

Single Pack SC15GH 220-240V 50Hz / 208-230V 60Hz CSIR

Single pack code number: **195B4183**

Position	Title	Code	Amount
1	Compressor SC15GH	104G8561	1
2	Starting relay	117U6011	1
3	Starting capacitor (80 μ F 220V, 6.3mm)	117U5017	1
4	Cord relief	103N1004	1
5	Cover	103N2008	1
6	Bolt joint for one compressor M6 \varnothing 16mm	118-1917	1

Secop GmbH • Lise-Meitner-Straße 29 • 24941 Flensburg, Germany • Tel: +49 461 4941 0 • www.secop.com

Secop accepts no responsibility for possible errors in catalogs, brochures, and other printed material. Secop reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequent changes being necessary to specifications already agreed. All trademarks in this material are the property of the respective companies. Secop and the Secop logotype are trademarks of Secop GmbH. All rights reserved.

Model

Designation	SC15GH	220-240V/50Hz 1~ 208-230V/60Hz 1~	Sales code:	104G8561
-------------	---------------	-----------------------------------	-------------	-----------------

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	13kg / 28,7lbs		
Motor protection	1# internal		
Winding resistance main	4,4Ω (at 25°C)		
Winding resistance aux	14Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



General - Configurations with SC15GH

	Conf. 1	Conf. 2	Conf. 3	Conf. 4
Motorconfiguration	CSIR	CSIR	CSIR	CSIR
Power supply (nominal)	220-240V/50Hz	220-240V/50Hz	208-230V/60Hz	208-230V/60Hz
Number of phases	1	1	1	1
Voltage range	198-254V	198-254V	198-254V	198-254V
Approvals	VDE, UL, CCC, KC	VDE, UL, CCC	VDE, UL, CCC, KC	VDE, UL, CCC
Starting torque	HST	HST	HST	HST
Note	- / -			

Applications with SC15GH

	Conf. 1	Conf. 2	Conf. 3	Conf. 4
Refrigerant	R134a	R513A	R134a	R513A
Application	HBP	HBP	HBP	HBP
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 SC15GH

	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)	19A	19A	18,3A	18,3A
RLA (rated load amps / 1s)	3,9A	3,9A	3,52A	3,52A
Cut in current	19A	19A	18,3A	18,3A

Model

Designation

SC15GH

220-240V/50Hz 1~ 208-230V/60Hz 1~

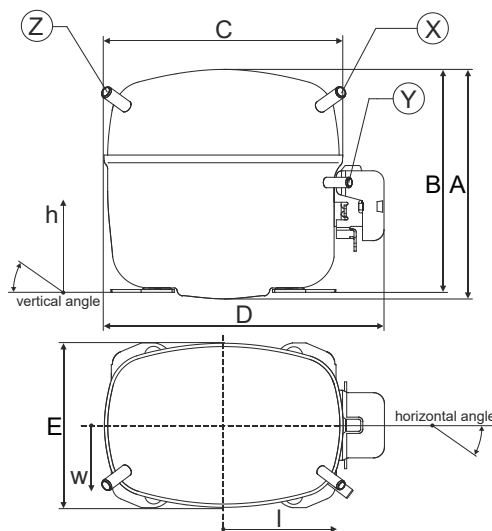
Sales code:

104G8561

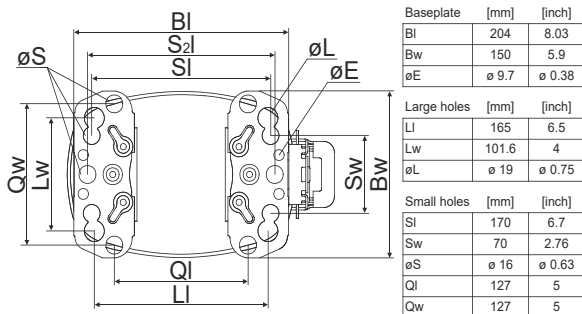
Compressor dimensions

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

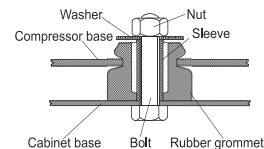
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 10,11-10,29	øi 8,11-8,29	øi 6,11-6,29
(i:inside, o:outside) [in]	øi 0,4-0,41	øi 0,32-0,33	øi 0,24-0,25
Material	copper	copper	copper
Horizontal angle ±2°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°
Position l/h/w [mm]	107/183/55	115/100/63	-107/183/55
[in]	4,2/7,2/2,2	4,5/3,9/2,5	-4,2/7,2/2,2
Straight tube l. [mm]	12	12	12
[in]	0,5	0,5	0,5



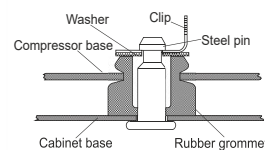
Compressor fixation



Bolt joint



Snap-on



Mounting accessories

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

Model

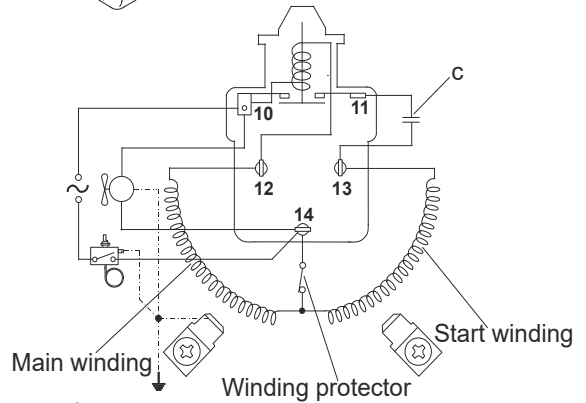
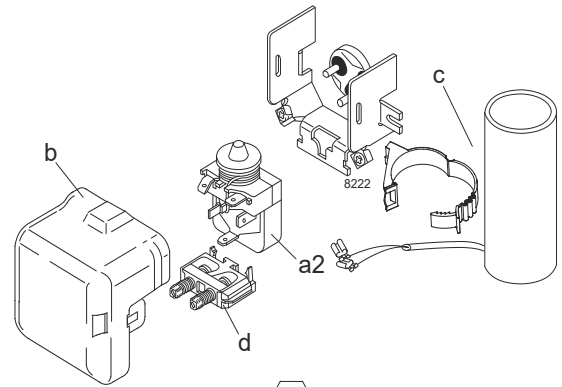
Designation	SC15GH	220-240V/50Hz	Conf. 1	Sales code:	104G8561
-------------	---------------	----------------------	----------------	-------------	-----------------

Configuration

Motorconfiguration	CSIR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R134a
Application	HBP
Voltage range	198-254V
Starting torque	HST
Approvals	VDE UL CCC KC

Electrical accessories / wiring diagram

CSIR



Components

a2	relay	117U6011
c	start capacitor (80μF)	117U5017
d	cord relief	103N1004
b	plastic cover	103N2008

Ambient/ machine room temperatures minimum /maximum

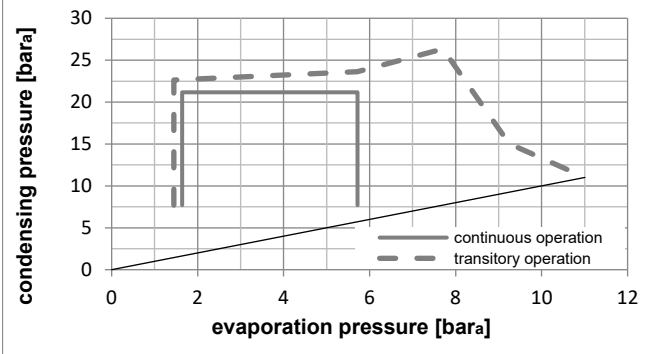
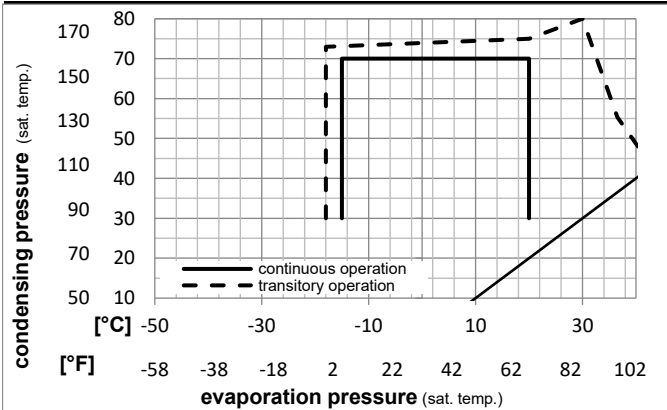
Ambient temperature range: 10 - 43°C / 50 - 110°F

Machine room temperature range: 10 - 48°C / 50 - 119°F

Compressor cooling: fan 3m/s

Operation Limits

Operation pressure range



Model

Designation **SC15GH** **220-240V/50Hz** Conf. 1 Sales code: **104G8561**

Optimization + standard conditions

R134a, 220V/50Hz, CSIR, fan 3m/s, VDE, UL, CCC, KC

		Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)			Return gas temp.			Liquid temp.			Cooling capacity			COP	EER	Power consumption			
		pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	Ref. mass flow									
[°C]	[°F]											[W]	[A]	[kg/h]									
7,2	45	54	35	46	1387,1	4737	1193,7	2,41	8,21	2,07	576,7	3,20	30,77	ASHRAE HBP									
5	41	55	32	55	1139,1	3890	980,3	2,02	6,89	1,74	564,9	3,14	28,07	cecomaf HBP									
5	41	50	20	50	1182,5	4039	1017,7	2,19	7,48	1,88	540,0	3,03	29,80	EN12900 HBP									
-7	20	54	35	46	738,1	2521	635,2	1,60	5,48	1,38	460,1	2,67	16,10	ASHRAE MBP									
-10	14	55	32	55	558,6	1908	480,7	1,32	4,50	1,13	423,9	2,50	13,51	cecomaf MBP									
-10	14	45	20	45	647,1	2210	556,9	1,58	5,40	1,36	409,1	2,44	15,15	EN12900 MBP									

Performance tables

R134a, 220V/50Hz, CSIR, fan 3m/s, VDE, UL, CCC, 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]	-15	5	510,8	1744	439,6	1,42	4,85	1,22	359,4	2,21	11,13
cond. pressure	-10	14	671,4	2293	577,8	1,64	5,60	1,41	409,1	2,44	14,69
pc= 45/113	-5	23	859,7	2936	739,9	1,90	6,50	1,64	451,7	2,63	18,91
return gas temp.	0	32	1080,1	3689	929,6	2,22	7,58	1,91	486,8	2,79	23,89
RGT= 32/90	5	41	1336,7	4565	1150,3	2,60	8,88	2,24	514,2	2,91	29,76
liquid temp	15	59	1975,0	6745	1699,7	3,63	12,39	3,12	544,3	3,05	44,74
Tliq= 45/113	20	68	2365,2	8078	2035,5	4,33	14,79	3,73	546,2	3,06	54,17
[°C / °F]	-15	5	416,9	1424	358,8	1,15	3,93	0,99	362,2	2,22	10,04
cond. pressure	-10	14	558,6	1908	480,7	1,32	4,50	1,13	423,9	2,50	13,51
pc= 55/131	-5	23	723,4	2470	622,5	1,51	5,16	1,30	478,5	2,75	17,58
return gas temp	0	32	915,5	3126	787,9	1,74	5,95	1,50	525,6	2,96	22,39
RGT= 32/90	5	41	1139,1	3890	980,3	2,02	6,89	1,74	564,9	3,14	28,07
liquid temp	15	59	1697,6	5798	1461,0	2,75	9,38	2,36	618,4	3,39	42,64
Tliq= 55/131	20	68	2040,9	6970	1756,4	3,23	11,03	2,78	631,9	3,45	51,90

Model

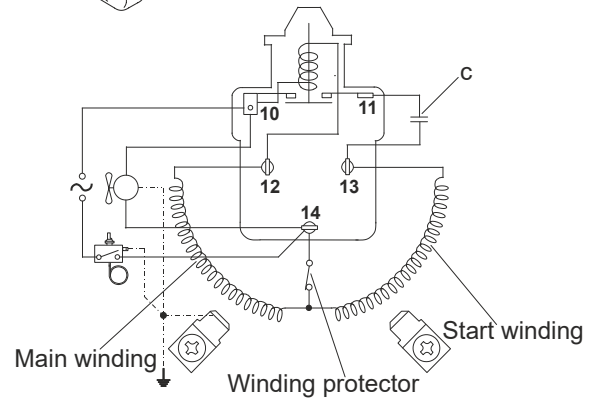
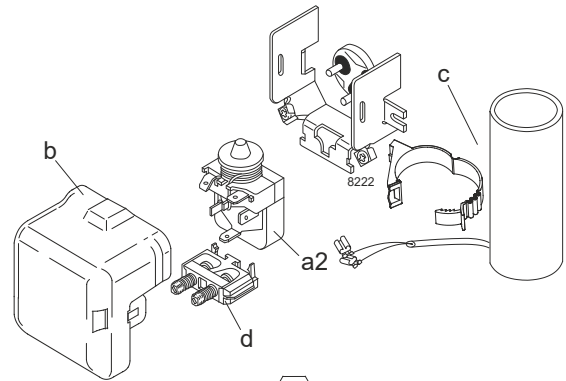
Designation	SC15GH	220-240V/50Hz	Conf. 2	Sales code:	104G8561
-------------	---------------	----------------------	----------------	-------------	-----------------

Configuration

Motorconfiguration	CSIR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R513A
Application	HBP
Voltage range	198-254V
Starting torque	HST
Approvals	VDE UL CCC

Electrical accessories / wiring diagram

CSIR

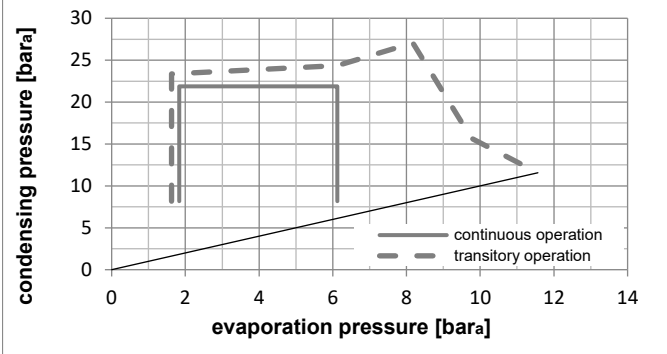
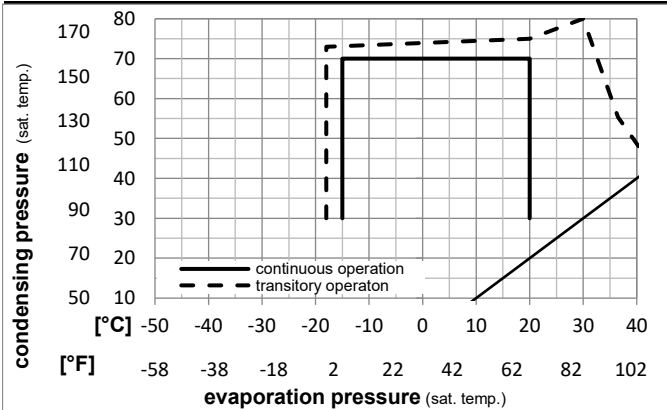


Ambient/ machine room temperatures minimum /maximum

Ambient temperature range:	10 - 43°C / 50 - 110°F
Machine room temperature range:	10 - 48°C / 50 - 119°F
Compressor cooling:	fan 3m/s

Operation Limits

Operation pressure range



Components

a2	relay	117U6011
c	start capacitor (80µF)	117U5017
d	cord relief	103N1004
b	plastic cover	103N2008

Model

Designation **SC15GH** **220-240V/50Hz** Conf. 2 Sales code: **104G8561**

Optimization + standard conditions

R513A, 220V/50Hz, CSIR, fan 3m/s, VDE, UL, CCC

		Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)						Power consumption			
		Return gas temp.				Liquid temp.						Current consumption			Ref. mass flow
		Cooling capacity				COP	EER	P1			I	m			
		pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
[°C]	7,2	54	35	46	1427,0	4873	1228,1	2,37	8,10	2,04	601,9	3,29	35,45	ASHRAE HBP	
[°F]	45	130	95	115											
[°C]	5	55	32	55	1154,7	3944	993,8	1,95	6,67	1,68	590,9	3,24	32,45	cecomaf HBP	
[°F]	41	131	90	131											
[°C]	5	50	20	50	1200,8	4101	1033,4	2,13	7,26	1,83	564,6	3,12	34,43	EN12900 HBP	
[°F]	41	122	68	122											
[°C]	-7	54	35	46	776,0	2650	667,8	1,59	5,44	1,37	487,4	2,77	19,01	ASHRAE MBP	
[°F]	20	130	95	115											
[°C]	-10	55	32	55	580,7	1983	499,8	1,29	4,40	1,11	450,9	2,61	16,06	cecomaf MBP	
[°F]	14	131	90	131											
[°C]	-10	45	20	45	677,2	2313	582,8	1,56	5,33	1,34	434,0	2,53	17,95	EN12900 MBP	
[°F]	14	113	68	113											

Performance tables

R513A, 220V/50Hz, CSIR, fan 3m/s, VDE, UL, 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]	-15	5	544,2	1859	468,4	1,42	4,85	1,22	383,1	2,30	13,33	
cond. pressure	-10	14	708,2	2419	609,5	1,63	5,57	1,40	434,0	2,53	17,41	
pc= 45/113	-5	23	899,1	3071	773,8	1,89	6,44	1,62	476,7	2,72	22,19	
return gas temp.	0	32	1121,0	3828	964,8	2,19	7,49	1,89	511,3	2,88	27,80	
RGT= 32/90	5	41	1377,9	4706	1185,9	2,56	8,76	2,21	537,4	3,00	34,37	
liquid temp	15	59	2012,8	6874	1732,3	3,57	12,19	3,07	563,8	3,12	50,93	
Tliq= 45/113	20	68	2398,9	8193	2064,5	4,25	14,53	3,66	563,9	3,12	61,25	
[°C / °F]	-15	5	438,6	1498	377,4	1,13	3,86	0,97	387,5	2,32	12,08	
cond. pressure	-10	14	580,7	1983	499,8	1,29	4,40	1,11	450,9	2,61	16,06	
pc= 55/131	-5	23	744,8	2544	641,0	1,47	5,03	1,27	506,1	2,86	20,69	
return gas temp	0	32	934,8	3192	804,5	1,69	5,78	1,46	552,8	3,07	26,10	
RGT= 32/90	5	41	1154,7	3944	993,8	1,95	6,67	1,68	590,9	3,24	32,45	
liquid temp	15	59	1700,5	5808	1463,5	2,65	9,06	2,28	641,0	3,46	48,56	
Tliq= 55/131	20	68	2034,4	6948	1750,8	3,12	10,65	2,68	652,6	3,51	58,70	

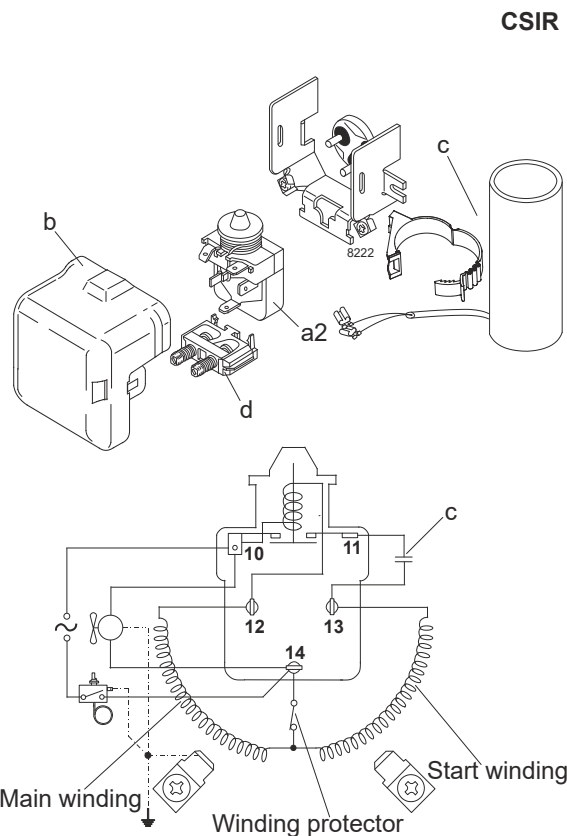
Model

Designation	SC15GH	208-230V/60Hz	Conf. 3	Sales code:	104G8561
-------------	---------------	----------------------	----------------	-------------	-----------------

Configuration

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

Electrical accessories / wiring diagram

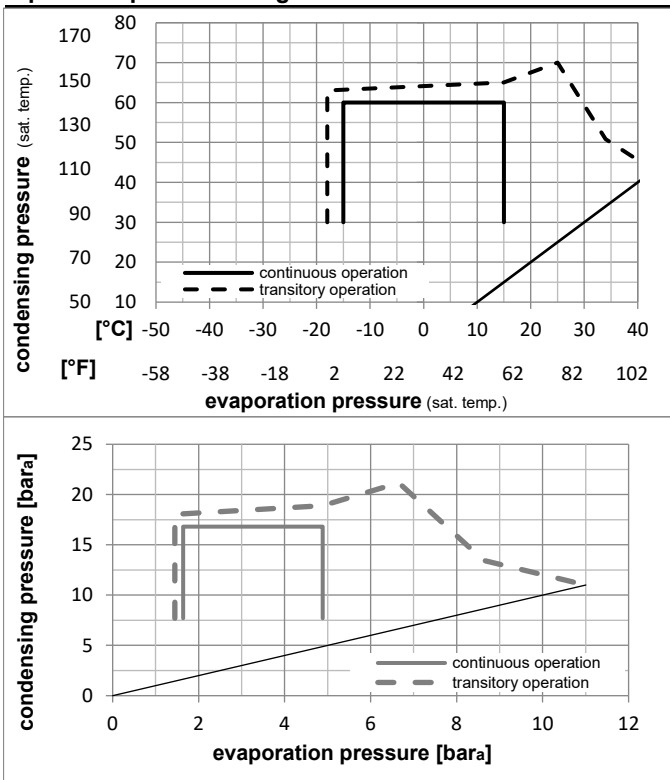


Ambient/ machine room temperatures minimum /maximum

Ambient temperature range:	10 - 43°C / 50 - 110°F
Machine room temperature range:	10 - 48°C / 50 - 119°F
Compressor cooling:	fan 3m/s

Operation Limits

Operation pressure range



Components

a2	relay	117U6011
c	start capacitor (80μF)	117U5017
d	cord relief	103N1004
b	plastic cover	103N2008

Model

Designation **SC15GH** **208-230V/60Hz** Conf. 3 Sales code: **104G8561**

Optimization + standard conditions

R134a, 230V/60Hz, CSIR, fan 3m/s, VDE, UL, CCC, KC

		Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)			Return gas temp.		Liquid temp.		Cooling capacity			COP	EER	Power consumption		
		pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	m						
[°C]	[°F]											[W]	[A]	[kg/h]						
7,2	45	54	35	46	1595,4	5449	1373,0	2,39	8,17	2,06	667,1	3,28	35,39	ASHRAE HBP						
5	41	55	32	55	1295,1	4423	1114,6	2,03	6,92	1,74	639,0	3,13	31,91	cecomaf HBP						
5	41	50	20	50	1349,4	4608	1161,3	2,21	7,56	1,91	609,3	2,97	34,00	EN12900 HBP						
-7	20	54	35	46	783,1	2675	674,0	1,67	5,70	1,44	469,3	2,25	17,09	ASHRAE MBP						
-10	14	55	32	55	581,5	1986	500,5	1,37	4,69	1,18	423,6	2,01	14,06	cecomaf MBP						
-10	14	45	20	45	677,9	2315	583,4	1,64	5,59	1,41	414,0	1,96	15,87	EN12900 MBP						

Performance tables

R134a, 230V/60Hz, CSIR, fan 3m/s, VDE, UL, CCC, 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]	-15	5	512,6	1751	441,1	1,44	4,91	1,24	356,5	1,66	11,17
cond. pressure	-10	14	703,3	2402	605,2	1,70	5,80	1,46	414,0	1,96	15,39
pc= 45/113	-5	23	934,2	3190	804,0	1,98	6,77	1,71	471,5	2,26	20,54
return gas temp.	0	32	1209,9	4132	1041,3	2,29	7,83	1,97	528,0	2,55	26,76
RGT= 32/90	5	41	1535,2	5243	1321,2	2,63	9,00	2,27	582,8	2,84	34,18
liquid temp	10	50	1914,6	6539	1647,7	3,02	10,30	2,60	634,9	3,11	42,96
Tliq= 45/113	15	59	2352,7	8035	2024,7	3,44	11,76	2,96	683,5	3,36	53,29
[°C / °F]	-15	5	424,6	1450	365,4	1,20	4,08	1,03	355,0	1,65	10,22
cond. pressure	-10	14	581,5	1986	500,5	1,37	4,69	1,18	423,6	2,01	14,06
pc= 55/131	-5	23	775,9	2650	667,7	1,57	5,36	1,35	494,4	2,38	18,86
return gas temp	0	32	1012,2	3457	871,1	1,79	6,10	1,54	566,5	2,75	24,76
RGT= 32/90	5	41	1295,1	4423	1114,6	2,03	6,92	1,74	639,0	3,13	31,91
liquid temp	10	50	1629,4	5565	1402,2	2,29	7,83	1,97	711,0	3,50	40,50
Tliq= 55/131	15	59	2019,5	6897	1738,0	2,58	8,82	2,22	781,6	3,87	50,72

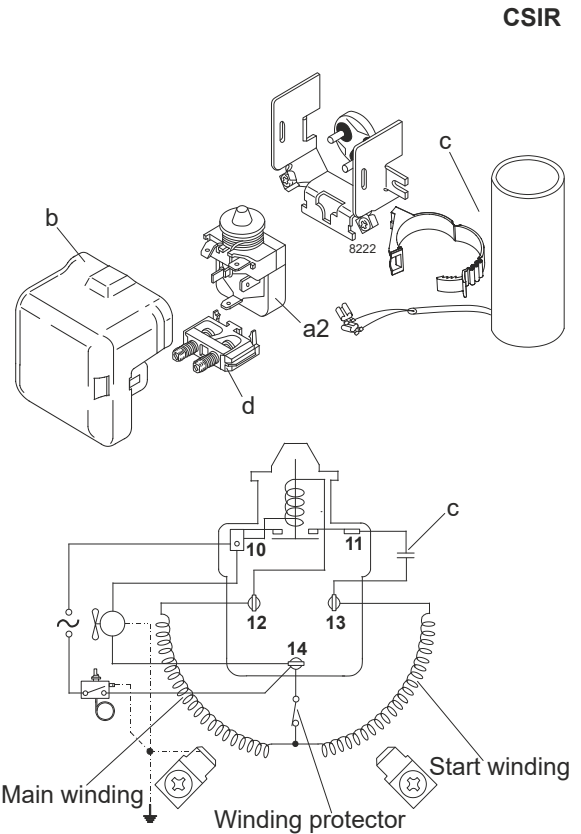
Model

Designation	SC15GH	208-230V/60Hz	Conf. 4	Sales code:	104G8561
-------------	---------------	----------------------	----------------	-------------	-----------------

Configuration

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

Electrical accessories / wiring diagram

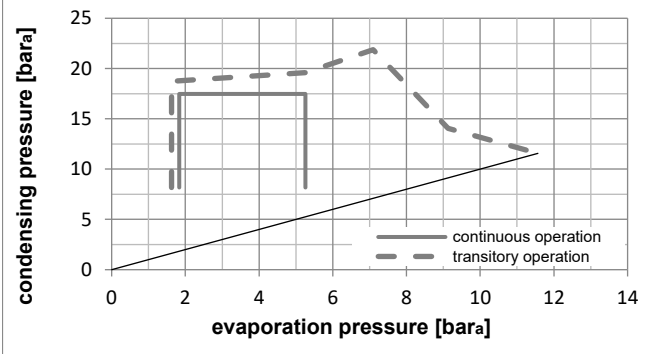
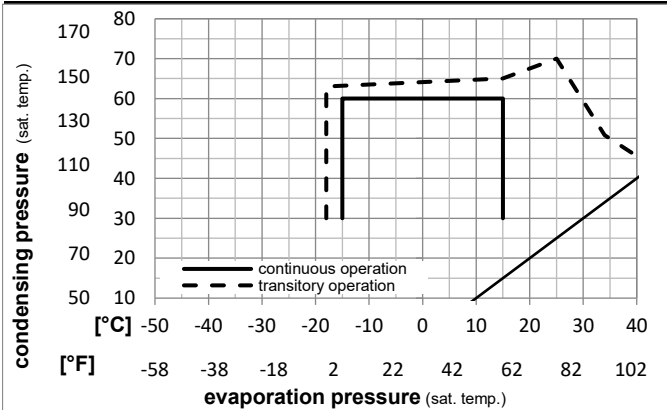


Ambient/ machine room temperatures minimum /maximum

Ambient temperature range:	10 - 43°C / 50 - 110°F
Machine room temperature range:	10 - 48°C / 50 - 119°F
Compressor cooling:	fan 3m/s

Operation Limits

Operation pressure range



Components

a2	relay	117U6011
c	start capacitor (80μF)	117U5017
d	cord relief	103N1004
b	plastic cover	103N2008

Model

Designation	SC15GH	208-230V/60Hz	Conf. 4	Sales code:	104G8561
-------------	---------------	----------------------	----------------	-------------	-----------------

Optimization + standard conditions

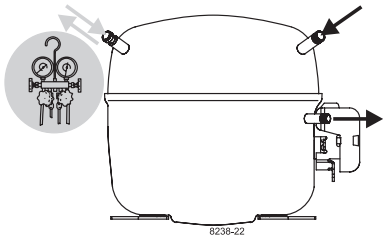
R513A, 230V/60Hz, CSIR, fan 3m/s, VDE, UL, CCC

		Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)			Return gas temp.			Liquid temp.			Cooling capacity			COP	EER	Power consumption			
		pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	m	[W]	[A]	[kg/h]						
[°C]	[°F]																						
7,2	45	54	35	46	1641,7	5607	1412,8	2,36	8,05	2,03	696,4	3,42	40,78								ASHRAE HBP		
5	41	55	32	55	1313,2	4485	1130,2	1,96	6,71	1,69	668,4	3,28	36,90								cecomaf HBP		
5	41	50	20	50	1370,6	4681	1179,5	2,15	7,35	1,85	637,0	3,11	39,30								EN12900 HBP		
-7	20	54	35	46	823,7	2813	708,9	1,66	5,66	1,43	496,8	2,38	20,18								ASHRAE MBP		
-10	14	55	32	55	604,8	2066	520,5	1,34	4,59	1,16	450,3	2,14	16,72								cecomaf MBP		
-10	14	45	20	45	709,7	2424	610,8	1,62	5,52	1,39	439,0	2,08	18,81								EN12900 MBP		

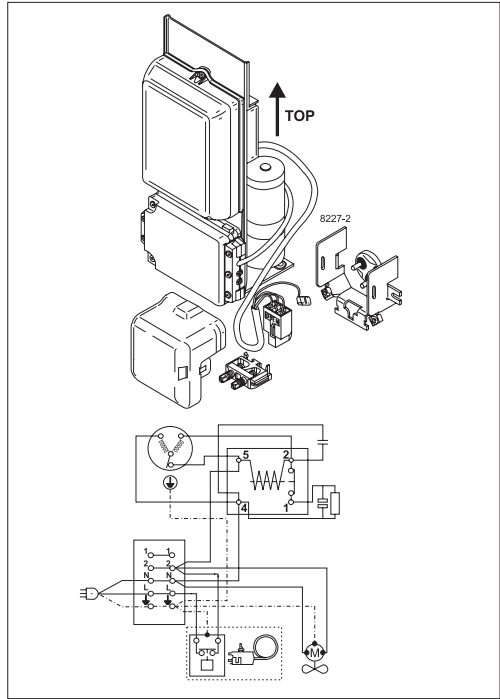
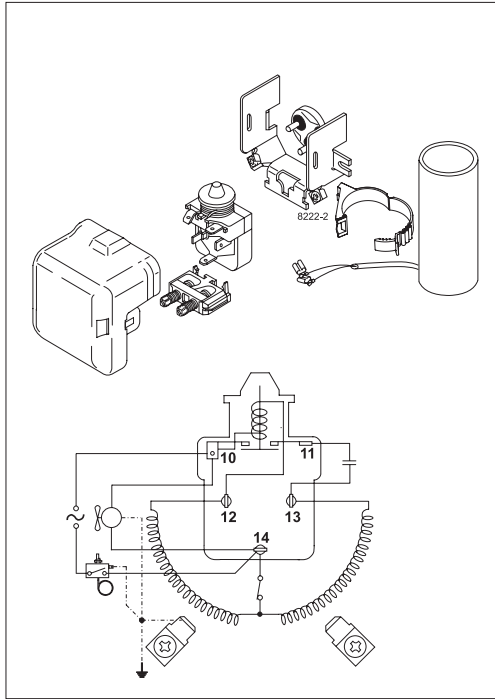
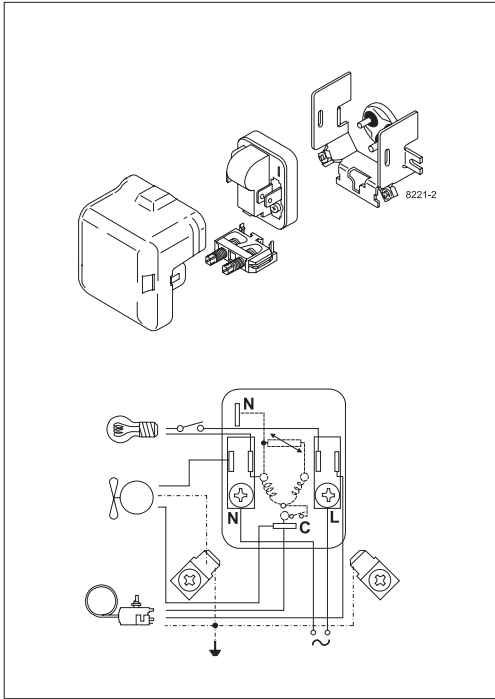
Performance tables

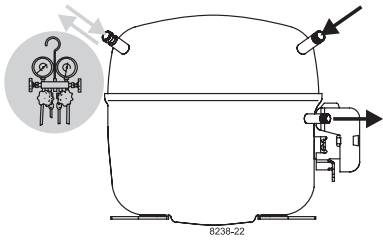
R513A, 230V/60Hz, CSIR, fan 3m/s, VDE, UL, CCC

	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]	-15	5	546,5	1866	470,3	1,44	4,91	1,24	380,1	1,78	13,39	
cond. pressure	-10	14	742,1	2535	638,7	1,69	5,77	1,45	439,0	2,08	18,25	
pc= 45/113	-5	23	977,2	3337	841,0	1,96	6,71	1,69	497,4	2,39	24,12	
return gas temp.	0	32	1256,0	4290	1081,0	2,27	7,74	1,95	554,3	2,68	31,15	
RGT= 32/90	5	41	1582,9	5406	1362,2	2,60	8,87	2,24	609,1	2,97	39,48	
liquid temp	10	50	1962,0	6700	1688,5	2,97	10,14	2,55	661,0	3,24	49,26	
Tliq= 45/113	15	59	2397,7	8188	2063,5	3,38	11,55	2,91	709,1	3,49	60,66	
[°C / °F]	-15	5	446,5	1525	384,3	1,18	4,02	1,01	379,7	1,77	12,30	
cond. pressure	-10	14	604,8	2066	520,5	1,34	4,59	1,16	450,3	2,14	16,72	
pc= 55/131	-5	23	799,2	2729	687,8	1,53	5,22	1,32	522,4	2,52	22,20	
return gas temp	0	32	1033,9	3531	889,8	1,74	5,93	1,49	595,4	2,90	28,87	
RGT= 32/90	5	41	1313,2	4485	1130,2	1,96	6,71	1,69	668,4	3,28	36,90	
liquid temp	10	50	1641,5	5606	1412,7	2,22	7,57	1,91	740,6	3,65	46,47	
Tliq= 55/131	15	59	2023,0	6909	1741,0	2,49	8,52	2,15	811,4	4,02	57,77	



SC Compressors





SC Compressors

Service/Repair – R290



8545



Secop accepts no responsibility for possible errors in catalogs, brochures, and other printed material. Secop reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequent changes being necessary to specifications already agreed. All trademarks in this material are the property of the respective companies. Secop and the Secop logotype are trademarks of Secop GmbH. All rights reserved. www.secop.com