

Single Pack SC15G 115V 60Hz CSIR

Single pack code number: **195B4164**

Position	Title	Code	Amount
1	Compressor SC15G	104G7550	1
2	Starting relay	117U6020	1
3	Starting capacitor (240 μ F 125V, 6.3mm)	117U5023	1
4	Cord relief	103N1004	1
5	Cover	103N2008	1
6	Bolt joint for one compressor M6 \varnothing 16mm	118-1917	1

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Model

Designation	SC15G	115V/60Hz 1~	Sales code:	104G7550
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R134a, R513A
Oil viscosity	22cSt	Displacement	15,28cm ³ / 0,93cu.in
Oil quantity	500cm ³ / 16,9fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	1300g / 45,9oz		
Free gas volume comp.	1460cm ³ / 49,4fl.oz		
Weight	13,2kg / 29,1lbs		
Motor protection	1# internal		
Winding resistance main	0,98Ω (at 25°C)		
Winding resistance aux	4,18Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



General - Configurations with SC15G

	Conf. 1	Conf. 2
Motorconfiguration	CSIR	CSIR
Power supply (nominal)	115V/60Hz	115V/60Hz
Number of phases	1	1
Voltage range	103-127V	103-127V
Approvals	UL	UL
Starting torque	HST	HST
Note	- / -	

Applications with SC15G

	Conf. 1	Conf. 2
Refrigerant	R134a	R513A
Application	LBP+MBP+HBP	LBP+MBP+HBP
System cooling	fan 1,5m/s	fan 1,5m/s
Hot gas defrost	OK	OK
Long interval pull down	OK	OK

Electrical data - Configurations with SC15G

	Conf. 1	Conf. 2
Starting device type	relay	relay
Run capacitor	-/-	-/-
Start capacitor	240μF	240μF
LRA (locked rotor amps / 4s)	39,7A	39,7A
RLA (rated load amps / 1s)	7,6A	7,6A
Cut in current	39,7A	39,7A
IP class	21	21

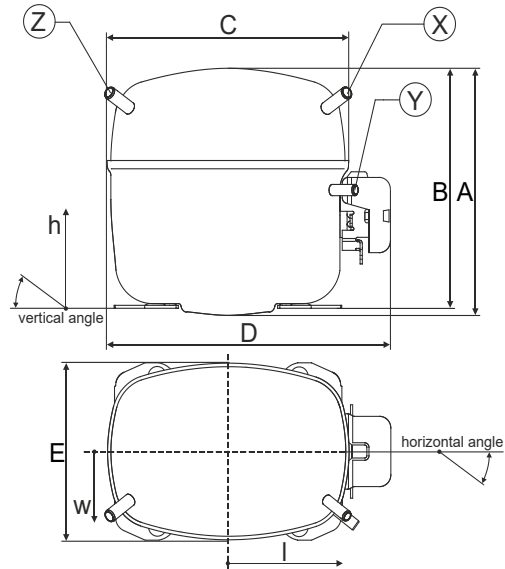
Model

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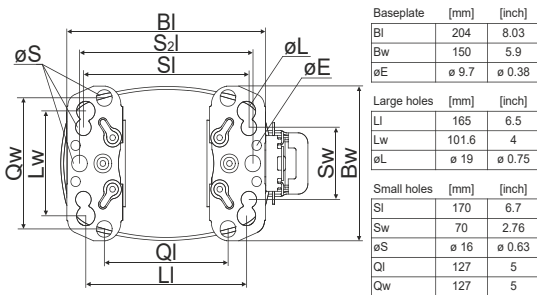
Compressor dimensions

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

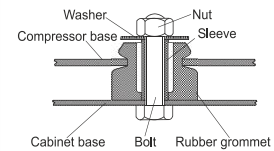
Connectors		Suction	Discharge	Process
		X	Y	Z
Diameter	[mm]	øi 8,11-8,29	øi 6,41-6,59	øi 6,41-6,59
	(i:inside, o:outside) [in]	øi 0,32-0,33	øi 0,25-0,26	øi 0,25-0,26
Material		copper	copper	copper
Horizontal angle	±2°	37°	37°	143°
Vertical angle	±2°	30°	0°	150°
Position l/h/w	[mm]	107/183/55	115/100/63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



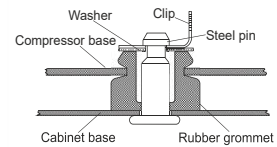
Compressor fixation



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

LRA value on compressor label and datasheet may differ due to different test conditions for UL approval.

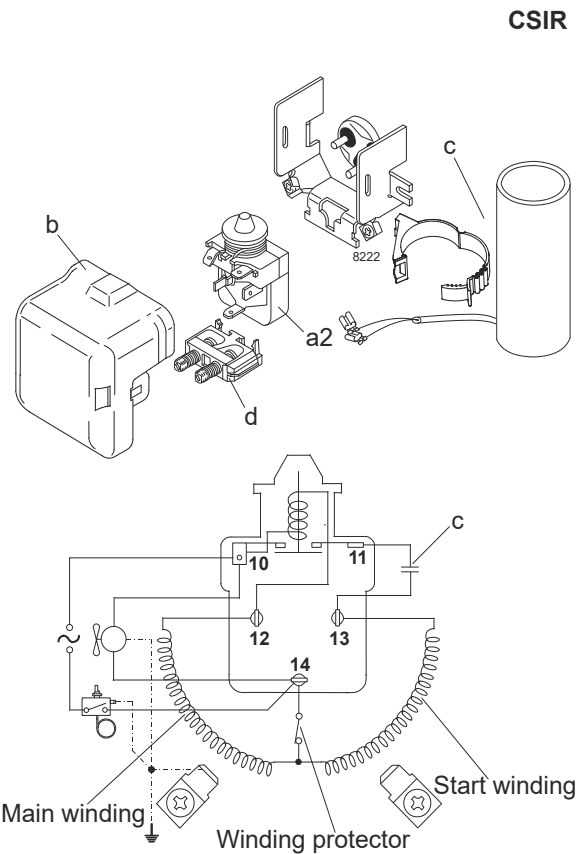
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Configuration

Motorconfiguration	CSIR	
Power supply (nominal)	115V/60Hz 1~	
Refrigerant	R134a	
Application	LBP+MBP+HBP	
Voltage range	103-127V	
Starting torque	HST	
Approvals	UL	SA3693

Electrical accessories / wiring diagram

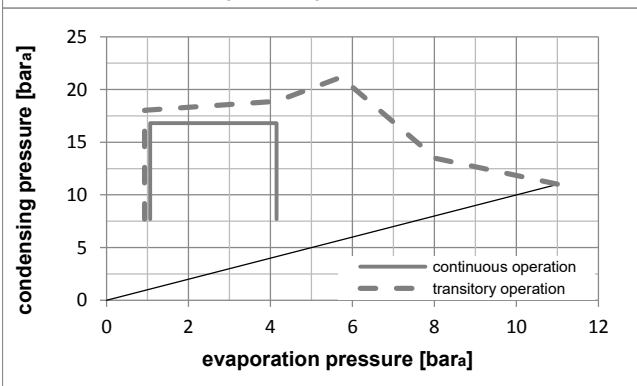
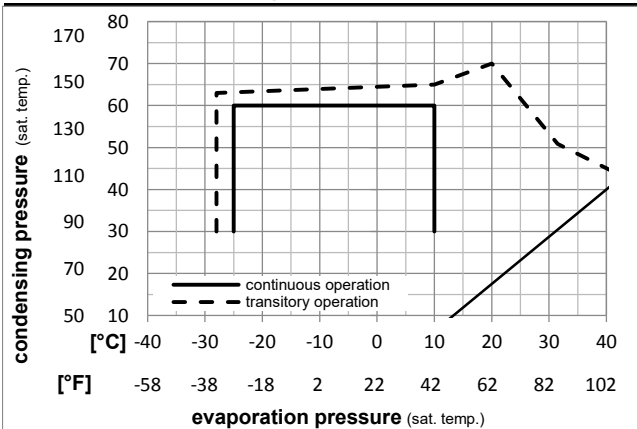


Ambient temperatures / system cooling

Ambient temperature min.:	10°C / 50°F
Ambient temperature max.:	43°C / 110°F

System cooling (n/a: outside limits)			
T ambient	LBP	MBP	HBP
32°C / 90°F	fan 1,5m/s	fan 1,5m/s	fan 1,5m/s
38°C / 100°F	fan 1,5m/s	fan 1,5m/s	fan 1,5m/s
43°C / 110°F	fan 1,5m/s	fan 1,5m/s	fan 1,5m/s

Operation pressure range



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

Model

Designation	SC15G	115V/60Hz	Conf. 1	Sales code:	104G7550
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Optimization + standard conditions

115V/60Hz, CSIR, fan 1,5m/s, UL

Evaporating pressure (saturation temperature)		Condensing pressure (saturation temperature)				Power consumption									ASHRAE LBP	
		Return gas temp.		Liquid temp.		Cooling capacity			COP	EER	P1		Current consumption			Ref. mass flow m
pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]				
[°C]	[°F]	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]				
-23,3	54,4	32,2	32,2	362,4	1238	311,9	1,10	3,76	0,95	329,3	5,02	7,04				
-10	130	90	90													
-6,66	54,4	35	46,1	899,5	3072	774,1	1,59	5,43	1,37	565,7	6,36	19,63				
20	130	95	115													
7,22	54,4	35	46,1	1625,2	5550	1398,7	2,12	7,24	1,83	766,2	7,85	36,06				
45	130	95	115													
-35	40	20	40	145,3	496	125,0	0,70	2,40	0,60	207,0	4,55	3,19				
-31	104	68	104													
-10	45	20	45	779,6	2662	670,9	1,57	5,37	1,35	496,2	5,91	18,25				
14	113	68	113													
5	50	20	50	1374,6	4695	1183,0	1,93	6,61	1,67	710,5	7,41	34,64				
41	122	68	122													

Performance tables

115V/60Hz, CSIR, fan 1,5m/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]	-25	-13	323,7	1106	278,6	1,03	3,53	0,89	313,5	4,94	7,01		
cond. pressure	-23,3	-10	366,0	1250	315,0	1,10	3,75	0,94	333,6	5,02	7,94		
pc= 45/113	-15	5	621,0	2121	534,4	1,43	4,88	1,23	434,9	5,54	13,54		
return gas temp.	-9,4	15	831,3	2839	715,4	1,65	5,64	1,42	503,1	5,95	18,20		
RGT= 32/90	0	32	1262,7	4312	1086,7	2,04	6,95	1,75	620,2	6,74	27,92		
liquid temp	4,4	40	1498,0	5116	1289,2	2,22	7,57	1,91	675,9	7,15	33,32		
Tliq= 45/113	10	50	1821,1	6219	1567,3	2,44	8,34	2,10	745,9	7,69	40,87		
[°C / °F]	-25	-13	256,2	875	220,5	0,84	2,87	0,72	305,3	4,92	6,13		
cond. pressure	-23,3	-10	292,3	998	251,5	0,89	3,04	0,76	328,8	5,02	7,00		
pc= 55/131	-15	5	516,1	1762	444,1	1,15	3,94	0,99	447,4	5,63	12,42		
return gas temp	-9,4	15	705,6	2410	607,2	1,34	4,57	1,15	527,1	6,11	17,07		
RGT= 32/90	0	32	1101,9	3763	948,3	1,66	5,67	1,43	663,8	7,06	26,95		
liquid temp	4,4	40	1320,6	4510	1136,5	1,81	6,19	1,56	728,6	7,56	32,51		
Tliq= 55/131	10	50	1623,1	5543	1396,8	2,00	6,84	1,72	810,1	8,22	40,35		

Model

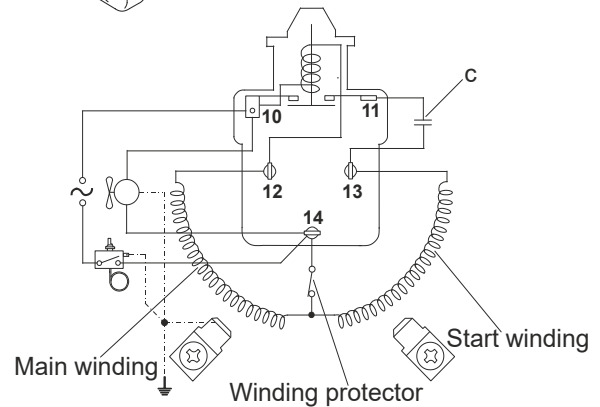
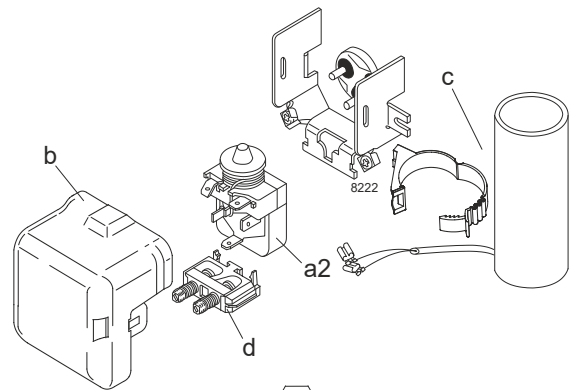
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Configuration

Motorconfiguration	CSIR	
Power supply (nominal)	115V/60Hz 1~	
Refrigerant	R513A	
Application	LBP+MBP+HBP	
Voltage range	103-127V	
Starting torque	HST	
Approvals	UL	SA3693

Electrical accessories / wiring diagram

CSIR

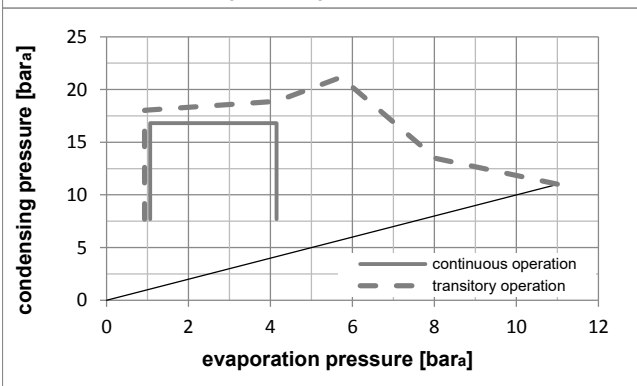
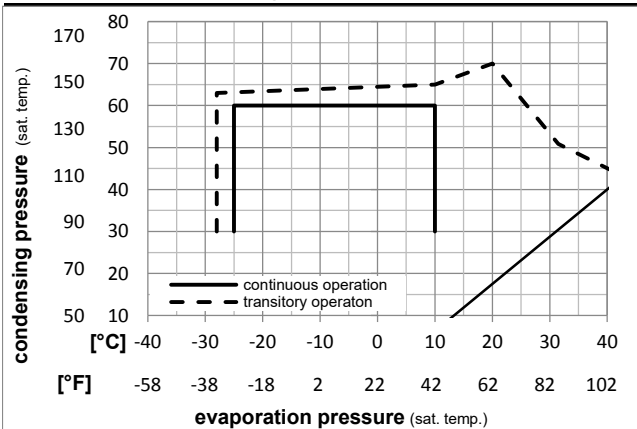


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Optimization + standard conditions

115V/60Hz, CSIR, fan 1,5m/s, UL

Evaporating pressure (saturation temperature)		Condensing pressure (saturation temperature)				Return gas temp.		Liquid temp.		Cooling capacity			COP	EER	P1	Current consumption		Ref. mass flow	
pe	pc	RGT	Tliq							[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
[°C]	-23,3	54,4	32,2	32,2	402,8	1376	346,7	1,11	3,80	0,96	362,0	4,93	8,67	ASHRAE LBP					
[°F]	-10	130	90	90															
[°C]	-6,66	54,4	35	46,1	945,4	3229	813,6	1,57	5,36	1,35	602,5	6,71	23,16	ASHRAE MBP					
[°F]	20	130	95	115															
[°C]	7,22	54,4	35	46,1	1670,9	5707	1438,0	2,08	7,11	1,79	802,9	8,19	41,51	ASHRAE HBP					
[°F]	45	130	95	115															
[°C]	-35	40	20	40	160,1	547	137,8	0,70	2,40	0,61	227,5	3,93	3,96	EN12900 LBP					
[°F]	-31	104	68	104															
[°C]	-10	45	20	45	815,6	2786	701,9	1,54	5,26	1,33	529,7	6,17	21,62	EN12900 MBP					
[°F]	14	113	68	113															
[°C]	5	50	20	50	1395,2	4765	1200,7	1,87	6,39	1,61	745,8	7,77	40,00	EN12900 HBP					
[°F]	41	122	68	122															

Performance tables

115V/60Hz, CSIR, fan 1,5m/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]	-25	-13	352,7	1204	303,5	1,03	3,52	0,89	342,5	4,78	8,60
cond. pressure	-23,3	-10	397,2	1356	341,8	1,09	3,73	0,94	363,4	4,94	9,69
pc= 45/113	-15	5	661,3	2258	569,1	1,41	4,83	1,22	467,5	5,71	16,20
return gas temp.	-9,4	15	875,7	2991	753,7	1,63	5,57	1,40	536,6	6,22	21,54
RGT= 32/90	0	32	1310,0	4474	1127,4	2,00	6,84	1,72	654,1	7,09	32,49
liquid temp	4,4	40	1544,6	5275	1329,3	2,18	7,43	1,87	709,6	7,50	38,50
Tliq= 45/113	10	50	1864,9	6369	1604,9	2,39	8,17	2,06	779,3	8,02	46,82
[°C / °F]	-25	-13	277,4	947	238,7	0,82	2,81	0,71	337,3	4,74	7,60
cond. pressure	-23,3	-10	314,7	1075	270,9	0,87	2,97	0,75	361,7	4,92	8,63
pc= 55/131	-15	5	542,6	1853	467,0	1,12	3,84	0,97	483,1	5,82	14,95
return gas temp	-9,4	15	732,5	2502	630,4	1,30	4,44	1,12	563,7	6,42	20,27
RGT= 32/90	0	32	1124,6	3841	967,8	1,60	5,48	1,38	700,8	7,43	31,40
liquid temp	4,4	40	1339,0	4573	1152,3	1,75	5,97	1,51	765,6	7,91	37,60
Tliq= 55/131	10	50	1633,8	5580	1406,0	1,93	6,59	1,66	846,9	8,52	46,25



SC Compressors





SC Compressors

Service/Repair – R290



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