

**Specification for
Embraco Scroll Compressor**

MODEL: EAF126P-A1-NAAA

RECORD OF REVISIONS

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EAF126P-A1-NAAA Technical Specifications

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1. Specifications

Model	EAF126P-A1-NAAA	Power	10HP
Displacement(m ³ /h)	29.4	Refrigerant	R407C
Cooling Cap.(W) ^(a)	30513	Input Power(W) ^(a)	8952
Rated Load Amps(A) ^(a)	17.0	COP ^(a)	3.41
Max. Vibration(mm) ^(a)	<0.10	Sound Level (dBA) ^(a)	76
Test Power Source ^(a)	50Hz-380V	Rated Speed (RPM) ^(a)	2900
Max. Moisture (mg)	< 500	Max. Impurity (mg)	< 100
Oil Circulation (%) ^(a)	<1%	Weight (kg, With Oil)	56
Electrical Specification	Power Source	380V-420V 3~50Hz 460V 3~60Hz	
	Run Capacitor	/	
	Min. Operation Voltage(V) ^(b)	342	
	Max. Operation Voltage(V)	462	
	Min. Starting Voltage(V) ^(c)	323	
	Lock Rotor Amps(A)	114.00	
	Max. Operation Current ^(d)	22.5 (A)	
Terminal Resistance (Ω) (± 10%) At 25 °C	T1(C)-T2(S)	1.2	
	T2(S)-T3(R)	1.18	
	T3(R)-T1(C)	1.19	
	Oil Type	POE	
Lubrication	Initial Charge(L)	3.5	
	Recharge(L)	3	
	Insulation Voltage(V)	2500	
Electrical Safety	Leakage Current(mA)	≤5	
	Insulation Resistance(MΩ)	>20	
	Ground Resistance(Ω)	<0.1	
	Max. Operation Pressure	High Side(MPa) 3 Low Side(MPa) 2	

Notes:

- a) Test Condition: Based On Test Power Voltage, First Rated Condition
- b) Test Condition: ET 13°C, CT 65°C, SH 11.1K
- c) Test Condition: Discharge/Suction Pressure Set To Refrigeration Saturation Pressure At 40°C
- d) Test Condition: ET 13°C, CT 65°C, SH11.1K, 90% Min. Rated Voltage

2. Configuration

Suction/Discharge	Injection	Sight Glass	Thermal Tube
Welded Fittings	NONE	NONE	NONE

3. Certifications

Certifications	Report N.O.
CB	CNCVC1175
CE	LVDJX23-0059
CCC	CVC23008010773
PED	/
UL	/

4. First Test Condition (°C)

Cooling Cap. and COP No Less Than 95% of Nominal Value, Power and Current No More Than 105% of Nominal Value (Performance And Sound Power Need 24hrs Break In At High Load Running Condition).

Item	Parameter	Value
1	Evaporating Temp.	7.2

2	Condensing Temp.	54.4
3	Ambient Temp.	35.0
4	Super Heat	11.1
5	Sub Cooling	8.3

5. Compressor Protection Parts

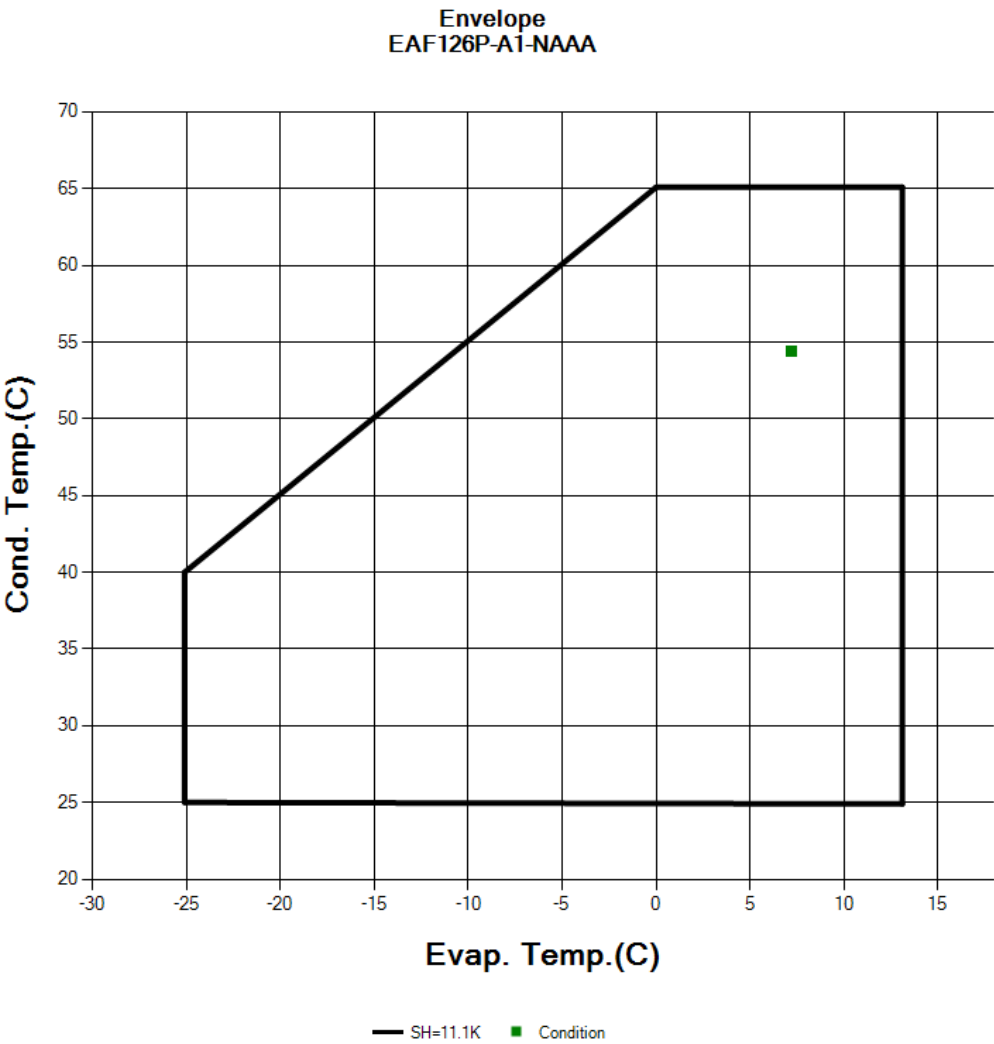
- a) Thermal Protection Inside:UP28OA08C-720(IN03);
b) Internal Pressure Release Valve, Open Range (Pressure Difference Between Discharge And Suction) : 2.76~3.10Mpa

6. Performance Data- EAF126P-A1-NAAA

kW	Temp. Cond. (°C)	Temp. Evap. (°C)								
		-25	-20	-15	-10	-5	0	5	10	13
Cooling Cap.	65						20.17	24.40	29.21	32.41
	60					17.85	21.80	26.28	31.38	34.77
	55				15.53	19.17	23.32	28.03	33.38	36.95
	50			13.27	16.60	20.41	24.74	29.66	35.24	38.97
	45		11.13	14.14	17.62	21.58	26.07	31.17	36.97	40.84
	40	9.16	11.85	14.98	18.58	22.68	27.33	32.59	38.59	42.59
	35	9.75	12.55	15.79	19.51	23.74	28.52	33.95	40.12	44.25
	30	10.34	13.24	16.59	20.42	24.76	29.68	35.25	41.60	45.86
	25	10.94	13.93	17.38	21.32	25.78	30.82	36.54	43.06	47.44
Input Power	65						11.27	11.26	11.27	11.30
	60					10.07	10.07	10.08	10.11	10.15
	55				8.98	9.01	9.02	9.05	9.10	9.14
	50			7.97	8.03	8.08	8.11	8.15	8.21	8.26
	45		7.01	7.13	7.21	7.26	7.31	7.36	7.42	7.48
	40	6.08	6.27	6.40	6.48	6.55	6.60	6.66	6.74	6.80
	35	5.41	5.61	5.75	5.84	5.92	5.98	6.04	6.13	6.19
	30	4.82	5.02	5.17	5.27	5.35	5.42	5.49	5.57	5.64
	25	4.28	4.49	4.64	4.75	4.83	4.90	4.97	5.07	5.13

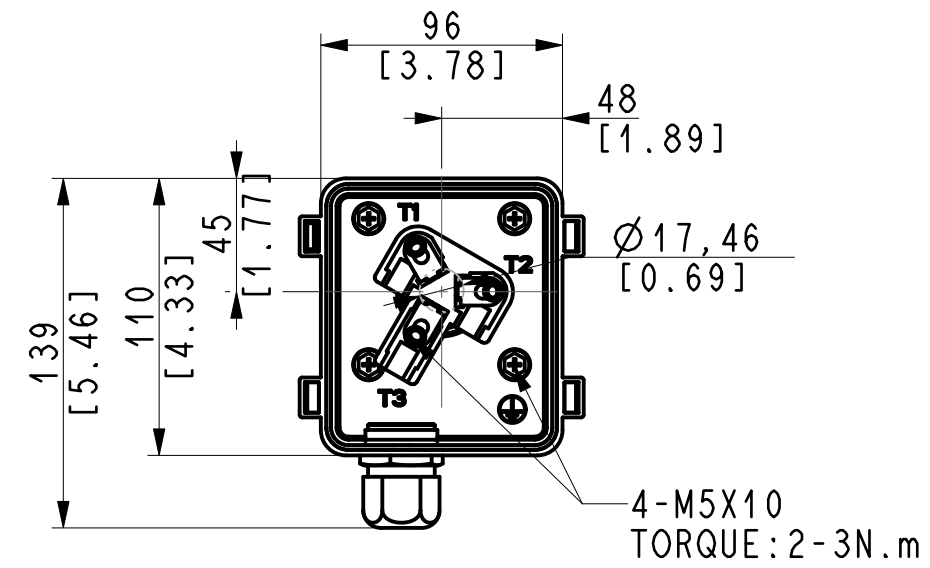
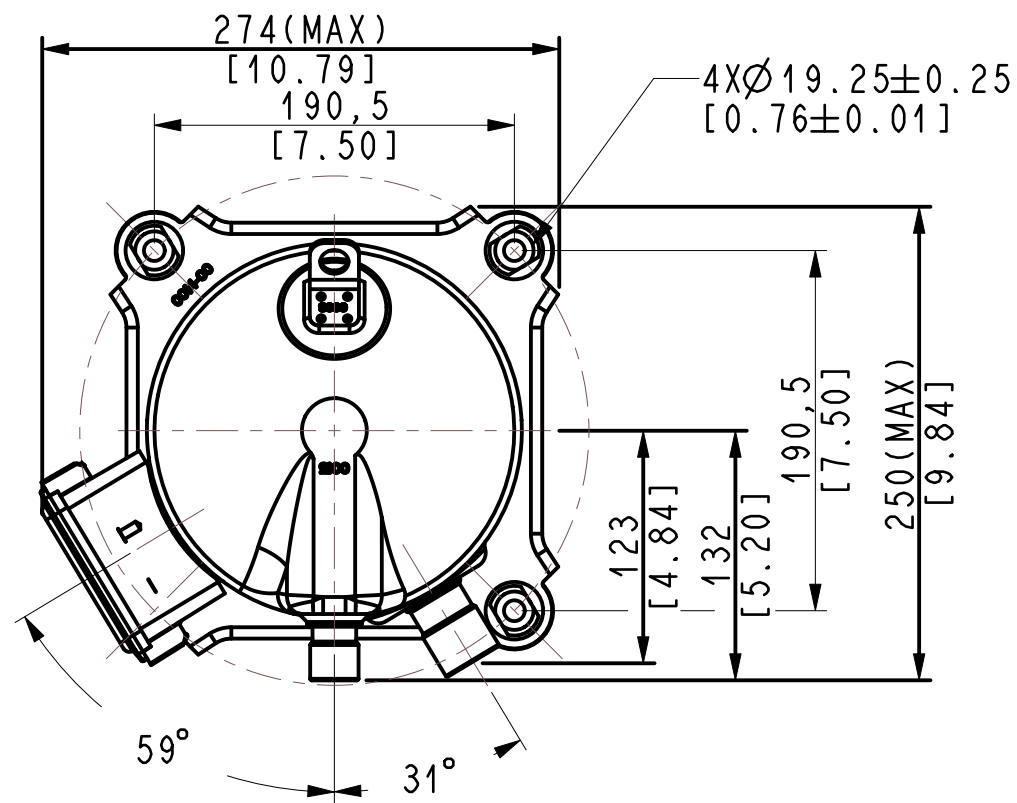
Notes: Capacity Calculation Based On SH=11.1K,SC=8.3K

7. Application Envelope

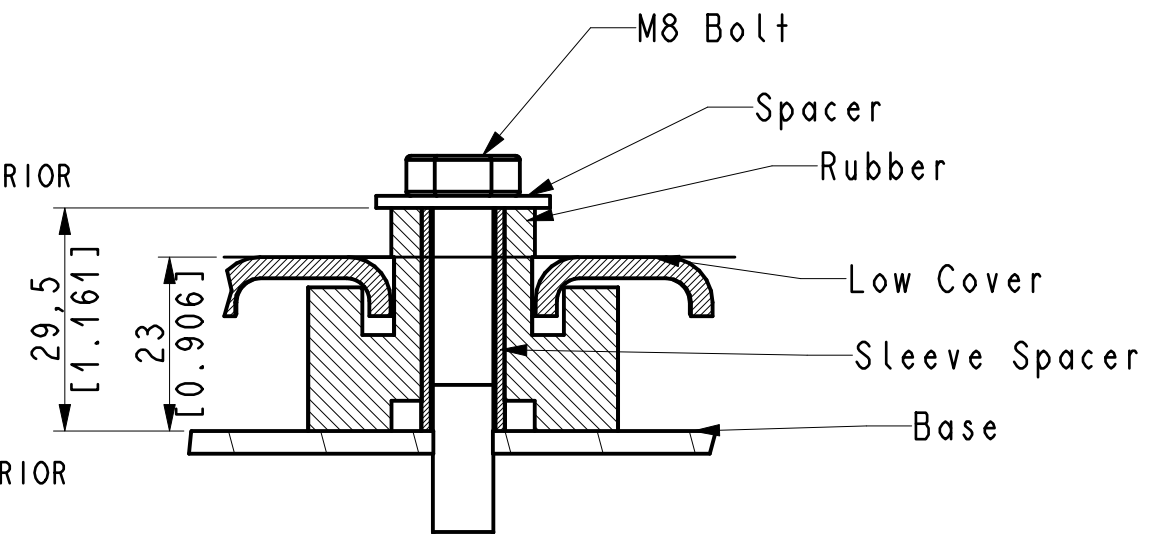
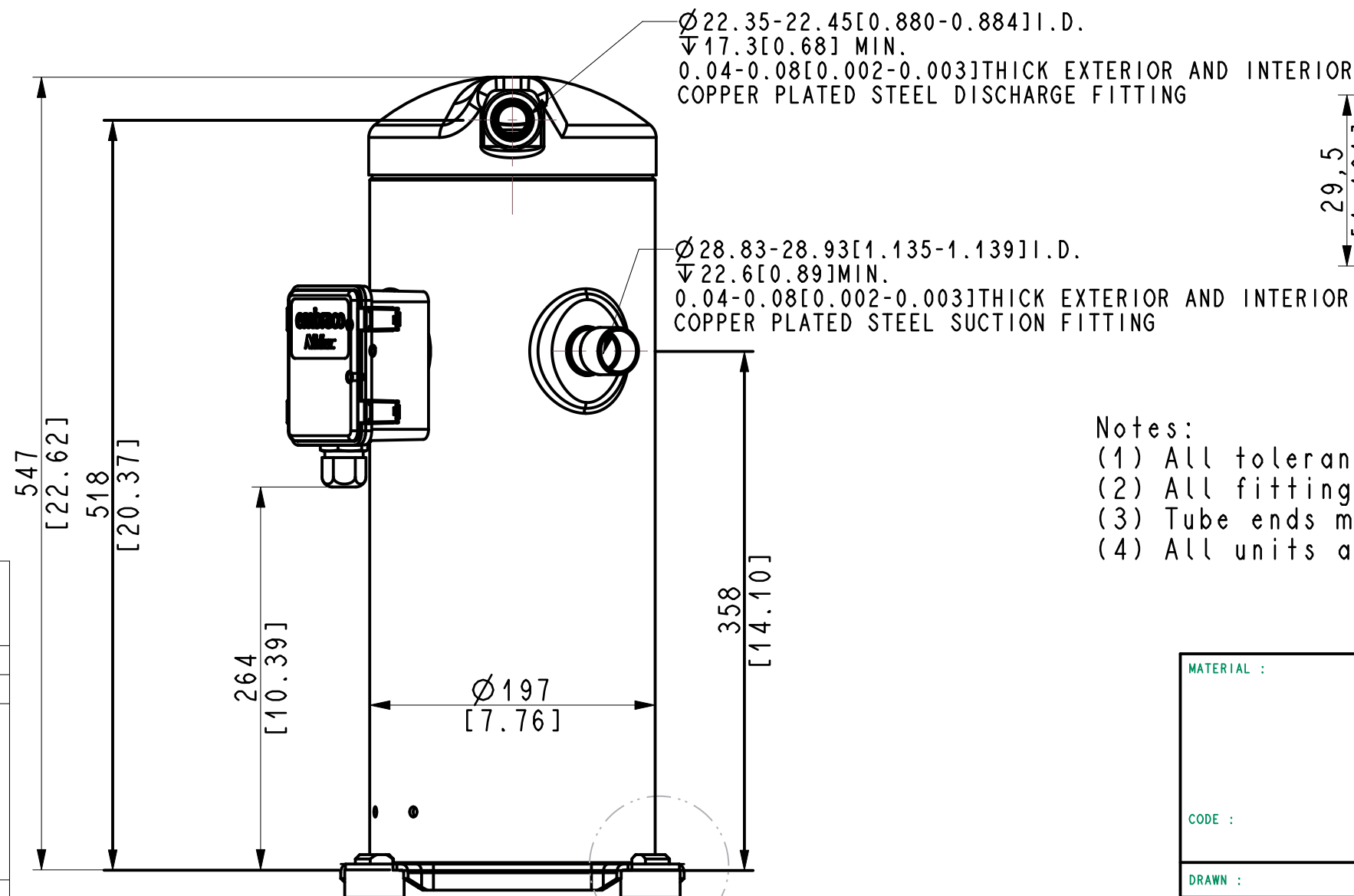


For compressor safety, shutdown compressor when DLT is above 125°C.
Restart compressor when DLT is below 85°C.

8. Drawing



TERMINAL BOX LAYOUT
SCALE 1:3



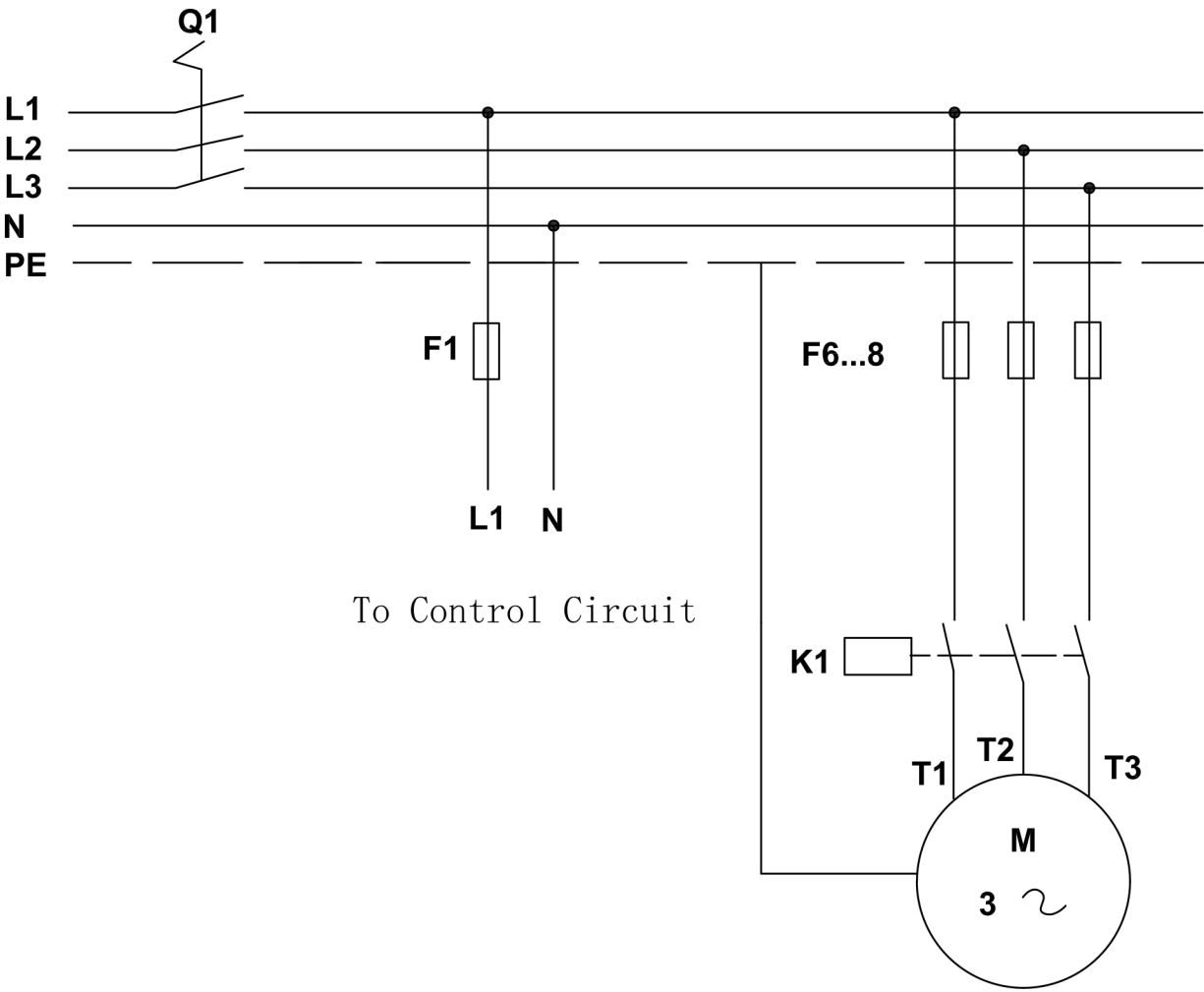
DETAIL FOOT

Notes:

- (1) All tolerances $\pm 1.5\text{mm}$ [0.06in] unless otherwise specified
- (2) All fittings: $\pm 3.0\text{mm}$ [0.12in]
- (3) Tube ends must be plugged
- (4) All units are in mm[inch]

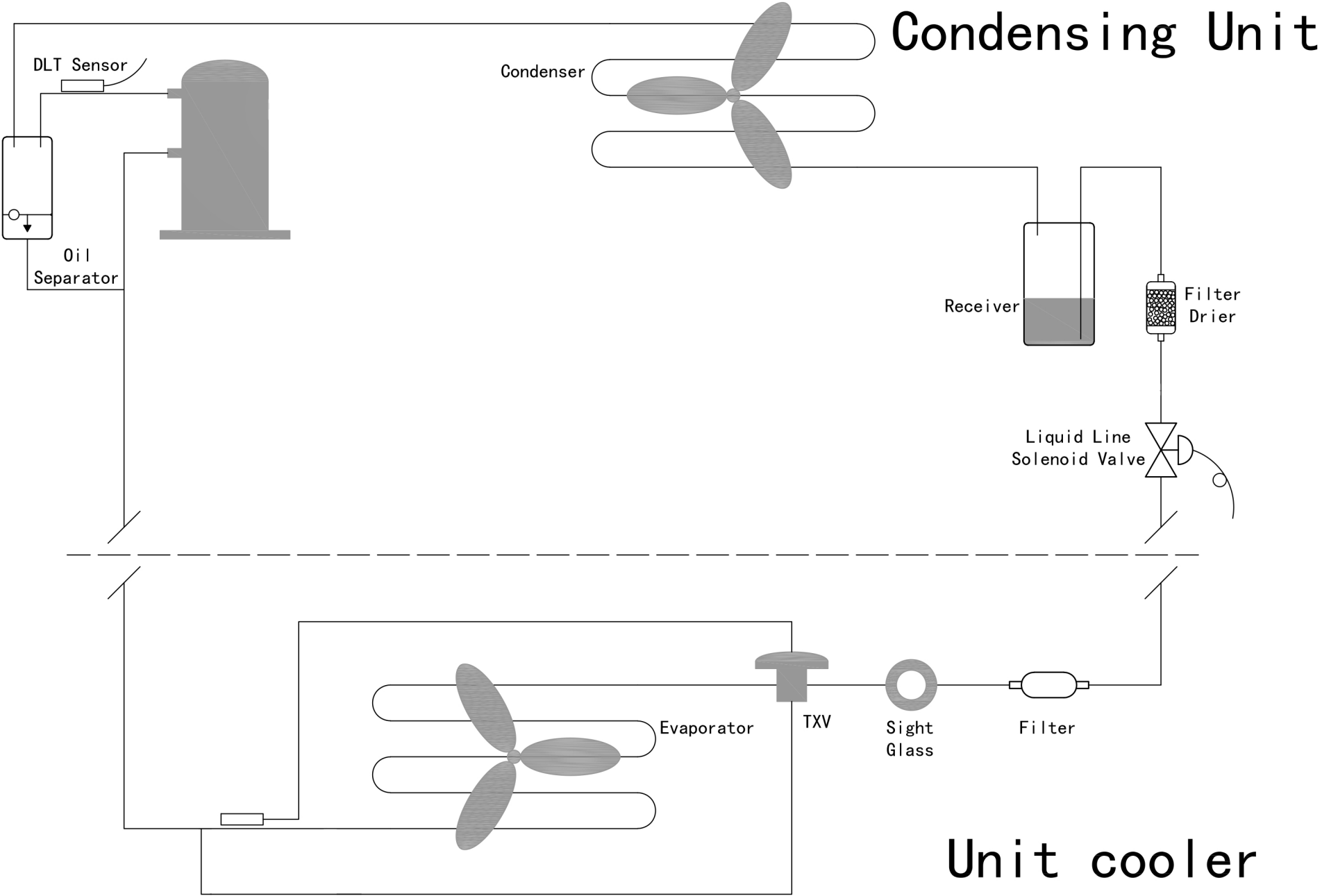
MATERIAL :			GEN. TOL. :	
			ANG. TOL. :	
			SCALE : 0,333	
			UNIT: mm	
CODE :		TITLE, DOCUMENT TYPE	REPLACE:	
			V0	
			No.	
DRAWN :		(EAF, EWF, EDF)	801-0003-00	
APP.:				
ECM :	DATE :	THIS MATERIAL IS CONFIDENTIAL AND PROPRIETARY TO EMBRACO, AND MAY NOT BE REPRODUCED, DISCLOSED, DISTRIBUTED OR USED WITHOUT PERMISSION	SHEET NUMBER: 1 OF 1	

SEE DETAIL FOOT



- Electrical Schematics
- L1/L2/L3/N/PE: 3 Phase Lines(line/neutral/ground)
- Q1: Manual Switch
- F1/F6...8: Fuse
- K1: Compressor Contactor
- M: Compressor Motor
- T1/T2/T3: Compressor Terminal

General System Schematic



Accessories List

Part N.O.	Specification	Part Name	Description	Qty	Type	Picture
019-0002-00	11.1*29.5	Sleeve Spacer		4	Standard	
200-0001-00		Rubber		4	Standard	
100-0006-00	M5x8,GB/T5789	Bolt		7	Standard	

Accessories List

034-0003-03		Sound Jacket		1	Optional	
028-0003-00	OD:197 90W 220V, L:618.6	Crank Heater		1	Optional	
017-0001-00	IP54	Terminal Box		1	Standard	
009-0025-00		Terminal Seal		1	Standard	

Accessories List

009-0023-00		Terminal Seal		1	Standard	
016-0003-00		T-Box		1	Standard	
017-0002-00	IP54	Terninal Cover		1	Standard	
031-0017-00	1-1/4"-12UNF-A	RotaLock Connector		1	Optional	

Accessories List

031-0018-00	1 3/4-12UNF 2A	RotaLock Connector		1	Optional	
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