Single
Packs

Single Pack NF6.1FX.2 115-127V 60Hz CSIR

Single pack code number: **195B4503**

Position	Title	Code	Amount
1	Compressor NF6.1FX.2	105G5631	1
2	Starting relay (overload protector MRP36AEN-6)	117U4127	1
3	Starting capacitor (280µF 125V, 6.3mm)	117U5025	1
4	Cord relief	117U0349	1
5	Cover	117U1021	1
6	Bolt joint for one compressor | M6 | ø16mm	118-1917	1

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Model
NF6.1FX.2

Sales code:
105G5631

Compressor Data

Refrigerant(s)	**R134a / R513A**
Refr. charge - tech. limit	**400g / 14.11oz**
Weight	**10.00 kg / 22.05lbs**
Displacement	**6.13 cm3 / 0.37cu.in**
Compressors on pallet	**80**

General – Configurations With NF6.1FX.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	95-135 V	95-135 V
Approvals	EAC, UL	EAC, UL
Starting torque	HST	HST
Refrigerant	R134a	R513A
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
NF6.1FX.2

Sales code:
105G5631

Compressor Design

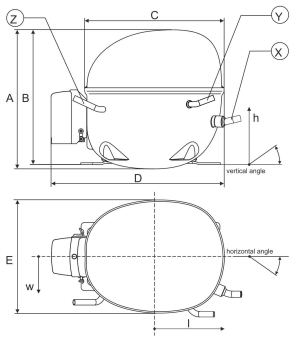
Oil type	**POE**	Winding resistance main	**2 Ohm**
Oil viscosity	**32cSt**	Winding resistance aux	**3.1 Ohm**
Oil quantity	**270 / 9.13fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**2,360 cm3 / 79.80fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**external**		

Compressor Dimensions

Housing

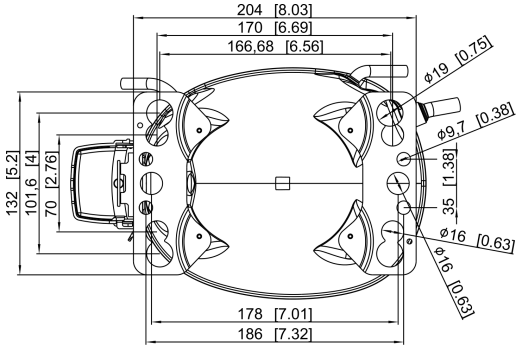
A Height	**197mm / 7.76in**
B Height	**191mm / 7.52in**
C Length shell	**205mm / 8.07in**
D Length w. cover	**254mm / 10.00in**
E Width	**166mm / 6.54in**

Find 3D Model here



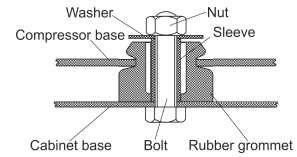
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.41–6.59 / 0.25–0.26in	øi 6.41–6.59 / 0.25–0.26in
Material	CU	CU	CU
Horizontal angle ±2°	0°	0°	0°
Vertical angle ±2°	15°	35°	155°
Position l/h/w [mm]	119/76/78 / 4.69/2.99/3.07in	127/103/54 / 5.00/4.06/2.13in	-113/94/72 / -4.45/3.70/2.83in
Straight tube l. [mm]	12 / 0.47in	12 / 0.47in	12 / 0.47in

Mounting Accessories

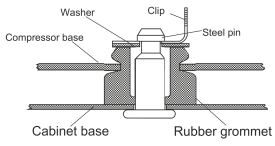


Dimensions in mm [in]

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
NF6.1FX.2 Configuration 1

Sales code:
105G5631

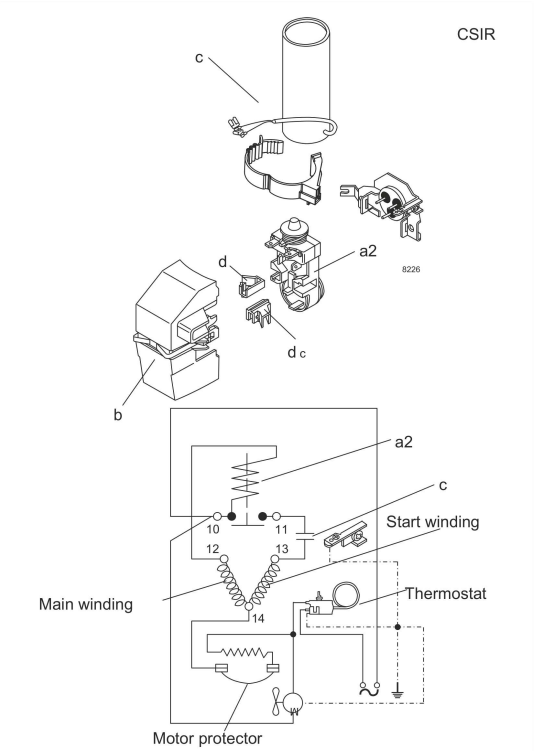
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**115 V/60 Hz 1~**
Refrigerant	**R134a**
Application	**LBP+MBP**
Voltage range	**95-135 V**
Starting torque	**HST**
Approvals	**EAC, UL**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**280 µF**
LRA (locked rotor amps / 4s/ U(N))	**22.2 A**
RLA (rated load amps / 1s/ U(N))	**3.7 A**
Cut in current (U(N))	**22.2 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 1,5m/s

Electrical Accessories / Wiring Diagram



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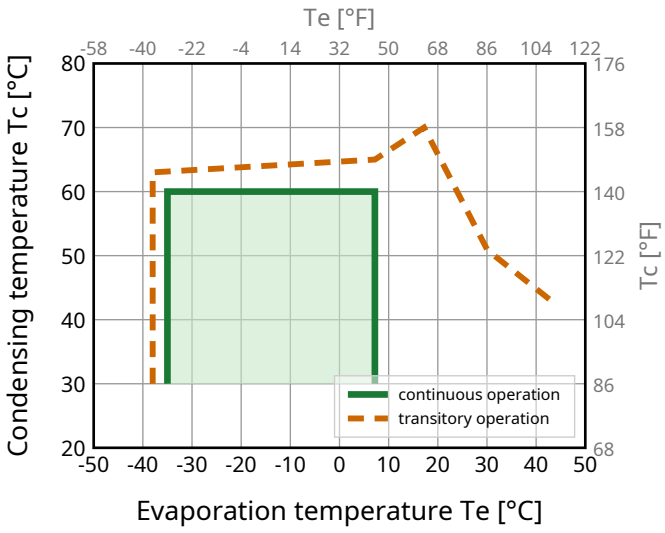
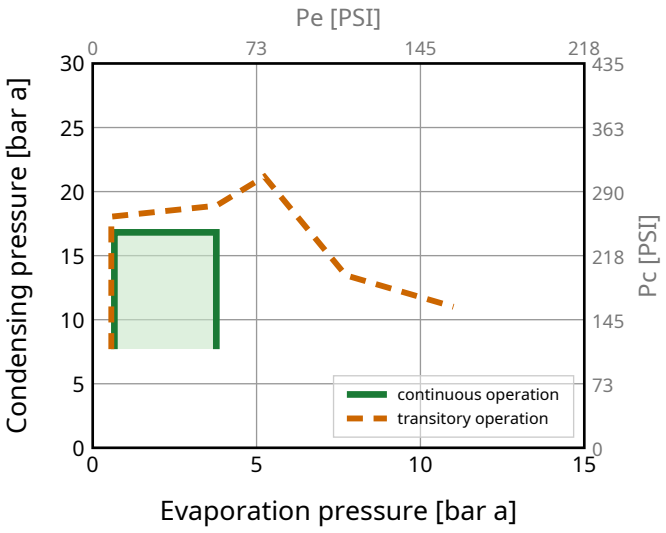
Components
a2 current relay (MRP36AEN-6) 117U4127
c start capacitor (280µF) 117U5025
b plastic cover + clamp 117U1021
d/dc cord relief 117U0349

Alternative components
a2 current relay (MRP36AEN-6) 117U4157
c start capacitor (280µF) 117U5074

Operation Pressure Range





Model

NF6.1FX.2 Configuration 1

Sales code:

105G5631

Standard Conditions

R134a, 115 V/60 Hz, CSIR, fan 1,5m/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	**211**	721	182	**1.19**	4.06	178	2.66	4.10	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**153**	521	131	**0.90**	3.08	169	2.62	3.65	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**100**	342	86	**0.76**	2.59	132	2.48	2.19	**EN12900 LBP**
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	**179**	612	154	**1.01**	3.44	178	2.64	4.70	**ARI540 LBP**
-23.3 -10	40.6 105.1	32.2 90	32.2 90	**243**	828	209	**1.38**	4.70	176	2.62	4.71	**AHAM LBP**
-35 -31	45 113	32 89.6	45 113	**91**	310	78	**0.71**	2.42	128	2.47	1.96	**opt LBP**

Performance Tables

R134a, 115 V/60 Hz, CSIR, fan 1,5m/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	**91**	310	78	**0.71**	2.42	128	2.47	1.96
-30	-22	**136**	464	117	**0.90**	3.08	150	2.53	2.93
-20	-4	**253**	863	217	**1.33**	4.53	190	2.70	5.48
-10	14	**413**	1408	355	**1.81**	6.17	228	2.92	9.01
0	32	**624**	2130	537	**2.31**	7.90	270	3.20	13.77
7.2	45	**814**	2776	700	**2.67**	9.12	304	3.43	18.13

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

-35	-31	**69**	236	59	**0.59**	2.02	117	2.44	1.64
-30	-22	**107**	364	92	**0.74**	2.53	144	2.53	2.54
-20	-4	**208**	711	179	**1.08**	3.67	193	2.73	4.98
-10	14	**352**	1201	303	**1.47**	5.01	240	3.00	8.48
0	32	**547**	1865	470	**1.89**	6.45	289	3.32	13.33
7.2	45	**723**	2468	622	**2.20**	7.51	329	3.58	17.83

Model
NF6.1FX.2 Configuration 2

Sales code:
105G5631

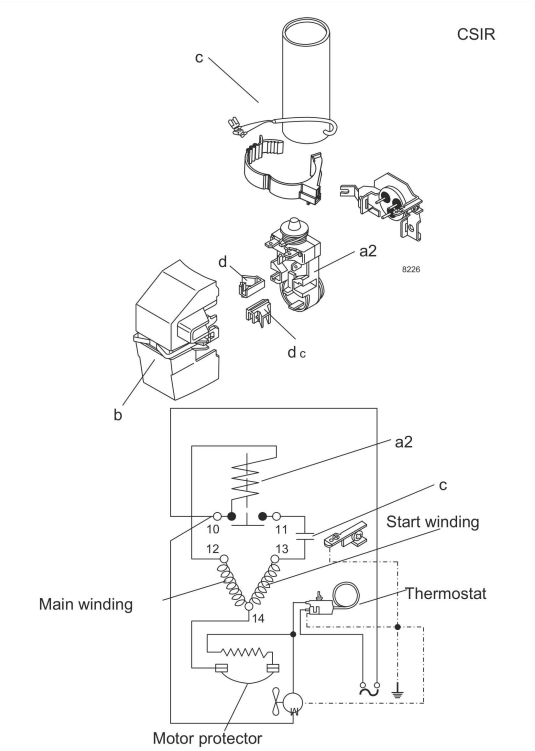
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**115 V/60 Hz 1~**
Refrigerant	**R513A**
Application	**LBP+MBP**
Voltage range	**95-135 V**
Starting torque	**HST**
Approvals	**EAC, UL**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**280 µF**
LRA (locked rotor amps / 4s/ U(N))	**22.2 A**
RLA (rated load amps / 1s/ U(N))	**3.7 A**
Cut in current (U(N))	**22.2 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 1,5m/s

Electrical Accessories / Wiring Diagram



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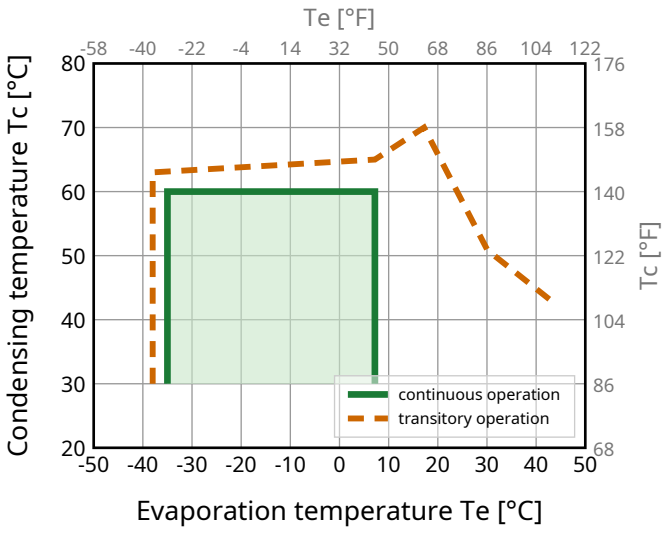
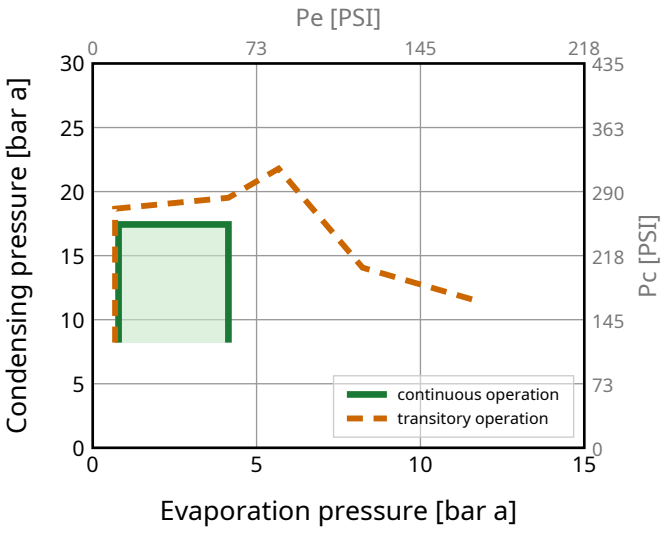
Components
a2 current relay (MRP36AEN-6) 117U4127
c start capacitor (280µF) 117U5025
b plastic cover + clamp 117U1021
d/dc cord relief 117U0349

Alternative components
a2 current relay (MRP36AEN-6) 117U4157
c start capacitor (280µF) 117U5074

Operation Pressure Range





Model
NF6.1FX.2 Configuration 2

Sales code:
105G5631

Standard Conditions

R513A, 115 V/60 Hz, CSIR, fan 1,5m/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	**233**	795	200	**1.21**	4.11	193	2.80	5.10	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**164**	561	141	**0.89**	3.04	184	2.76	4.55	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**111**	380	96	**0.78**	2.65	143	2.54	2.80	**EN12900 LBP**
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	**187**	638	161	**0.97**	3.31	192	2.80	5.83	**ARI540 LBP**
-23.3 -10	40.6 105.1	32.2 90	32.2 90	**266**	909	229	**1.40**	4.78	190	2.79	5.83	**AHAM LBP**
-35 -31	45 113	32 89.6	45 113	**102**	348	88	**0.73**	2.50	140	2.52	2.51	**opt LBP**

Performance Tables

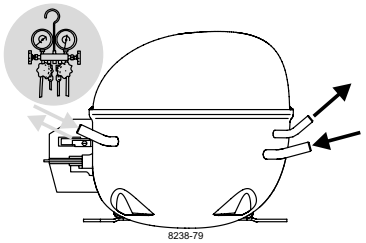
R513A, 115 V/60 Hz, CSIR, fan 1,5m/s

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	**102**	348	88	**0.73**	2.50	140	2.52	2.51
-30	-22	**150**	512	129	**0.92**	3.14	163	2.65	3.70
-20	-4	**272**	927	234	**1.33**	4.53	204	2.86	6.74
-10	14	**434**	1483	374	**1.79**	6.11	242	3.06	10.88
0	32	**647**	2209	557	**2.28**	7.79	284	3.28	16.40
7.2	45	**836**	2852	719	**2.63**	8.96	318	3.47	21.42

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

-35	-31	**78**	264	67	**0.60**	2.05	129	2.46	2.13
-30	-22	**117**	399	101	**0.74**	2.52	158	2.62	3.23
-20	-4	**221**	753	190	**1.06**	3.60	209	2.89	6.14
-10	14	**365**	1245	314	**1.43**	4.87	256	3.13	10.24
0	32	**557**	1902	479	**1.83**	6.25	304	3.39	15.85
7.2	45	**731**	2493	628	**2.12**	7.25	344	3.60	21.05



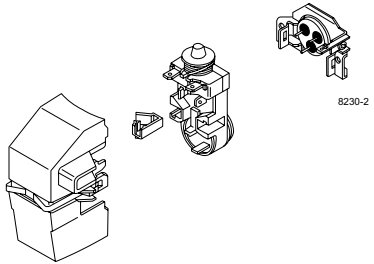
NF Compressors

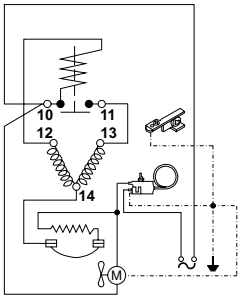
SECOP

Keep electrical equipment clear from oil, chemicals, and water

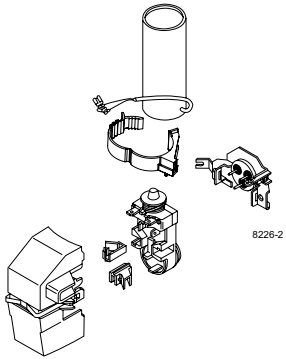
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

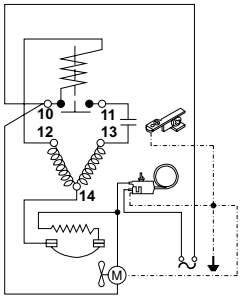
RSIR





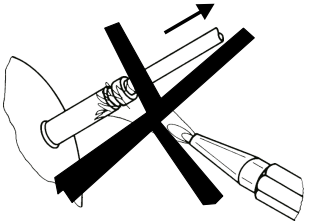
CSIR

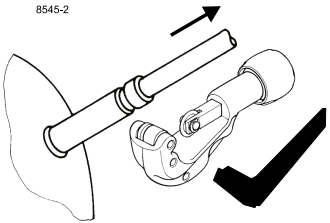


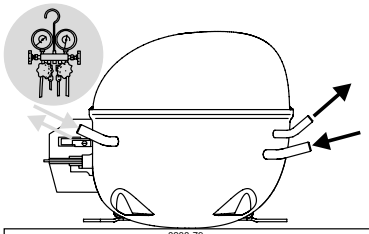


Service/Repair – R1234yf

(applies to all flammable refrigerants)







NF Compressors

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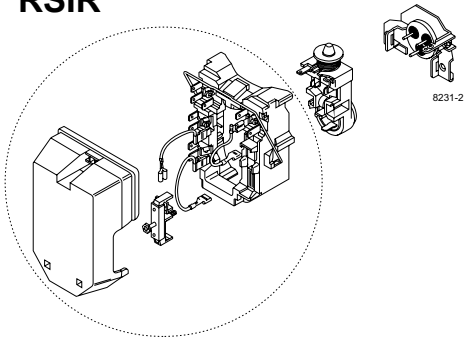
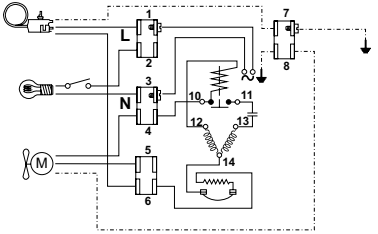
RSIR





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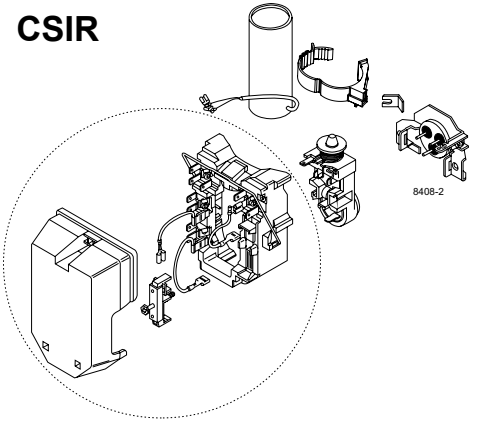
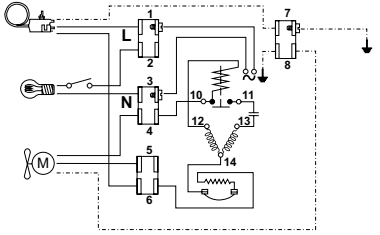
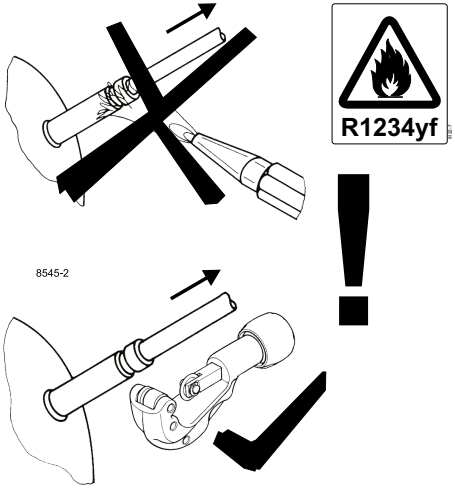




Service/Repair – R1234yf

(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**