



Producer: **Frascold**

Line: **W**

Model: **W50-187Y**

Cooling capacity [kW]: **86.07**

Displacement [m³/h]: **186**

Refrigerant: **R22, R134a, R404A, R407A, 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]	186
Cylinders quantity		8
Oil charge	[l]	7.70
Oil type		POE68
Type of lubrication		Oil pump
Net weight	[kg]	311.00

Electrical data

Power supply		400V/3Ph/50Hz
Maximum operating current	[A]	89.1
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, R407F, R448A, R449A, R450A, R452A, R507, R513A
Capacity control	None, Step (option), Inverter (option)

Performance

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

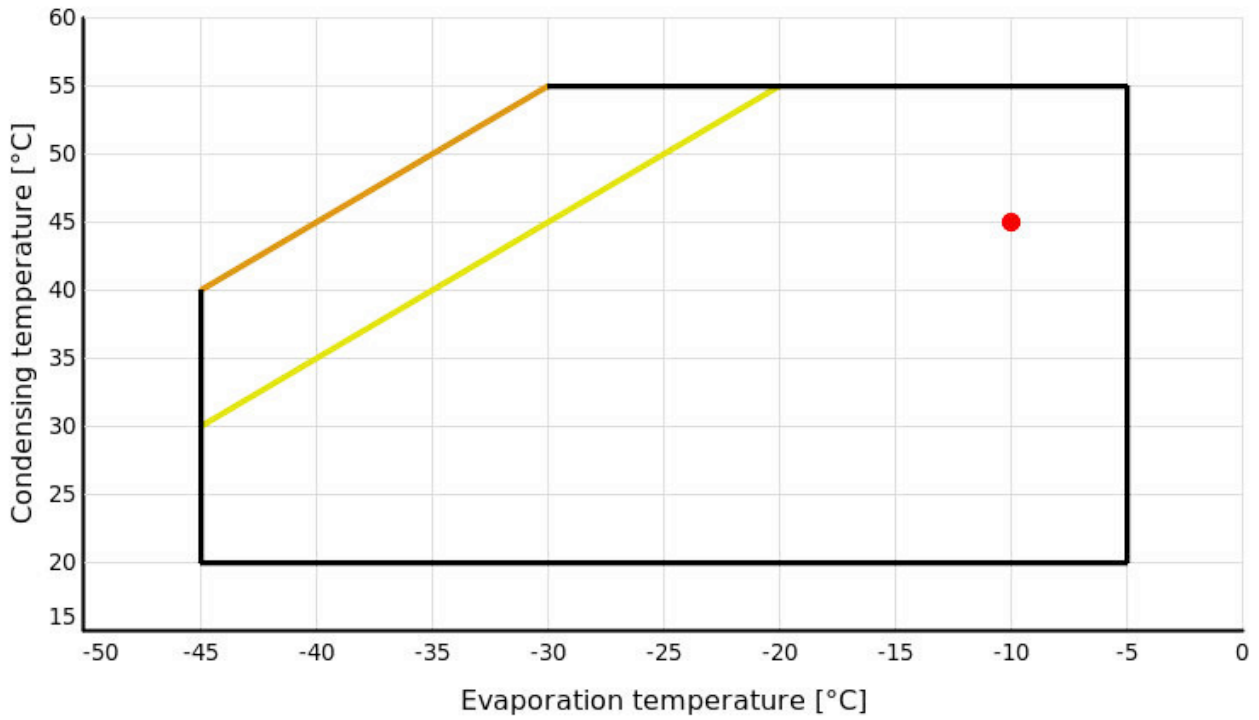
Cooling capacity [kW]

		Evaporation temperature [°C]								
		-45	-40	-35	-30	-25	-20	-15	-10	-5
Condensation temperature [°C]	55				19.44	27.87	38.17	50.71	65.87	84.06
	50			16.03	23.83	33.38	45.00	59.06	75.92	95.97
	45		12.47	19.58	28.31	38.98	51.93	67.51	86.07	108.00
	40	9.04	15.37	23.22	32.89	44.69	58.97	76.08	96.36	120.18
	35	11.48	18.37	26.96	37.57	50.52	66.15	84.80	106.81	132.52
	30	14.01	21.44	30.79	42.36	56.47	73.46	93.67	117.43	145.06
	25	16.61	24.61	34.73	47.27	62.56	80.94	102.72	128.24	157.80
	20	19.30	27.88	38.78	52.31	68.81	88.58	111.96	139.25	170.75

Power consumption [kW]

		Evaporation temperature [°C]								
		-45	-40	-35	-30	-25	-20	-15	-10	-5
Condensation temperature [°C]	55				22.92	27.99	33.03	38.03	42.96	47.82
	50			18.65	23.35	28.03	32.65	37.20	41.67	46.03
	45		14.87	19.24	23.57	27.85	32.05	36.16	40.16	44.03
	40	11.53	15.60	19.62	23.58	27.46	31.25	34.92	38.45	41.84
	35	12.37	16.11	19.79	23.38	26.87	30.24	33.47	36.54	39.44
	30	12.99	16.42	19.75	22.98	26.08	29.03	31.83	34.44	36.86
	25	13.41	16.52	19.51	22.38	25.09	27.64	30.00	32.15	34.09
	20	13.62	16.42	19.08	21.58	23.91	26.05	27.98	29.68	31.14

Application range

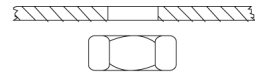
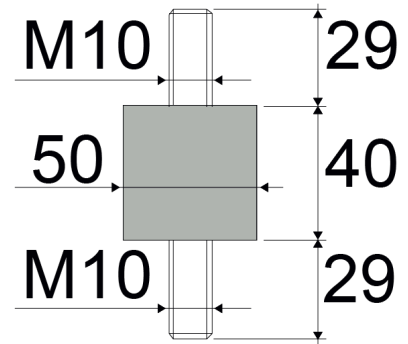
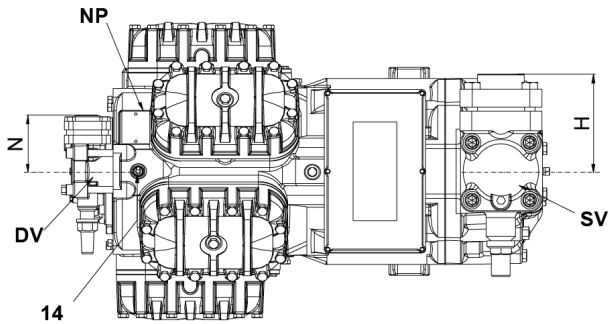
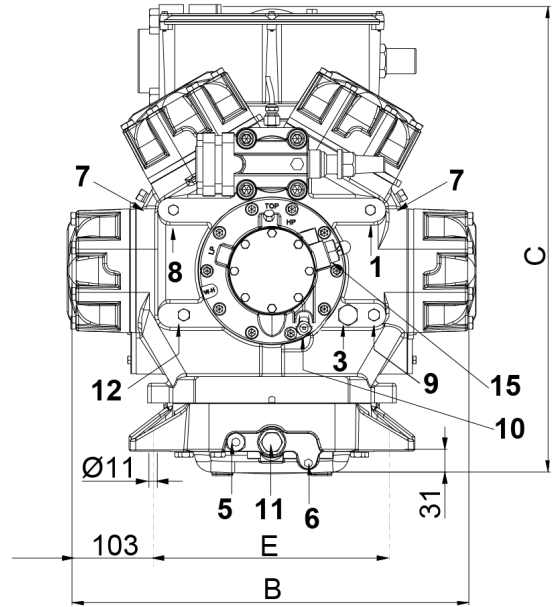
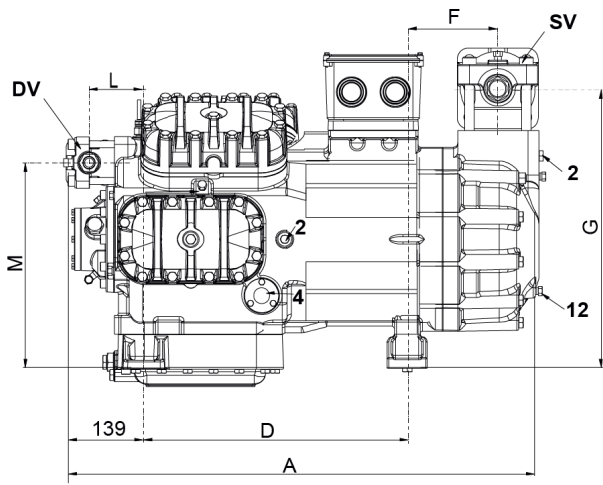


Legend

- With additional header cooling
- Without cooling
- Current operating conditions

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

Dimensions



Symbols

1	High pressure connection	1/8" NPT
2	Low pressure connection	1/4" 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	1/4" 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