

Customer specific data sheet

Model

Designation	SC18CL	220-240V/50Hz 1~	Sales code:	104L2150
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R404A, R507
Oil viscosity	32cST	Displacement	17,69cm³ / 1,08cu.in
Oil quantity	550cm³ / 18,6fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	1300g / 45,9oz		
Free gas volume comp.	1460cm³ / 49,4fl.oz		
Weight	13,8kg / 30,4lbs		
Motor protection	1# internal		
Winding resistance main	3,7Ω (at 25°C)		
Winding resistance aux	14Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	135°C / 275°F		



General - Configurations with SC18CL

	Conf. 1
Motorconfiguration	CSCR
Power supply (nominal)	220-240V/50Hz
Number of phases	1
Voltage range	198-254V
Approvals	CCC, EAC
Starting torque	HST
Note	- / -

Applications with SC18CL

	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 SC18CL

	Conf. 1
Starting device type	relay
Run capacitor	10μF
Start capacitor	80μF
LRA (locked rotor amps / 4s)	20,43A
RLA (rated load amps / 1s)	4,2A
Cut in current	20,43A

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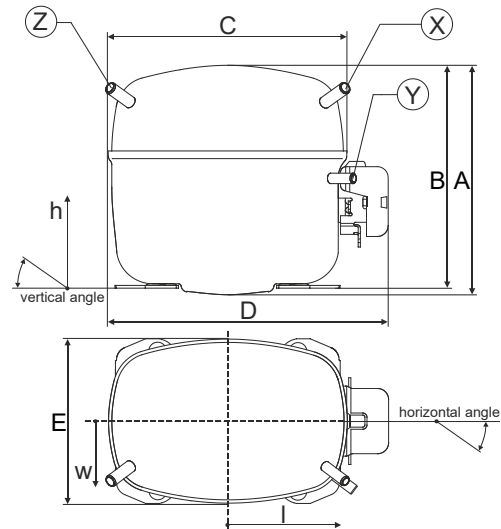
Sales code:

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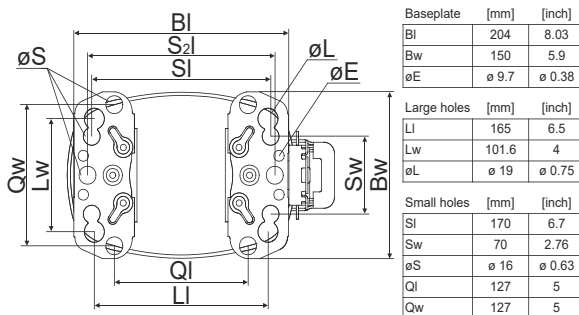
Compressor dimensions

Housing	A Height	219mm / 8,62in
	B Height	213mm / 8,39in
	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 10,11-10,29	øi 6,11-6,29	øi 6,11-6,29
(i:inside, o:outside) [in]	øi 0,4-0,41	øi 0,24-0,25	øi 0,24-0,25
Material	copper	copper	copper
Horizontal angle ±2°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°
Position l/h/w [mm]	107/193/55	115/110/63	-107/193/55
[in]	4,2/7,6/2,2	4,5/4,3/2,5	-4,2/7,6/2,2
Straight tube l. [mm]	12	12	12
[in]	0,5	0,5	0,5

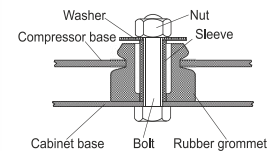


Compressor fixation

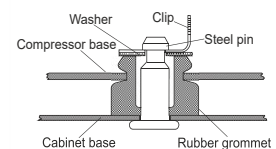


Baseplate	[mm]	[inch]
BI	204	8.03
Bw	150	5.9
øE	9.7	0.38
Large holes	[mm]	[inch]
LI	165	6.5
Lw	101.6	4
øL	19	0.75
Small holes	[mm]	[inch]
SI	170	6.7
Sw	70	2.76
øS	16	0.63
QI	127	5
Qw	127	5

Bolt joint



Snap-on



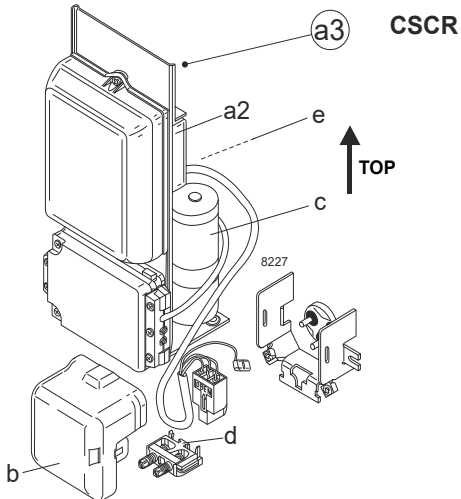
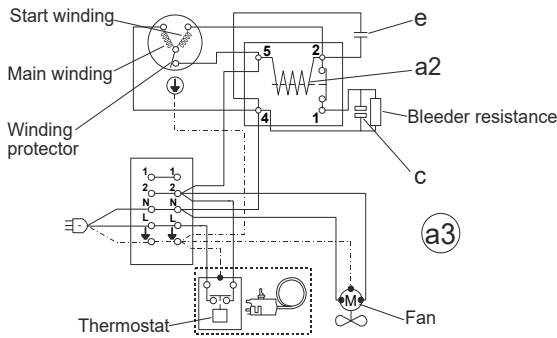
Mounting accessories

	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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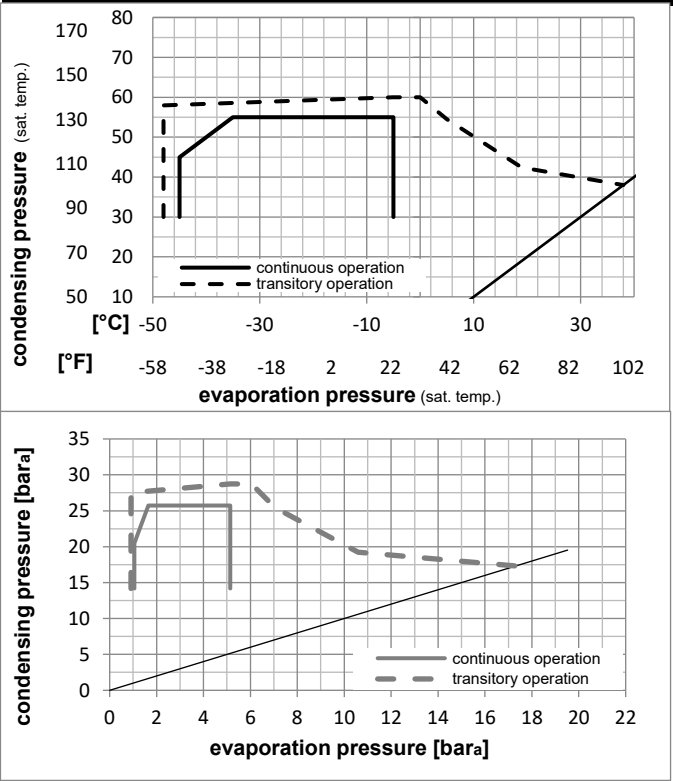
Configuration		Electrical accessories / wiring diagram		
Motorconfiguration	CSCR			
Power supply (nominal)	220-240V/50Hz 1~			
Refrigerant	R404A			
Application	LBP+MBP			
Voltage range	198-254V			
Starting torque	HST			
Approvals	CCC EAC			

Ambient/ machine room temperatures minimum /maximum

Ambient temperature range:	10 - 38°C / 50 - 101°F
Machine room temperature range:	10 - 43°C / 50 - 110°F
Compressor cooling:	fan 3m/s

Operation Limits

Operation pressure range



Components

a3	SC starter kit (550mm)	117-7027
b	plastic cover	103N2009
d	cord relief	103N1004

Alternative components

a3	SC starter kit (1000mm)	117-7040
a3	SC starter kit (650mm)	117-7046
c	start capacitor (80µF)	117U5373
e	run capacitor (10µF, 6.3mm)	117-7112

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Optimization + standard conditions

R404A, 220V/50Hz, CSCR, fan 3m/s, CCC, EAC

Evaporating pressure (saturation temperature)					Condensing pressure (saturation temperature)						Power consumption			
											Current consumption			
					Return gas temp.									
					Liquid temp.						Ref. mass flow			
					Cooling capacity									
					COP						EER			
					P1						I			
					m									
					[W]						[A]			
					[kg/h]									
					ASHRAE LBP									
[°C]	-23	54	32	32	800,9	2735	689,3	1,21	4,14	1,04	660,0	3,78	18,66	
[°F]	-10	130	90	90										

[°C]	-25	55	32	55	538,7	1840	463,6	0,86	2,92	0,74	629,0	3,65	16,83	cecomaf LBP
[°F]	-13	131	90	131										

[°C]	-35	40	20	40	436,2	1490	375,4	0,97	3,30	0,83	451,0	3,01	11,85	EN12900 LBP
[°F]	-31	104	68	104										

[°C]	-23	49	4,4	49	609,4	2081	524,5	0,93	3,19	0,80	652,4	3,75	21,58	ARI540 LBP
[°F]	-10	120	40	120										

[°C]	-23	41	32	32	949,2	3242	816,9	1,51	5,17	1,30	627,4	3,66	22,12	AHAM LBP
[°F]	-10	105	90	90										

[°C]	-35	45	32	45	394,5	1347	339,6	0,87	2,96	0,75	455,2	3,02	10,55	opt
[°F]	-31	113	90	113										

Performance tables

R404A, 220V/50Hz, CSCR, fan 3m/s, CCC, EAC

	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]	[W]	[A]	[kg/h]	[kg/h]
[°C / °F]	-45	-49	166,7	569	143,5	0,57	1,94	0,49	293,6	2,61	4,43				
cond. pressure	-35	-31	394,5	1347	339,6	0,87	2,96	0,75	455,2	3,02	10,55				
pc= 45/113	-30	-22	541,8	1850	466,3	1,01	3,47	0,87	534,0	3,29	14,54				
return gas temp.	-25	-13	715,3	2443	615,6	1,16	3,97	1,00	614,8	3,60	19,30				
RGT= 32/90	-20	-4	918,3	3136	790,3	1,31	4,48	1,13	700,1	3,96	24,92				
liquid temp	-15	5	1153,9	3941	993,0	1,46	4,97	1,25	792,3	4,36	31,52				
Tliq= 45/113	-5	23	1734,8	5925	1493,0	1,72	5,88	1,48	1007,6	5,29	48,23				
[°C / °F]	-45	-49	83,9	286	72,2	0,33	1,14	0,29	252,2	2,47	2,58				
cond. pressure	-35	-31	275,1	940	236,8	0,62	2,11	0,53	444,8	2,97	8,51				
pc= 55/131	-30	-22	396,3	1353	341,1	0,74	2,52	0,64	536,7	3,29	12,32				
return gas temp	-25	-13	538,7	1840	463,6	0,86	2,92	0,74	629,0	3,65	16,83				
RGT= 32/90	-20	-4	705,3	2409	606,9	0,97	3,33	0,84	724,2	4,05	22,19				
liquid temp	-15	5	899,2	3071	773,9	1,09	3,72	0,94	824,7	4,50	28,52				
Tliq= 55/131	-5	23	1381,5	4718	1188,9	1,31	4,49	1,13	1051,7	5,52	44,72				