Single
Packs

Single Pack SC10CL 220-240V 50Hz CSIR

Single pack code number: **195B4070**

Position	Title	Code	Amount
1	Compressor SC10CL	104L2523	1
2	Starting relay	117U6003	1
3	Starting capacitor (80µF 220V, 6.3mm)	117U5017	1
4	Cord relief	103N1004	1
5	Cover	103N2009	1
6	Bolt joint for one compressor | M6 | ø16mm	118-1917	1

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Model
SC10CL

Sales code:
104L2523

Compressor Data

Refrigerant(s)	**R404A / R452A / R507**
Refr. charge - tech. limit	**1300g / 45.86oz**
Weight	**13.10 kg / 28.88lbs**
Displacement	**10.29 cm3 / 0.63cu.in**
Compressors on pallet	**80**

General – Configurations With SC10CL

–	**Conf. 1**	**Conf. 2**
Motor configuration	CSIR	CSIR
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
SC10CL

Sales code:
104L2523

Compressor Design

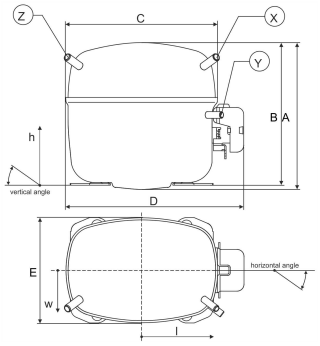
Oil type	**POE**	Winding resistance main	**6.9 Ohm**
Oil viscosity	**32cSt**	Winding resistance aux	**11 Ohm**
Oil quantity	**550 / 18.60fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**1,460 cm3 / 49.37fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**internal**		

Compressor Dimensions

Housing

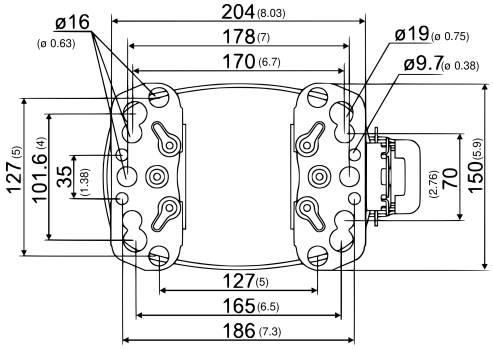
A Height	**209mm / 8.23in**
B Height	**203mm / 7.99in**
C Length shell	**218mm / 8.58in**
D Length w. cover	**255mm / 10.04in**
E Width	**151mm / 5.94in**

Find 3D Model here



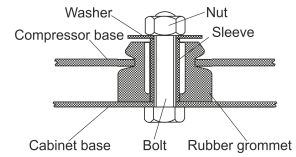
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°
Position l/h/w [mm]	107/183/55 / 4.21/7.20/2.17in	115/100/63 / 4.53/3.94/2.48in	-107/183/55 / -4.21/7.20/2.17in
Straight tube l. [mm]	12 / 0.47in	12 / 0.47in	12 / 0.47in

Mounting Accessories

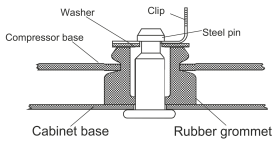


Dimensions in mm [in]

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
SC10CL Configuration 1

Sales code:
104L2523

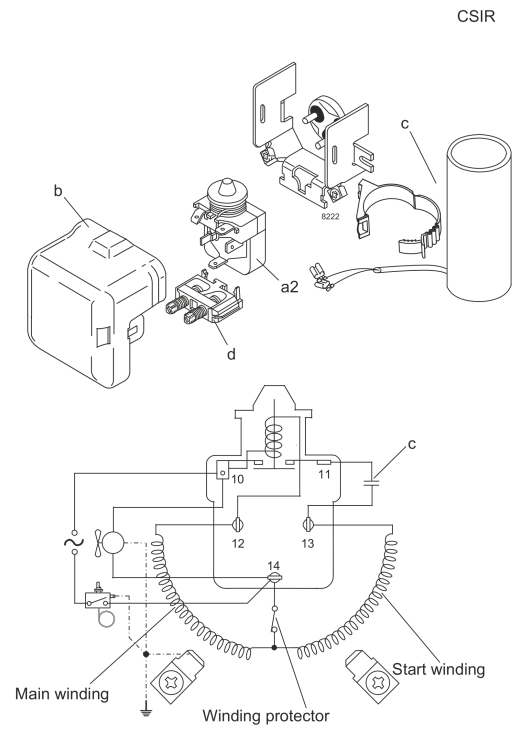
Configuration

Motor configuration	**CSIR**
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	**-/-**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**13 A**
RLA (rated load amps / 1s/ U(N))	**2.5 A**
Cut in current (U(N))	**17 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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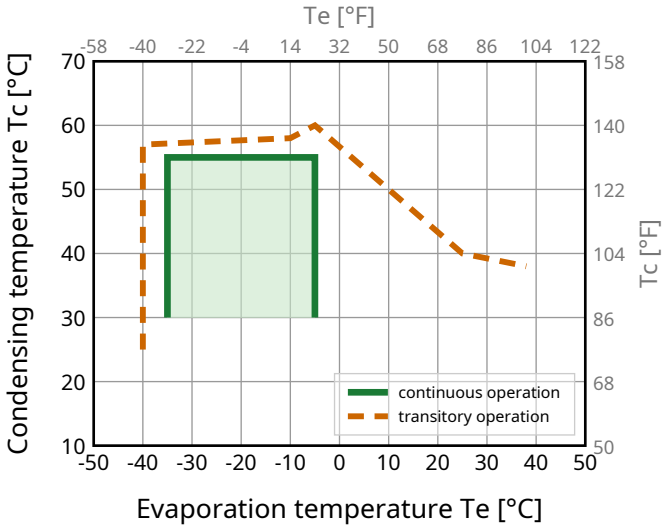
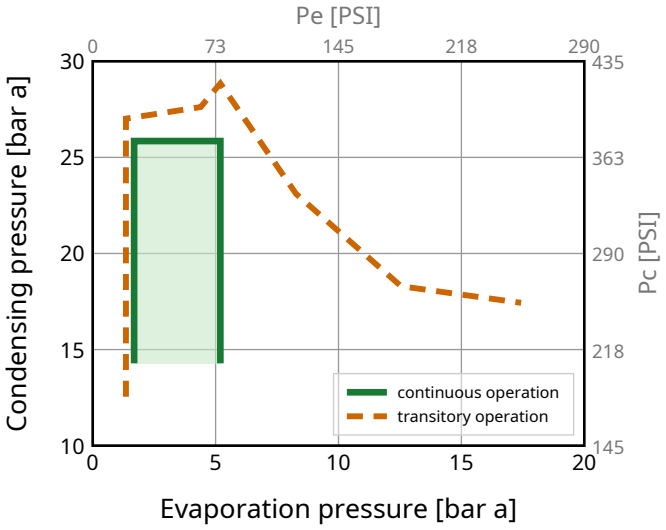
Components
a2 assy. relay 117U6003
c start capacitor (80µF) 117U5017
d cord relief 103N1004
b plastic cover 103N2009

Operation Pressure Range





Model Sales code:

SC10CL Configuration 1 **104L2523**

Standard Conditions

R404A, 220 V/50 Hz, CSIR, 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	**402**	1370	345	**1.13**	3.85	356	2.28	9.33	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**261**	892	225	**0.79**	2.68	332	2.21	8.15	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**197**	671	169	**0.79**	2.69	250	1.93	5.33	**EN12900 LBP**
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	**314**	1070	270	**0.86**	2.92	366	2.28	11.07	**ARI540 LBP**
-23.3 -10	40.6 105.1	32.2 90	32.2 90	**499**	1703	429	**1.34**	4.58	371	2.26	11.60	**AHAM LBP**
-35 -31	45 113	32 89.6	45 113	**168**	574	145	**0.69**	2.36	243	1.91	4.48	**opt LBP**

Performance Tables

R404A, 220 V/50 Hz, CSIR, 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]
-35	-31	**168**	574	145	**0.69**	2.36	243	1.91	4.48
-30	-22	**258**	882	222	**0.88**	3.00	294	2.06	6.92
-25	-13	**365**	1245	314	**1.04**	3.56	350	2.21	9.82
-20	-4	**490**	1670	421	**1.19**	4.07	410	2.39	13.25
-15	5	**634**	2163	545	**1.35**	4.59	471	2.59	17.29
-10	14	**800**	2731	688	**1.51**	5.16	530	2.81	22.00
-5	23	**990**	3380	852	**1.70**	5.79	584	3.04	27.50

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

-35	-31	**95**	325	82	**0.42**	1.45	225	1.84	2.94
-30	-22	**172**	586	148	**0.63**	2.14	274	2.01	5.32
-25	-13	**261**	892	225	**0.79**	2.68	332	2.21	8.15
-20	-4	**366**	1250	315	**0.92**	3.14	399	2.42	11.51
-15	5	**489**	1667	420	**1.04**	3.55	470	2.64	15.47
-10	14	**630**	2149	542	**1.16**	3.95	544	2.89	20.13
-5	23	**792**	2703	681	**1.28**	4.38	617	3.15	25.61

Model
SC10CL Configuration 2

Sales code:
104L2523

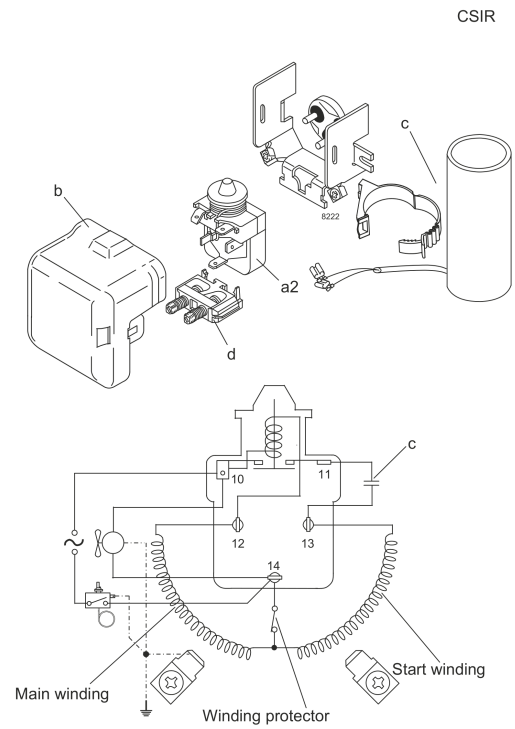
Configuration

Motor configuration	**CSIR**
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	**-/-**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**13 A**
RLA (rated load amps / 1s/ U(N))	**2.5 A**
Cut in current (U(N))	**17 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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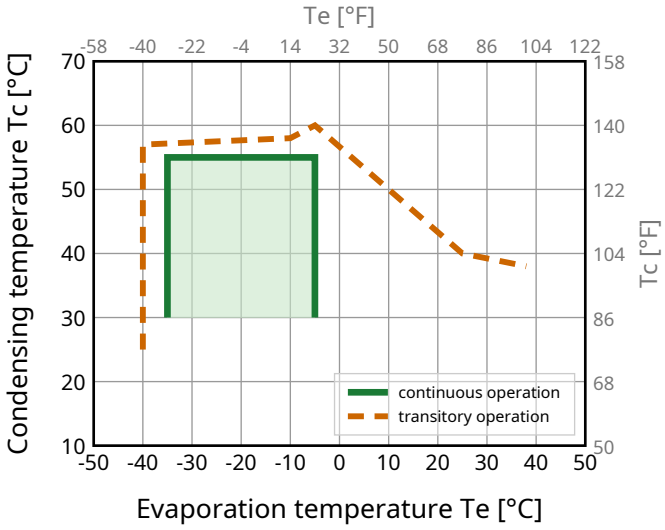
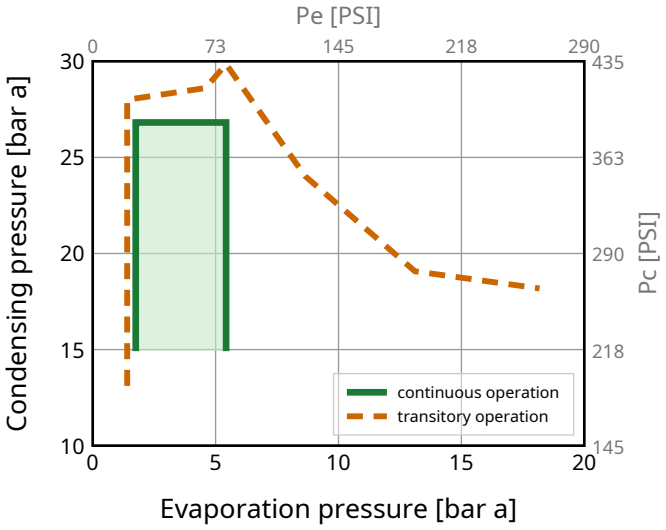
Components
a2 assy. relay 117U6003
c start capacitor (80µF) 117U5017
d cord relief 103N1004
b plastic cover 103N2009

Operation Pressure Range





Model
SC10CL Configuration 2

Sales code:
104L2523

Standard Conditions

R452A, 220 V/50 Hz, CSIR, 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	**368**	1257	317	**1.10**	3.76	334	2.20	8.92	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**240**	821	207	**0.77**	2.63	312	2.12	7.76	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**177**	604	152	**0.76**	2.59	233	1.85	4.98	**EN12900 LBP**
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	**290**	991	250	**0.84**	2.87	345	2.24	10.60	**ARI540 LBP**
-23.3 -10	40.6 105.1	32.2 90	32.2 90	**460**	1568	395	**1.31**	4.48	350	2.26	11.12	**AHAM LBP**
-35 -31	45 113	32 89.6	45 113	**151**	514	130	**0.67**	2.28	226	1.82	4.17	**opt LBP**

Performance Tables

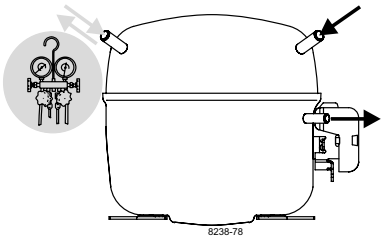
R452A, 220 V/50 Hz, CSIR, fan 3m/s

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]
-35	-31	**151**	514	130	**0.67**	2.28	226	1.82	4.17
-30	-22	**235**	802	202	**0.86**	2.92	275	2.00	6.54
-25	-13	**336**	1145	289	**1.02**	3.48	330	2.19	9.38
-20	-4	**454**	1549	391	**1.17**	4.00	388	2.39	12.77
-15	5	**593**	2022	510	**1.32**	4.52	447	2.60	16.79
-10	14	**753**	2570	648	**1.49**	5.08	506	2.80	21.51
-5	23	**938**	3200	807	**1.67**	5.71	560	2.99	27.04

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

-35	-31	**85**	289	73	**0.41**	1.39	208	1.76	2.71
-30	-22	**156**	532	134	**0.61**	2.08	255	1.93	5.00
-25	-13	**240**	821	207	**0.77**	2.63	312	2.12	7.76
-20	-4	**341**	1162	293	**0.91**	3.09	376	2.35	11.06
-15	5	**458**	1564	394	**1.03**	3.51	446	2.59	15.01
-10	14	**596**	2032	512	**1.15**	3.92	519	2.85	19.68
-5	23	**754**	2573	649	**1.27**	4.35	592	3.11	25.21



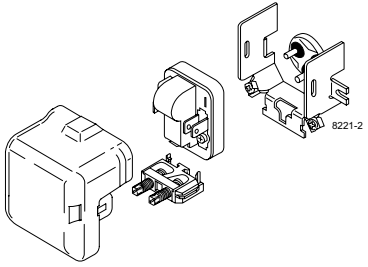
SC Compressors

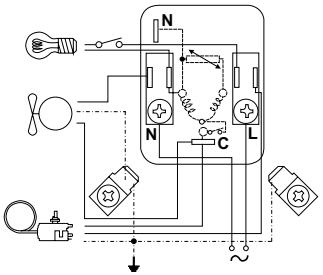
SECOP

Keep electrical equipment clear from oil, chemicals, and water

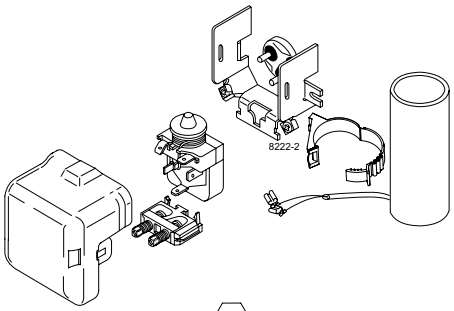
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

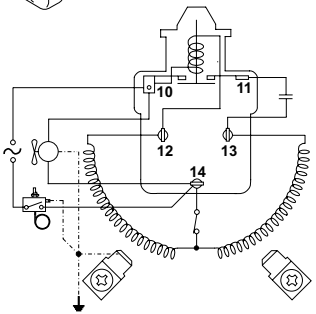
RSIR





CSIR





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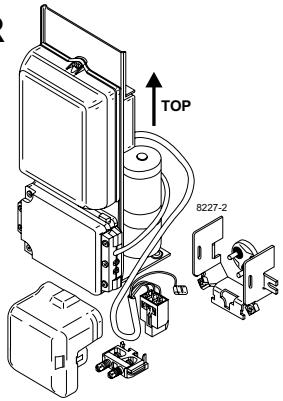
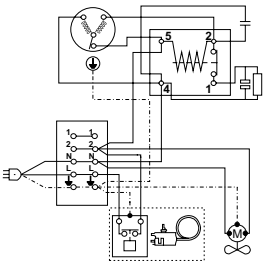
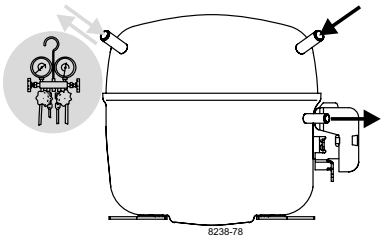






SC Compressors

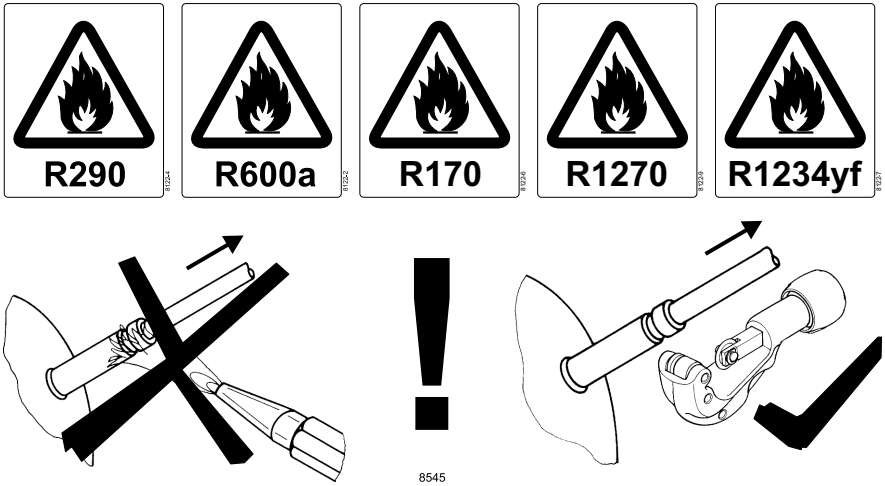
SECOP

Keep electrical equipment clear from oil, chemicals, and water

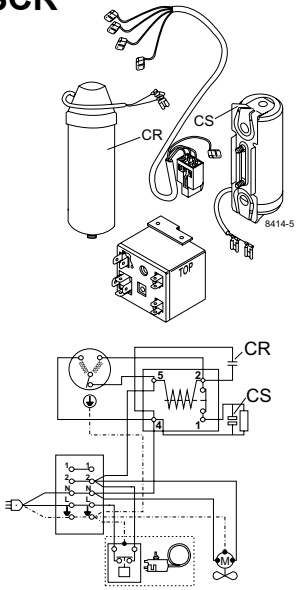
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

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

(applies to all flammable refrigerants)



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**