Single
Packs

Single Pack SC12CLX.2 115V 60Hz CSIR

Single pack code number: **195B4117**

Position	Title	Code	Amount
1	Compressor SC12CLX.2	104L1696	1
2	Starting relay	117U6020	1
3	Starting capacitor (240µF 125V, 6.3mm)	117U5023	1
4	Cord relief	103N1004	1
5	Cover	103N2008	1
6	Bolt joint for one compressor | M6 | ø16mm	118-1917	1

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Model
SC12CLX.2

Sales code:
104L1696

Compressor Data

Refrigerant(s)	**R404A / R452A / R507**
Refr. charge - tech. limit	**1300g / 45.86oz**
Weight	**13.20 kg / 29.10lbs**
Displacement	**12.87 cm3 / 0.79cu.in**
Compressors on pallet	**80**

General – Configurations With SC12CLX.2

–	**Conf. 1**	**Conf. 2**
Motor configuration	CSIR	CSIR
Power supply (nominal)	115 V/60 Hz	115 V/60 Hz
Number of phases	1	1
Voltage range	103-127 V	103-127 V
Approvals	UL	UL
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
SC12CLX.2

Sales code:
104L1696

Compressor Design

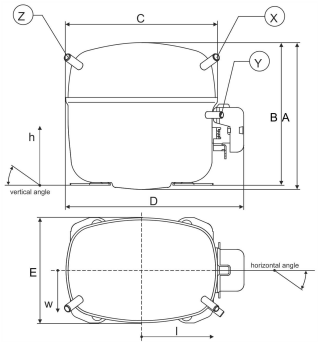
Oil type	**POE**	Winding resistance main	**1 Ohm**
Oil viscosity	**32cSt**	Winding resistance aux	**4.2 Ohm**
Oil quantity	**500 / 16.91fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**1,510 cm3 / 51.06fl.oz**	Max. discharge temp.	**135°C / 275°F**
Motor protection	**internal**		

Compressor Dimensions

Housing

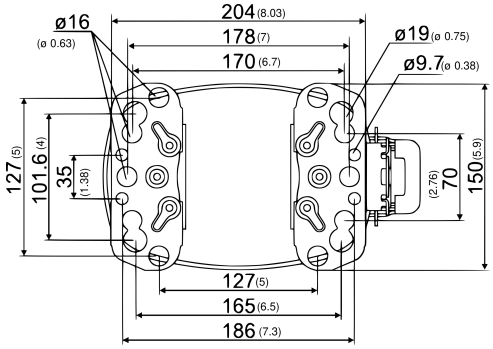
A Height	**209mm / 8.23in**
B Height	**203mm / 7.99in**
C Length shell	**218mm / 8.58in**
D Length w. cover	**255mm / 10.04in**
E Width	**151mm / 5.94in**

Find 3D Model here



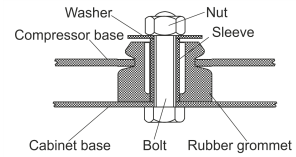
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.41–6.59 / 0.25–0.26in	øi 6.41–6.59 / 0.25–0.26in
Material	CU	CU	CU
Horizontal angle ±2°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°
Position l/h/w [mm]	107/183/55 / 4.21/7.20/2.17in	115/100/63 / 4.53/3.94/2.48in	-107/183/55 / -4.21/7.20/2.17in
Straight tube l. [mm]	12 / 0.47in	12 / 0.47in	12 / 0.47in

Mounting Accessories

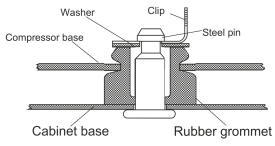


Dimensions in mm [in]

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
SC12CLX.2 Configuration 1

Sales code:
104L1696

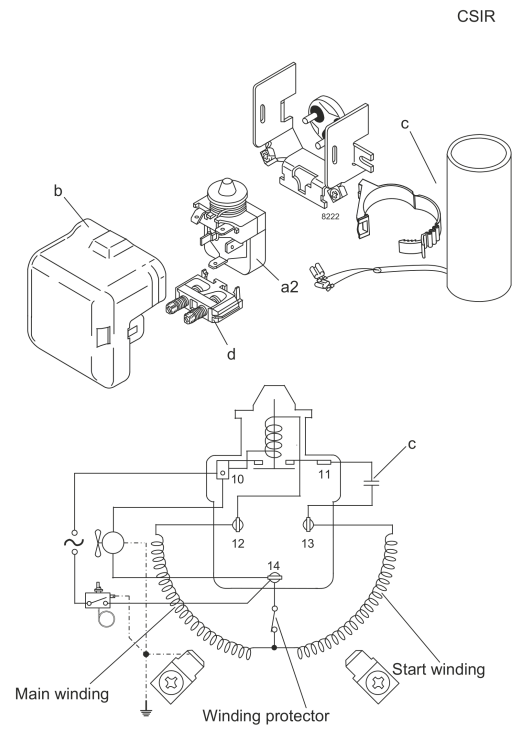
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**115 V/60 Hz 1~**
Refrigerant	**R404A**
Application	**LBP**
Voltage range	**103-127 V**
Starting torque	**HST**
Approvals	**UL**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**240 µF**
LRA (locked rotor amps / 4s/ U(N))	**39.7 A**
RLA (rated load amps / 1s/ U(N))	**7.6 A**
Cut in current (U(N))	**39.7 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



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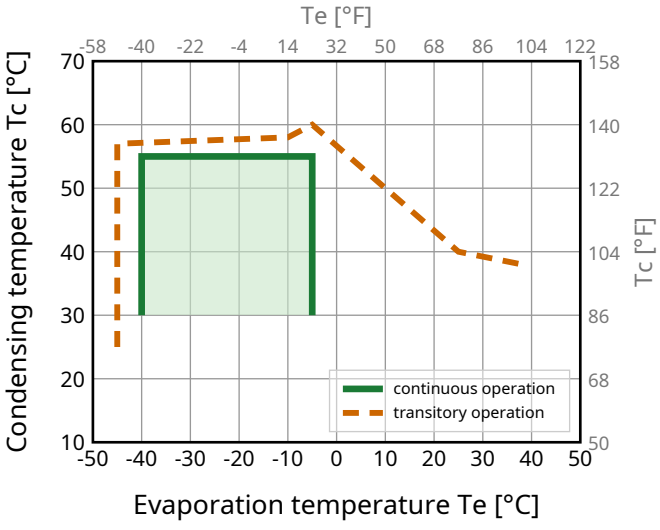
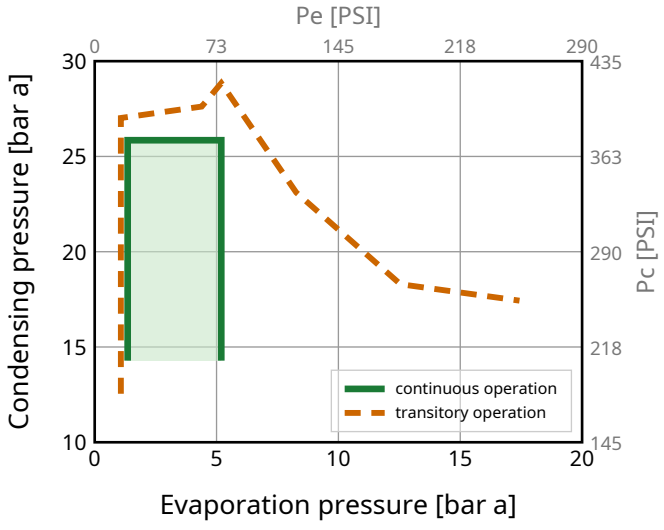
Components
a2 relay 117U6020
c start capacitor (240µF) 117U5023
d cord relief 103N1004
b plastic cover 103N2008

Alternative components
a2 relay 117U6020
c start capacitor (240µF, 15kOhm) 117U5034
d cord relief 103N1004
b plastic cover 103N2008

Operation Pressure Range





Model

SC12CLX.2 Configuration 1

Sales code:

104L1696

Standard Conditions

R404A, 115 V/60 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	**725**	2474	624	**1.14**	3.90	635	7.21	16.86	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**486**	1658	418	**0.80**	2.74	604	7.00	15.15	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**372**	1269	320	**0.84**	2.86	444	6.10	10.08	**EN12900 LBP**
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	**540**	1843	464	**0.86**	2.94	628	7.16	19.06	**ARI540 LBP**
-23.3 -10	40.6 105.1	32.2 90	32.2 90	**814**	2777	700	**1.33**	4.52	614	7.09	18.92	**AHAM LBP**
-35 -31	45 113	32 89.6	45 113	**334**	1140	287	**0.77**	2.62	435	6.03	8.91	**opt LBP**

Performance Tables

R404A, 115 V/60 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]
-40	-40	**214**	731	184	**0.62**	2.12	346	5.66	5.69
-35	-31	**334**	1140	287	**0.77**	2.62	435	6.03	8.91
-30	-22	**469**	1601	404	**0.91**	3.10	517	6.46	12.57
-25	-13	**623**	2125	536	**1.05**	3.57	595	6.95	16.76
-20	-4	**798**	2721	686	**1.18**	4.04	674	7.50	21.60
-15	5	**997**	3402	858	**1.32**	4.50	756	8.10	27.19
-10	14	**1225**	4178	1053	**1.45**	4.94	845	8.76	33.67
-5	23	**1483**	5060	1275	**1.57**	5.35	945	9.48	41.17

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

-40	-40	**108**	370	93	**0.38**	1.29	287	5.43	3.33
-35	-31	**223**	760	191	**0.55**	1.88	403	5.89	6.87
-30	-22	**347**	1185	299	**0.68**	2.33	508	6.42	10.77
-25	-13	**486**	1658	418	**0.80**	2.74	604	7.00	15.15
-20	-4	**641**	2188	552	**0.92**	3.14	696	7.64	20.14
-15	5	**817**	2787	703	**1.04**	3.54	788	8.34	25.86
-10	14	**1016**	3465	873	**1.15**	3.93	882	9.09	32.46
-5	23	**1241**	4234	1067	**1.26**	4.31	983	9.91	40.11

Model
SC12CLX.2 Configuration 2

Sales code:
104L1696

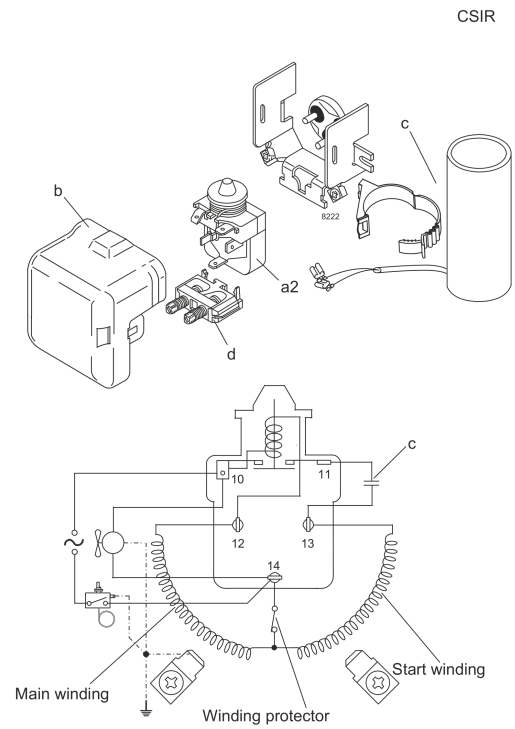
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**115 V/60 Hz 1~**
Refrigerant	**R452A**
Application	**LBP**
Voltage range	**103-127 V**
Starting torque	**HST**
Approvals	**UL**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**240 µF**
LRA (locked rotor amps / 4s/ U(N))	**39.7 A**
RLA (rated load amps / 1s/ U(N))	**7.6 A**
Cut in current (U(N))	**39.7 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



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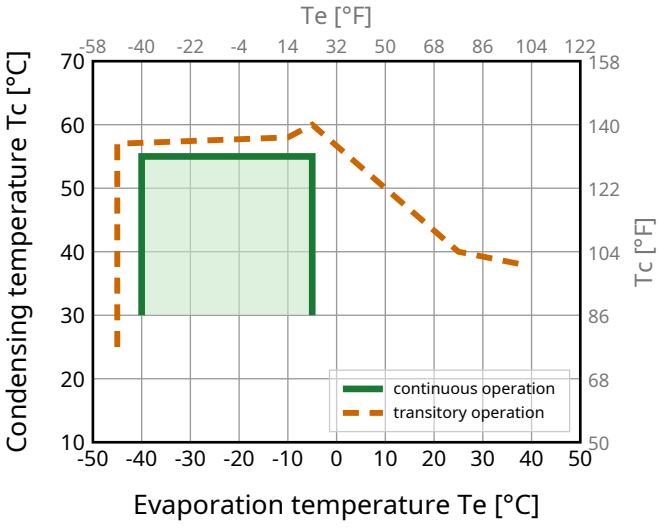
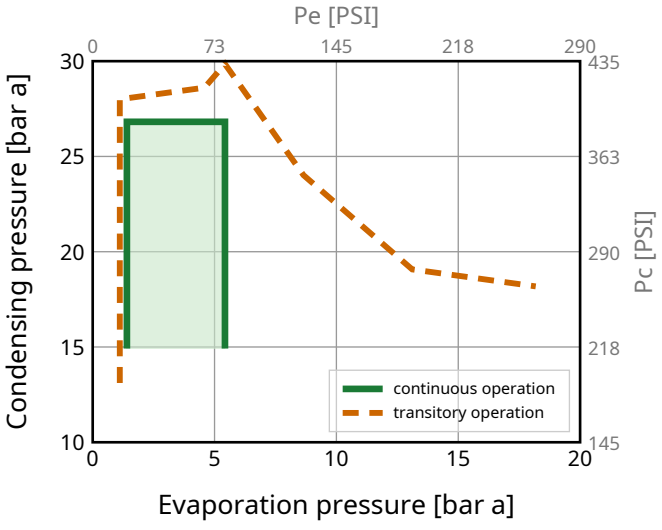
Components
a2 relay 117U6020
c start capacitor (240µF) 117U5023
d cord relief 103N1004
b plastic cover 103N2008

Alternative components
a2 relay 117U6020
c start capacitor (240µF, 15kOhm) 117U5034
d cord relief 103N1004
b plastic cover 103N2008

Operation Pressure Range





Model

SC12CLX.2 Configuration 2

Sales code:

104L1696

Standard Conditions

R452A, 115 V/60 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	**667**	2276	574	**1.14**	3.87	588	6.99	16.14	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**448**	1528	385	**0.80**	2.74	557	6.79	14.45	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**335**	1143	288	**0.83**	2.82	406	5.76	9.44	**EN12900 LBP**
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	**501**	1709	431	**0.86**	2.93	582	6.96	18.29	**ARI540 LBP**
-23.3 -10	40.6 105.1	32.2 90	32.2 90	**751**	2561	646	**1.31**	4.49	571	6.88	18.16	**AHAM LBP**
-35 -31	45 113	32 89.6	45 113	**300**	1024	258	**0.76**	2.59	396	5.69	8.32	**opt LBP**

Performance Tables

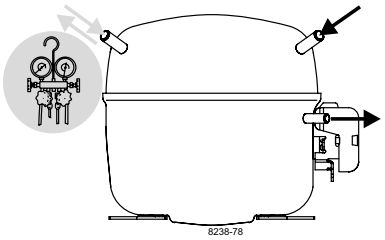
R452A, 115 V/60 Hz, CSIR, fan 3m/s

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]
-40	-40	**188**	641	162	**0.60**	2.06	311	5.11	5.19
-35	-31	**300**	1024	258	**0.76**	2.59	396	5.69	8.32
-30	-22	**428**	1459	368	**0.90**	3.07	475	6.23	11.90
-25	-13	**574**	1957	493	**1.04**	3.55	552	6.75	16.04
-20	-4	**741**	2529	638	**1.18**	4.02	629	7.27	20.85
-15	5	**934**	3187	803	**1.32**	4.49	709	7.82	26.45
-10	14	**1155**	3942	993	**1.45**	4.94	797	8.42	32.98
-5	23	**1408**	4805	1211	**1.57**	5.36	896	9.09	40.59

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

-40	-40	**91**	310	78	**0.36**	1.23	253	4.71	2.89
-35	-31	**198**	675	170	**0.55**	1.86	363	5.47	6.32
-30	-22	**316**	1078	272	**0.68**	2.32	464	6.15	10.13
-25	-13	**448**	1528	385	**0.80**	2.74	557	6.79	14.45
-20	-4	**598**	2039	514	**0.92**	3.15	648	7.40	19.41
-15	5	**768**	2621	661	**1.04**	3.55	738	8.01	25.15
-10	14	**963**	3285	828	**1.16**	3.95	831	8.65	31.82
-5	23	**1185**	4044	1019	**1.27**	4.34	931	9.33	39.61



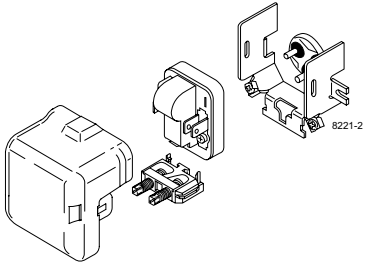
SC Compressors

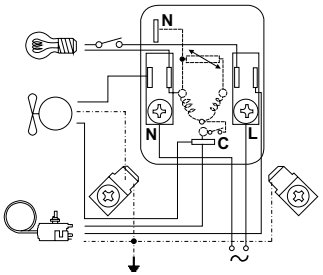
SECOP

Keep electrical equipment clear from oil, chemicals, and water

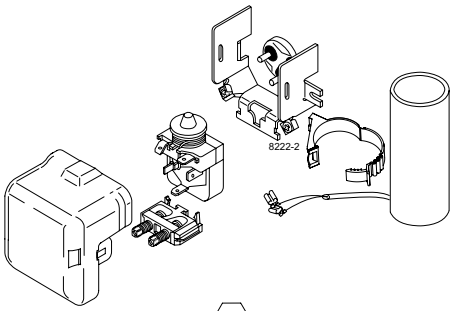
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

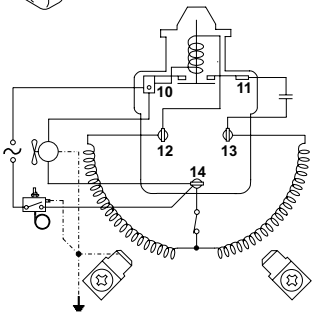
RSIR



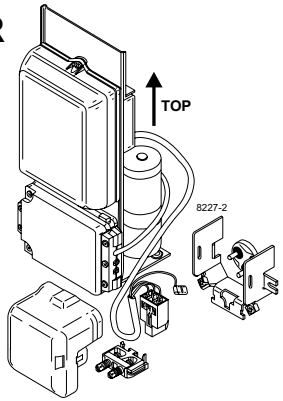


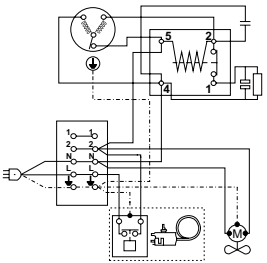
CSIR

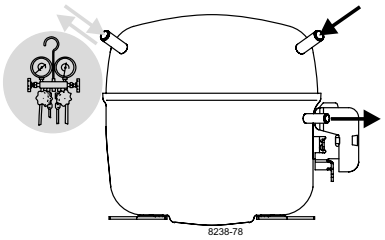




CSCR







SC Compressors

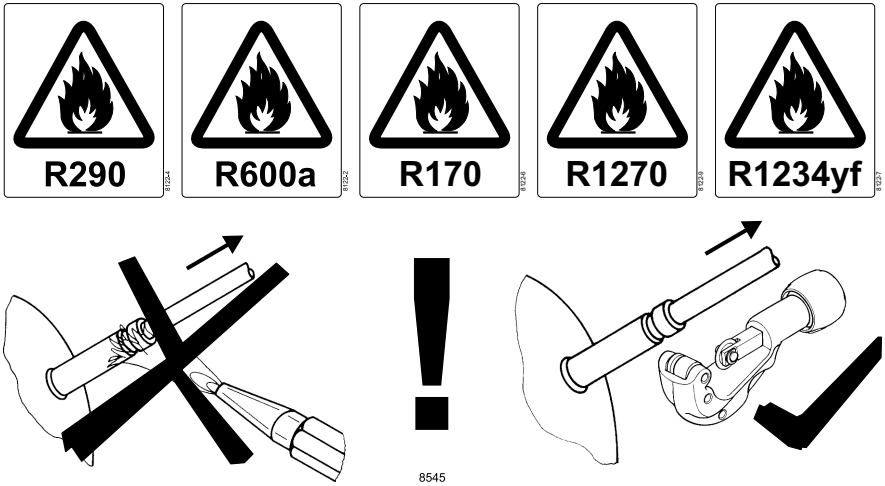
SECOP

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)



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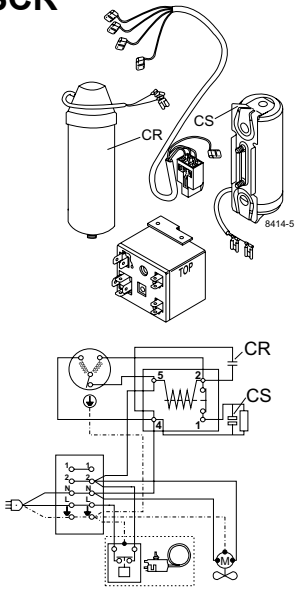

Dismantling, recycling, disposal: At the end of a compressor's lifecycle, proceed by separating and storing components according to their environmental impact. Parts that may cause pollution must be clearly identified and handled separately, ensuring appropriate disposal. Refrigerant gas must not be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