

1. Specifications

Model	IRM5.0HPE7G-100	Power	5HP
Displacement(m ³ /h)	17.2	Refrigerant	R404A
Cooling Cap.(W) ^(a)	10447	Input Power(W) ^(a)	5394
Rated Load Amps(A) ^(a)	26.8	COP ^(a)	1.94
Max. Vibration(mm) ^(a)	<0.10	Sound Level (dBA) ^(a)	75
Test Power Source ^(a)	60Hz-220V	Rated Speed (RPM) ^(a)	3500
Max. Moisture (mg)	< 500	Max. Impurity (mg)	< 100
Oil Circulation (%) ^(a)	<1%	Weight (kg, With Oil)	30
Electrical Specification	Power Source	208V-230V 1~60Hz	
	Run Capacitor	100μF/500V	
	Min. Operation Voltage(V) ^(b)	187	
	Max. Operation Voltage(V)	253	
	Min. Starting Voltage(V) ^(c)	177	
	Lock Rotor Amps(A)	152.00	
	Max. Operation Current ^(d)	38.5 (A)	
	Motor Insulation Temp.(°C)	130	
Terminal Resistance (Ω) (± 10%) At 25 °C	T1(C)-T2(S)	1.3	
	T2(S)-T3(R)	1.67	
	T3(R)-T1(C)	0.37	
Lubrication	Oil Type	POE	
	Initial Charge(L)	1.4	
	Recharge(L)	1.25	
Electrical Safety	Insulation Voltage(V)	2500	
	Leakage Current(mA)	≤5	
	Insulation Resistance(M Ω)	>20	
	Ground Resistance(Ω)	<0.1	
Max. Operation Pressure	High Side(MPa)	3.2	
	Low Side(MPa)	2	

Notes:

- a) Test Condition: Based On Test Power Voltage, First Rated Condition;
- b) Test Condition: ET 10°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 10°C, CT 65°C, SH11.1K, 90% Min. Rated Voltage;

2. Configuration

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

3. Certifications

Certifications	Report N.O.
CB	CNCVC1566
CE	/
CCC	/
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.	-6.7
2	Condensing Temp.	48.9
3	Ambient Temp.	35.0
4	Super Heat	25
5	Sub Cooling	0

5. Compressor Protection Parts

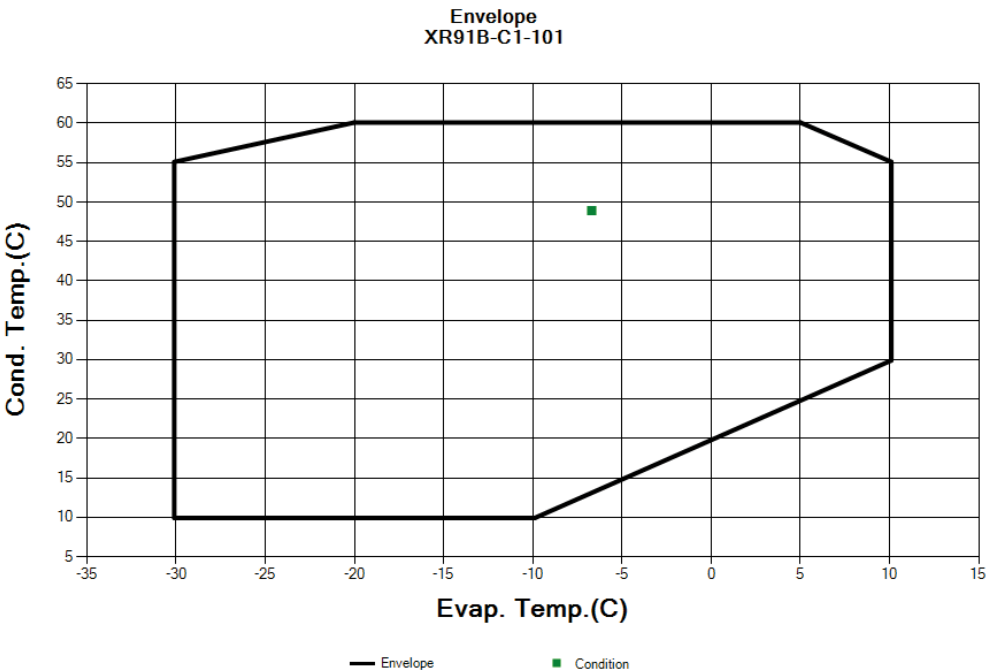
- a) Thermal Protection Inside:
- b) Internal Pressure Release Valve, Open Range (Pressure Difference Between Discharge And Suction) : 2.76~3.10Mpa

6. Performance Data-

kW	Temp. Cond. (°C)	Temp. Evap. (°C)								
		-30	-25	-20	-15	-10	-5	0	5	10
Cooling Cap.	60			4.17	5.25	6.54	8.07	9.91	12.10	
	55	3.01	3.86	4.88	6.10	7.54	9.25	11.27	13.69	16.59
	50	3.45	4.41	5.54	6.89	8.47	10.34	12.55	15.18	18.31
	45	3.87	4.92	6.16	7.63	9.35	11.38	13.77	16.60	19.96
	40	4.26	5.40	6.75	8.33	10.20	12.38	14.95	17.98	21.58
	35	4.62	5.85	7.30	9.01	11.01	13.36	16.10	19.35	23.19
	30	4.96	6.28	7.83	9.66	11.81	14.32	17.26	20.72	24.83
	25	5.27	6.68	8.35	10.30	12.59	15.28	18.43	22.14	
	20	5.57	7.07	8.84	10.93	13.38	16.26	19.63		
	15	5.85	7.44	9.33	11.57	14.19	17.27			
	10	6.12	7.81	9.83	12.21	15.02				
Input Power	60			5.90	6.17	6.43	6.68	6.91	7.13	
	55	4.83	5.09	5.35	5.61	5.85	6.08	6.31	6.51	6.70
	50	4.40	4.65	4.89	5.12	5.35	5.57	5.78	5.98	6.16
	45	4.04	4.26	4.48	4.70	4.91	5.12	5.32	5.51	5.69
	40	3.72	3.92	4.12	4.32	4.52	4.72	4.91	5.09	5.27
	35	3.42	3.60	3.78	3.97	4.16	4.35	4.53	4.71	4.88
	30	3.13	3.29	3.46	3.63	3.81	3.99	4.17	4.34	4.51
	25	2.83	2.98	3.13	3.29	3.46	3.63	3.80	3.97	
	20	2.51	2.64	2.78	2.93	3.08	3.25	3.41		
	15	2.15	2.26	2.39	2.52	2.67	2.83			
	10	1.72	1.82	1.94	2.07	2.21				

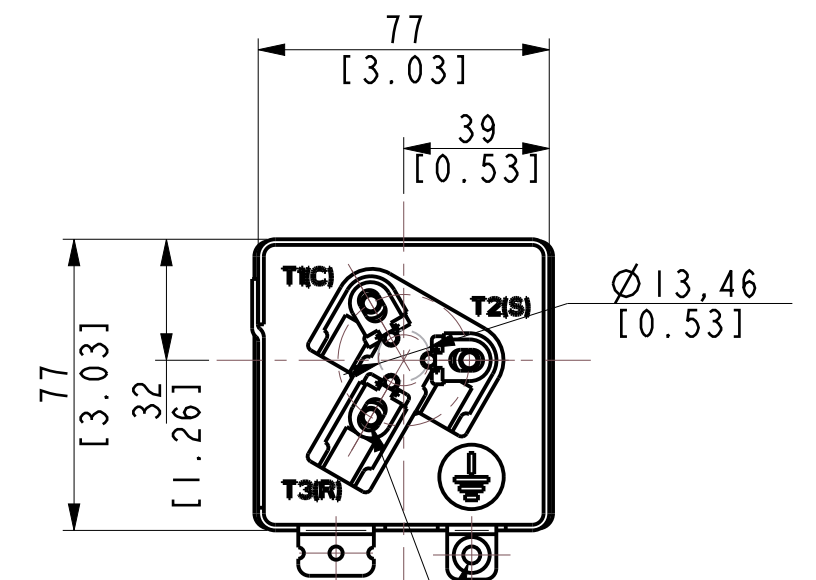
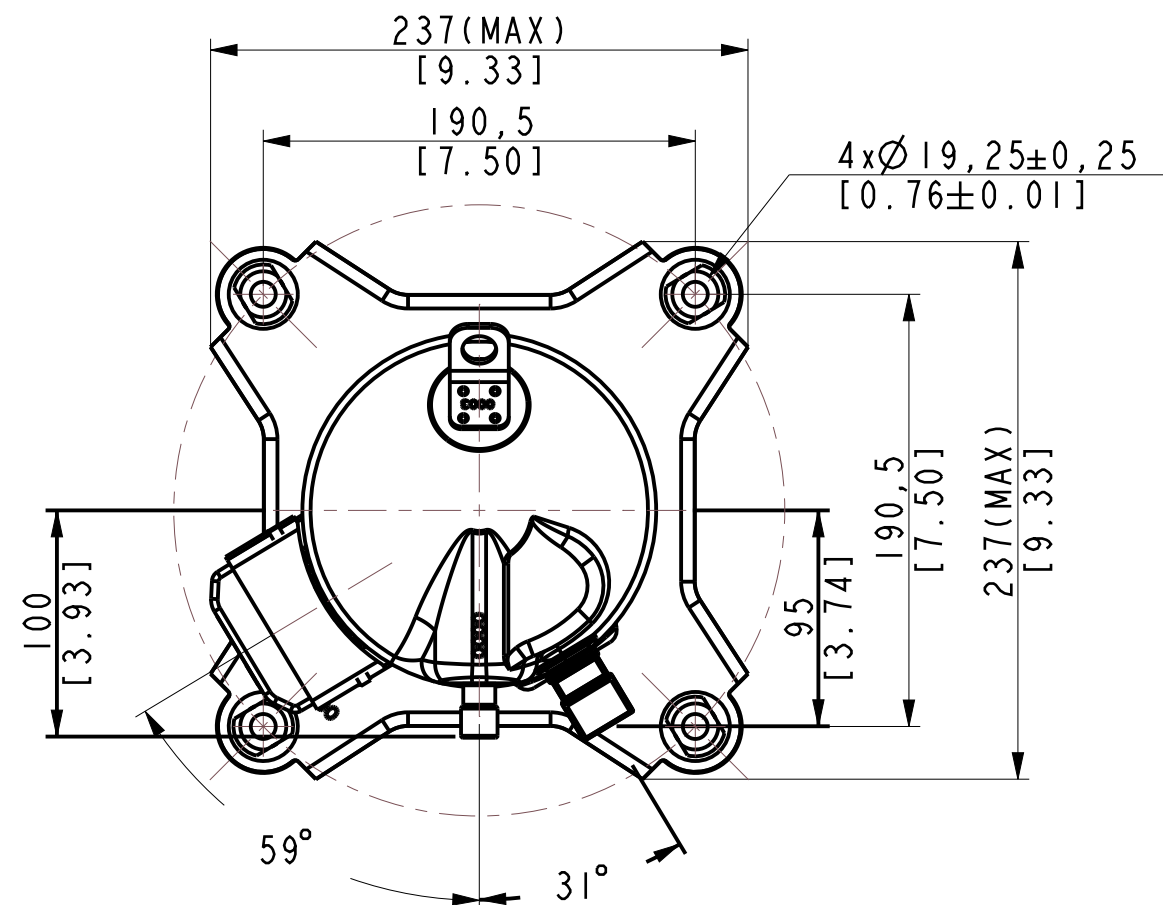
Notes: Capacity Calculation Based On SH=11.1K And Zero Sub Cooling

7. Application Envelope

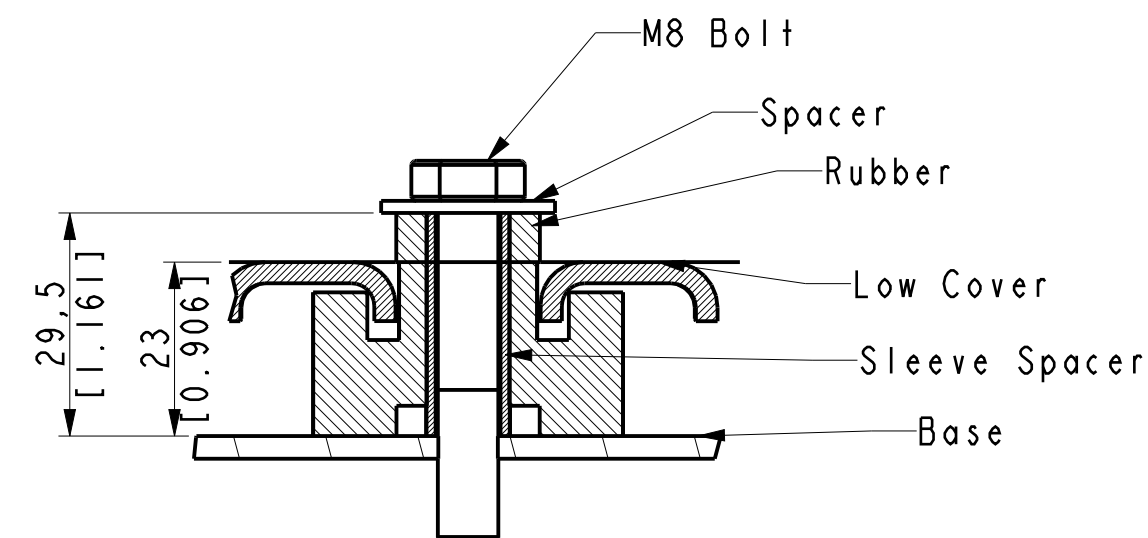


For Compressor Safty, Shutdown Compressor When DLT Above 125°C ;ReStart Compressor When DLT Below 85°C

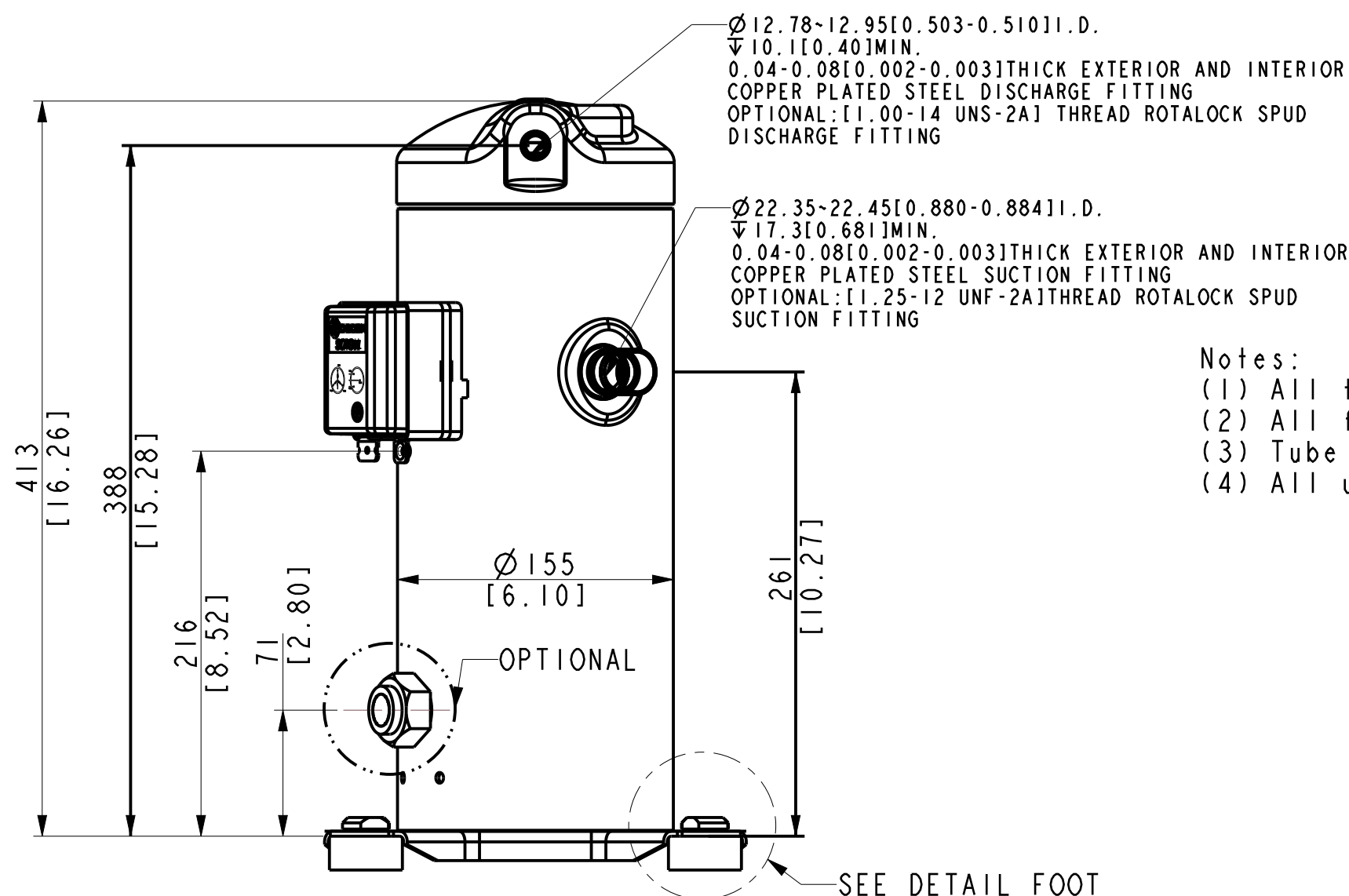
8. Drawing



TERMINAL BOX LAYOUT
SCALE 1:2
4-M5X10
TORQUE: 2-3N.m



DETAIL FOOT



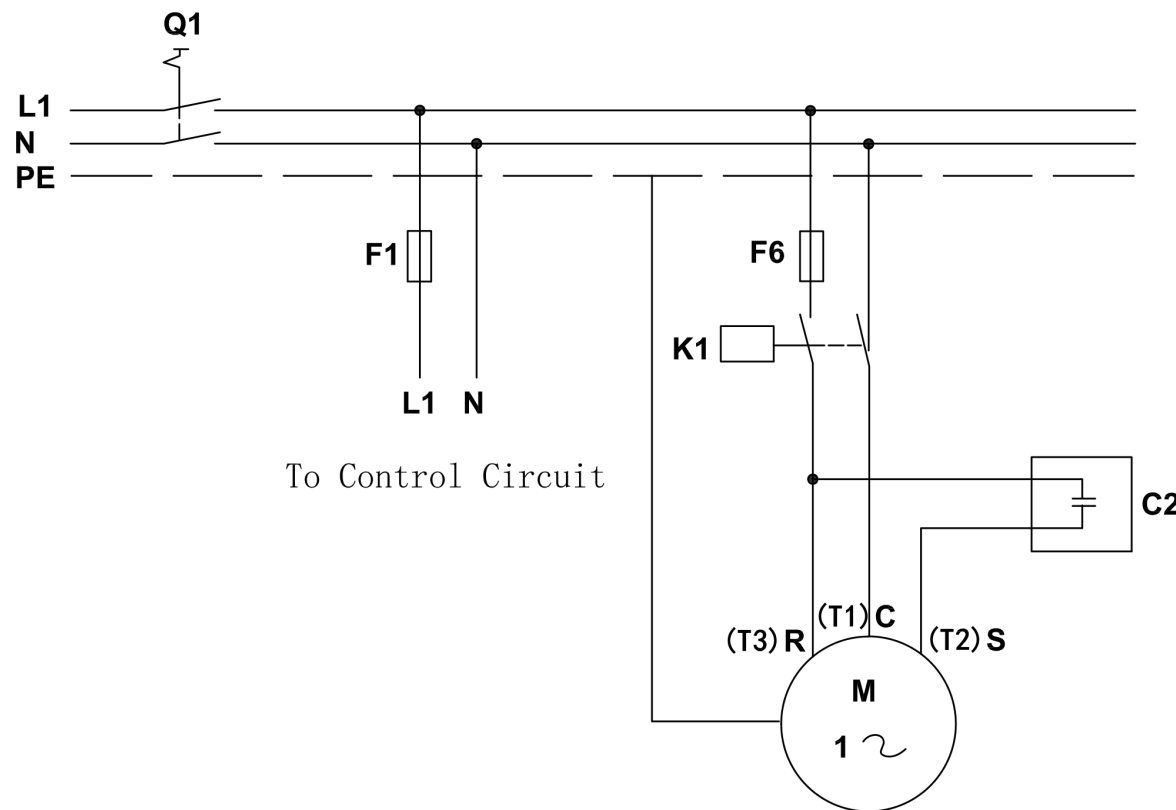
Notes:

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

TECHNICAL DATASHEET
IRM5.0HPE3G-100

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Electrical Schematics

L1/N/PE: Single Phase Lines(line/neutral/ground)

Q1: Manual Switch

F1/F6: Fuse

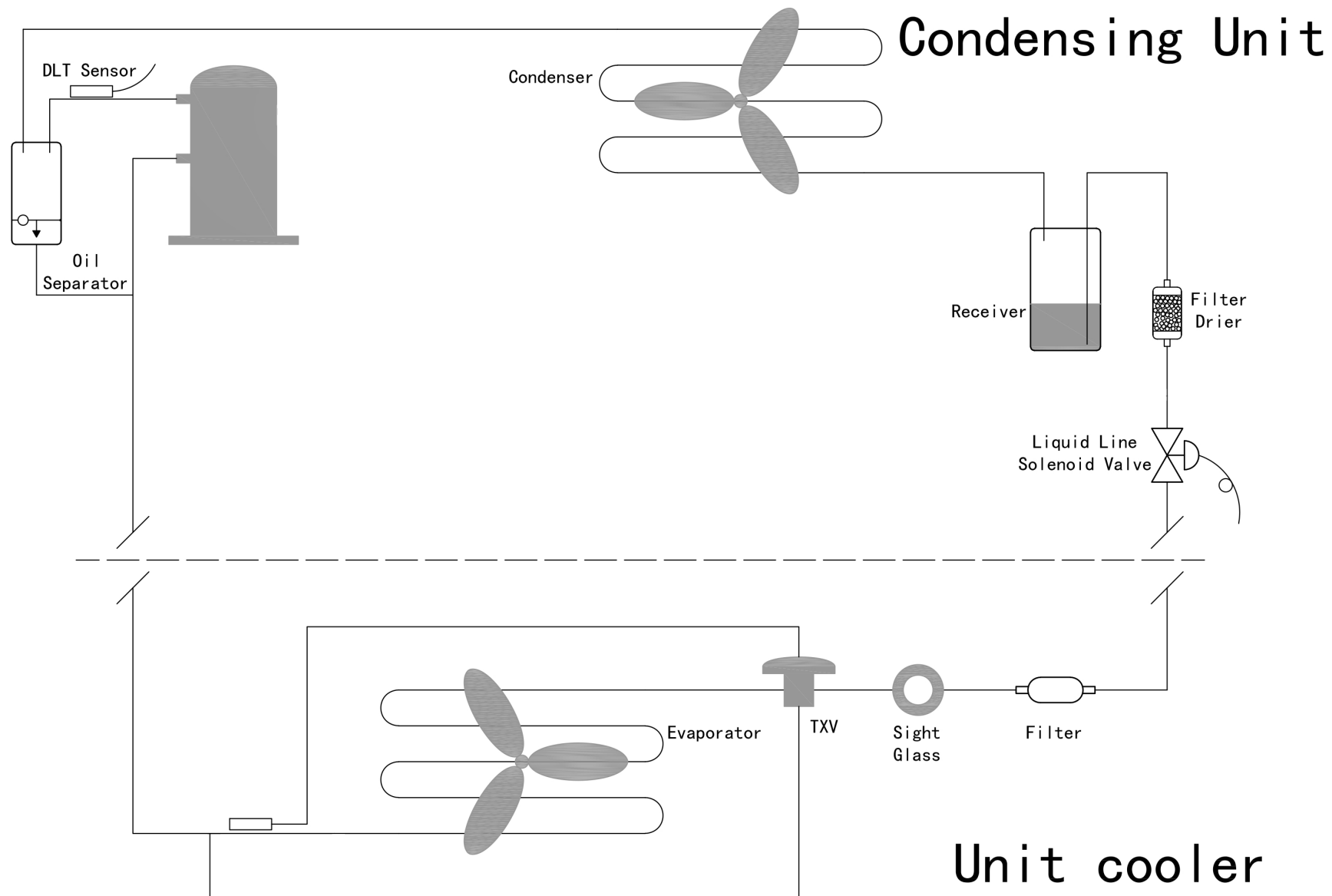
K1: Compressor Contactor

C2: Run Capacitor

M: Compressor Motor

R/C/S: Compressor Terminal

General System Schematic



Part N.O.	Specification	Qty	Part Name	Picture	Type	Description
020-0001-00		Terminal Seal		1	Standard	
019-0002-00	11.1*29.5	Sleeve Spacer		4	Standard	
200-0001-00		Rubber		4	Standard	