

Single Pack SC15G 115V 60Hz CSIR

Single pack code number: **195B4680**

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	Snap-on in quantities \varnothing 7,3 \varnothing 16mm	118-1919	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

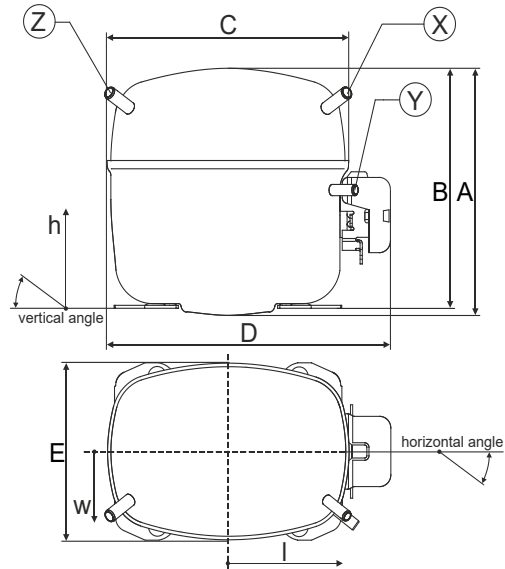
Model

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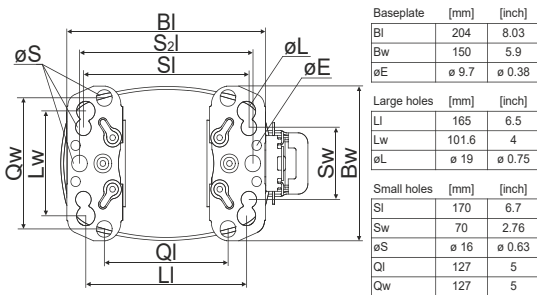
Compressor dimensions

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

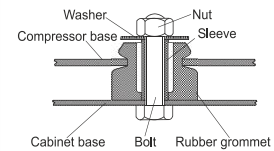
Connectors		Suction	Discharge	Process
		X	Y	Z
Diameter	[mm]	øi 8,11-8,29	øi 6,41-6,59	øi 6,41-6,59
(i:inside, o:outside)	[in]	øi 0,32-0,33	øi 0,25-0,26	øi 0,25-0,26
Material		copper	copper	copper
Horizontal angle	±2°	37°	37°	143°
Vertical angle	±2°	30°	0°	150°
Position l/h/w	[mm]	107/183/55	115/100/63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



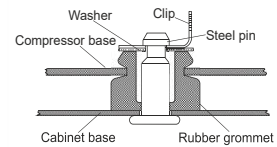
Compressor fixation



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.

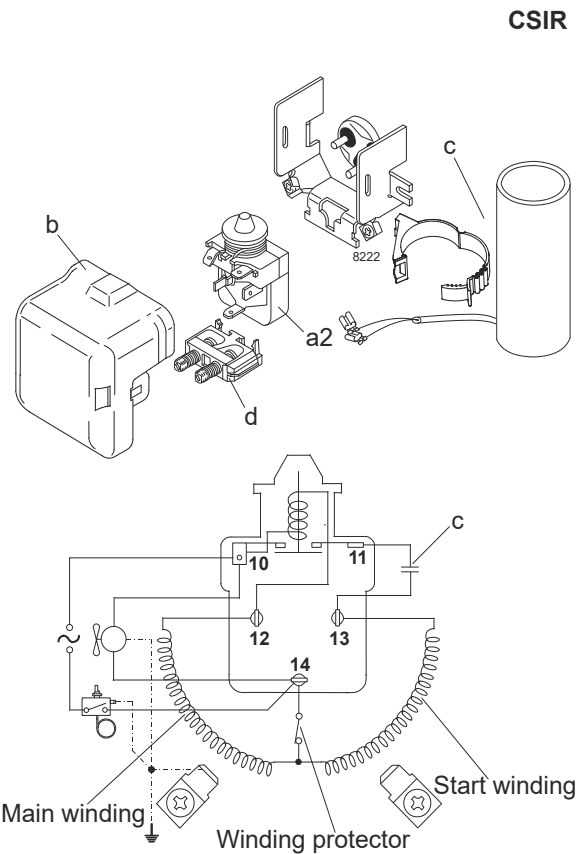
Model

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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

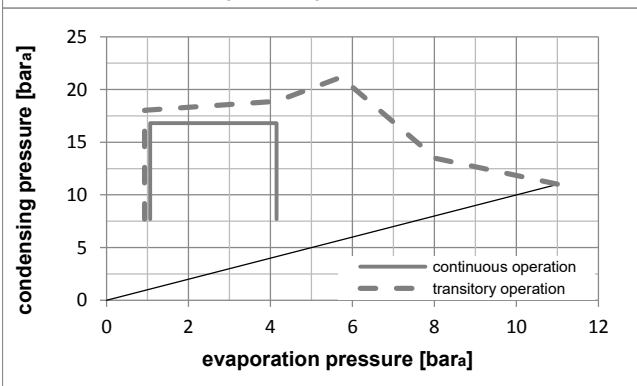
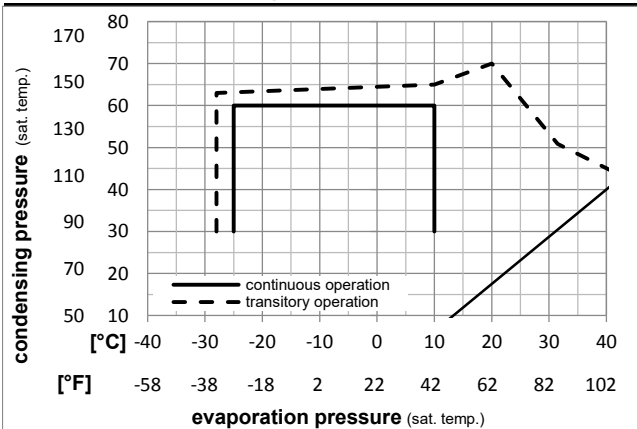


Ambient temperatures / system cooling

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

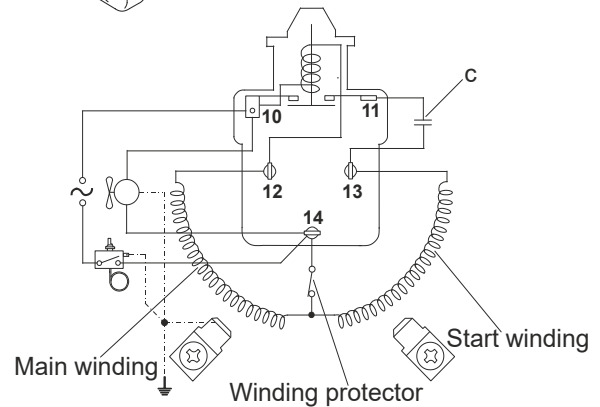
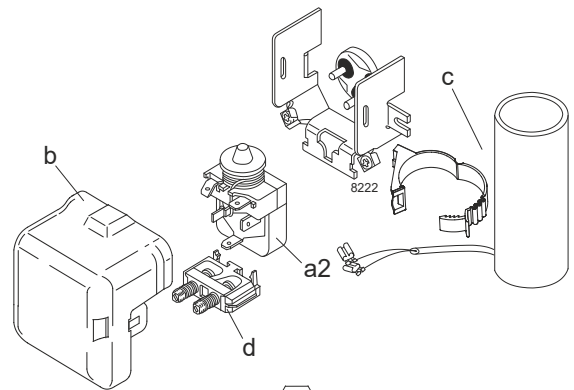
Designation	SC15G	115V/60Hz	Conf. 2	Sales code:	104G7550
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Configuration

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

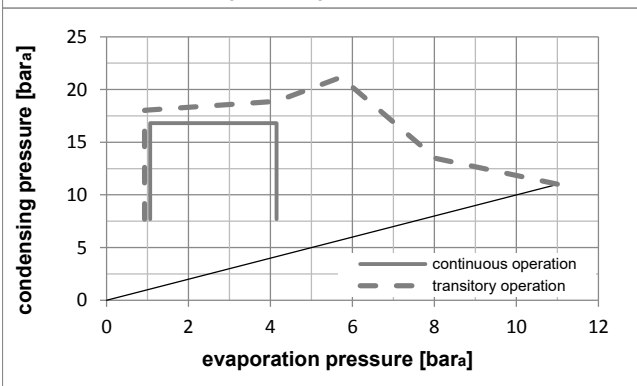
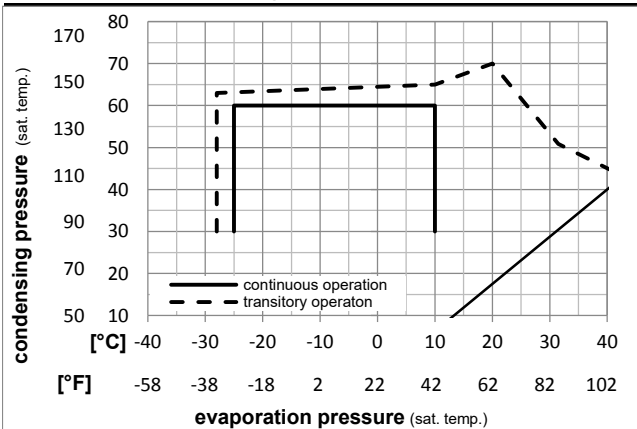


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Optimization + standard conditions

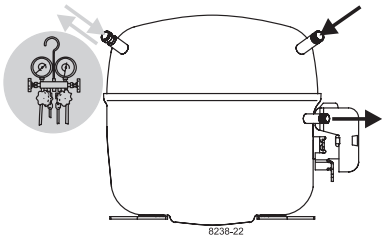
115V/60Hz, CSIR, fan 1,5m/s, UL

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

Performance tables

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

[°C / °F]	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]
-25	-13	-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
-25	-13	-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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