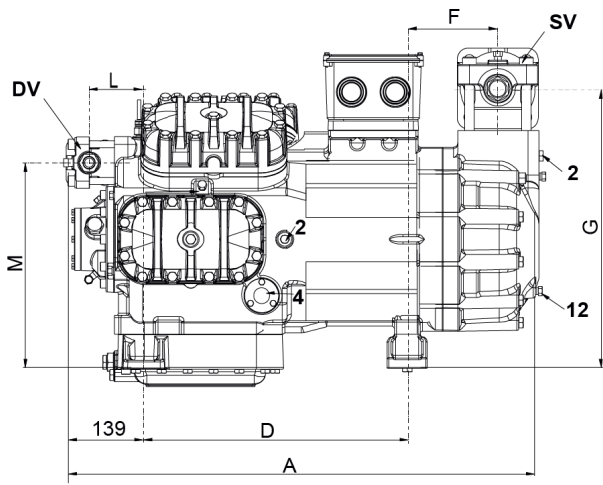


Legend

- With additional header cooling
- Without cooling

Reference conditions - suction gas temperature: 20°C, subcooling: 0 K.

Dimensions



Symbols

1	High pressure connection	1/8" NPT
2	Low pressure connection	1/8" NPT
3	Oil charge plug	3/8" GAS
4	Oil level sight glass	-
5	Crankcase heater seat	-
6	Oil drain plug	1/4" GAS
7	Liquid injection plug	1/8" NPT
8	Liquid injection sensor plug	1/8" NPT
9	Oil pressure switch connection (LP)	1/4" NPT
10	Oil pressure switch connection (HP)	1/4" SAE
11	Oil filter	3/8" GAS
12	Oil return plug	1/4" NPT
14	Max. discharge temperature sensor connection	1/8" NPT
15	Electronic oil pressure switch connection	-

DV	Discharge valve
SV	Suction valve
NP	Nameplate

Compressor dimensions

Dimension A	[mm]	838
Dimension B	[mm]	511
Dimension C	[mm]	588
Dimension D	[mm]	458
Dimension E	[mm]	305

Valves position

Dimension F	[mm]	158
Dimension G	[mm]	486
Dimension H	[mm]	160
Dimension L	[mm]	95
Dimension M	[mm]	358
Dimension N	[mm]	95