

Model

Designation	SC10CL	115V/60Hz 1~	Sales code:	104L1509
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R404A, R507
Oil viscosity	32cSt	Displacement	10,29cm ³ / 0,63cu.in
Oil quantity	499cm ³ / 16,9fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	1300g / 45,9oz		
Free gas volume comp.	1510cm ³ / 51,1fl.oz		
Weight	13,1kg / 28,9lbs		
Motor protection	1# internal		
Winding resistance main	1Ω (at 25°C)		
Winding resistance aux	4,2Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



General - Configurations with SC10CL

Conf. 1

Motor configuration	CSIR
Power supply (nominal)	115V/60Hz
Number of phases	1
Voltage range	103-127V
Approvals	UL
Starting torque	HST
Note	Electrical equipment is included and pre-assembled to compressor.

Applications with SC10CL

Conf. 1

Refrigerant	R404A
Application	LBP+MBP
System cooling	fan 3m/s
Hot gas defrost	OK
Long interval pull down	OK

Electrical data - Configurations with SC10CL

Conf. 1

Starting device type	relay
Run capacitor	-/-
Start capacitor	240μF
LRA (locked rotor amps / 4s/ U(N))	39,7A
RLA (rated load amps / 1s/ U(N))	7,6A
Cut in current (U(N))	39,7A

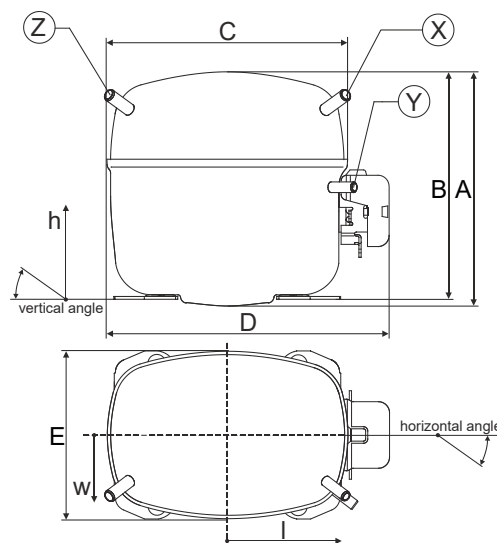
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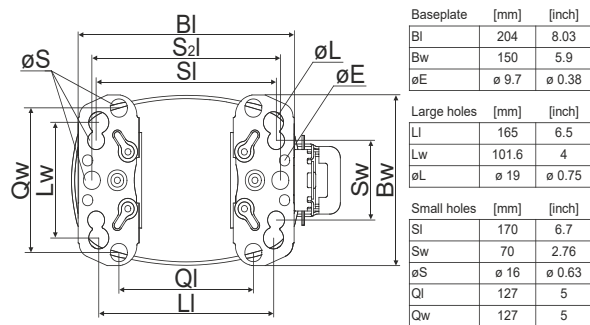
Compressor dimensions

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

Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8,11-8,29	øi 6,41-6,59	øi 6,41-6,59
(i:inside, o:outside) [in]	øi 0,32-0,33	øi 0,25-0,26	øi 0,25-0,26
Material	copper	copper	copper
Horizontal angle	±2° 37°	37°	143°
Vertical angle	±2° 30°	0°	150°
Position l/h/w [mm]	107/183/55	115/100/63	-107/183/55
	[in] 4,2/7,2/2,2	4,5/3,9/2,5	-4,2/7,2/2,2
Straight tube l.	[mm] 12	12	12
	[in] 0,5	0,5	0,5

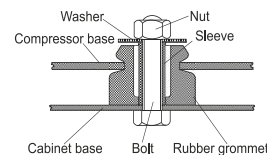


Compressor fixation

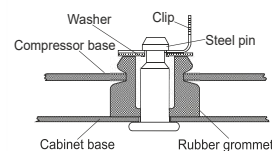


Baseplate	[mm]	[inch]
BI	204	8.03
Bw	150	5.9
øE	ø 9.7	ø 0.38
Large holes	[mm]	[inch]
LI	165	6.5
Lw	101.6	4
øL	ø 19	ø 0.75
Small holes	[mm]	[inch]
SI	170	6.7
Sw	70	2.76
øS	ø 16	ø 0.63
QI	127	5
Qw	127	5

Bolt joint



Snap-on



Mounting accessories

	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

Application notes

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

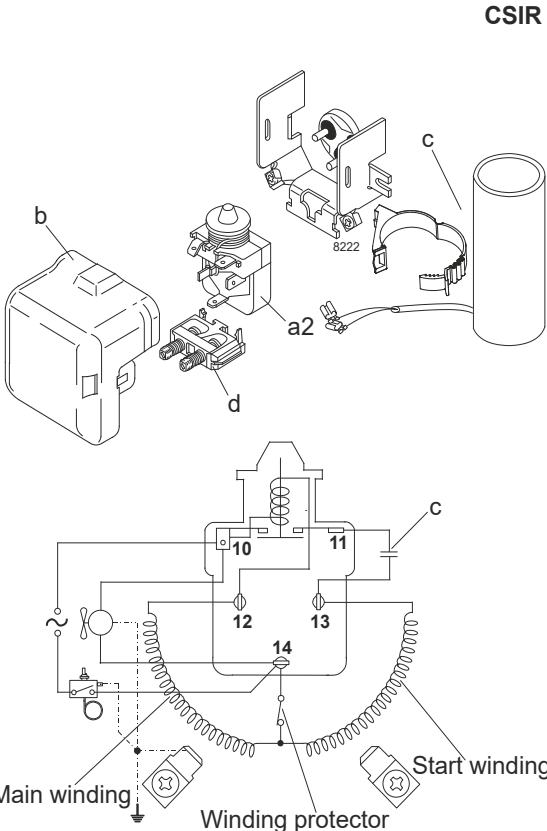
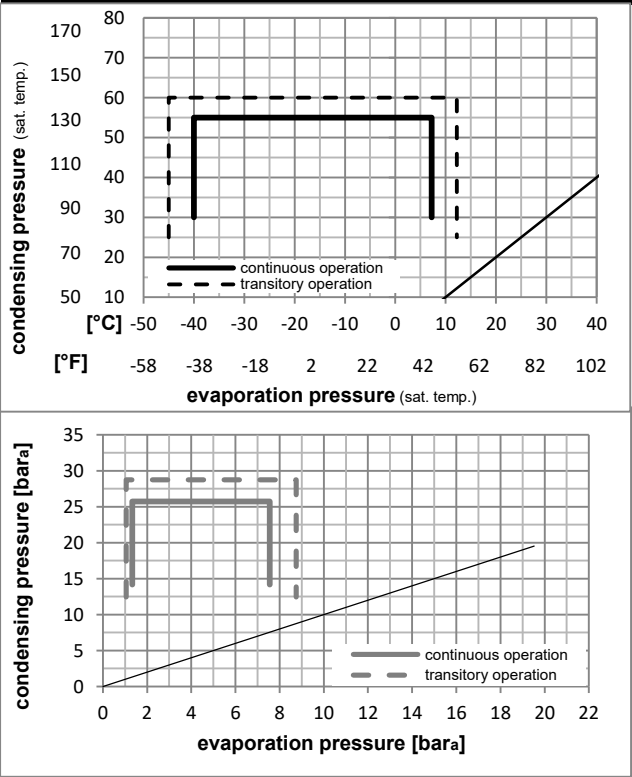
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Configuration	Electrical accessories / wiring diagram			
Motor configuration	CSIR			CSIR
Power supply (nominal)	115V/60Hz 1~			
Refrigerant	R404A			
Application	LBP+MBP			
Voltage range	103-127V			
Starting torque	HST			
Approvals	UL			

Ambient/ machine room temperatures minimum /maximum

Ambient temperature range:	10 - 43°C / 50 - 110°F
Machine room temperature range:	10 - 48°C / 50 - 119°F
Compressor cooling:	fan 3m/s

Operation pressure range



Components (incl. and pre. assemb.)

a2	relay	117U6020
c	start capacitor (240µF)	117U5023
d	cord relief	103N1004
b	plastic cover	103N2008

Alternative comp.

a2	relay	117U6020
c	start capacitor (240µF, 15kOhm)	117U5034
d	cord relief	103N1004
b	plastic cover	103N2008

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Optimization + standard conditions

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

Evaporating pressure (saturation temperature)					Condensing pressure (saturation temperature)						Power consumption			
Return gas temp.					Liquid temp.						Current consumption			
Cooling capacity					COP		EER		Ref. mass flow					
pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	m		
[°C]	[°F]									[W]	[A]	[kg/h]		
-23	54	32	32	416,4	1422	358,3	0,99	3,37	0,85	422,3	5,58	9,70	ASHRAE LBP	
-10	130	90	90											
-25	55	32	55	269,7	921	232,1	0,68	2,32	0,59	396,5	5,44	8,43	cecomaf LBP	
-13	131	90	131											
-35	40	20	40	213,7	730	183,9	0,74	2,53	0,64	288,9	4,84	5,81	EN12900 LBP	
-31	104	68	104											
-7	54	35	46	918,3	3136	790,3	1,42	4,86	1,22	645,5	7,19	25,27	ASHRAE MBP	
20	130	95	115											
-10	55	32	55	663,9	2267	571,3	1,10	3,77	0,95	601,8	6,87	21,25	cecomaf MBP	
14	131	90	131											
-10	45	20	45	871,0	2975	749,6	1,48	5,04	1,27	590,3	6,59	26,24	EN12900 MBP	
14	113	68	113											

Performance tables

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

	pe		Cooling capacity			COP	EER		P1	I	m
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]
[°C / °F]	-34	-30	183,6	627	158,0	0,65	2,21	0,56	283,6	4,79	4,91
cond. pressure	-34	-30	183,6	627	158,0	0,65	2,21	0,56	283,6	4,79	4,91
pc= 45/113	-23	-10	458,0	1564	394,2	1,05	3,59	0,90	435,6	5,54	12,38
return gas temp.	-15	5	729,1	2490	627,4	1,37	4,66	1,17	534,0	6,18	19,92
RGT= 32/90	-4	25	1201,2	4102	1033,8	1,82	6,22	1,57	659,2	7,11	33,47
liquid temp	0	32	1401,4	4786	1206,0	1,99	6,79	1,71	704,6	7,46	39,40
Tliq= 45/113	7,2	45	1827,4	6241	1572,7	2,30	7,85	1,98	794,9	8,15	52,41
[°C / °F]	-34	-30	103,5	353	89,1	0,42	1,44	0,36	245,1	4,63	3,20
cond. pressure	-34	-30	103,5	353	89,1	0,42	1,44	0,36	245,1	4,63	3,20
pc= 55/131	-23	-10	304,7	1041	262,2	0,72	2,47	0,62	420,9	5,59	9,54
return gas temp	-15	5	511,2	1746	439,9	0,95	3,26	0,82	536,0	6,37	16,21
RGT= 32/90	-4	25	884,5	3021	761,2	1,30	4,43	1,12	682,0	7,50	28,71
liquid temp	0	32	1046,6	3574	900,7	1,43	4,87	1,23	734,1	7,93	34,32
Tliq= 55/131	7,2	45	1397,2	4772	1202,5	1,67	5,70	1,44	836,5	8,74	46,90