Single
Packs

Single Pack SC18GH 220-240V 50Hz / 208-230V 60Hz CSCR

Single pack code number: **195B4175**

Position	Title	Code	Amount
1	Compressor SC18GH	104G8861	1
2	SC starting device (550mm)	117-7039	1
3	Cord relief	103N1004	1
4	Cover	103N2008	1
5	Bolt joint for one compressor | M6 | ø16mm	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 subsequential 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
SC18GH

Sales code:
104G8861

Compressor Data

Refrigerant(s)	**R134a / R513A**
Refr. charge - tech. limit	**1300g / 45.86oz**
Weight	**13.80 kg / 30.42lbs**
Displacement	**17.69 cm3 / 1.08cu.in**
Compressors on pallet	**80**

General – Configurations With SC18GH

–	Conf. 1	Conf. 2	Conf. 3	Conf. 4
Motor configuration	CSCR	CSCR	CSCR	CSCR
Power supply (nominal)	220-240 V/50 Hz	220-240 V/50 Hz	208-230 V/60 Hz	208-230 V/60 Hz
Number of phases	1	1	1	1
Voltage range	198-254 V	198-254 V	198-254 V	198-254 V
Approvals	VDE, UL, CCC, KC	VDE, UL, CCC	VDE, UL, CCC, KC	VDE, UL, CCC
Starting torque	HST	HST	HST	HST
Refrigerant	R134a	R513A	R134a	R513A
Application	HBP	HBP	HBP	HBP
Hot gas defrost	OK	OK	OK	OK
Long interval pull down	OK	OK	OK	OK

Application Notes

- Provision for PE Grounding is located at the PE Stamp on the compressor

Model
SC18GH

Sales code:
104G8861

Compressor Design

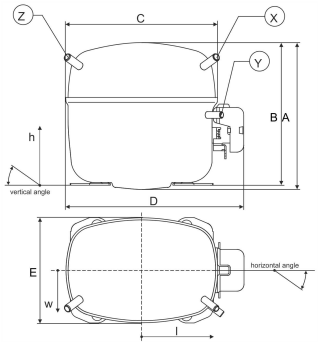
Oil type	**POE**	Winding resistance main	**3.5 Ohm**
Oil viscosity	**22cSt**	Winding resistance aux	**13 Ohm**
Oil quantity	**504 / 17.04fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**1,460 cm3 / 49.37fl.oz**	Max. discharge temp.	**135°C / 275°F**
Motor protection	**internal**		

Compressor Dimensions

Housing

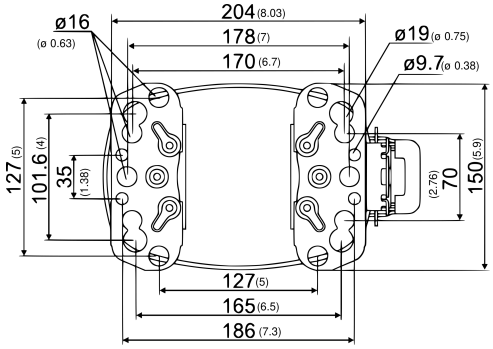
A Height	**219mm / 8.62in**
B Height	**213mm / 8.39in**
C Length shell	**218mm / 8.58in**
D Length w. cover	**255mm / 10.04in**
E Width	**151mm / 5.94in**

Find 3D Model here



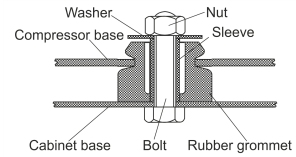
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 10.11–10.29 / 0.40–0.41in	øi 8.11–8.29 / 0.32–0.33in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°
Position l/h/w [mm]	107/193/55 / 4.21/7.60/2.17in	115/110/63 / 4.53/4.33/2.48in	-107/193/55 / -4.21/7.60/2.17in
Straight tube l. [mm]	12 / 0.47in	12 / 0.47in	12 / 0.47in

Mounting Accessories

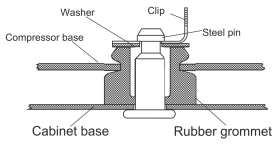


Dimensions in mm [in]

Bolt joint



Snap-on



	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

Model
SC18GH Configuration 1

Sales code:
104G8861

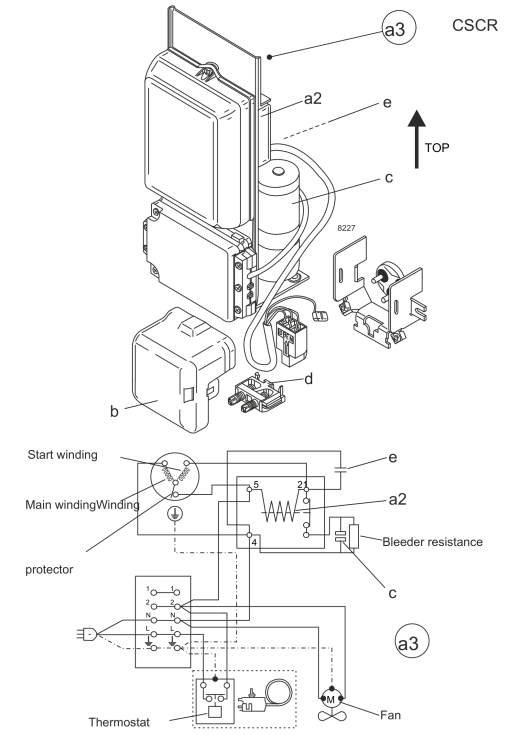
Configuration

Motor configuration	**CSCR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R134a**
Application	**HBP**
Voltage range	**198-254 V**
Starting torque	**HST**
Approvals	**VDE, UL, CCC, KC**
Starting device type	**relay**
Run capacitor	**10 µF**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**22 A**
RLA (rated load amps / 1s/ U(N))	**3.9 A**
Cut in current (U(N))	**22 A**

Ambient/ machine room temperatures minimum /maximum
Ambient temperature range: 10 - 43°C / 50 - 109°F
Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling
fan 3m/s

Electrical Accessories / Wiring Diagram

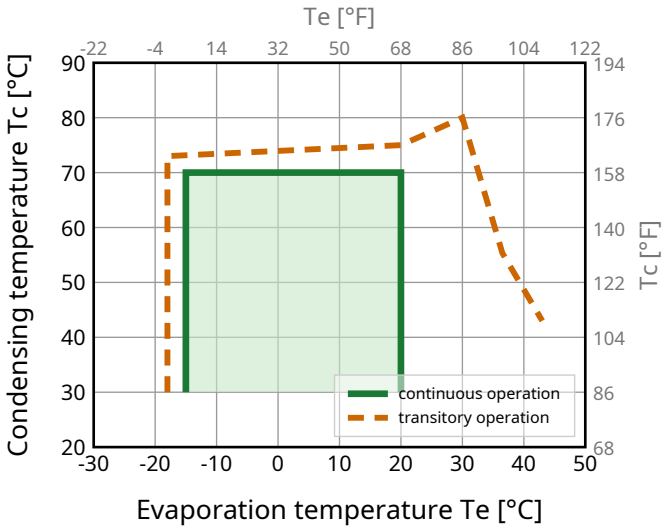


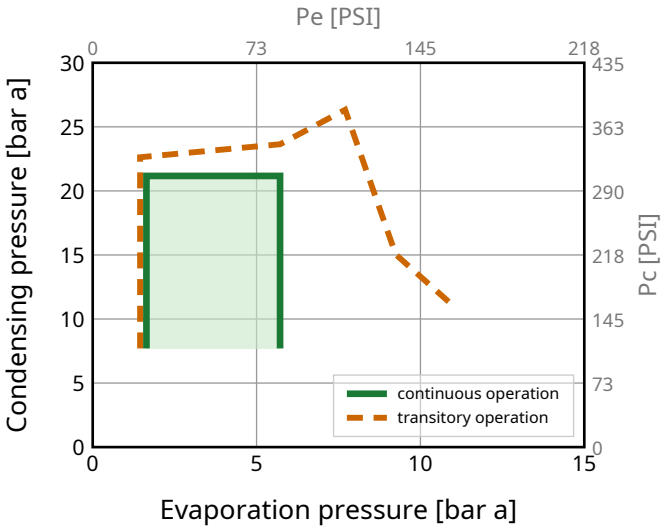
View full size

Components
a3 SC starter kit (550mm) 117-7039
b plastic cover 103N2008
d cord relief 103N1004

Alternative components
a3 SC starter kit (1000mm) 117-7043

Operation Pressure Range





Model
SC18GH Configuration 1

Sales code:
104G8861

Standard Conditions

R134a, 220 V/50 Hz, CSCR, fan 3m/s

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	ṁ	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-6.7 20	54.4 129.9	35 95	46.1 115	**840**	2867	723	**1.74**	5.93	483	2.79	18.30	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**640**	2182	550	**1.42**	4.83	452	2.66	15.42	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**749**	2556	644	**1.73**	5.91	433	2.59	17.47	**EN12900 MBP**
7.2 45	54.4 129.9	35 95	46.1 115	**1598**	5451	1374	**2.57**	8.76	622	3.33	35.36	**ASHRAE HBP**
5 41	55 131	32 89.6	55 131	**1310**	4470	1127	**2.17**	7.39	605	3.26	32.18	**CECOMAF HBP**
5 41	50 122	20 68	50 122	**1365**	4657	1174	**2.35**	8.03	580	3.15	34.24	**EN12900 HBP**

Performance Tables

R134a, 220 V/50 Hz, CSCR, fan 3m/s

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

pe		Cooling capacity			COP	EER	P	I	ṁ
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-15	5	**597**	2037	513	**1.54**	5.25	388	2.42	12.99
-10	14	**776**	2647	667	**1.79**	6.11	433	2.59	16.94
-5	23	**990**	3376	851	**2.07**	7.07	478	2.75	21.71
0	32	**1243**	4240	1069	**2.39**	8.15	520	2.90	27.42
5	41	**1540**	5254	1324	**2.76**	9.41	558	3.04	34.20
10	50	**1885**	6433	1621	**3.20**	10.90	590	3.18	42.20
15	59	**2284**	7793	1964	**3.73**	12.73	612	3.31	51.60
20	68	**2740**	9349	2356	**4.40**	15.00	623	3.44	62.59

pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F

-15	5	**485**	1656	417	**1.20**	4.10	404	2.44	11.65
-10	14	**640**	2182	550	**1.42**	4.83	452	2.66	15.42
-5	23	**825**	2816	710	**1.64**	5.60	502	2.86	20.00
0	32	**1047**	3573	901	**1.89**	6.45	554	3.06	25.54
5	41	**1310**	4470	1127	**2.17**	7.39	605	3.26	32.18
10	50	**1618**	5522	1392	**2.48**	8.48	651	3.45	40.10
15	59	**1976**	6744	1700	**2.86**	9.75	692	3.63	49.47
20	68	**2389**	8151	2054	**3.30**	11.25	724	3.80	60.53

Model
SC18GH Configuration 2

Sales code:
104G8861

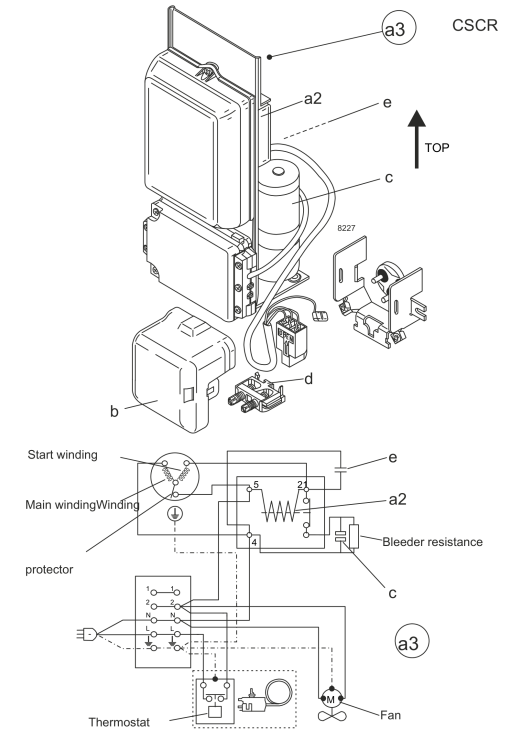
Configuration

Motor configuration	**CSCR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R513A**
Application	**HBP**
Voltage range	**198-254 V**
Starting torque	**HST**
Approvals	**VDE, UL, CCC**
Starting device type	**relay**
Run capacitor	**10 µF**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**22 A**
RLA (rated load amps / 1s/ U(N))	**3.9 A**
Cut in current (U(N))	**22 A**

Ambient/ machine room temperatures minimum /maximum
Ambient temperature range: 10 - 43°C / 50 - 109°F
Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling
fan 3m/s

Electrical Accessories / Wiring Diagram

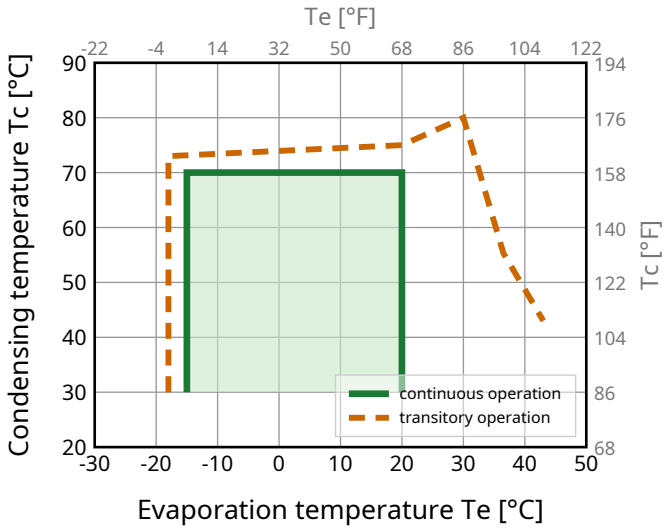


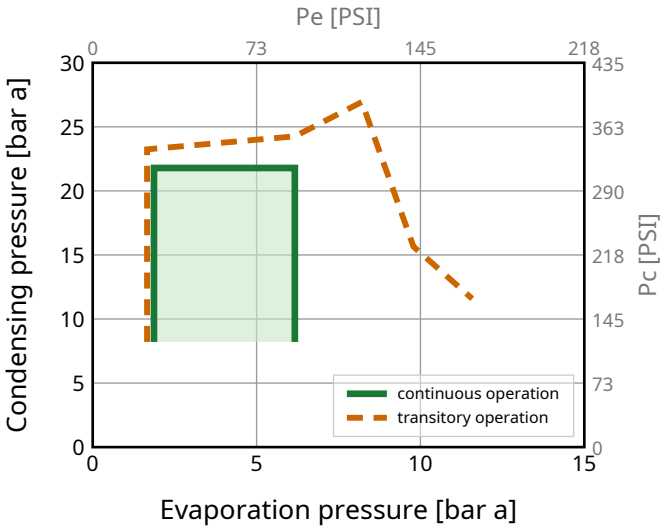
View full size

Components
a3 SC starter kit (550mm) 117-7039
b plastic cover 103N2008
d cord relief 103N1004

Alternative components
a3 SC starter kit (1000mm) 117-7043

Operation Pressure Range





Model
SC18GH Configuration 2

Sales code:
104G8861

Standard Conditions

R513A, 220 V/50 Hz, CSCR, fan 3m/s

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	ṁ	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-6.7 20	54.4 129.9	35 95	46.1 115	**882**	3011	759	**1.72**	5.86	514	2.87	22.00	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**664**	2267	571	**1.38**	4.69	483	2.75	18.64	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**779**	2659	670	**1.69**	5.76	461	2.66	21.10	**EN12900 MBP**
7.2 45	54.4 129.9	35 95	46.1 115	**1642**	5604	1413	**2.52**	8.61	651	3.44	41.73	**ASHRAE HBP**
5 41	55 131	32 89.6	55 131	**1327**	4529	1141	**2.09**	7.14	634	3.37	38.06	**CECOMAF HBP**
5 41	50 122	20 68	50 122	**1375**	4690	1182	**2.26**	7.72	608	3.26	40.53	**EN12900 HBP**

Performance Tables

R513A, 220 V/50 Hz, CSCR, fan 3m/s

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

pe		Cooling capacity			COP	EER	P	I	ṁ
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-15	5	**636**	2168	547	**1.53**	5.21	416	2.47	15.83
-10	14	**818**	2790	703	**1.77**	6.05	461	2.66	20.47
-5	23	**1034**	3529	889	**2.04**	6.97	506	2.84	26.03
0	32	**1289**	4398	1109	**2.35**	8.03	548	3.01	32.65
5	41	**1586**	5413	1364	**2.71**	9.25	585	3.17	40.49
10	50	**1931**	6588	1660	**3.14**	10.71	615	3.29	49.73
15	59	**2326**	7937	2000	**3.66**	12.48	636	3.37	60.55
20	68	**2777**	9475	2388	**4.30**	14.69	645	3.41	73.22

pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F

-15	5	**510**	1740	439	**1.17**	4.00	435	2.55	14.23
-10	14	**664**	2267	571	**1.38**	4.69	483	2.75	18.64
-5	23	**849**	2897	730	**1.59**	5.43	533	2.95	23.97
0	32	**1069**	3646	919	**1.83**	6.24	584	3.16	30.39
5	41	**1327**	4529	1141	**2.09**	7.14	634	3.37	38.06
10	50	**1629**	5558	1401	**2.40**	8.18	680	3.55	47.19
15	59	**1978**	6750	1701	**2.75**	9.39	719	3.71	58.00
20	68	**2379**	8118	2046	**3.17**	10.82	750	3.84	70.77

Model
SC18GH Configuration 3

Sales code:
104G8861

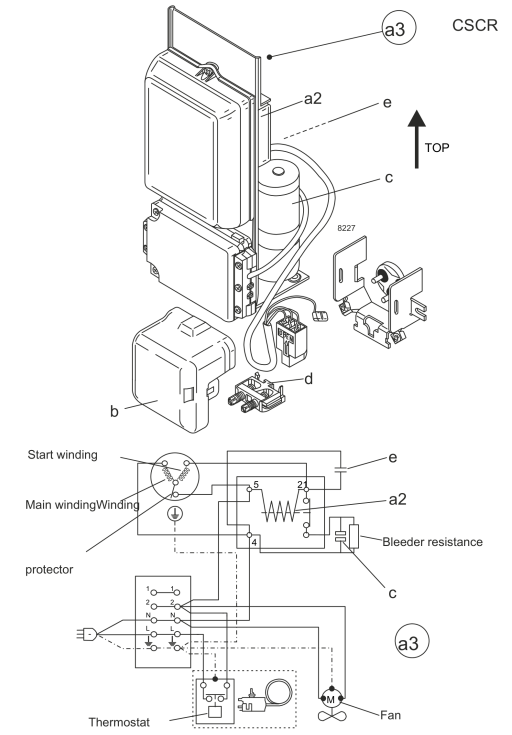
Configuration

Motor configuration	**CSCR**
Power supply (nominal)	**208-230 V/60 Hz 1~**
Refrigerant	**R134a**
Application	**HBP**
Voltage range	**198-254 V**
Starting torque	**HST**
Approvals	**VDE, UL, CCC, KC**
Starting device type	**relay**
Run capacitor	**10 µF**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**22 A**
RLA (rated load amps / 1s/ U(N))	**3.9 A**
Cut in current (U(N))	**22 A**

Ambient/ machine room temperatures minimum /maximum
Ambient temperature range: 10 - 43°C / 50 - 109°F
Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling
fan 3m/s

Electrical Accessories / Wiring Diagram

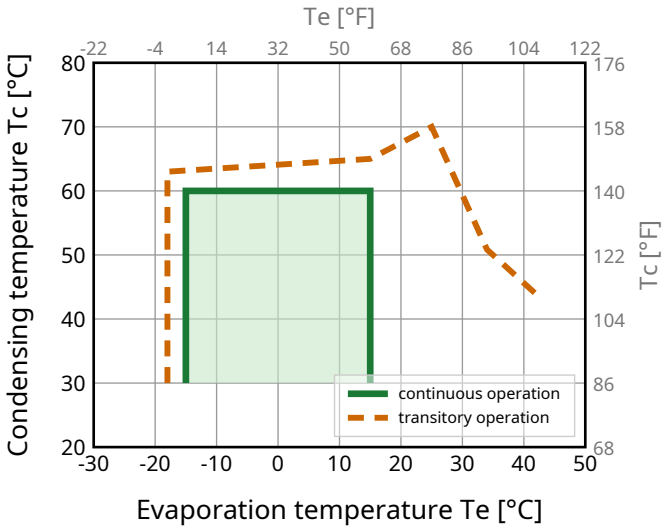


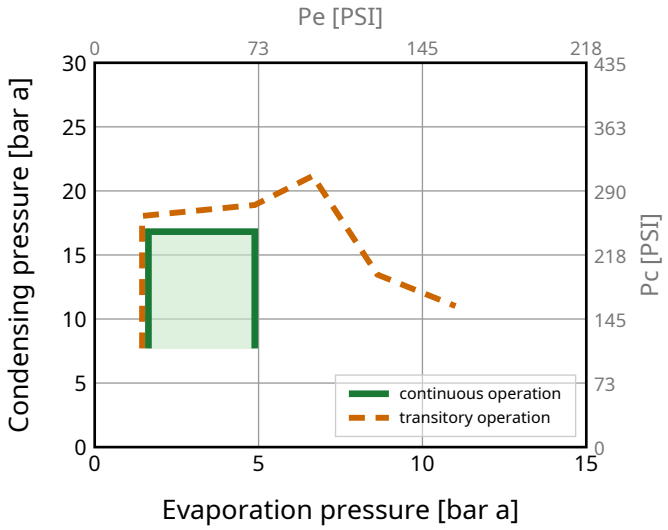
View full size

Components
a3 SC starter kit (550mm) 117-7039
b plastic cover 103N2008
d cord relief 103N1004

Alternative components
a3 SC starter kit (1000mm) 117-7043

Operation Pressure Range





Model
SC18GH Configuration 3

Sales code:
104G8861

Standard Conditions

R134a, 230 V/60 Hz, CSCR, fan 3m/s

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	ṁ	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-6.7 20	54.4 129.9	35 95	46.1 115	**975**	3325	838	**1.76**	6.01	553	2.65	21.22	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**745**	2542	641	**1.46**	4.97	512	2.45	17.96	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**874**	2981	751	**1.76**	6.01	496	2.42	20.37	**EN12900 MBP**
7.2 45	54.4 129.9	35 95	46.1 115	**1836**	6265	1579	**2.51**	8.55	733	3.47	40.65	**ASHRAE HBP**
5 41	55 131	32 89.6	55 131	**1506**	5139	1295	**2.13**	7.26	708	3.35	37.00	**CECOMAF HBP**
5 41	50 122	20 68	50 122	**1573**	5368	1353	**2.30**	7.84	685	3.25	39.47	**EN12900 HBP**

Performance Tables

R134a, 230 V/60 Hz, CSCR, fan 3m/s

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

pe		Cooling capacity			COP	EER	P	I	ṁ
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-15	5	**702**	2397	604	**1.60**	5.46	439	2.17	15.28
-10	14	**905**	3088	778	**1.82**	6.22	496	2.42	19.76
-5	23	**1148**	3917	987	**2.07**	7.08	554	2.66	25.19
0	32	**1437**	4902	1236	**2.36**	8.05	609	2.90	31.70
5	41	**1776**	6060	1527	**2.69**	9.17	661	3.13	39.45
10	50	**2171**	7408	1867	**3.08**	10.50	706	3.37	48.60
15	59	**2627**	8965	2260	**3.54**	12.07	743	3.60	59.36

pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F

-15	5	**572**	1953	492	**1.27**	4.35	450	2.14	13.74
-10	14	**745**	2542	641	**1.46**	4.97	512	2.45	17.96
-5	23	**955**	3257	821	**1.66**	5.65	577	2.75	23.14
0	32	**1207**	4117	1038	**1.88**	6.40	643	3.05	29.43
5	41	**1506**	5139	1295	**2.13**	7.26	708	3.35	37.00
10	50	**1858**	6341	1598	**2.41**	8.24	770	3.65	46.04
15	59	**2268**	7739	1951	**2.75**	9.37	826	3.94	56.77

Model
SC18GH Configuration 4

Sales code:
104G8861

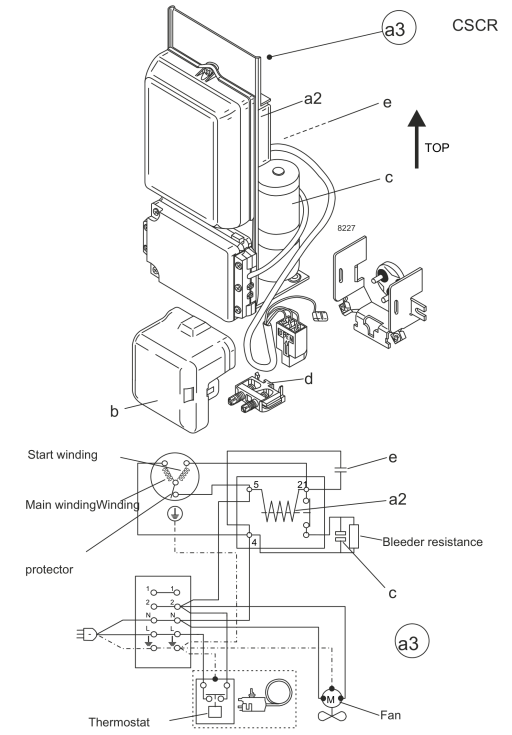
Configuration

Motor configuration	**CSCR**
Power supply (nominal)	**208-230 V/60 Hz 1~**
Refrigerant	**R513A**
Application	**HBP**
Voltage range	**198-254 V**
Starting torque	**HST**
Approvals	**VDE, UL, CCC**
Starting device type	**relay**
Run capacitor	**10 µF**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**22 A**
RLA (rated load amps / 1s/ U(N))	**3.9 A**
Cut in current (U(N))	**22 A**

Ambient/ machine room temperatures minimum /maximum
Ambient temperature range: 10 - 43°C / 50 - 109°F
Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling
fan 3m/s

Electrical Accessories / Wiring Diagram

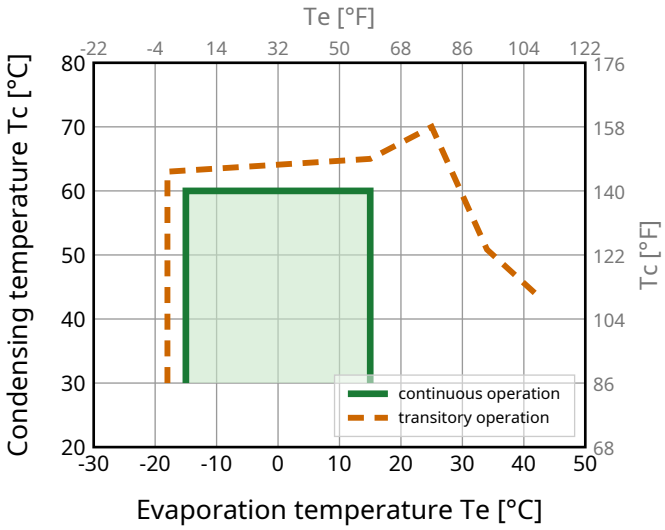


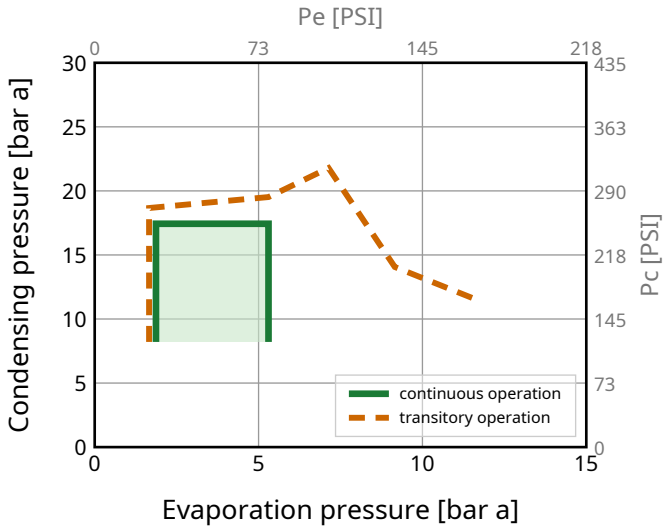
View full size

Components
a3 SC starter kit (550mm) 117-7039
b plastic cover 103N2008
d cord relief 103N1004

Alternative components
a3 SC starter kit (1000mm) 117-7043

Operation Pressure Range





Model
SC18GH Configuration 4

Sales code:
104G8861

Standard Conditions

R513A, 230 V/60 Hz, CSCR, fan 3m/s

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	ṁ	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-6.7 20	54.4 129.9	35 95	46.1 115	**1024**	3494	881	**1.75**	5.96	586	2.79	25.53	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**774**	2643	666	**1.42**	4.86	544	2.59	21.73	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**910**	3105	783	**1.73**	5.90	527	2.50	24.64	**EN12900 MBP**
7.2 45	54.4 129.9	35 95	46.1 115	**1890**	6447	1625	**2.47**	8.42	765	3.65	48.01	**ASHRAE HBP**
5 41	55 131	32 89.6	55 131	**1527**	5211	1313	**2.06**	7.03	741	3.53	43.80	**CECOMAF HBP**
5 41	50 122	20 68	50 122	**1586**	5410	1364	**2.21**	7.55	716	3.41	46.75	**EN12900 HBP**

Performance Tables

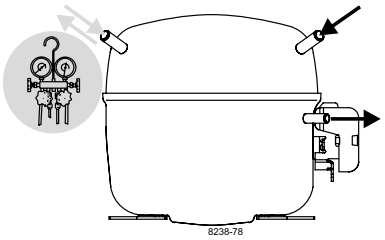
R513A, 230 V/60 Hz, CSCR, fan 3m/s

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

pe		Cooling capacity			COP	EER	P	I	ṁ
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-15	5	**749**	2555	644	**1.60**	5.45	469	2.23	18.66
-10	14	**955**	3257	821	**1.81**	6.19	527	2.50	23.90
-5	23	**1201**	4097	1033	**2.06**	7.01	584	2.78	30.22
0	32	**1491**	5088	1282	**2.33**	7.95	640	3.04	37.77
5	41	**1831**	6248	1575	**2.65**	9.04	691	3.29	46.74
10	50	**2225**	7592	1914	**3.02**	10.32	735	3.50	57.30
15	59	**2678**	9136	2303	**3.47**	11.85	771	3.68	69.70

pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F

-15	5	**602**	2054	518	**1.25**	4.26	482	2.29	16.80
-10	14	**774**	2643	666	**1.42**	4.86	544	2.59	21.73
-5	23	**983**	3354	845	**1.61**	5.50	610	2.90	27.75
0	32	**1232**	4205	1060	**1.82**	6.22	676	3.22	35.04
5	41	**1527**	5211	1313	**2.06**	7.03	741	3.53	43.80
10	50	**1872**	6388	1610	**2.33**	7.96	802	3.83	54.24
15	59	**2272**	7753	1954	**2.65**	9.04	858	4.09	66.62



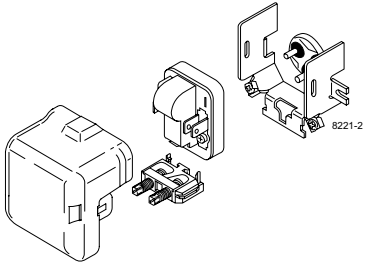
SC Compressors

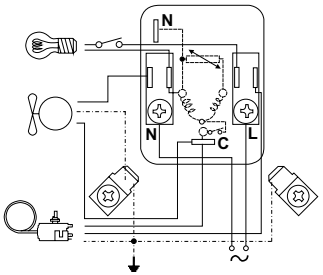
SECOP

Keep electrical equipment clear from oil, chemicals, and water

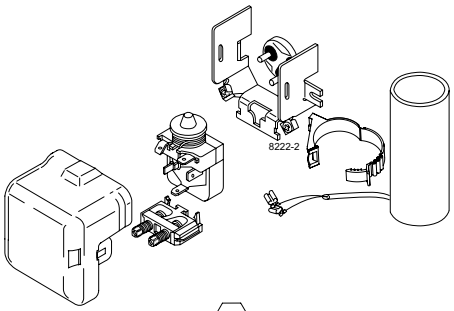
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

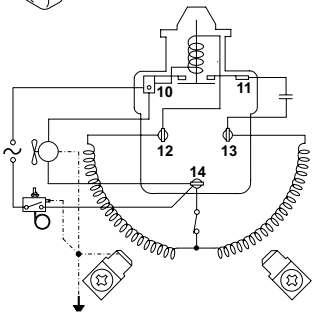
RSIR



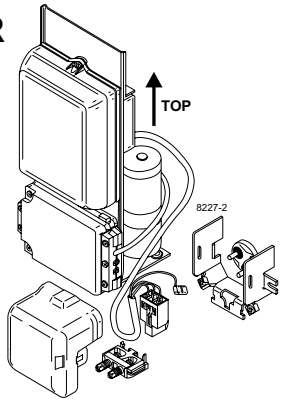


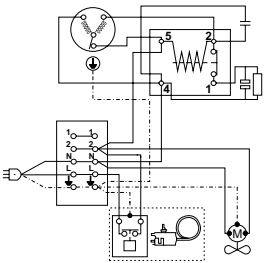
CSIR

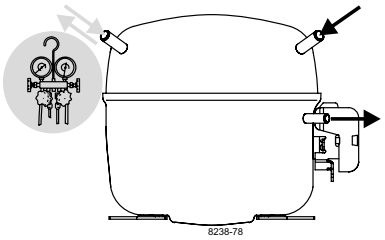




CSCR







SC Compressors

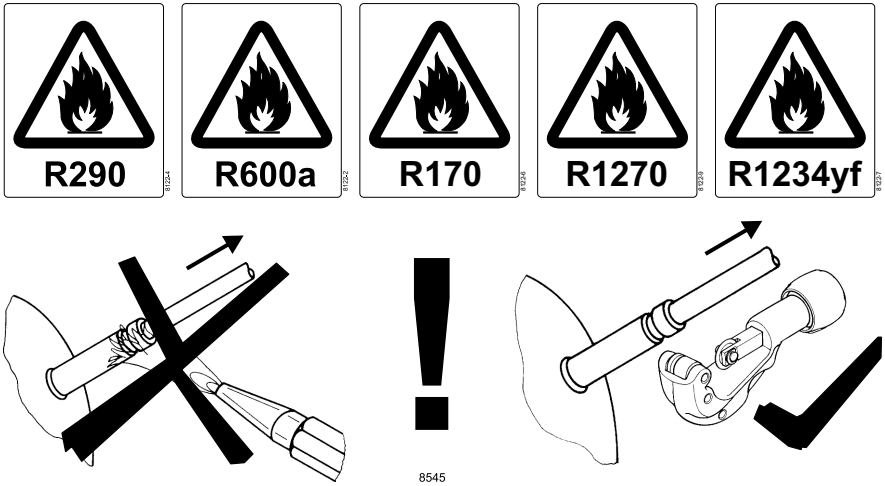
SECOP

Keep electrical equipment clear from oil, chemicals, and water

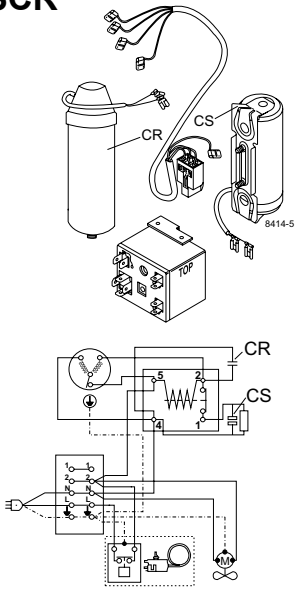
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

Service/Repair – R290, R600a, R170, R1270, R1234yf

(applies to all flammable refrigerants)



CSCR



Dismantling, recycling, disposal: At the end of a compressor's lifecycle, proceed by separating and storing components according to their environmental impact. Parts that may cause pollution must be clearly identified and handled separately, ensuring appropriate disposal. Refrigerant gas must not be released into the environment and should be recovered by qualified operators. Compressor oil must also be collected separately. The compressor should be disposed of at specialized disposal centers in accordance with the applicable regulations. **Subject to modifications/alterations. www.secop.com**