

## Model: S8-42Y

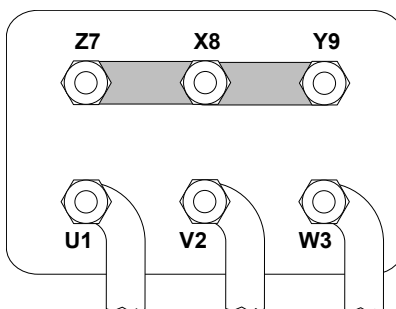
Refrigerant: R404A

Power supply: 400/3/50 DOL-STAR

### Technical data:

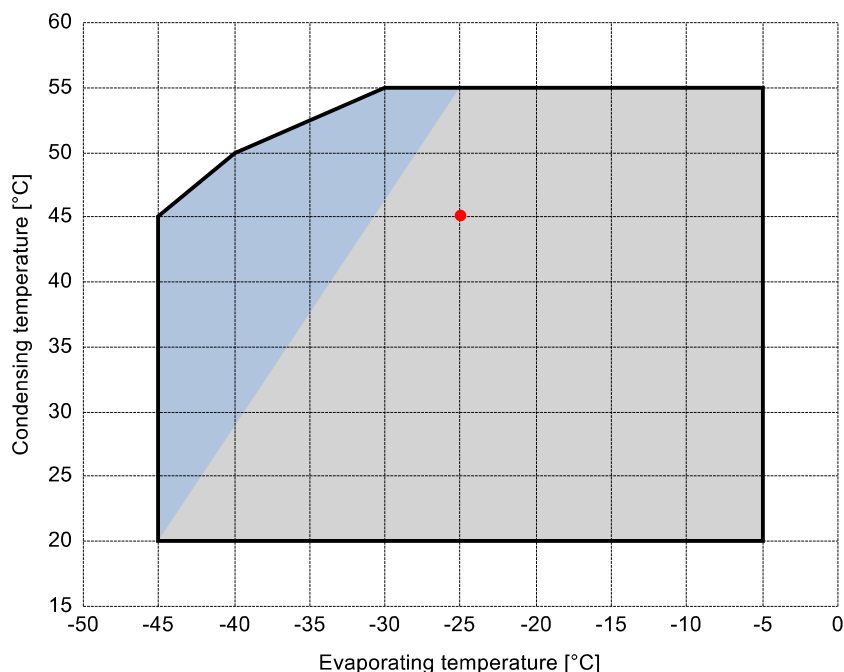
Displacement	41.32 m³/h
Nominal compressor speed	1450 rpm
Motor voltage	400 V
Nominal operating frequency	50 Hz
maximum allowed operating current (MRA)	20.3 A
locked rotor current (LRA)	90.3 A
Number of pistons	4
Net weight	117 kg
Lubricant	FRASCOLD POE32
Oil charge	2.9 l

### Motor connections:



### Application range:

Additional cooling required



#### Reference conditions according to EN12900

- Suction gas temperature = 20 °C
- Liquid subcooling = 0 K
- 100% of the capacity

#### Certified by:

- Frascold tentative data

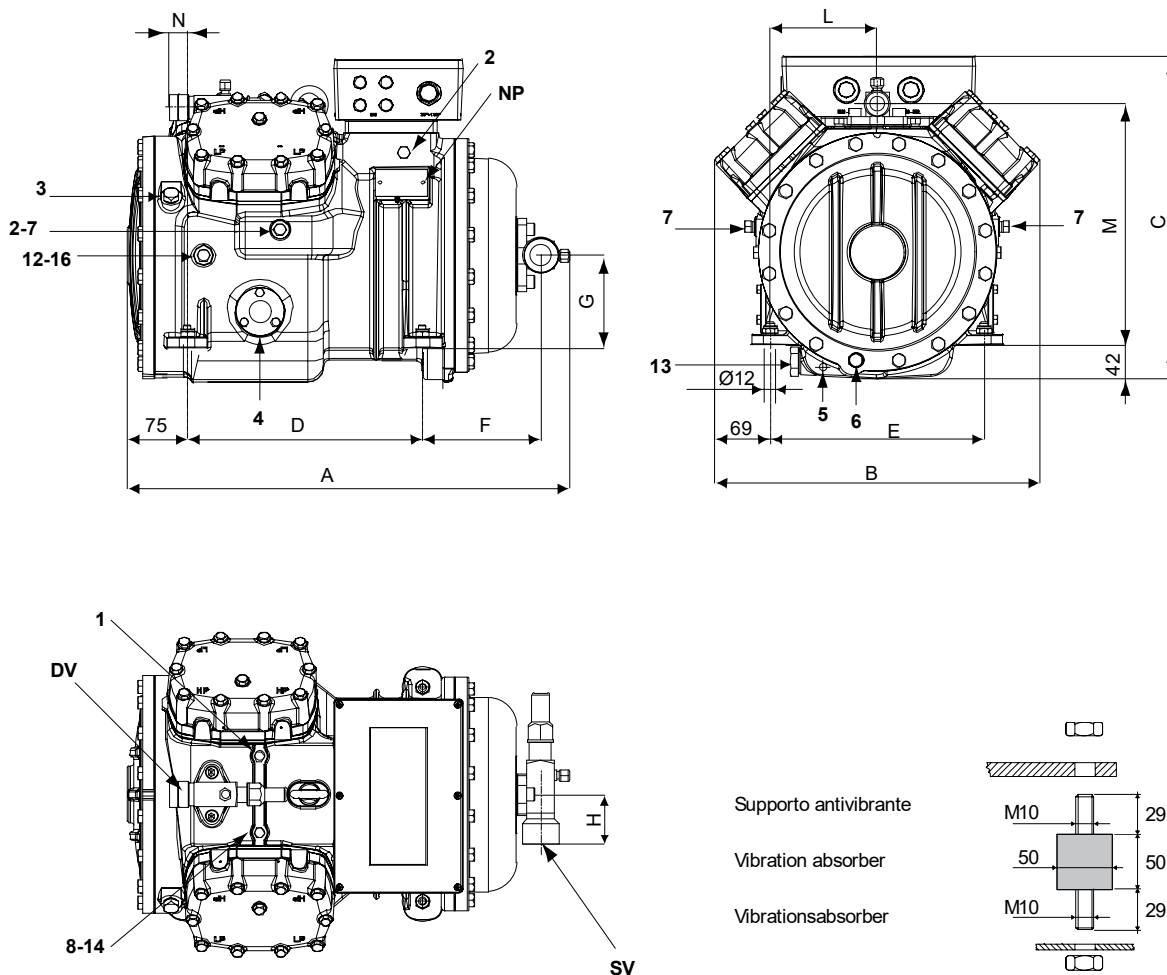
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Power supply: 400/3/50 DOL-STAR

## Dimensions:



## Legend:

SV: Suction Valve	1 3/8" in - 35 mm	1: High pressure connection	1/8" NPT
DV: Discharge valve	1 1/8" in - 28.575 mm	2: Low pressure connection	1/8" NPT
A: Length	550 mm	3: Oil charge plug	1/4" GAS
B: Width	405 mm	4: Oil level sight glass	-
C: Height	405 mm	5: Crankcase heater seat	-
D: Base mounting	292 mm	6: Oil drain plug	M10 x 30
E: Base mounting	266 mm	7: Liquid injection plug	1/4" NPT
F: Suction Valve	147 mm	8: Liquid injection sensor plug	1/8" NPT
G: Suction Valve	115 mm	12: Oil return plug	1/4" NPT
H: Suction Valve	58 mm	13: Magnetic plug	1/2" GAS
L: Discharge valve	133 mm	14: Max discharge temperature sensor connection	1/8" NPT
M: Discharge valve	298 mm	16: Crankcase pressure plug	1/4" NPT
N: Discharge valve	23 mm	NP: Nameplate	

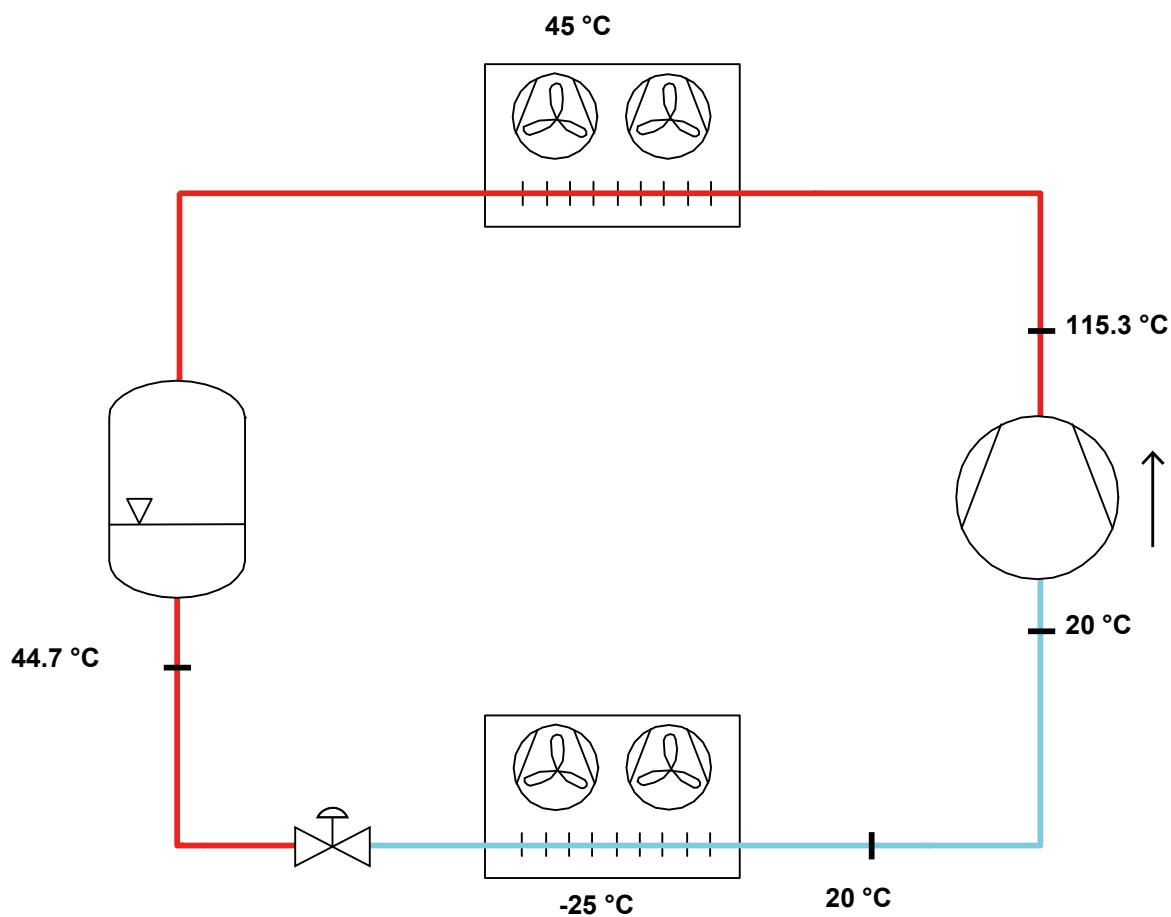
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**P&I Diagram:**



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**Performance data:**

Operating mode	Subcritical, 100 % of the capacity
Liquid subcooling	0 K
Suction gas temperature	20 °C
Useful fraction of superheating	100 %
Frequency	50 Hz
Additional cooling required	

**Refrigerating capacity [kW]**

T.Evap	-45 °C	-40 °C	-35 °C	-30 °C	-25 °C	-20 °C	-15 °C	-10 °C	-5 °C
T.Cond									
55 °C	-	-	-	6.231	8.276	10.635	13.366	16.528	20.178
50 °C	-	3.463	5.23	7.24	9.55	12.218	15.302	18.862	22.954
45 °C	2.406	4.109	6.041	8.259	10.821	13.786	17.212	21.157	25.679
40 °C	2.967	4.778	6.862	9.276	12.078	15.328	19.083	23.401	28.341
35 °C	3.552	5.458	7.681	10.279	13.31	16.832	20.904	25.583	30.928
30 °C	4.147	6.137	8.487	11.257	14.504	18.287	22.663	27.691	33.43
25 °C	4.742	6.803	9.269	12.198	15.649	19.68	24.349	29.714	35.833
20 °C	5.325	7.444	10.013	13.09	16.733	21	25.949	31.638	38.126

**Power input [W]**

T.Evap	-45 °C	-40 °C	-35 °C	-30 °C	-25 °C	-20 °C	-15 °C	-10 °C	-5 °C
T.Cond									
55 °C	-	-	-	5774	6874	7988	9103	10207	11290
50 °C	-	3785	4779	5801	6838	7879	8912	9924	10905
45 °C	2962	3878	4824	5786	6755	7717	8662	9577	10451
40 °C	3069	3941	4831	5730	6624	7503	8354	9166	9926
35 °C	3152	3972	4802	5631	6446	7235	7987	8690	9332
30 °C	3208	3972	4737	5490	6219	6913	7561	8149	8667
25 °C	3239	3942	4634	5306	5945	6538	7075	7544	7932
20 °C	3244	3879	4495	5080	5622	6109	6530	6874	7127

**COP/EER [W/W]**

T.Evap	-45 °C	-40 °C	-35 °C	-30 °C	-25 °C	-20 °C	-15 °C	-10 °C	-5 °C
T.Cond									
55 °C	-	-	-	1.08	1.2	1.33	1.47	1.62	1.79
50 °C	-	0.91	1.09	1.25	1.4	1.55	1.72	1.9	2.1
45 °C	0.81	1.06	1.25	1.43	1.6	1.79	1.99	2.21	2.46
40 °C	0.97	1.21	1.42	1.62	1.82	2.04	2.28	2.55	2.86
35 °C	1.13	1.37	1.6	1.83	2.06	2.33	2.62	2.94	3.31
30 °C	1.29	1.54	1.79	2.05	2.33	2.65	3	3.4	3.86
25 °C	1.46	1.73	2	2.3	2.63	3.01	3.44	3.94	4.52
20 °C	1.64	1.92	2.23	2.58	2.98	3.44	3.97	4.6	5.35

**Current [A]**

T.Evap	-45 °C	-40 °C	-35 °C	-30 °C	-25 °C	-20 °C	-15 °C	-10 °C	-5 °C
T.Cond									
55 °C	-	-	-	10.55	12.12	13.77	15.47	17.17	18.86
50 °C	-	7.95	9.2	10.59	12.07	13.61	15.17	16.73	18.26
45 °C	7.03	8.06	9.26	10.57	11.95	13.37	14.79	16.19	17.55
40 °C	7.14	8.14	9.27	10.49	11.76	13.05	14.33	15.56	16.73
35 °C	7.23	8.18	9.23	10.35	11.5	12.65	13.77	14.84	15.82
30 °C	7.29	8.18	9.14	10.16	11.18	12.18	13.14	14.02	14.8
25 °C	7.33	8.14	9.01	9.9	10.79	11.64	12.42	13.11	13.69
20 °C	7.33	8.07	8.83	9.6	10.34	11.02	11.63	12.12	12.49

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**Performance data:**

Operating mode	Subcritical, 100 % of the capacity
Liquid subcooling	0 K
Suction gas temperature	20 °C
Useful fraction of superheating	100 %
Frequency	50 Hz
Additional cooling required	

Mass flow [kg/h]	T.Evap	-45 °C	-40 °C	-35 °C	-30 °C	-25 °C	-20 °C	-15 °C	-10 °C	-5 °C
T.Cond										
55 °C	-	-	-	212	284	368	467	585	724	
50 °C	-	107	163	227	301	388	490	611	753	
45 °C	69	118	175	240	316	406	511	634	779	
40 °C	80	129	186	252	330	422	529	655	802	
35 °C	90	139	196	263	342	436	545	673	823	
30 °C	99	148	205	273	353	448	559	689	840	
25 °C	108	156	213	281	362	458	570	702	854	
20 °C	116	162	219	288	369	466	579	712	865	