

Model: Z35-106Y

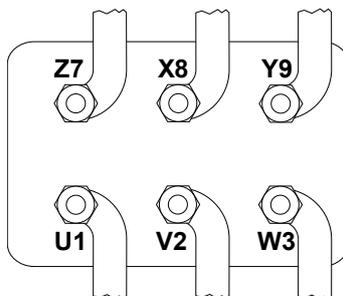
Refrigerant: R404A

Power supply: 400/3/50 PWS

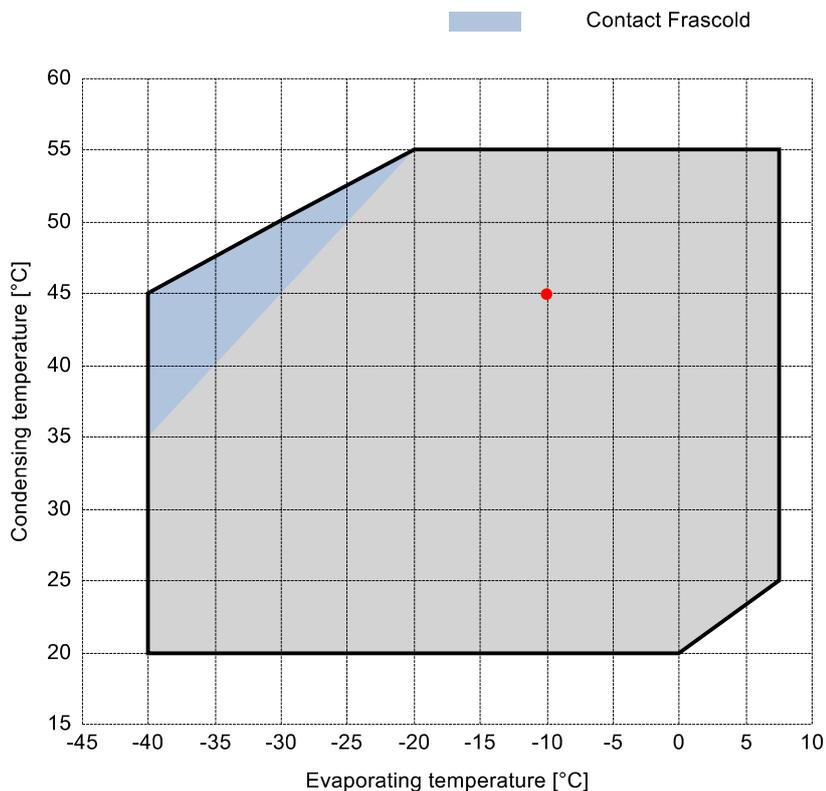
Technical data:

Displacement	106,16 m³/h
Nominal compressor speed	1450 rpm
Motor voltage	400 V
Nominal operating frequency	50 Hz
Maximum allowed operating current (MRA)	60,2 A
Locked rotor current (LRA)	144,5 A
Locked rotor current (LRA), DOL	239,2 A
Number of pistons	6
Net weight	223 kg
Lubricant	FRASCOLD POE68
Oil charge	3,7 l
Maximum static pressure LP	20,5 bar
Maximum operating pressure HP	30 bar

Motor connections:



Application range:



Reference conditions according to EN12900

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

Certified by:

- ASERCOM (ref. EN12900, 50 Hz, 100% cap.)

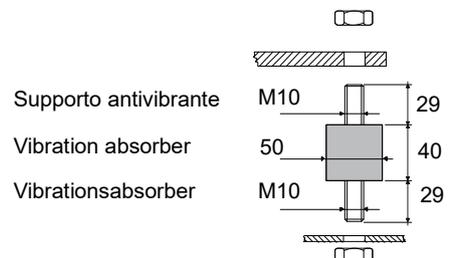
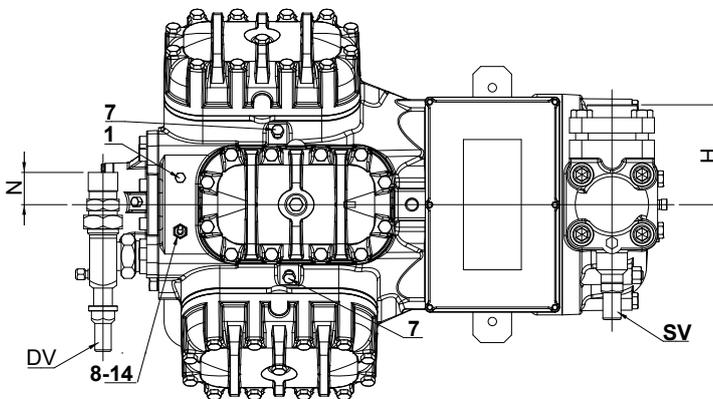
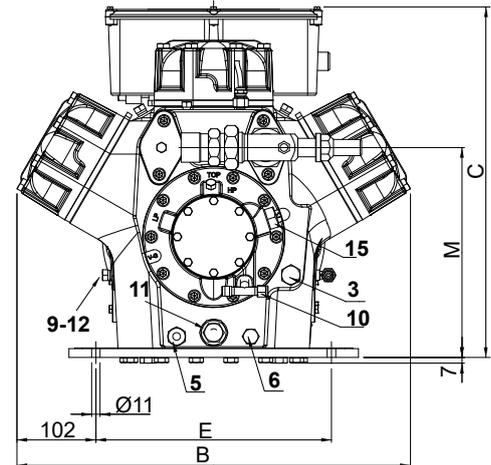
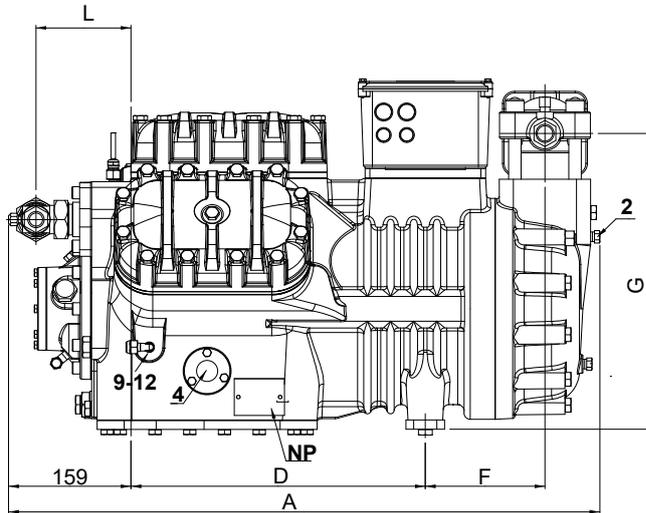
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Model: Z35-106Y

Refrigerant: R404A

Power supply: 400/3/50 PWS

Dimensions:



Legend:

SV: Suction Valve	2 1/8" in - 54 mm	3: Oil charge plug	3/8" GAS
DV: Discharge valve	1 3/8" - 35 mm	4: Oil level sight glass	-
A: Length	806 mm	5: Crankcase heater seat	-
B: Width	509 mm	6: Oil drain plug	1/4" GAS
C: Height	457 mm	7: Liquid injection plug	1/4" NPT
D: Base mounting	381 mm	8: Liquid injection sensor plug	1/8" NPT
E: Base mounting	305 mm	9: Oil pressure switch connection (LP)	1/4" NPT
F: Suction Valve	180 mm	10: Oil pressure switch connection (HP)	1/4" SAE
G: Suction Valve	386 mm	11: Oil filter	3/8" GAS
H: Suction Valve	130 mm	12: Oil return plug	1/4" NPT
L: Discharge valve	123 mm	14: Max discharge temperature sensor connection	1/8" NPT
M: Discharge valve	274 mm	15: Electronic oil pressure switch connection	-
N: Discharge valve	42 mm	NP: Nameplate	-
1: High pressure connection	1/8" NPT	DIMENSION UNITS:	mm
2: Low pressure connection	1/4" NPT	SECONDARY DIMENSION UNITS:	[in]

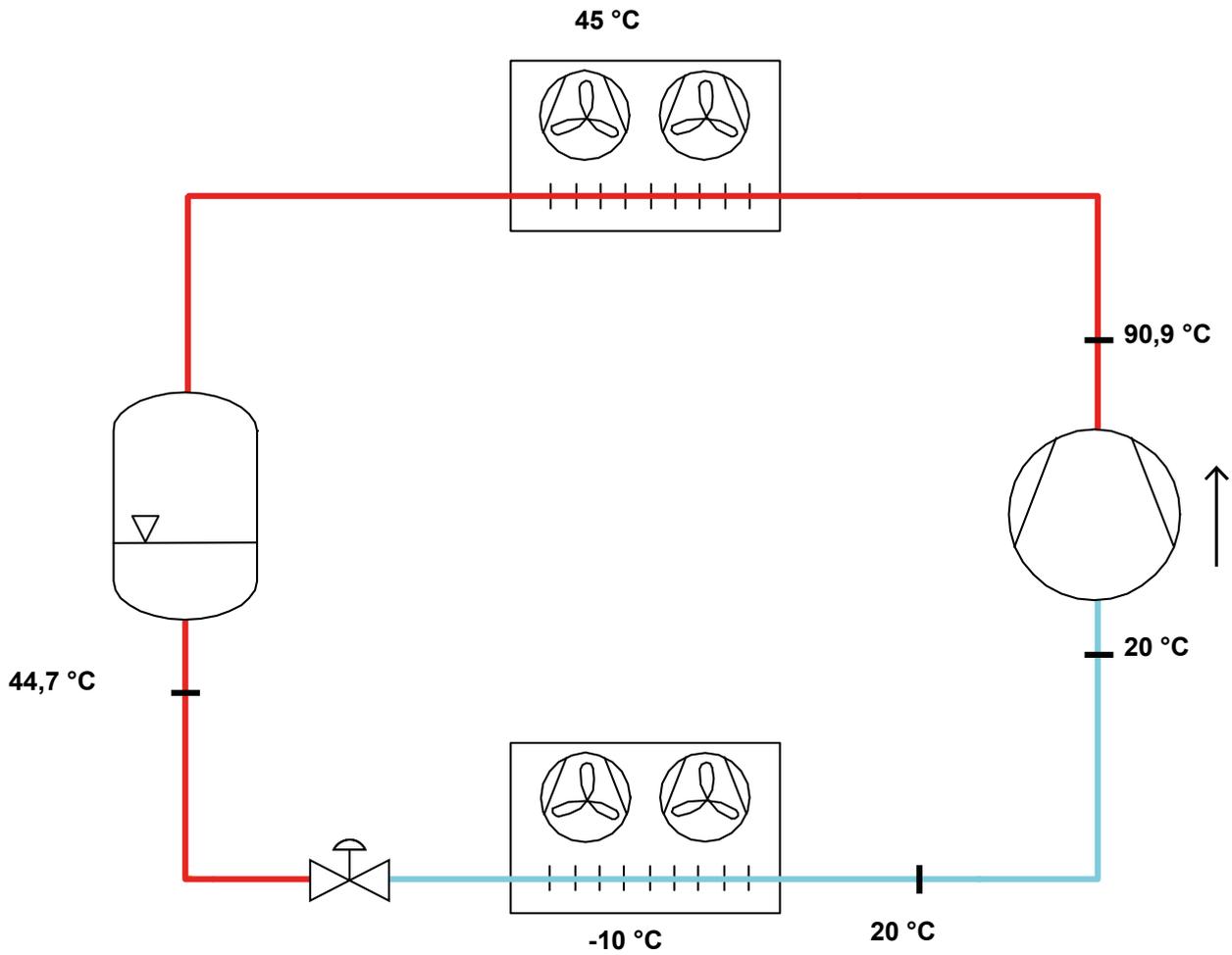
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Refrigerant: R404A

Power supply: 400/3/50 PWS

P&I Diagram:



Model: Z35-106Y

Refrigerant: R404A

Power supply: 400/3/50 PWS

Polynomial coefficients according to EN12900 for Z35-106Y:

*S = Tevap ; D = Tcond

Reference conditions	
Refrigerant	R404A
Ambient temperature	35 °C
Suction gas temperature	20 °C
Liquid subcooling	0 K
Frequency	50 Hz

	Refrigerating capacity [W]	Power input [W]
C1	1,552702E+005	6,070707E+003
C2	5,489231E+003	-4,213716E+002
C3	-1,709093E+003	5,896858E+002
C4	6,561263E+001	-1,273243E+001
C5	-5,414844E+001	1,848581E+001
C6	1,161878E-001	-3,213948E+000
C7	2,274825E-001	-8,623965E-002
C8	-5,244152E-001	1,577454E-001
C9	-1,367679E-002	-3,967940E-002
C10	1,061443E-002	8,388491E-003

Polynomial coefficients according to selection for Z35-106Y:

*S = Tevap ; D = Tcond

Reference conditions	
Refrigerant	R404A
Ambient temperature	35 °C
Suction gas temperature	20 °C
Liquid subcooling	0 K
Frequency	50 Hz
Capacity step	100 %
Useful fraction of superheating	100 %
ECO OFF	

	Refrigerating capacity [kW]	Evaporator capacity [kW]	Power input [kW]	Mass flow [kg/h]	Current [A]	Discharge temperature [°C]	Disc
C1	1,552702E+002	1,552702E+002	6,070707E+000	3,005585E+003	1,555125E+001	2,691086E+001	3,005585
C2	5,489231E+000	5,489231E+000	-4,213716E-001	1,135286E+002	-6,584845E-001	-1,243835E+000	1,135286
C3	-1,709093E+000	-1,709093E+000	5,896858E-001	-9,642542E+000	7,805105E-001	1,140931E+000	-9,642542
C4	6,561263E-002	6,561263E-002	-1,273243E-002	1,629393E+000	-2,013653E-002	-3,346987E-003	1,629393
C5	-5,414844E-002	-5,414844E-002	1,848581E-002	-2,610168E-001	2,808682E-002	-3,251180E-003	-2,610168
C6	1,161878E-004	1,161878E-004	-3,213948E-003	-8,575014E-002	-2,439261E-003	-1,969738E-003	-8,575014
C7	2,274825E-004	2,274825E-004	-8,623965E-005	9,492664E-003	-1,641946E-004	-2,829942E-004	9,492664
C8	-5,244152E-004	-5,244152E-004	1,577454E-004	-1,949960E-003	2,635635E-004	8,700226E-005	-1,949960
C9	-1,367679E-005	-1,367679E-005	-3,967940E-005	-1,084208E-003	-4,275615E-005	5,185659E-005	-1,084208
C10	1,061443E-005	1,061443E-005	8,388491E-006	5,746792E-004	-1,951405E-006	3,743179E-005	5,746792

$$Y = C1 + C2*S + C3*D + C4*S^2 + C5*S*D + C6*D^2 + C7*S^3 + C8*D*S^2 + C9*S*D^2 + C10*D^3$$

All data subject to change without notice

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	-40 °C	-35 °C	-30 °C	-25 °C	-20 °C	-15 °C	-10 °C	-5 °C	0 °C	5 °C	7,5 °C
T.Cond											
55 °C	-	-	-	-	27	34	42	52	63	77	84
50 °C	-	-	18	24	30	38	48	59	71	86	94
45 °C	11	15	20	27	34	43	53	65	80	96	105
40 °C	13	17	23	30	38	48	59	72	88	105	115
35 °C	14	19	25	33	42	52	65	79	96	115	126
30 °C	16	21	28	36	45	57	71	86	104	125	136
25 °C	17	23	30	39	49	62	77	93	113	135	147
20 °C	19	25	33	42	53	67	82	101	121	-	-

Power input [kW]

T.Evap	-40 °C	-35 °C	-30 °C	-25 °C	-20 °C	-15 °C	-10 °C	-5 °C	0 °C	5 °C	7,5 °C
T.Cond											
55 °C	-	-	-	-	19,738	22,425	25,104	27,71	30,177	32,441	33,477
50 °C	-	-	14,425	16,795	19,246	21,714	24,133	26,44	28,569	30,455	31,288
45 °C	10,162	12,104	14,217	16,436	18,696	20,934	23,084	25,082	26,863	28,362	28,985
40 °C	10,113	11,972	13,964	16,022	18,082	20,08	21,951	23,63	25,053	26,154	26,564
35 °C	10,032	11,8	13,66	15,547	17,397	19,145	20,727	22,078	23,132	23,826	24,018
30 °C	9,915	11,58	13,299	15,005	16,635	18,124	19,407	20,419	21,095	21,372	21,34
25 °C	9,754	11,307	12,875	14,39	15,79	17,009	17,983	18,646	18,935	18,785	18,524
20 °C	9,542	10,974	12,38	13,696	14,855	15,795	16,45	16,755	16,646	-	-

COP/EER [W/W]

T.Evap	-40 °C	-35 °C	-30 °C	-25 °C	-20 °C	-15 °C	-10 °C	-5 °C	0 °C	5 °C	7,5 °C
T.Cond											
55 °C	-	-	-	-	1,36	1,51	1,68	1,87	2,1	2,36	2,51
50 °C	-	-	1,27	1,42	1,58	1,76	1,98	2,22	2,5	2,83	3,02
45 °C	1,11	1,27	1,44	1,62	1,82	2,05	2,31	2,61	2,96	3,38	3,61
40 °C	1,24	1,43	1,63	1,85	2,09	2,37	2,69	3,06	3,5	4,03	4,33
35 °C	1,4	1,61	1,84	2,1	2,39	2,73	3,13	3,59	4,15	4,83	5,23
30 °C	1,57	1,8	2,07	2,38	2,73	3,15	3,64	4,23	4,95	5,85	6,38
25 °C	1,76	2,03	2,34	2,7	3,13	3,64	4,26	5,01	5,96	7,17	7,92
20 °C	1,97	2,27	2,64	3,07	3,6	4,23	5,02	6	7,28	-	-