

## 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 $\mu$ 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	<b>SC15G</b>	<b>115V/60Hz 1~</b>	Sales code:	<b>104G7550</b>
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**Compressor design**

Oil type	Polyolester	Refrigerant(s)	<b>R134a, R513A</b>
Oil viscosity	22cSt	Displacement	15,28cm <sup>3</sup> / 0,93cu.in
Oil quantity	500cm <sup>3</sup> / 16,9fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	1300g / 45,9oz		
Free gas volume comp.	1460cm <sup>3</sup> / 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**

	<b>Conf. 1</b>	<b>Conf. 2</b>
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**

	<b>Conf. 1</b>	<b>Conf. 2</b>
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**

	<b>Conf. 1</b>	<b>Conf. 2</b>
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

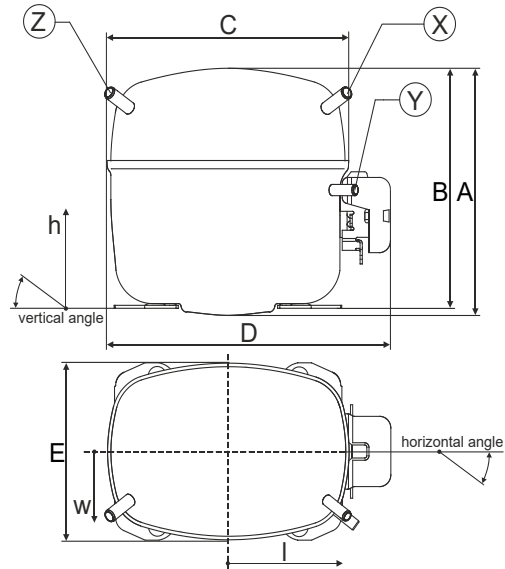
**Model**

Designation	<b>SC15G</b>	<b>115V/60Hz 1~</b>	Sales code:	<b>104G7550</b>
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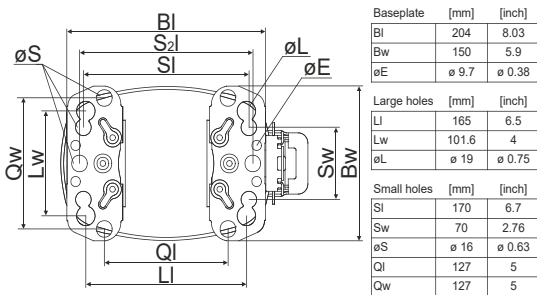
**Compressor dimensions**

<b>Housing</b>	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

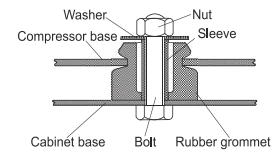
<b>Connectors</b>		<b>Suction</b>	<b>Discharge</b>	<b>Process</b>
		<b>X</b>	<b>Y</b>	<b>Z</b>
Diameter	[mm]	øi 8,11-8,29	øi 6,41-6,59	øi 6,41-6,59
	(i:inside, o:outside) [in]	øi 0,32-0,33	øi 0,25-0,26	øi 0,25-0,26
Material		copper	copper	copper
Horizontal angle	±2°	37°	37°	143°
Vertical angle	±2°	30°	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



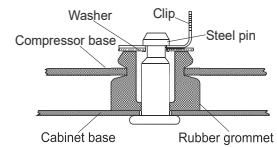
**Compressor fixation**



**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

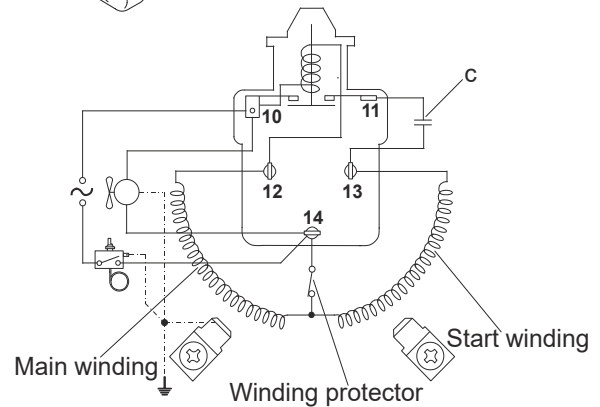
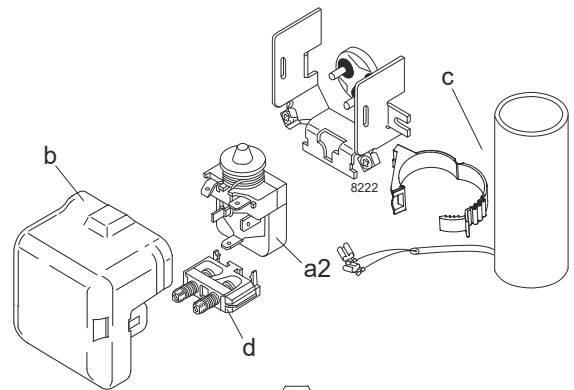
Designation	<b>SC15G</b>	<b>115V/60Hz</b>	<b>Conf. 1</b>	Sales code:	<b>104G7550</b>
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## Configuration

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

CSIR

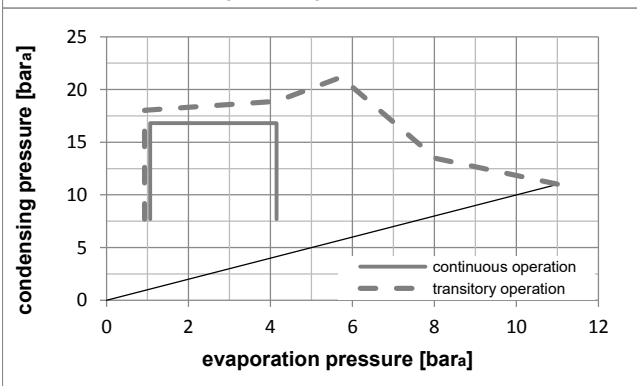
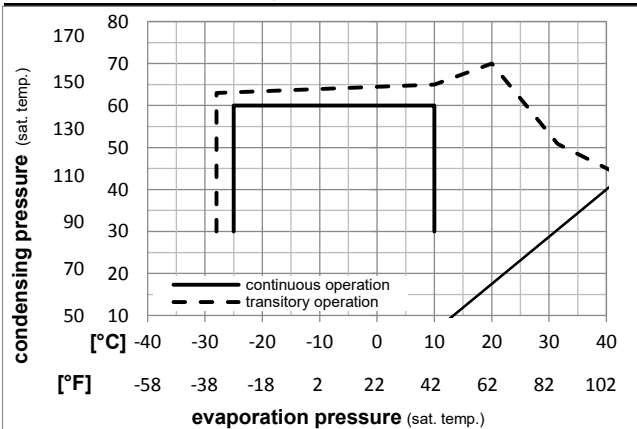


## Ambient temperatures / system cooling

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**

**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		Power consumption		Current consumption		Ref. mass flow		
pe	pc	RGT	Tliq							[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I			m			
[°C]	[°C]	[°C]	[°C]	[°C]	[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	ASHRAE LBP										
-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	ASHRAE MBP										
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	ASHRAE HBP										
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	EN12900 LBP										
-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	EN12900 MBP										
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	EN12900 HBP										
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]				
[°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

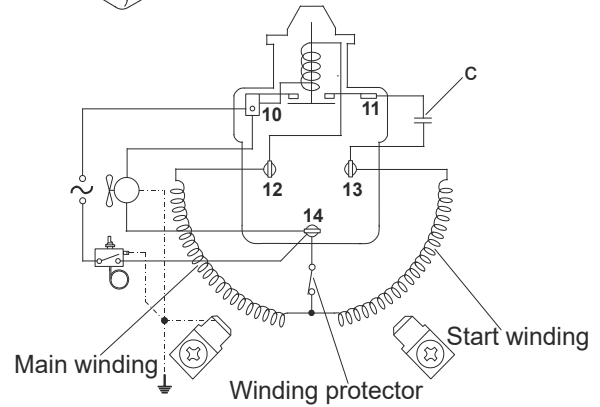
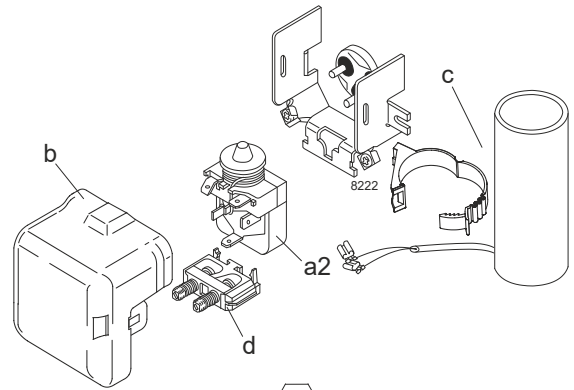
Designation	<b>SC15G</b>	<b>115V/60Hz</b>	<b>Conf. 2</b>	Sales code:	<b>104G7550</b>
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## Configuration

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

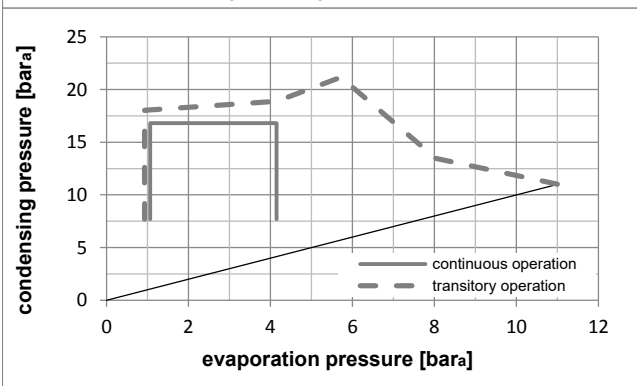
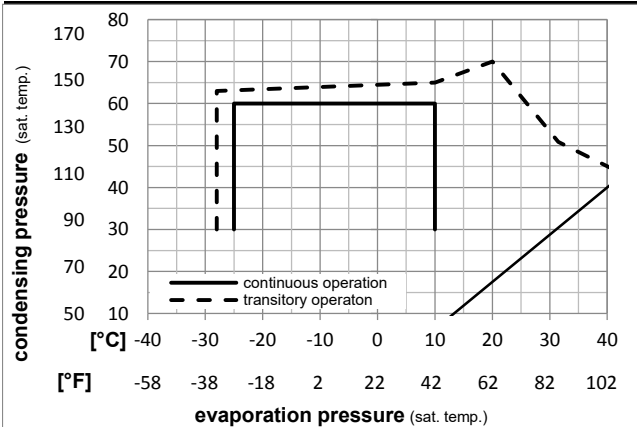


## Ambient temperatures / system cooling

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	<b>SC15G</b>	<b>115V/60Hz</b>	<b>Conf. 2</b>	Sales code:	<b>104G7550</b>
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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]	[°C]	[°F]	[°C]	[°F]	[°C]	[°F]	[°C]	[A]	[kg/h]				
-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				
-10	130	90	90													
-6,66	54,4	35	46,1	945,4	3229	813,6	1,57	5,36	1,35	602,5	6,71	23,16				
20	130	95	115													
7,22	54,4	35	46,1	1670,9	5707	1438,0	2,08	7,11	1,79	802,9	8,19	41,51				
45	130	95	115													
-35	40	20	40	160,1	547	137,8	0,70	2,40	0,61	227,5	3,93	3,96				
-31	104	68	104													
-10	45	20	45	815,6	2786	701,9	1,54	5,26	1,33	529,7	6,17	21,62				
14	113	68	113													
5	50	20	50	1395,2	4765	1200,7	1,87	6,39	1,61	745,8	7,77	40,00				
41	122	68	122													

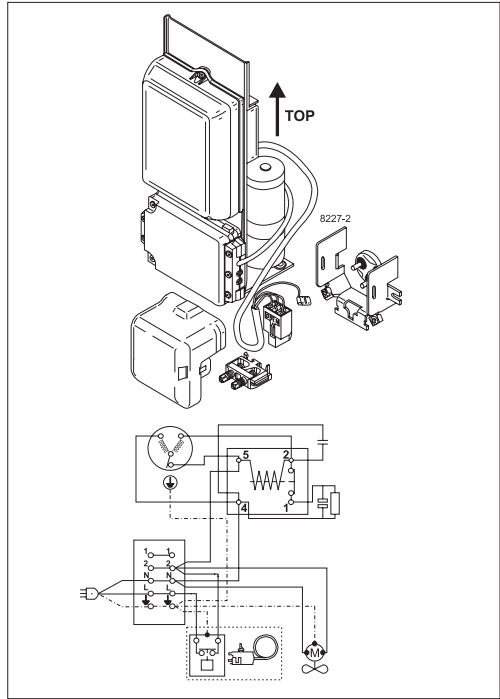
**Performance tables**

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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