

Model

Designation	SC15G	220-240V/50Hz 1~ 220-240V/60Hz 1~	Sales code:	104G8520
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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	504cm ³ / 17fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	1300g / 45,9oz		
Free gas volume comp.	1410cm ³ / 47,7fl.oz		
Weight	13,2kg / 29,1lbs		
Motor protection	1# internal		
Winding resistance main	5,13Ω (at 25°C)		
Winding resistance aux	13,51Ω (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	Conf. 3	Conf. 4
Motorconfiguration	CSIR	CSIR	CSIR	CSIR
Power supply (nominal)	220-240V/50Hz	208-230V/60Hz	220-240V/50Hz	208-230V/60Hz
Number of phases	1	1	1	1
Voltage range	187-254V	198-254V	187-254V	198-254V
Approvals	VDE, CCC, EAC, KC	VDE, CCC, EAC, KC	VDE, CCC	VDE, CCC
Starting torque	HST	HST	HST	HST
Note	- / -			

Applications with SC15G

	Conf. 1	Conf. 2	Conf. 3	Conf. 4
Refrigerant	R134a	R134a	R513A	R513A
Application	LBP+MBP+HBP	LBP	LBP+MBP+HBP	LBP
System cooling	fan 3m/s	fan 3m/s	fan 3m/s	fan 3m/s
Hot gas defrost	OK	OK	OK	OK
Long interval pull down	OK	OK	OK	OK

Electrical data - Configurations with SC15G

	Conf. 1	Conf. 2	Conf. 3	Conf. 4
Starting device type	relay	relay	relay	relay
Run capacitor	- / -	- / -	- / -	- / -
Start capacitor	80μF	80μF	80μF	80μF
LRA (locked rotor amps / 4s)	16,2A	15,6A	16,2A	15,6A
RLA (rated load amps / 1s)	3,1A	2,8A	3,1A	2,8A
Cut in current	16,2A	15,6A	16,2A	15,6A
IP class	21	21	21	21

Model

Designation

SC15G

220-240V/50Hz 1~ 220-240V/60Hz 1~

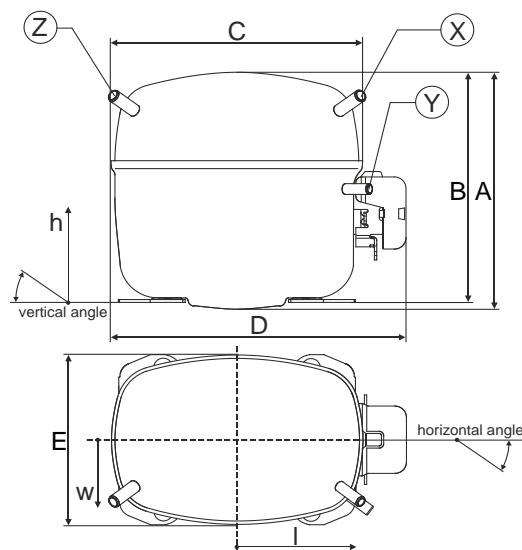
Sales code:

104G8520

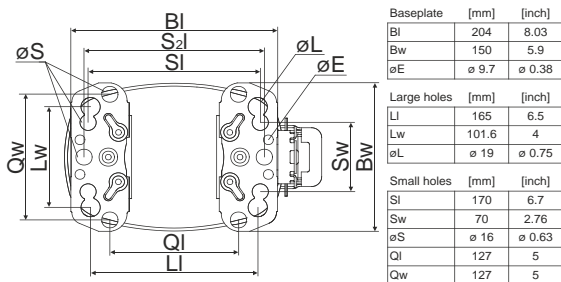
Compressor dimensions

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 6,11-6,29		øi 6,11-6,29	
(i:inside, o:outside) [in]	øi 0,32-0,33		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]	107/183/55		115/100/63		-107/183/55	
	[in]		4,2/7,2/2,2		-4,2/7,2/2,2	
Straight tube l.	[mm]		12		12	
	[in]		0,5		0,5	



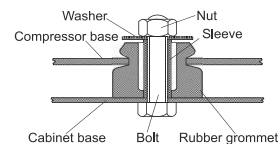
Compressor fixation



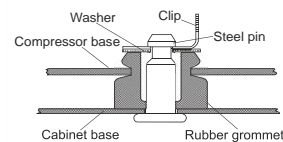
Mounting accessories

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

Bolt joint



Snap-on



Model

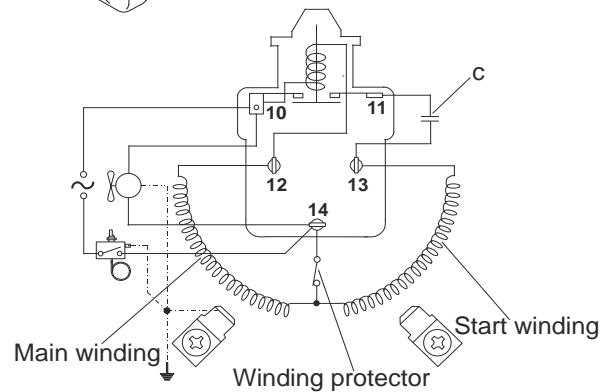
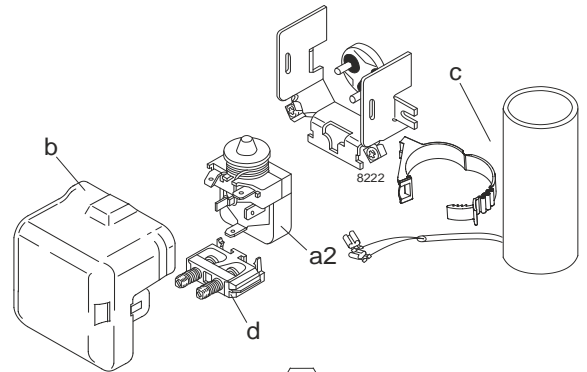
Designation	SC15G	220-240V/50Hz	Conf. 1	Sales code:	104G8520
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Configuration

Motorconfiguration	CSIR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R134a
Application	LBP+MBP+HBP
Voltage range	187-254V
Starting torque	HST
Approvals	VDE CCC EAC KC

Electrical accessories / wiring diagram

CSIR

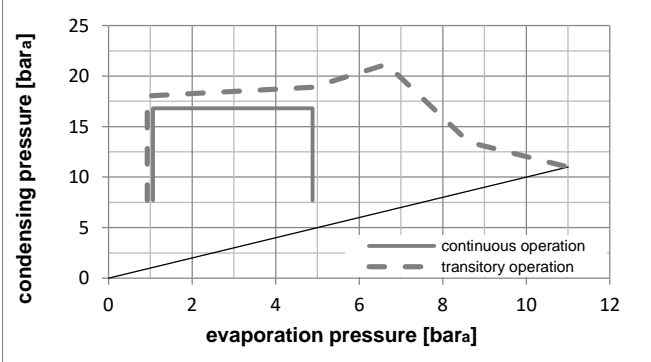
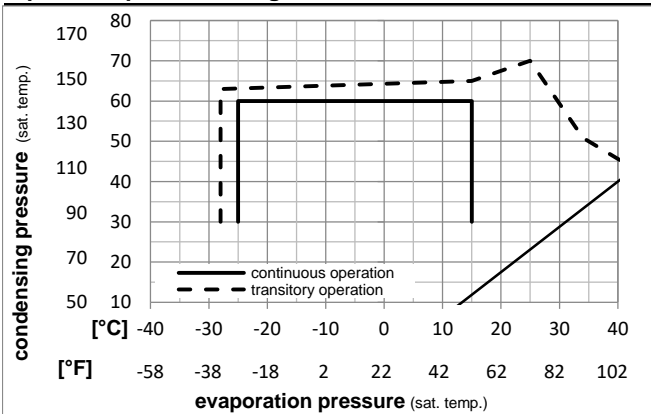


Ambient temperatures / system cooling

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 3m/s	fan 3m/s	fan 3m/s
38°C / 100°F	fan 3m/s	fan 3m/s	fan 3m/s
43°C / 110°F	fan 3m/s	fan 3m/s	fan 3m/s

Operation pressure range



Components

a2	relay	117U6005
c	start capacitor (80μF)	117U5017
d	cord relief	103N1004
b	plastic cover	103N2009

Model

Designation **SC15G 220-240V/50Hz** Conf. 1 Sales code: **104G8520**

Optimization + standard conditions

220V/50Hz, CSIR, fan 3m/s, VDE, CCC, EAC, KC

Evaporating pressure (saturation temperature)					Condensing pressure (saturation temperature)						Power consumption				ASHRAE LBP
					Return gas temp.			Liquid temp.			Current consumption		Ref. mass flow		
					Cooling capacity			COP			EER				
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		259,0	885	222,9	1,00	3,43	0,86	258,1	2,27	5,03	ASHRAE LBP	
[-10]	130	90	90												
-25	55	32	55		164,2	561	141,3	0,71	2,41	0,61	232,7	2,21	3,93	cecomaf LBP	
[-13]	131	89,6	131												
-35	40	20	40		95,7	327	82,4	0,80	2,73	0,69	119,9	1,95	2,10	EN12900 LBP	
[-31]	104	68	104												
-6,66	54,4	35	46,1		746,5	2550	642,5	1,57	5,35	1,35	476,9	2,91	16,29	ASHRAE MBP	
[20]	130	95	115												
-10	55	32	55		568,4	1941	489,2	1,29	4,42	1,11	439,7	2,78	13,74	cecomaf MBP	
[14]	131	89,6	131												
-10	45	20	45		650,7	2222	560,0	1,58	5,41	1,36	410,7	2,66	15,23	EN12900 MBP	
[14]	113	68	113												

Performance tables

220V/50Hz, CSIR, fan 3m/s, VDE, CCC, EAC, KC

	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	260,7	890	224,4	1,10	3,76	0,95	236,6	2,19	5,65		
cond. pressure	-20	-4	382,8	1307	329,5	1,29	4,39	1,11	297,9	2,34	8,32		
pc= 45/113	-10	14	675,1	2306	581,0	1,64	5,61	1,41	410,7	2,66	14,77		
return gas temp.	-5	23	853,2	2914	734,3	1,85	6,31	1,59	461,9	2,83	18,76		
RGT= 32/90	0	32	1058,0	3613	910,5	2,08	7,10	1,79	509,3	3,01	23,40		
liquid temp	5	41	1293,4	4417	1113,1	2,34	7,99	2,01	552,7	3,19	28,79		
Tliq= 45/113	15	59	1871,8	6392	1610,9	2,99	10,20	2,57	626,9	3,59	42,40		
[°C / °F]	-25	-13	164,2	561	141,3	0,71	2,41	0,61	232,7	2,21	3,93		
cond. pressure	-20	-4	290,3	991	249,8	0,95	3,23	0,81	307,1	2,40	6,96		
pc= 55/131	-10	14	568,4	1941	489,2	1,29	4,42	1,11	439,7	2,78	13,74		
return gas temp	-5	23	728,4	2488	626,8	1,46	5,00	1,26	497,5	2,99	17,71		
RGT= 32/90	0	32	907,6	3100	781,1	1,65	5,64	1,42	549,3	3,20	22,20		
liquid temp	5	41	1110,0	3791	955,3	1,87	6,37	1,61	595,0	3,42	27,35		
Tliq= 55/131	15	59	1600,3	5465	1377,2	2,40	8,19	2,06	667,3	3,88	40,20		

Model

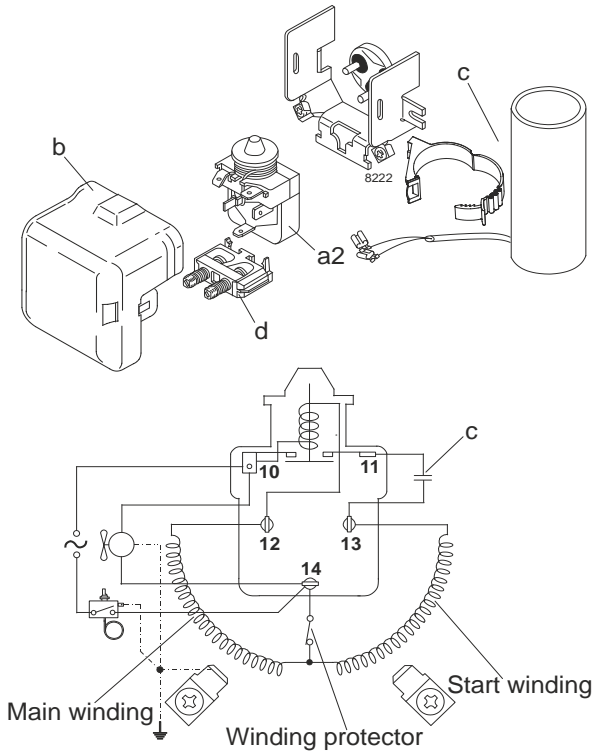
Designation	SC15G	208-230V/60Hz	Conf. 2	Sales code:	104G8520
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Configuration

Motorconfiguration	CSIR
Power supply (nominal)	208-230V/60Hz 1~
Refrigerant	R134a
Application	LBP
Voltage range	198-254V
Starting torque	HST
Approvals	VDE CCC EAC KC

Electrical accessories / wiring diagram

CSIR

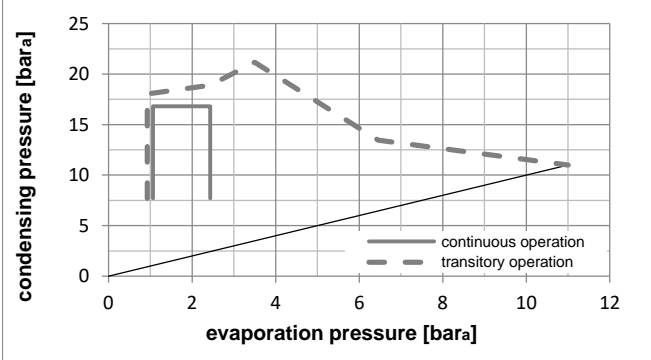
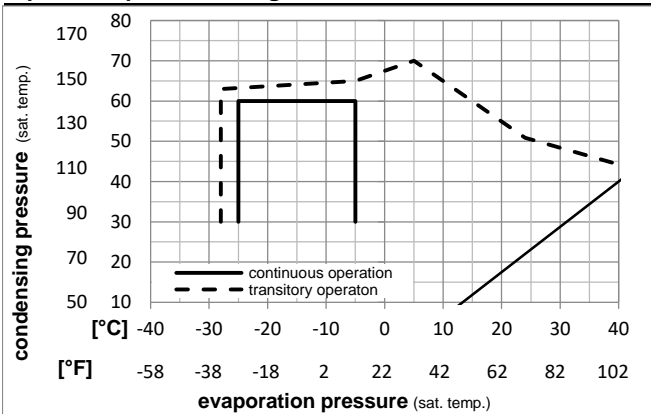


Ambient temperatures / system cooling

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 3m/s	n/a	n/a
38°C / 100°F	fan 3m/s	n/a	n/a
43°C / 110°F	fan 3m/s	n/a	n/a

Operation pressure range



Components

a2	relay	117U6005
c	start capacitor (80µF)	117U5017
d	cord relief	103N1004
b	plastic cover	103N2009

Model

Designation **SC15G 208-230V/60Hz** Conf. 2 Sales code: **104G8520**

Optimization + standard conditions

220V/60Hz, CSIR, fan 3m/s, VDE, CCC, EAC, KC

Evaporating pressure (saturation temperature)					Condensing pressure (saturation temperature)						Power consumption				ASHRAE LBP
Return gas temp.					Liquid temp.						Current consumption			Ref. mass flow ṁ	
Cooling capacity					COP		EER		P1	I	ṁ				
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	370,0	1264	318,4	1,07	3,64	0,92	347,0	2,03	7,18	ASHRAE LBP	
[°F]	-10	130	90	90											
[°C]	-25	55	32	55	262,0	895	225,5	0,79	2,71	0,68	330,2	1,99	6,27	cecomaf LBP	
[°F]	-13	131	89,6	131											
[°C]	-35	40	20	40	167,8	573	144,4	0,94	3,22	0,81	177,9	1,56	3,68	EN12900 LBP	
[°F]	-31	104	68	104											
[°C]	-6,66	54,4	35	46,1	884,5	3021	761,2	1,64	5,59	1,41	540,7	2,73	19,30	ASHRAE MBP	
[°F]	20	130	95	115											
[°C]	-10	55	32	55	677,1	2312	582,7	1,34	4,57	1,15	505,6	2,59	16,37	cecomaf MBP	
[°F]	14	131	89,6	131											
[°C]	-10	45	20	45	784,8	2680	675,4	1,69	5,76	1,45	465,6	2,47	18,37	EN12900 MBP	
[°F]	14	113	68	113											

Performance tables

220V/60Hz, CSIR, fan 3m/s, VDE, CCC, EAC, KC

	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	346,8	1184	298,5	1,15	3,94	0,99	300,8	1,90	7,51
cond. pressure	-23,3	-10	389,3	1330	335,1	1,22	4,16	1,05	319,8	1,96	8,44
pc= 45/113	-20	-4	479,5	1638	412,7	1,34	4,59	1,16	356,7	2,08	10,42
return gas temp.	-17,8	0	545,3	1862	469,3	1,43	4,89	1,23	381,1	2,17	11,86
RGT= 32/90	-15	5	635,4	2170	546,9	1,54	5,27	1,33	411,9	2,27	13,85
liquid temp	-10	14	814,2	2781	700,7	1,75	5,97	1,51	465,6	2,47	17,82
Tliq= 45/113	-5	23	1015,5	3468	874,0	1,97	6,71	1,69	516,6	2,67	22,33
[°C / °F]	-25	-13	262,0	895	225,5	0,79	2,71	0,68	330,2	1,99	6,27
cond. pressure	-23,3	-10	298,2	1018	256,6	0,85	2,91	0,73	349,7	2,05	7,14
pc= 55/131	-20	-4	376,5	1286	324,0	0,97	3,31	0,83	388,0	2,17	9,03
return gas temp	-17,8	0	434,4	1484	373,9	1,05	3,59	0,90	413,8	2,25	10,44
RGT= 32/90	-15	5	514,9	1759	443,1	1,15	3,94	0,99	446,8	2,37	12,40
liquid temp	-10	14	677,1	2312	582,7	1,34	4,57	1,15	505,6	2,59	16,37
Tliq= 55/131	-5	23	862,5	2946	742,3	1,53	5,23	1,32	563,3	2,82	20,97

Model

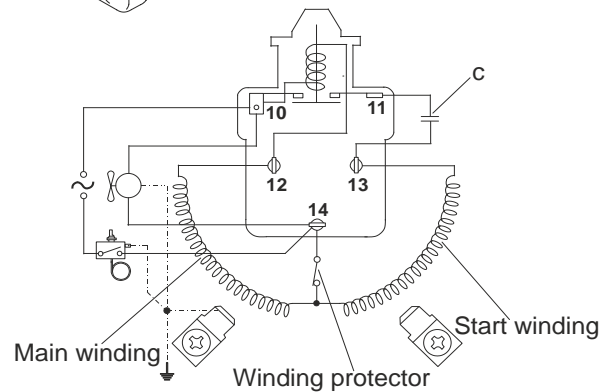
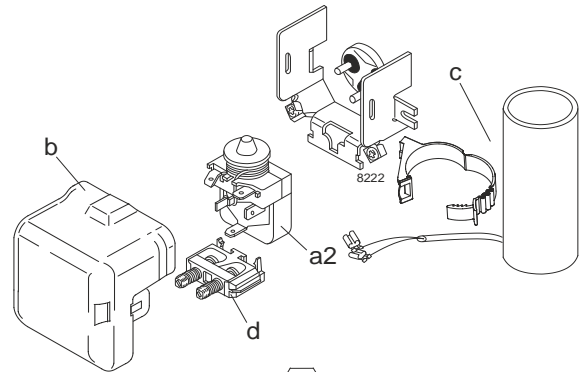
Designation	SC15G	220-240V/50Hz	Conf. 3	Sales code:	104G8520
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Configuration

Motorconfiguration	CSIR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R513A
Application	LBP+MBP+HBP
Voltage range	187-254V
Starting torque	HST
Approvals	VDE CCC

Electrical accessories / wiring diagram

CSIR

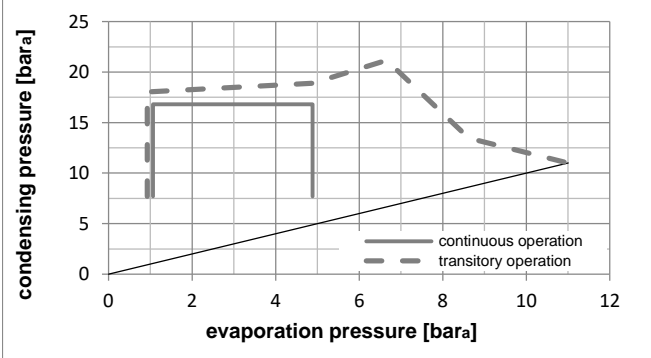
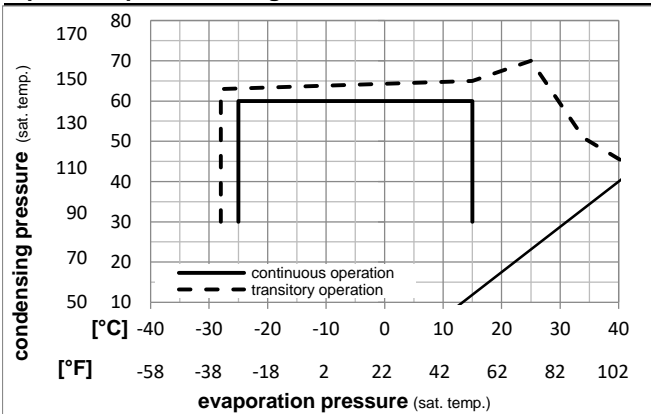


Ambient temperatures / system cooling

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 3m/s	fan 3m/s	fan 3m/s
38°C / 100°F	fan 3m/s	fan 3m/s	fan 3m/s
43°C / 110°F	fan 3m/s	fan 3m/s	fan 3m/s

Operation pressure range



Components

a2	relay	117U6005
c	start capacitor (80µF)	117U5017
d	cord relief	103N1004
b	plastic cover	103N2009

Model

Designation **SC15G 220-240V/50Hz** Conf. **3** Sales code: **104G8520**

Optimization + standard conditions

220V/50Hz, CSIR, fan 3m/s, VDE, CCC

Evaporating pressure (saturation temperature)					Condensing pressure (saturation temperature)						Power consumption				ASHRAE LBP	
					Return gas temp.						Current consumption					Ref. mass flow ṁ
					Liquid temp.											
					Cooling capacity											
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	COP	EER	[kcal/Wh]	P1	I	ṁ			
[°C]	[°C]	[°C]	[°C]	[°C]				[W/W]	[Btu/Wh]		[W]	[A]	[kg/h]			
[°F]	-23,3	54,4	32,2	32,2	287,9	983	247,8	1,02	3,48	0,88	282,6	2,30	6,20			
	-10	130	90	90												
[°C]	-25	55	32	55	178,3	609	153,4	0,70	2,38	0,60	255,7	2,21	4,88	cecomaf LBP		
[°F]	-13	131	89,6	131												
[°C]	-35	40	20	40	109,4	374	94,2	0,84	2,86	0,72	130,6	1,81	2,71	EN12900 LBP		
[°F]	-31	104	68	104												
[°C]	-6,66	54,4	35	46,1	784,2	2678	674,9	1,54	5,27	1,33	508,4	3,02	19,21	ASHRAE MBP		
[°F]	20	130	95	115												
[°C]	-10	55	32	55	590,3	2016	508,0	1,25	4,28	1,08	470,9	2,90	16,32	cecomaf MBP		
[°F]	14	131	89,6	131												
[°C]	-10	45	20	45	680,5	2324	585,6	1,55	5,30	1,34	438,6	2,80	18,04	EN12900 MBP		
[°F]	14	113	68	113												

Performance tables

220V/50Hz, CSIR, fan 3m/s, VDE, CCC

	pe	Cooling capacity			COP	EER	P1	I	m		
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]		[A]
[°C / °F]	-25	-13	285,1	974	245,4	1,11	3,78	0,95	257,9	2,22	6,95
cond. pressure	-20	-4	412,4	1408	354,9	1,28	4,37	1,10	322,5	2,43	10,08
pc= 45/113	-10	14	711,6	2430	612,4	1,62	5,54	1,40	438,6	2,80	17,49
return gas temp.	-5	23	891,4	3044	767,2	1,82	6,21	1,57	490,2	2,96	22,01
RGT= 32/90	0	32	1096,7	3746	943,9	2,04	6,97	1,76	537,3	3,11	27,20
liquid temp	5	41	1331,5	4547	1145,9	2,29	7,84	1,98	580,2	3,25	33,21
Tliq= 45/113	15	59	1905,4	6507	1639,8	2,92	9,97	2,51	652,8	3,48	48,21
[°C / °F]	-25	-13	178,3	609	153,4	0,70	2,38	0,60	255,7	2,21	4,88
cond. pressure	-20	-4	308,7	1054	265,7	0,92	3,15	0,80	334,2	2,46	8,48
pc= 55/131	-10	14	590,3	2016	508,0	1,25	4,28	1,08	470,9	2,90	16,32
return gas temp	-5	23	749,3	2559	644,9	1,42	4,84	1,22	529,2	3,09	20,81
RGT= 32/90	0	32	925,9	3162	796,9	1,59	5,45	1,37	580,7	3,25	25,86
liquid temp	5	41	1124,0	3839	967,3	1,80	6,14	1,55	625,5	3,40	31,59
Tliq= 55/131	15	59	1600,6	5466	1377,5	2,30	7,87	1,98	694,9	3,62	45,71

Model

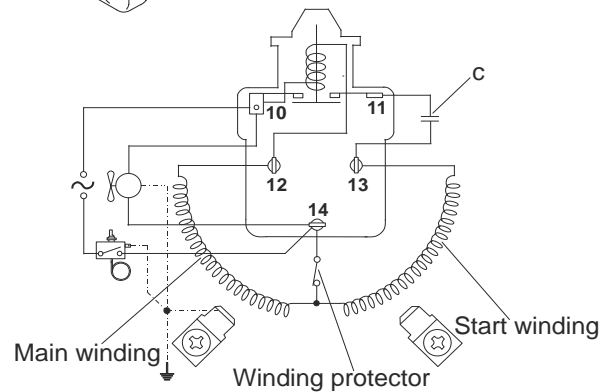
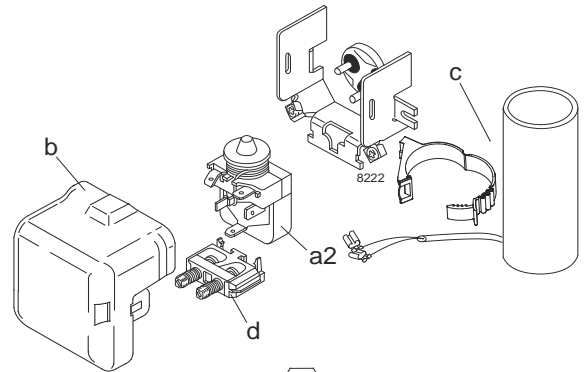
Designation	SC15G	208-230V/60Hz	Conf. 4	Sales code:	104G8520
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Configuration

Motorconfiguration	CSIR
Power supply (nominal)	208-230V/60Hz 1~
Refrigerant	R513A
Application	LBP
Voltage range	198-254V
Starting torque	HST
Approvals	VDE CCC

Electrical accessories / wiring diagram

CSIR

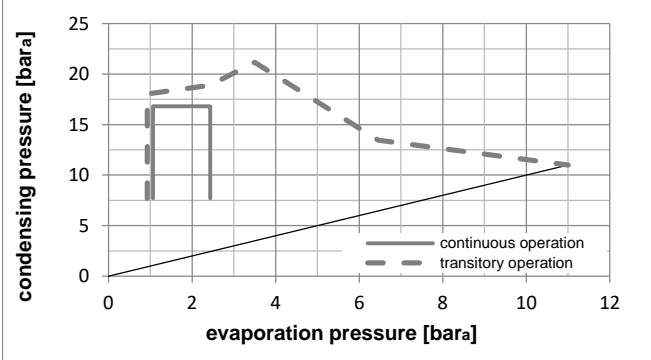
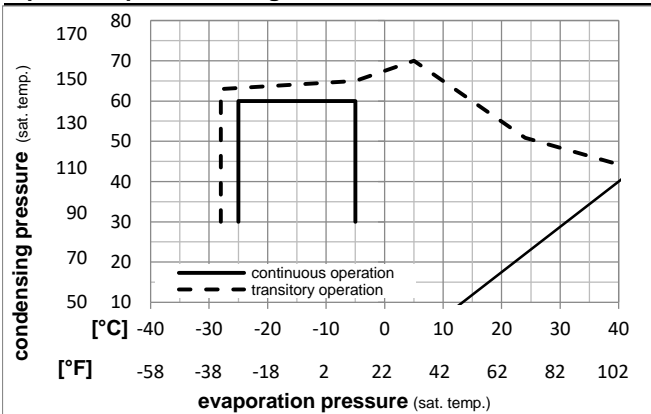


Ambient temperatures / system cooling

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 3m/s	n/a	n/a
38°C / 100°F	fan 3m/s	n/a	n/a
43°C / 110°F	fan 3m/s	n/a	n/a

Operation pressure range



Components

a2	relay	117U6005
c	start capacitor (80µF)	117U5017
d	cord relief	103N1004
b	plastic cover	103N2009

Model

Designation **SC15G 208-230V/60Hz** Conf. 4 Sales code: **104G8520**

Optimization + standard conditions

220V/60Hz, CSIR, fan 3m/s, VDE, CCC

Evaporating pressure (saturation temperature)					Condensing pressure (saturation temperature)						Power consumption				ASHRAE LBP
					Return gas temp.			Liquid temp.			Current consumption		Ref. mass flow m		
pe	pc	RGT	Tliq		W	[Btu/h]	[kcal/h]	COP	EER	[Btu/Wh]	[kcal/Wh]	P1		I	
[°C]	[°F]	[°C]	[°F]	[°C]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]		
-23,3	54,4	32,2	32,2		411,6	1406	354,2	1,07	3,67	0,92	383,1	2,19	8,86	ASHRAE LBP	
-10	130	90	90												
-25	55	32	55		284,0	970	244,4	0,77	2,65	0,67	366,7	2,13	7,78	cecomaf LBP	
-13	131	89,6	131												
-35	40	20	40		187,8	641	161,6	0,94	3,21	0,81	199,6	1,47	4,65	EN12900 LBP	
-31	104	68	104												
-6,66	54,4	35	46,1		928,2	3170	798,8	1,61	5,49	1,38	577,4	2,95	22,74	ASHRAE MBP	
20	130	95	115												
-10	55	32	55		702,6	2400	604,7	1,29	4,42	1,11	542,7	2,81	19,43	cecomaf MBP	
14	131	89,6	131												
-10	45	20	45		820,4	2802	706,0	1,65	5,63	1,42	497,9	2,64	21,74	EN12900 MBP	
14	113	68	113												

Performance tables

220V/60Hz, CSIR, fan 3m/s, VDE, CCC

	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	378,7	1293	325,9	1,15	3,92	0,99	330,2	1,98	9,23
cond. pressure	-23,3	-10	423,0	1445	364,1	1,21	4,13	1,04	349,7	2,06	10,32
pc= 45/113	-20	-4	516,5	1764	444,5	1,33	4,55	1,15	387,4	2,21	12,62
return gas temp.	-17,8	0	584,1	1995	502,7	1,42	4,84	1,22	412,4	2,30	14,29
RGT= 32/90	-15	5	676,3	2310	582,1	1,52	5,21	1,31	443,7	2,43	16,57
liquid temp	-10	14	857,8	2930	738,3	1,72	5,88	1,48	497,9	2,64	21,09
Tliq= 45/113	-5	23	1060,6	3622	912,7	1,93	6,60	1,66	549,1	2,84	26,18
[°C / °F]	-25	-13	284,0	970	244,4	0,77	2,65	0,67	366,7	2,13	7,78
cond. pressure	-23,3	-10	321,2	1097	276,4	0,83	2,84	0,72	386,3	2,20	8,80
pc= 55/131	-20	-4	401,0	1369	345,1	0,94	3,22	0,81	424,9	2,35	11,01
return gas temp	-17,8	0	459,7	1570	395,6	1,02	3,48	0,88	450,8	2,45	12,64
RGT= 32/90	-15	5	540,7	1847	465,3	1,12	3,82	0,96	483,9	2,58	14,89
liquid temp	-10	14	702,6	2400	604,7	1,29	4,42	1,11	542,7	2,81	19,43
Tliq= 55/131	-5	23	886,4	3027	762,8	1,48	5,04	1,27	600,3	3,04	24,62