Single
Packs

Single Pack SC21CL 220-240V 50Hz CSCR

Single pack code number: **195B4510**

Position	Title	Code	Amount
1	Compressor SC21CL	104L2322	1
2	SC starting device (1000mm)	117-7040	1
3	Cord relief	103N1004	1
4	Cover	103N2009	1
5	Bolt joint for one compressor | M6 | ø16mm	118-1917	1

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Model
SC21CL

Sales code:
104L2322

Compressor Data

Refrigerant(s)	**R404A / R452A / R507**
Refr. charge - tech. limit	**1300g / 45.86oz**
Weight	**14.10 kg / 31.09lbs**
Displacement	**20.95 cm3 / 1.28cu.in**
Compressors on pallet	**80**

General – Configurations With SC21CL

–	**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	LBP
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
SC21CL

Sales code:
104L2322

Compressor Design

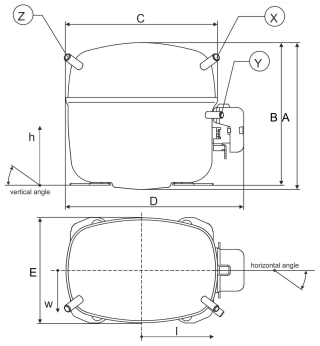
Oil type	**POE**	Winding resistance main	**3.4 Ohm**
Oil viscosity	**32,5cSt**	Winding resistance aux	**14.4 Ohm**
Oil quantity	**544 / 18.39fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**1,410 cm3 / 47.68fl.oz**	Max. discharge temp.	**135°C / 275°F**
Motor protection	**internal**		

Compressor Dimensions

Housing

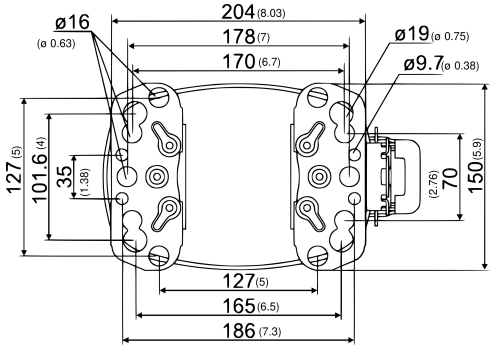
A Height	**219mm / 8.62in**
B Height	**213mm / 8.39in**
C Length shell	**239mm / 9.41in**
D Length w. cover	**255mm / 10.04in**
E Width	**151mm / 5.94in**

Find 3D Model here



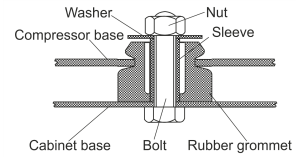
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 10.11–10.29 / 0.40–0.41in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°
Position l/h/w [mm]	107/193/55 / 4.21/7.60/2.17in	115/110/63 / 4.53/4.33/2.48in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

Mounting Accessories

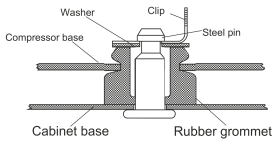


Dimensions in mm [in]

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
SC21CL Configuration 1

Sales code:
104L2322

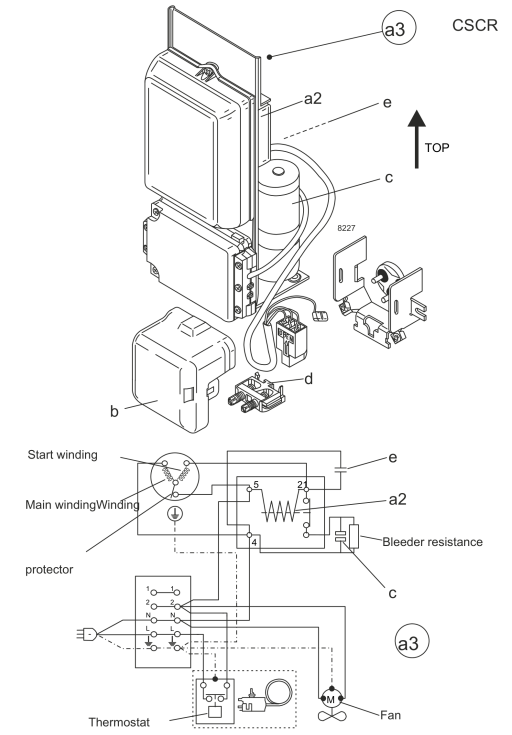
Configuration

Motor configuration	**CSCR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R404A**
Application	**LBP**
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))	**23.4 A**
RLA (rated load amps / 1s/ U(N))	**4.3 A**
Cut in current (U(N))	**23.4 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



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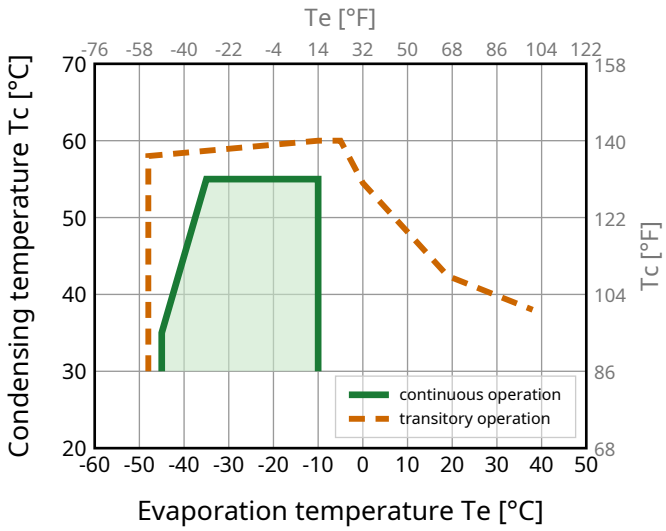
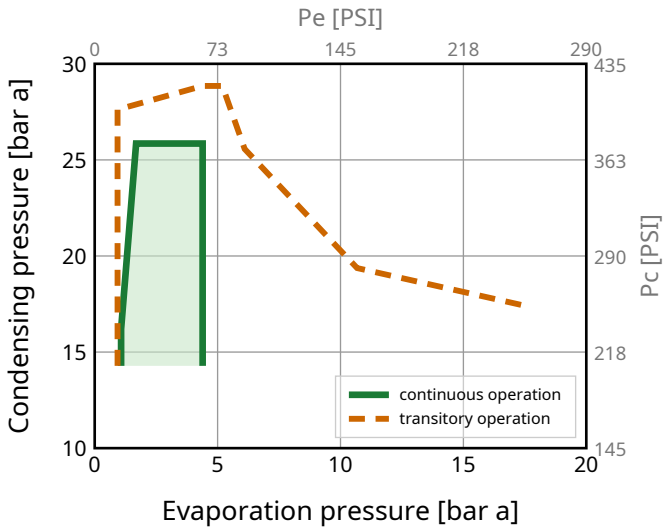
Components
a3 SC starter kit (550mm) 117-7027
b plastic cover 103N2009
d cord relief 103N1004

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

SC21CL Configuration 1

Sales code:

104L2322

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	**905**	3088	778	**1.18**	4.02	768	4.02	21.04	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**608**	2076	523	**0.83**	2.82	736	3.86	18.97	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**509**	1737	438	**0.98**	3.33	521	2.95	13.80	**EN12900 LBP**
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	**689**	2351	592	**0.92**	3.14	750	3.92	24.31	**ARI540 LBP**
-23.3 -10	40.6 105.1	32.2 90	32.2 90	**1093**	3729	940	**1.53**	5.23	712	3.80	25.41	**AHAM LBP**
-35 -31	45 113	32 89.6	45 113	**455**	1552	391	**0.85**	2.91	534	2.94	12.13	**opt LBP**

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	**226**	771	194	**0.56**	1.93	400	2.40	5.99
-40	-40	**325**	1108	279	**0.70**	2.40	462	2.63	8.63
-35	-31	**455**	1552	391	**0.85**	2.91	534	2.94	12.13
-30	-22	**617**	2107	531	**1.00**	3.43	615	3.31	16.53
-25	-13	**813**	2773	699	**1.16**	3.95	702	3.71	21.88
-20	-4	**1042**	3556	896	**1.31**	4.47	795	4.14	28.22
-15	5	**1306**	4457	1123	**1.47**	5.00	891	4.58	35.62
-10	14	**1606**	5481	1381	**1.62**	5.54	989	5.00	44.16

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

-45	-49	**174**	595	150	**0.43**	1.48	401	2.29	5.34
-40	-40	**236**	804	203	**0.50**	1.70	472	2.57	7.24
-35	-31	**328**	1118	282	**0.59**	2.02	553	2.94	10.11
-30	-22	**452**	1541	388	**0.70**	2.40	641	3.38	14.00
-25	-13	**608**	2076	523	**0.83**	2.82	736	3.86	18.97
-20	-4	**799**	2726	687	**0.96**	3.27	835	4.37	25.09
-15	5	**1024**	3494	881	**1.09**	3.73	937	4.89	32.41
-10	14	**1284**	4382	1105	**1.24**	4.21	1040	5.41	41.05

Model
SC21CL Configuration 2

Sales code:
104L2322

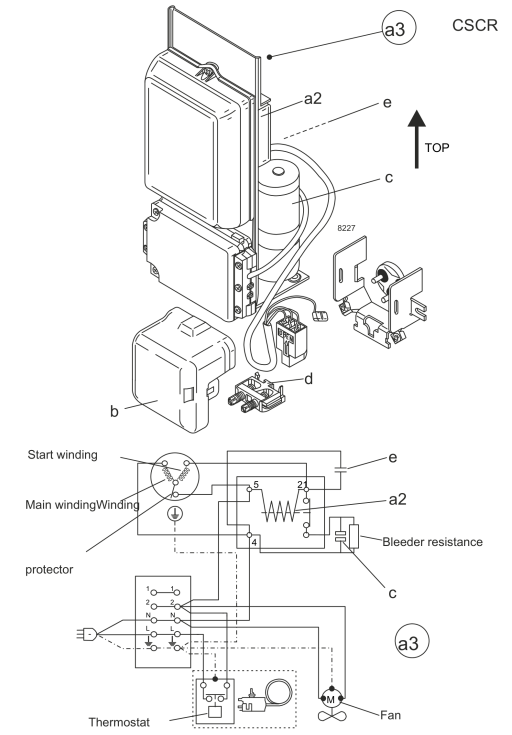
Configuration

Motor configuration	**CSCR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R452A**
Application	**LBP**
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))	**23.4 A**
RLA (rated load amps / 1s/ U(N))	**4.3 A**
Cut in current (U(N))	**23.4 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



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Components
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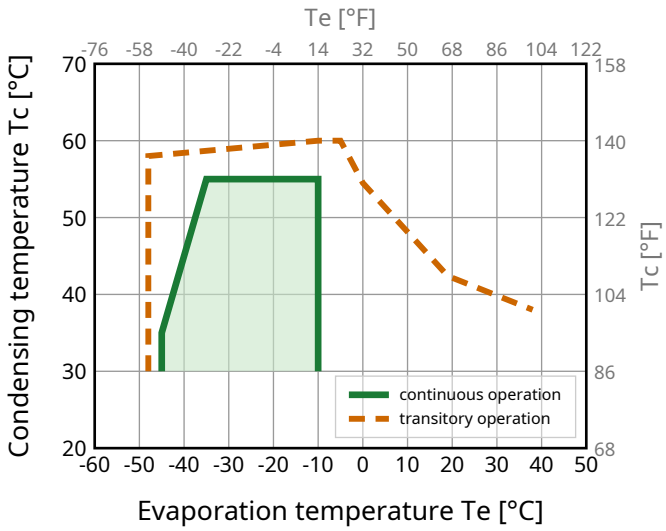
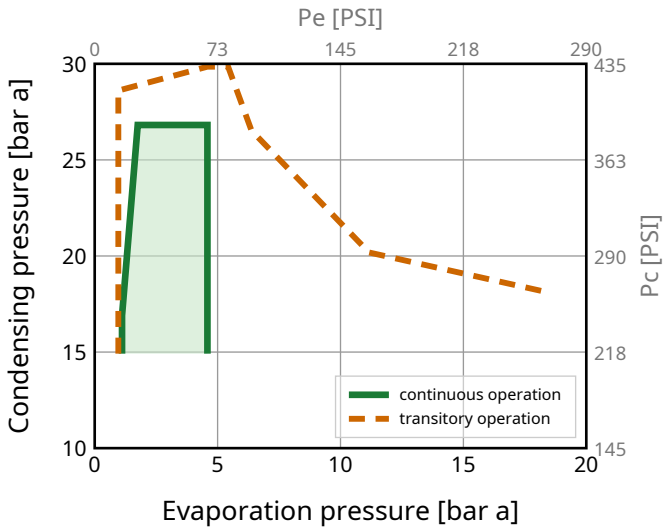
b plastic cover 103N2009
d cord relief 103N1004

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

SC21CL Configuration 2

Sales code:

104L2322

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	**832**	2839	716	**1.17**	3.98	714	3.77	20.13	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**560**	1912	482	**0.82**	2.80	682	3.62	18.08	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**459**	1565	394	**0.96**	3.27	479	2.71	12.92	**EN12900 LBP**
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	**639**	2179	549	**0.91**	3.12	699	3.70	23.32	**ARI540 LBP**
-23.3 -10	40.6 105.1	32.2 90	32.2 90	**1008**	3440	867	**1.51**	5.17	666	3.56	24.40	**AHAM LBP**
-35 -31	45 113	32 89.6	45 113	**408**	1394	351	**0.83**	2.85	489	2.76	11.32	**opt LBP**

Performance Tables

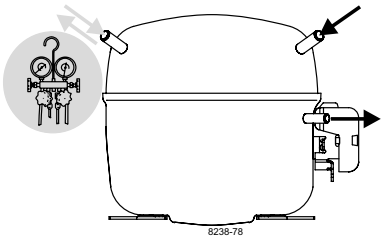
R452A, 220 V/50 Hz, CSCR, fan 3m/s

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	**194**	661	167	**0.54**	1.86	357	2.16	5.34
-40	-40	**286**	976	246	**0.68**	2.33	418	2.44	7.90
-35	-31	**408**	1394	351	**0.83**	2.85	489	2.76	11.32
-30	-22	**562**	1919	484	**0.99**	3.38	568	3.12	15.64
-25	-13	**748**	2554	644	**1.15**	3.91	654	3.50	20.93
-20	-4	**968**	3305	833	**1.30**	4.44	745	3.91	27.24
-15	5	**1224**	4175	1052	**1.46**	4.97	840	4.34	34.65
-10	14	**1515**	5168	1303	**1.62**	5.51	937	4.78	43.24

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

-45	-49	**148**	505	127	**0.42**	1.45	348	2.12	4.69
-40	-40	**205**	699	176	**0.49**	1.67	420	2.45	6.52
-35	-31	**292**	996	251	**0.58**	1.99	500	2.81	9.32
-30	-22	**410**	1399	353	**0.70**	2.38	588	3.20	13.15
-25	-13	**560**	1912	482	**0.82**	2.80	682	3.62	18.08
-20	-4	**744**	2539	640	**0.95**	3.26	780	4.07	24.17
-15	5	**963**	3285	828	**1.09**	3.73	882	4.53	31.52
-10	14	**1217**	4153	1047	**1.24**	4.22	985	4.99	40.23



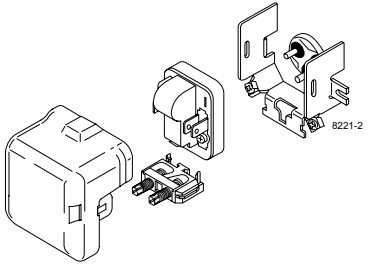
SC Compressors

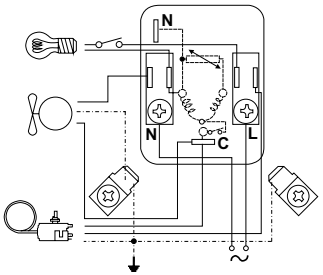
SECOP

Keep electrical equipment clear from oil, chemicals, and water

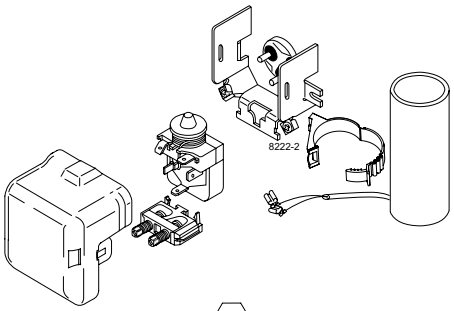
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

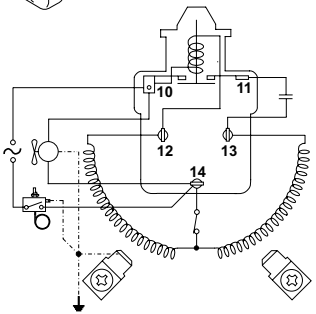
RSIR





CSIR





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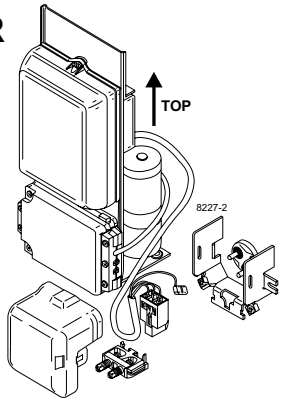
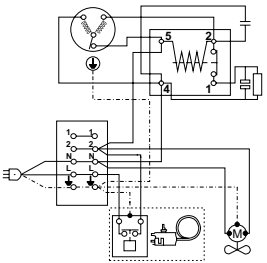
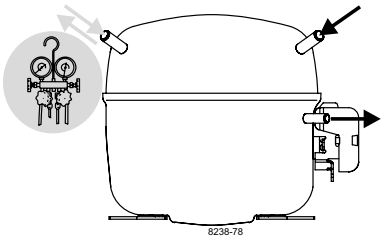






SC Compressors

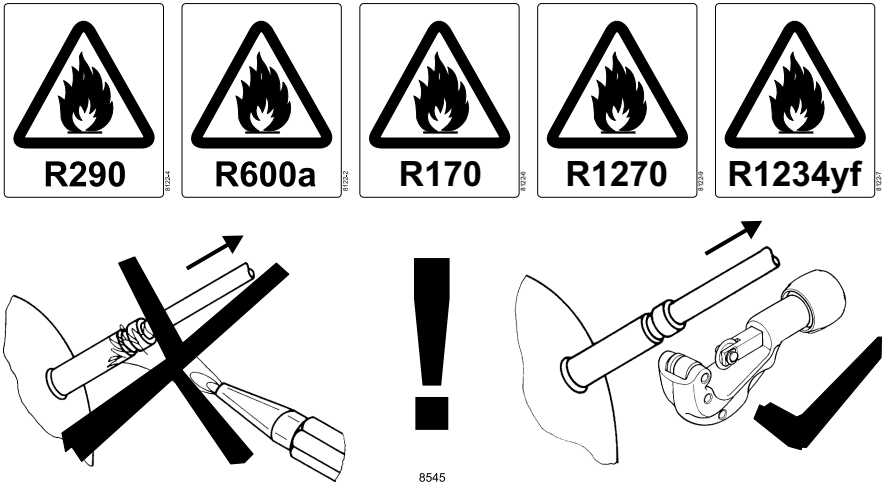
SECOP

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)



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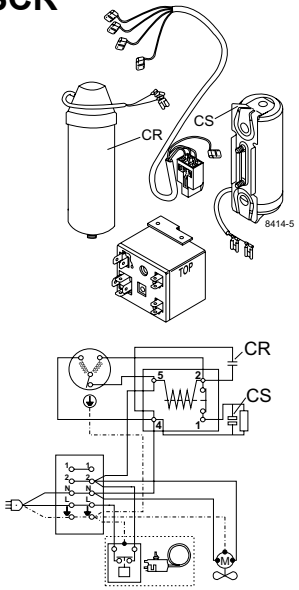

Dismantling, recycling, disposal: At the end of a compressor's lifecycle, proceed by separating and storing components according to their environmental impact. Parts that may cause pollution must be clearly identified and handled separately, ensuring appropriate disposal. Refrigerant gas must not be 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**