Single
Packs

Single Pack NF7CLX 115-127V 60Hz CSIR

Single pack code number: **195B4075**

Position	Title	Code	Amount
1	Compressor NF7CLX	105F1721	1
2	Starting relay (overload protector MRT22AFZ-6)	117U4129	1
3	Starting capacitor (320µF 125V, 6.3mm)	117U5022	1
4	Cord relief	117U0349	2
5	Cover	117U1021	1
6	Bolt joint for one compressor | M6 | ø16mm	118-1917	1

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Model
NF7CLX

Sales code:
105F1721

Compressor Data

Refrigerant(s)	**R404A / R452A**
Refr. charge - tech. limit	**400g / 14.11oz**
Weight	**10.00 kg / 22.05lbs**
Displacement	**7.27 cm3 / 0.44cu.in**
Compressors on pallet	**80**

General – Configurations With NF7CLX

–	**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	95-135 V	95-135 V
Approvals	UL, CCC, EAC	UL, CCC, EAC
Starting torque	HST	HST
Refrigerant	R404A	R452A
Application	LBP+MBP	LBP+MBP
Long interval pull down	OK	OK

Application Notes

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

Model
NF7CLX

Sales code:
105F1721

Compressor Design

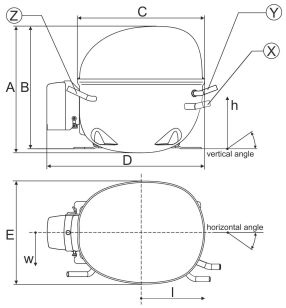
Oil type	**POE**	Winding resistance main	**1.62 Ohm**
Oil viscosity	**32cSt**	Winding resistance aux	**4.9 Ohm**
Oil quantity	**303 / 10.25fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**2,280 cm3 / 77.10fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**external**		

Compressor Dimensions

Housing

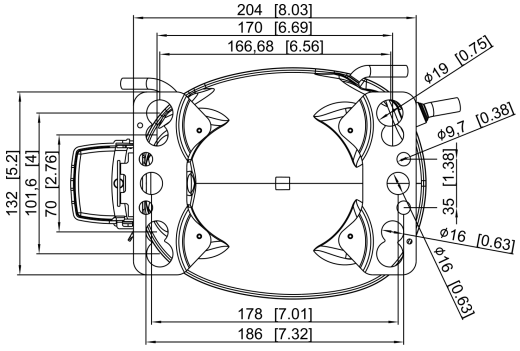
A Height	**197mm / 7.76in**
B Height	**191mm / 7.52in**
C Length shell	**205mm / 8.07in**
D Length w. cover	**254mm / 10.00in**
E Width	**166mm / 6.54in**

Find 3D Model here



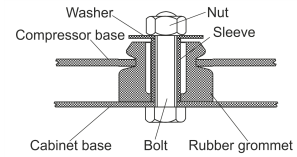
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.41–6.59 / 0.25–0.26in	øi 6.41–6.59 / 0.25–0.26in
Material	CU	CU	CU
Horizontal angle ±2°	0°	0°	0°
Vertical angle ±2°	15°	35°	155°
Position l/h/w [mm]	125.5/75.5/78 / 4.94/2.97/3.07in	133/102.5/54 / 5.24/4.04/2.13in	-107/93.5/72 / -4.21/3.68/2.83in
Straight tube l. [mm]	12 / 0.47in	12 / 0.47in	12 / 0.47in

Mounting Accessories

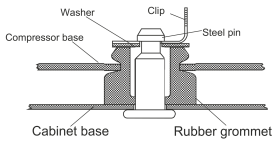


Dimensions in mm [in]

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
NF7CLX Configuration 1

Sales code:
105F1721

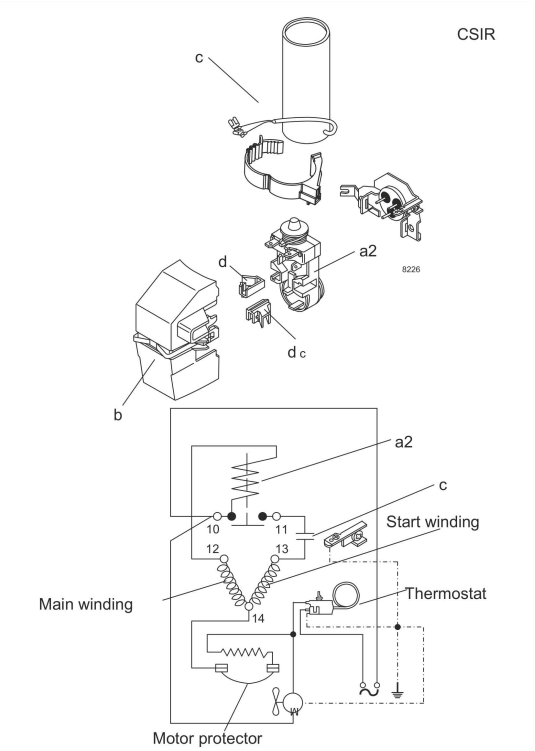
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**115 V/60 Hz 1~**
Refrigerant	**R404A**
Application	**LBP+MBP**
Voltage range	**95-135 V**
Starting torque	**HST**
Approvals	**UL, CCC, EAC**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**320 µF**
LRA (locked rotor amps / 4s/ U(N))	**30.8 A**
RLA (rated load amps / 1s/ U(N))	**4.9 A**
Cut in current (U(N))	**30.8 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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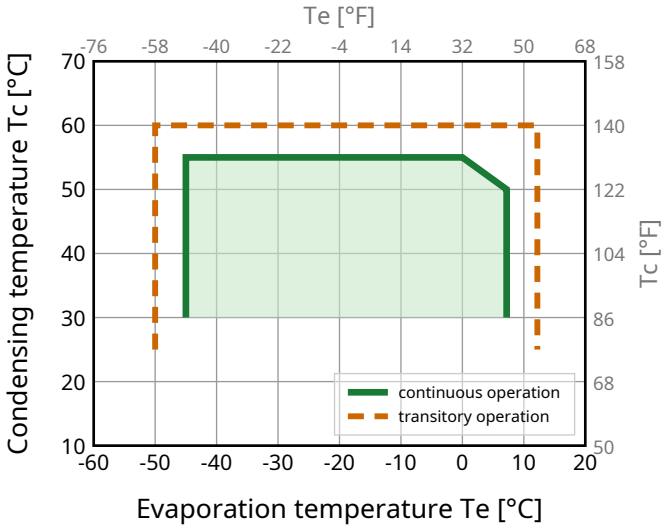
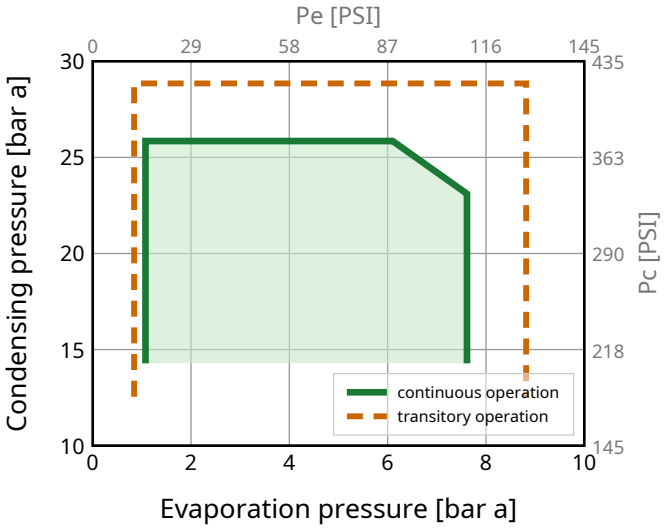
Components
a2 current relay (MRT22AFZ-6) 117U4129
c start capacitor (320µF) 117U5022
b plastic cover + clamp 117U1021
d/dc cord relief 117U0349

Operation Pressure Range





Model Sales code:

NF7CLX Configuration 1 **105F1721**

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	**452**	1543	389	**1.23**	4.19	368	4.53	10.52	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**306**	1042	263	**0.86**	2.95	353	4.44	9.53	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**248**	847	213	**0.93**	3.18	266	3.90	6.72	**EN12900 LBP**
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	**342**	1166	294	**0.94**	3.21	363	4.46	12.06	**ARI540 LBP**
-23.3 -10	40.6 105.1	32.2 90	32.2 90	**514**	1752	442	**1.46**	4.98	352	4.37	11.94	**AHAM LBP**
-35 -31	45 113	32 89.6	45 113	**230**	786	198	**0.86**	2.94	267	3.91	6.14	**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]
-45	-49	**111**	379	95	**0.59**	2.00	189	3.64	2.94
-40	-40	**166**	565	143	**0.72**	2.47	228	3.76	4.40
-30	-22	**307**	1047	264	**1.00**	3.43	306	4.10	8.22
-20	-4	**502**	1711	431	**1.30**	4.44	385	4.60	13.58
-10	14	**763**	2604	656	**1.61**	5.51	473	5.26	20.98
0	32	**1105**	3771	950	**1.93**	6.58	573	6.07	31.03
7.2	45	**1408**	4805	1211	**2.15**	7.33	656	6.75	40.36

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

-45	-49	**70**	240	60	**0.40**	1.37	175	3.60	2.15
-40	-40	**115**	392	99	**0.52**	1.78	220	3.75	3.53
-30	-22	**231**	787	198	**0.75**	2.55	309	4.17	7.16
-20	-4	**394**	1343	338	**0.99**	3.37	399	4.74	12.36
-10	14	**616**	2103	530	**1.24**	4.24	496	5.47	19.71
0	32	**913**	3115	785	**1.51**	5.15	604	6.36	29.91
7.2	45	**1179**	4024	1014	**1.70**	5.81	693	7.09	39.56

Model
NF7CLX Configuration 2

Sales code:
105F1721

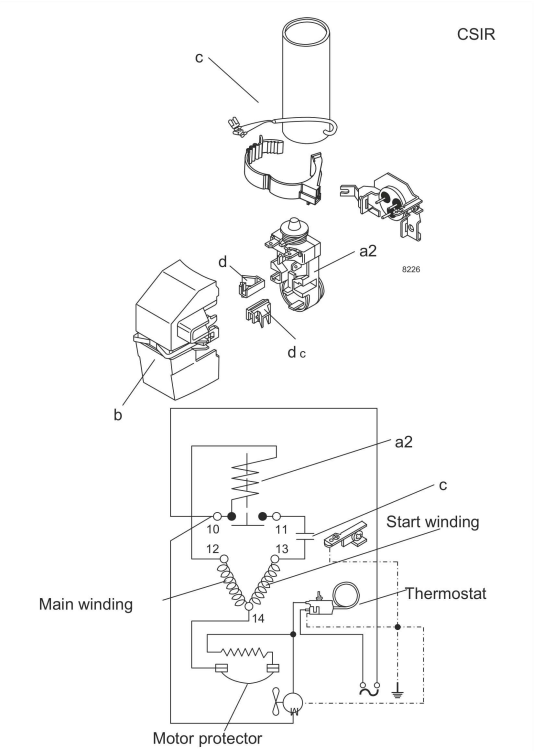
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**115 V/60 Hz 1~**
Refrigerant	**R452A**
Application	**LBP+MBP**
Voltage range	**95-135 V**
Starting torque	**HST**
Approvals	**UL, CCC, EAC**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**320 µF**
LRA (locked rotor amps / 4s/ U(N))	**30.8 A**
RLA (rated load amps / 1s/ U(N))	**4.9 A**
Cut in current (U(N))	**30.8 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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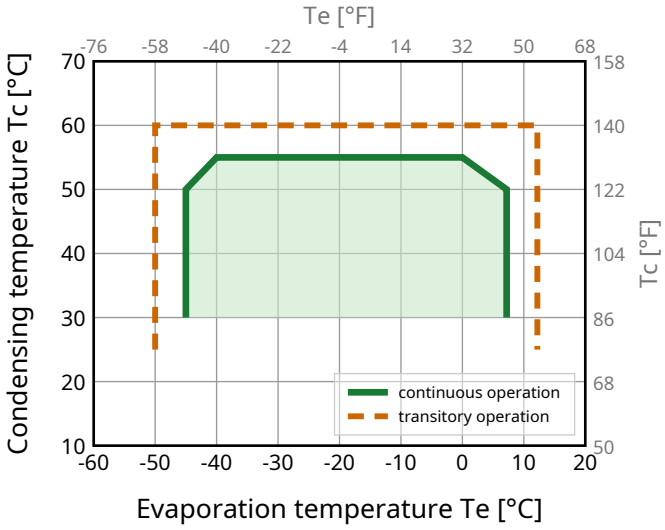
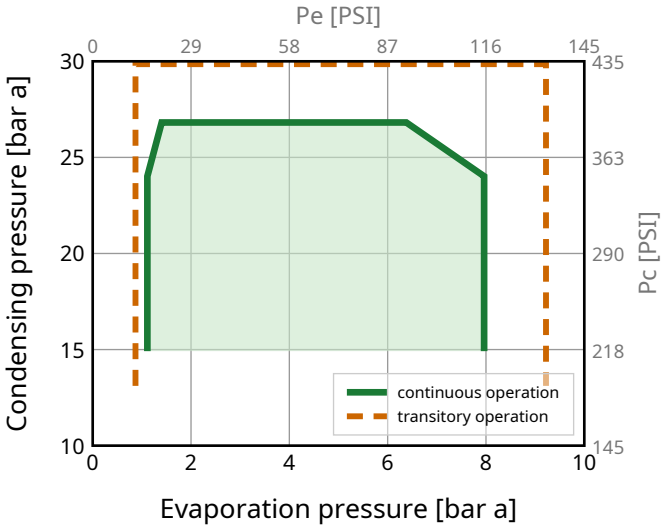
Components
a2 current relay (MRT22AFZ-6) 117U4129
c start capacitor (320µF) 117U5022
b plastic cover + clamp 117U1021
d/dc cord relief 117U0349

Operation Pressure Range





Model
NF7CLX Configuration 2

Sales code:
105F1721

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	**415**	1417	357	**1.21**	4.13	343	4.45	10.05	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**281**	959	242	**0.86**	2.92	328	4.34	9.07	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**224**	763	192	**0.91**	3.10	246	3.77	6.29	**EN12900 LBP**
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	**317**	1080	272	**0.93**	3.18	339	4.42	11.56	**ARI540 LBP**
-23.3 -10	40.6 105.1	32.2 90	32.2 90	**473**	1615	407	**1.44**	4.90	330	4.35	11.45	**AHAM LBP**
-35 -31	45 113	32 89.6	45 113	**207**	706	178	**0.84**	2.87	246	3.77	5.73	**opt LBP**

Performance Tables

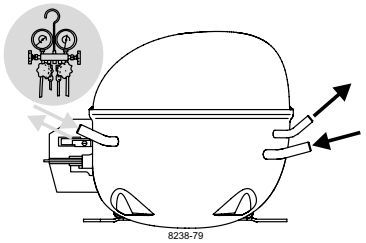
R452A, 115 V/60 Hz, CSIR, fan 3m/s

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]
-45	-49	**94**	322	81	**0.56**	1.90	169	3.25	2.60
-40	-40	**146**	497	125	**0.70**	2.40	208	3.51	4.02
-30	-22	**279**	953	240	**0.99**	3.36	283	4.03	7.77
-20	-4	**466**	1589	401	**1.29**	4.39	362	4.58	13.10
-10	14	**719**	2453	618	**1.60**	5.46	449	5.18	20.52
0	32	**1053**	3591	905	**1.92**	6.53	550	5.87	30.69
7.2	45	**1351**	4609	1162	**2.13**	7.27	634	6.45	40.19

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

-45	-49	**57**	196	49	**0.38**	1.28	153	3.13	1.82
-40	-40	**99**	339	85	**0.50**	1.72	197	3.44	3.16
-30	-22	**209**	714	180	**0.74**	2.51	284	4.04	6.72
-20	-4	**366**	1249	315	**0.98**	3.35	373	4.65	11.89
-10	14	**583**	1991	502	**1.24**	4.23	470	5.32	19.28
0	32	**875**	2987	753	**1.51**	5.15	580	6.08	29.64
7.2	45	**1140**	3888	980	**1.70**	5.80	671	6.71	39.51



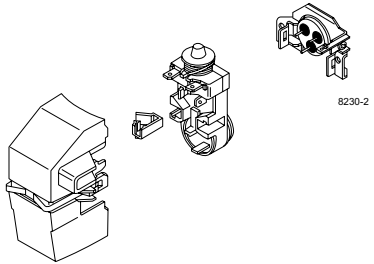
NF Compressors

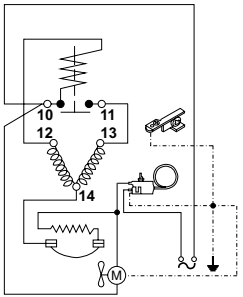
SECOP

Keep electrical equipment clear from oil, chemicals, and water

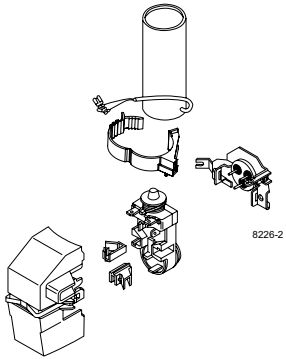
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

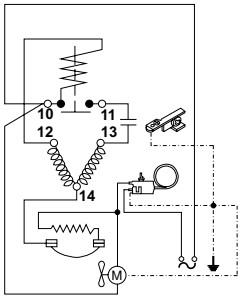
RSIR





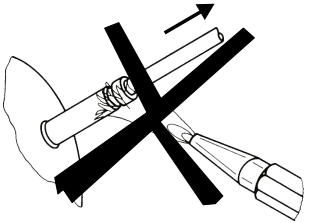
CSIR

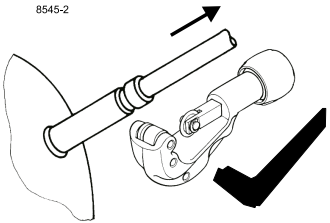


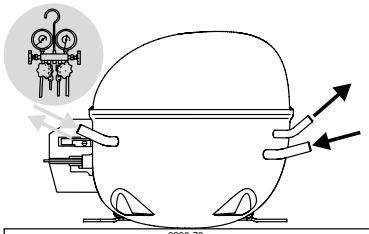


Service/Repair – R1234yf

(applies to all flammable refrigerants)







NF Compressors

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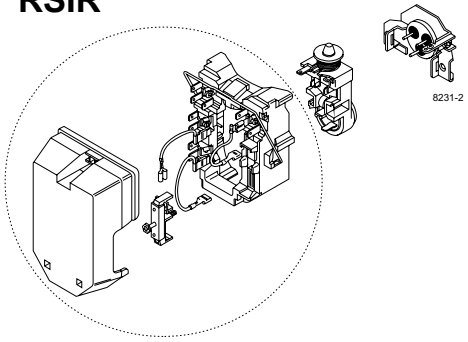
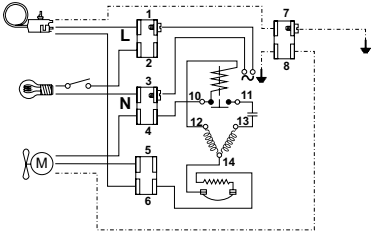
RSIR





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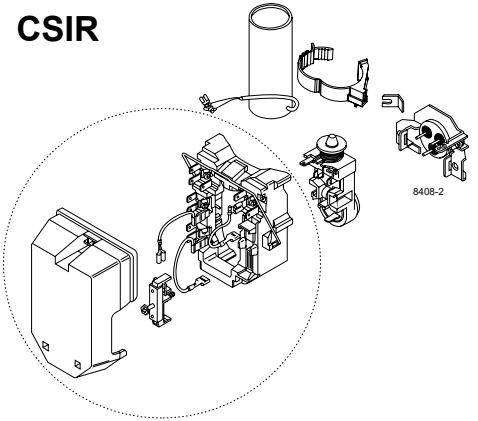
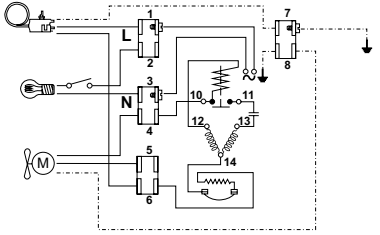
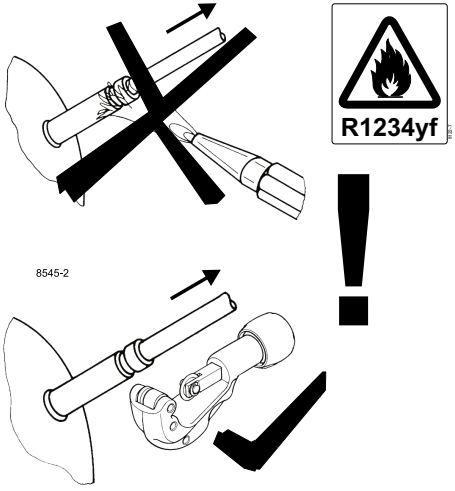




Service/Repair – R1234yf

(applies to all flammable refrigerants)



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**