

Model

SC10CL

Sales code:

104L1503

Compressor Data

Refrigerant(s)	R404A / R507
Refr. charge - tech. limit	1300g / 45.86oz
Weight	13.10 kg / 28.88lbs
Displacement	10.29 cm3 / 0.63cu.in
Compressors on pallet	80



General – Configurations With SC10CL

-	Conf. 1
Motor configuration	CSIR
Power supply (nominal)	115 V/60 Hz
Number of phases	1
Voltage range	103-127 V
Approvals	UL
Starting torque	HST
Refrigerant	R404A
Application	LBP+MBP
Hot gas defrost	OK
Long interval pull down	OK

Application Notes

- Provision for PE Grounding is located at the PE Stamp on the compressor

Model
SC10CL

Sales code:
104L1503

Compressor Design

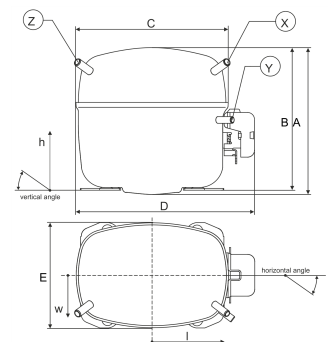
Oil type	POE	Winding resistance main	1.000 Ohm
Oil viscosity	32cSt	Winding resistance aux	4.20 Ohm
Oil quantity	499 / 16.87fl.oz	Max. winding temp.	125 °C
Free gas volume comp.	1,510 cm ³ / 51.06fl.oz	Max. discharge temp.	130°C / 266°F
Motor protection	internal		

Compressor Dimensions

Housing

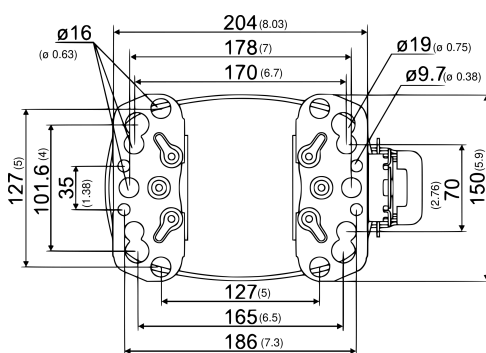
A Height	209mm / 8.23in
B Height	203mm / 7.99in
C Length shell	218mm / 8.58in
D Length w. cover	255mm / 10.04in
E Width	151mm / 5.94in

[Find 3D Model here](#)



Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.41–6.59 / 0.25–0.26in	øi 6.41–6.59 / 0.25–0.26in
Material	CU	CU	CU
Horizontal angle ±2°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°
Position l/h/w [mm]	107/183/55 / 4.21/7.20/2.17in	115/100/63 / 4.53/3.94/2.48in	-107/183/55 / -4.21/7.20/2.17in
Straight tube l. [mm]	12 / 0.47in	12 / 0.47in	12 / 0.47in

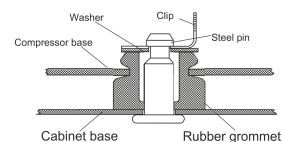
Mounting Accessories



Bolt joint



Snap-on



Dimensions in mm [in]

	one comp.	multi pack
Bolt joint M6 ø16mm	118-1917	118-1918
Bolt joint ø1/4" ø16mm	118-1946	-
Bolt joint ø1/4" ø19mm	118-1949	-
Snap-on ø7,3 ø16mm	118-1947	118-1919

Model
SC10CL

Configuration 1

Sales code:
104L1503

Configuration

Motor configuration	CSIR
Power supply (nominal)	115 V/60 Hz 1~
Refrigerant	R404A
Application	LBP+MBP
Voltage range	103-127 V
Starting torque	HST
Approvals	UL
Starting device type	relay
Run capacitor	-/-
Start capacitor	240 µF
LRA (locked rotor amps / 4s/ U(N))	39.7 A
RLA (rated load amps / 1s/ U(N))	7.6 A
Cut in current (U(N))	39.7 A

Ambient/ machine room temperatures minimum /maximum

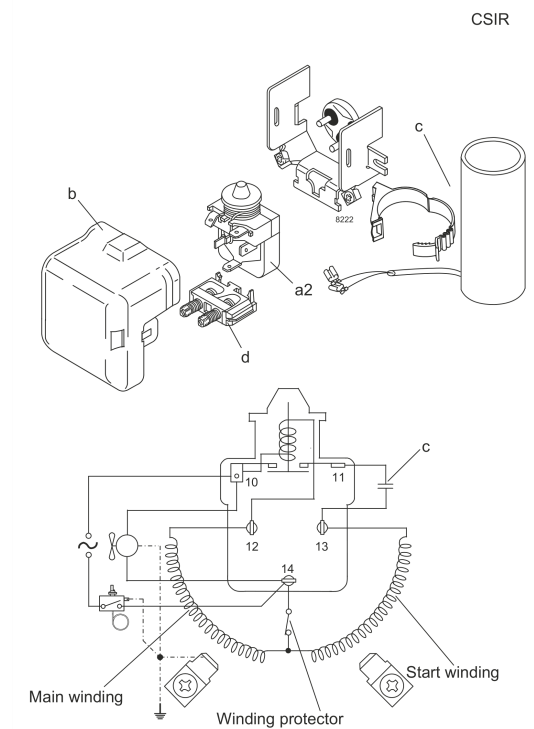
Ambient temperature range: 10 - 43°C / 50 - 109°F

Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



[View full size](#)

Components

a2 relay 117U6020

c start capacitor (240µF) 117U5023

d cord relief 103N1004

b plastic cover 103N2008

Alternative components

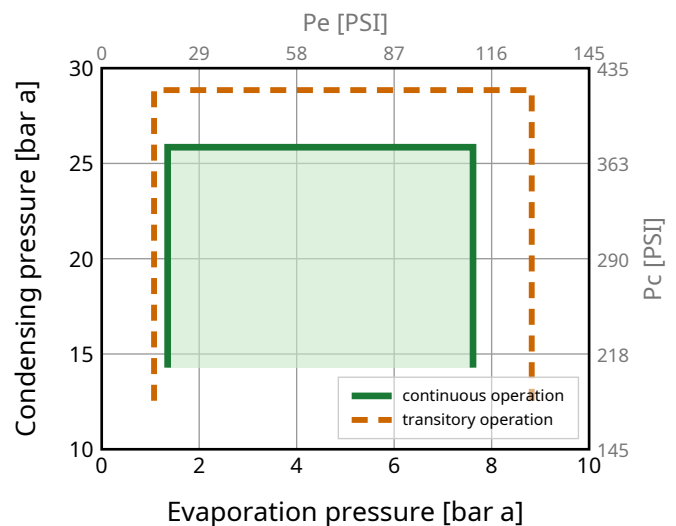
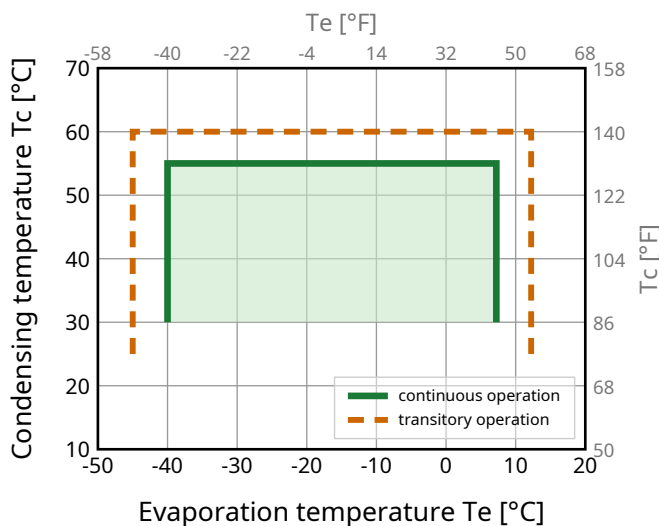
a2 relay 117U6020

c start capacitor (240µF, 15kOhm) 117U5034

d cord relief 103N1004

b plastic cover 103N2008

Operation Pressure Range



Model
SC10CL

Configuration 1

Sales code:
104L1503

Standard Conditions

R404A, 115 V/60 Hz, CSIR, fan 3m/s

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	m	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-23.3 -10	54.4 129.9	32.2 90	32.2 90	418	1426	359	0.99	3.37	423	5.59	9.71	ASHRAE LBP
-25 -13	55 131	32 89.6	55 131	270	920	232	0.68	2.32	396	5.44	8.41	CECOMAF LBP
-35 -31	40 104	20 68	40 104	214	729	184	0.74	2.52	289	4.84	5.79	EN12900 LBP
-6.7 20	54.4 129.9	35 95	46.1 115	917	3130	789	1.42	4.85	645	7.19	25.20	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	664	2265	571	1.10	3.76	602	6.87	21.22	CECOMAF MBP
-10 14	45 113	20 68	45 113	871	2973	749	1.48	5.04	590	6.59	26.20	EN12900 MBP

Performance Tables

R404A, 115 V/60 Hz, CSIR, fan 3m/s

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

pe		Cooling capacity			COP	EER	P	I	m
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-40	-40	75	257	65	0.39	1.33	193	4.45	2.00
-30	-22	283	966	243	0.81	2.77	348	5.08	7.58
-20	-4	559	1907	481	1.17	4.01	476	5.79	15.13
-10	14	924	3154	795	1.57	5.34	590	6.59	25.41
0	32	1401	4782	1205	1.99	6.79	705	7.46	39.35
7.2	45	1826	6230	1570	2.30	7.84	795	8.15	52.32

pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F

-40	-40	26	90	23	0.18	0.63	142	4.19	0.81
-30	-22	175	598	151	0.55	1.87	320	5.00	5.44
-20	-4	381	1299	327	0.81	2.77	468	5.89	11.96
-10	14	664	2265	571	1.10	3.76	602	6.87	21.22
0	32	1047	3571	900	1.43	4.87	734	7.93	34.29
7.2	45	1396	4763	1201	1.67	5.70	836	8.74	46.83