Single
Packs

Single Pack SC18CL 220-240V 50Hz CSCR

Single pack code number: **195B4022**

Position	Title	Code	Amount
1	Compressor SC18CL	104L2123	1
2	SC starting device (550mm)	117-7027	1
3	Cord relief	103N1004	1
4	Cover	103N2009	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
SC18CL

Sales code:
104L2123

Compressor Data

Refrigerant(s)	**R404A / R452A / R507**
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 SC18CL

–	**Conf. 1**	**Conf. 2**
Motor configuration	CSCR	CSCR
Power supply (nominal)	220-240 V/50 Hz	220-240 V/50 Hz
Number of phases	1	1
Voltage range	198-254 V	198-254 V
Approvals	VDE, CCC, EAC	VDE, CCC
Starting torque	HST	HST
Refrigerant	R404A	R452A
Application	LBP+MBP	LBP+MBP
Hot gas defrost	OK	OK
Long interval pull down	OK	OK

Application Notes

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

Model
SC18CL

Sales code:
104L2123

Compressor Design

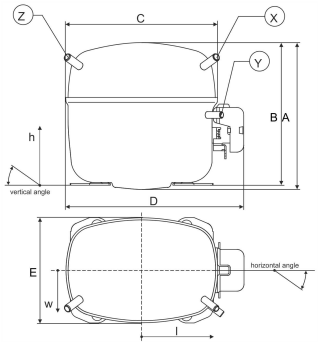
Oil type	**POE**	Winding resistance main	**3.7 Ohm**
Oil viscosity	**32cSt**	Winding resistance aux	**14 Ohm**
Oil quantity	**601 / 20.32fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**1,460 cm3 / 49.37fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**internal**		

Compressor Dimensions

Housing

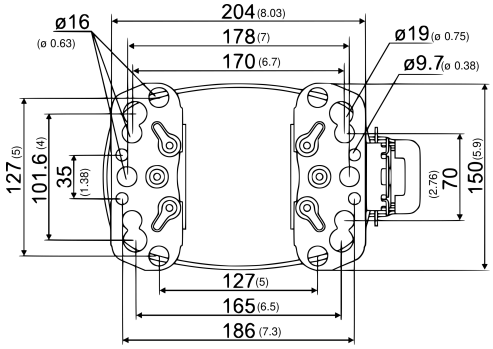
A Height	**219mm / 8.62in**
B Height	**213mm / 8.39in**
C Length shell	**218mm / 8.58in**
D Length w. cover	**255mm / 10.04in**
E Width	**151mm / 5.94in**

Find 3D Model here



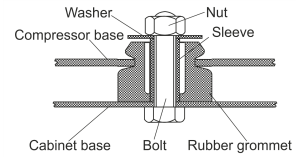
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 10.11–10.29 / 0.40–0.41in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°
Position l/h/w [mm]	107/193/55 / 4.21/7.60/2.17in	115/110/63 / 4.53/4.33/2.48in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

Mounting Accessories

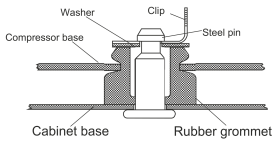


Dimensions in mm [in]

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
SC18CL Configuration 1

Sales code:
104L2123

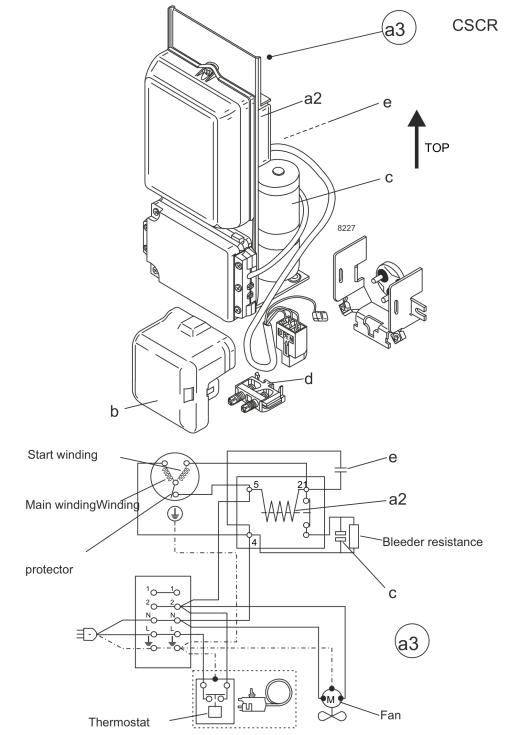
Configuration

Motor configuration	**CSCR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R404A**
Application	**LBP+MBP**
Voltage range	**198-254 V**
Starting torque	**HST**
Approvals	**VDE, CCC, EAC**
Starting device type	**relay**
Run capacitor	**10 µF**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**20.43 A**
RLA (rated load amps / 1s/ U(N))	**3.9 A**
Cut in current (U(N))	**20.43 A**

Ambient/ machine room temperatures minimum /maximum
Ambient temperature range: 10 - 38°C / 50 - 100°F
Machine room temp. compressor: 10 - 43°C / 50 - 109°F

System Cooling
fan 3m/s

Electrical Accessories / Wiring Diagram

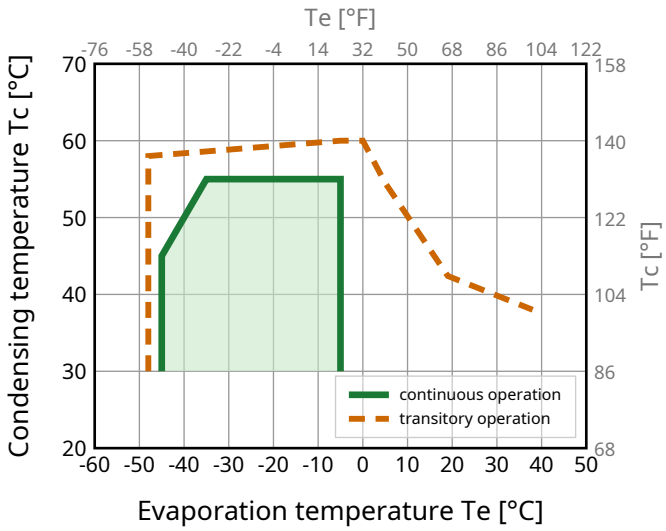


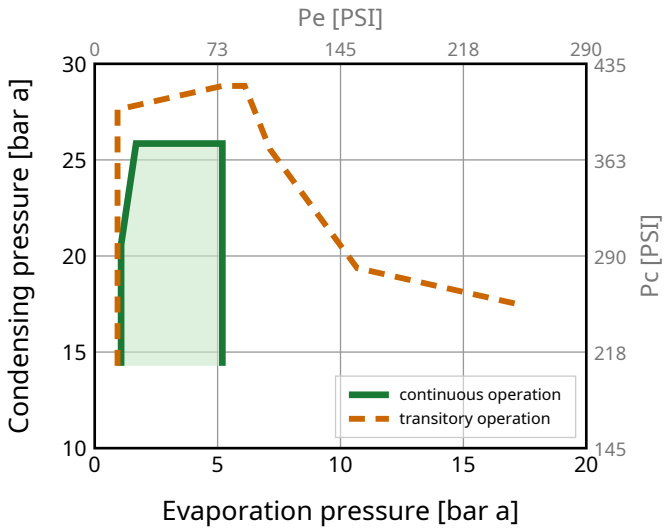
View full size

Components
a3 SC starter kit (550mm) 117-7027
b plastic cover 103N2009
d cord relief 103N1004

Alternative components
a3 SC starter kit (1000mm) 117-7040
a3 SC starter kit (650mm) 117-7046
c start capacitor (80µF) 117U5373
e run capacitor (10µF, 6.3mm) 117-7112

Operation Pressure Range





Model
SC18CL Configuration 1

Sales code:
104L2123

Standard Conditions

R404A, 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]	
-23.3 -10	54.4 129.9	32.2 90	32.2 90	**803**	2739	690	**1.22**	4.15	661	3.78	18.66	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**539**	1838	463	**0.86**	2.92	629	3.65	16.80	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**436**	1489	375	**0.97**	3.30	451	3.01	11.82	**EN12900 LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**1508**	5145	1297	**1.50**	5.10	1008	5.33	41.42	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**1124**	3834	966	**1.20**	4.11	933	4.99	35.91	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**1343**	4583	1155	**1.50**	5.13	894	4.80	40.39	**EN12900 MBP**

Performance Tables

R404A, 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]
-45	-49	**167**	569	143	**0.57**	1.94	294	2.61	4.42
-40	-40	**271**	923	233	**0.72**	2.46	376	2.79	7.19
-30	-22	**542**	1849	466	**1.01**	3.46	534	3.29	14.51
-20	-4	**918**	3133	790	**1.31**	4.48	700	3.96	24.86
-10	14	**1425**	4862	1226	**1.59**	5.44	894	4.80	39.18
-5	23	**1735**	5919	1492	**1.72**	5.88	1008	5.29	48.16

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

-45	-49	**84**	286	72	**0.33**	1.14	252	2.46	2.57
-40	-40	**172**	587	148	**0.49**	1.67	351	2.70	5.29
-30	-22	**396**	1352	341	**0.74**	2.52	537	3.29	12.29
-20	-4	**705**	2406	607	**0.97**	3.32	724	4.05	22.14
-10	14	**1124**	3834	966	**1.20**	4.11	933	4.99	35.91
-5	23	**1382**	4714	1188	**1.31**	4.48	1052	5.52	44.66

Model
SC18CL Configuration 2

Sales code:
104L2123

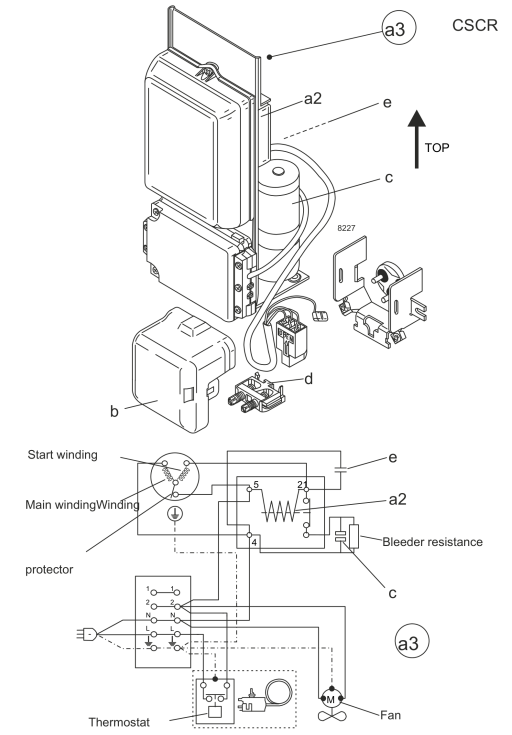
Configuration

Motor configuration	**CSCR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R452A**
Application	**LBP+MBP**
Voltage range	**198-254 V**
Starting torque	**HST**
Approvals	**VDE, CCC**
Starting device type	**relay**
Run capacitor	**10 µF**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**20.43 A**
RLA (rated load amps / 1s/ U(N))	**3.9 A**
Cut in current (U(N))	**20.43 A**

Ambient/ machine room temperatures minimum /maximum
Ambient temperature range: 10 - 38°C / 50 - 100°F
Machine room temp. compressor: 10 - 43°C / 50 - 109°F

System Cooling
fan 3m/s

Electrical Accessories / Wiring Diagram

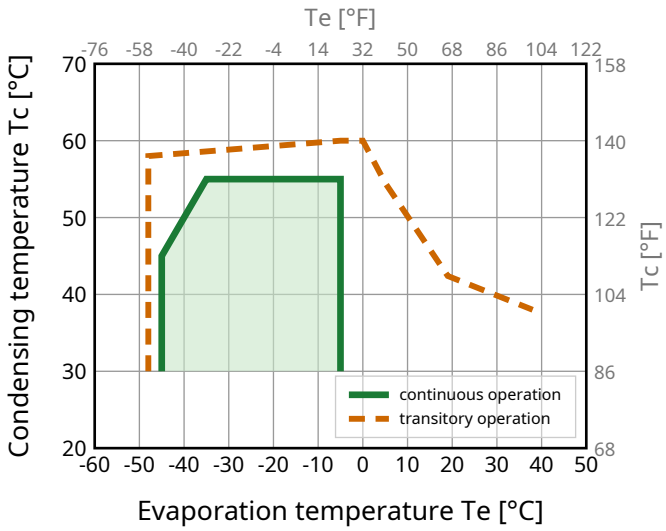


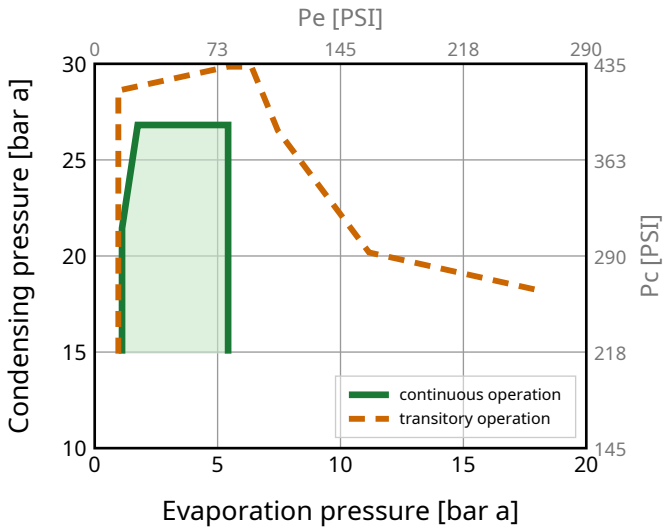
View full size

Components
a3 SC starter kit (550mm) 117-7027
b plastic cover 103N2009
d cord relief 103N1004

Alternative components
a3 SC starter kit (1000mm) 117-7040
a3 SC starter kit (650mm) 117-7046
c start capacitor (80µF) 117U5373
e run capacitor (10µF, 6.3mm) 117-7112

Operation Pressure Range





Model
SC18CL Configuration 2

Sales code:
104L2123

Standard Conditions

R452A, 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]	
-23.3 -10	54.4 129.9	32.2 90	32.2 90	**738**	2519	635	**1.20**	4.10	614	2.96	17.86	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**496**	1693	427	**0.85**	2.90	583	2.83	16.01	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**393**	1341	338	**0.95**	3.23	414	2.13	11.07	**EN12900 LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**1430**	4881	1230	**1.50**	5.10	957	4.47	40.80	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**1065**	3634	916	**1.21**	4.12	882	4.11	35.20	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**1268**	4328	1091	**1.50**	5.12	846	3.96	39.57	**EN12900 MBP**

Performance Tables

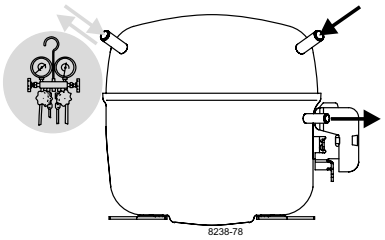
R452A, 220 V/50 Hz, CSCR, fan 3m/s

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]
-45	-49	**140**	478	120	**0.54**	1.85	258	1.38	3.86
-40	-40	**238**	810	204	**0.70**	2.39	339	1.80	6.56
-30	-22	**494**	1684	424	**1.00**	3.41	494	2.49	13.73
-20	-4	**854**	2912	734	**1.30**	4.44	656	3.14	24.00
-10	14	**1344**	4586	1156	**1.59**	5.42	846	3.96	38.38
-5	23	**1647**	5620	1416	**1.72**	5.87	958	4.48	47.48

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

-45	-49	**65**	221	56	**0.30**	1.03	214	1.26	2.05
-40	-40	**148**	504	127	**0.47**	1.62	311	1.72	4.70
-30	-22	**360**	1229	310	**0.73**	2.49	493	2.47	11.55
-20	-4	**657**	2241	565	**0.97**	3.31	676	3.20	21.34
-10	14	**1065**	3634	916	**1.21**	4.12	882	4.11	35.20
-5	23	**1319**	4501	1135	**1.32**	4.50	1000	4.69	44.09



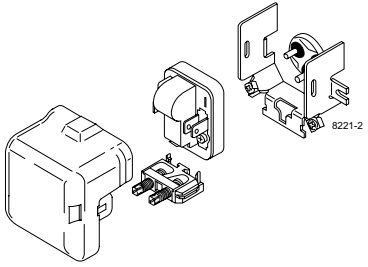
SC Compressors

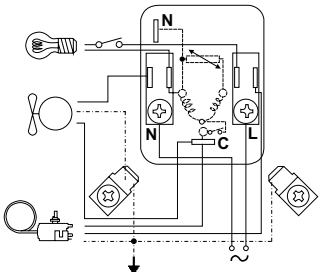
SECOP

Keep electrical equipment clear from oil, chemicals, and water

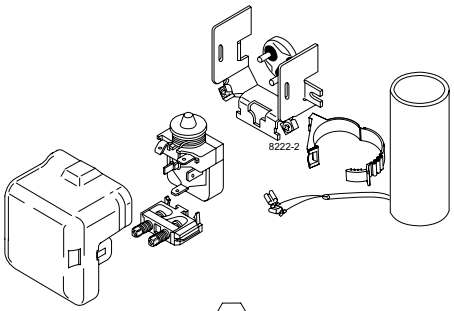
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

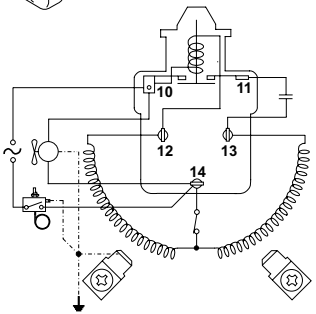
RSIR



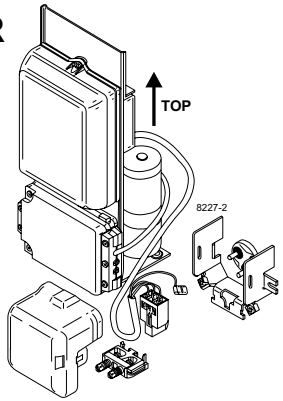


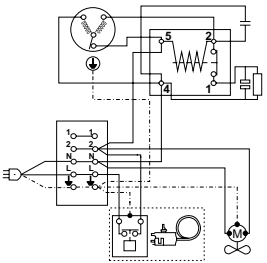
CSIR

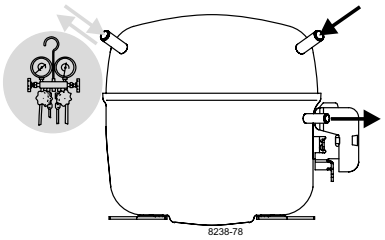




CSCR







SC Compressors

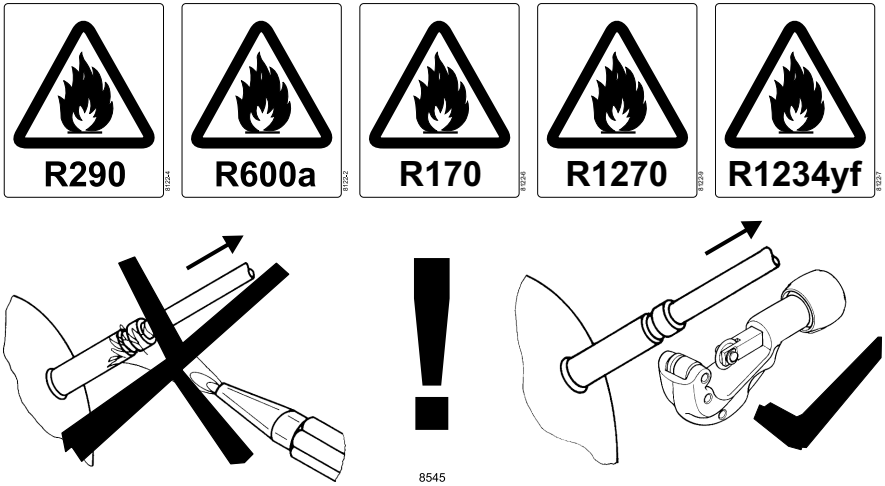
SECOP

Keep electrical equipment clear from oil, chemicals, and water

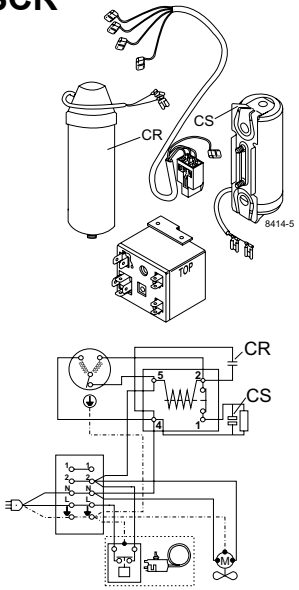
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

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**