Single
Packs

Single Pack NF10FX 115-127V 60Hz CSIR

Single pack code number: **195B4470**

Position	Title	Code	Amount
1	Compressor NF10FX	105G5941	1
2	Starting relay (overload protector MRT22AFZ-6)	117U4129	1
3	Starting capacitor (320µF 125V, 6.3mm)	117U5022	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
NF10FX

Sales code:
105G5941

Compressor Data

Refrigerant(s)	**R134a / R513A**
Refr. charge - tech. limit	**460g / 16.23oz**
Weight	**10.00 kg / 22.05lbs**
Displacement	**10.09 cm3 / 0.62cu.in**
Compressors on pallet	**80**

General – Configurations With NF10FX

–	**Conf. 1**	**Conf. 2**
Motor configuration	CSIR	CSIR
Power supply (nominal)	115-127 V/60 Hz	115-127 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	R134a	R513A
Application	LBP+MBP	LBP+MBP
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
NF10FX

Sales code:
105G5941

Compressor Design

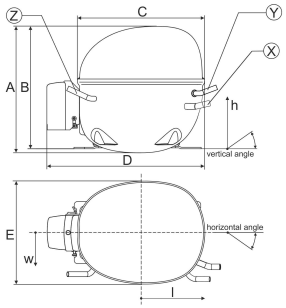
Oil type	**POE**	Winding resistance main	**1.62 Ohm**
Oil viscosity	**32cSt**	Winding resistance aux	**4.9 Ohm**
Oil quantity	**298 / 10.08fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**2,360 cm3 / 79.80fl.oz**	Max. discharge temp.	**110°C / 230°F**
Motor protection	**external**		

Compressor Dimensions

Housing

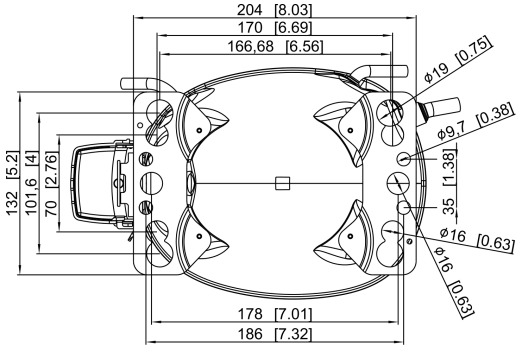
A Height	**197mm / 7.76in**
B Height	**191mm / 7.52in**
C Length shell	**205mm / 8.07in**
D Length w. cover	**254mm / 10.00in**
E Width	**166mm / 6.54in**

Find 3D Model here



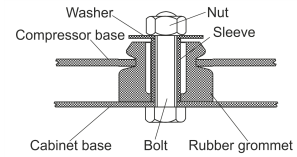
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.41–6.59 / 0.25–0.26in	øi 6.41–6.59 / 0.25–0.26in
Material	CU	CU	CU
Horizontal angle ±2°	0°	0°	0°
Vertical angle ±2°	15°	35°	155°
Position l/h/w [mm]	125.5/75.5/78 / 4.94/2.97/3.07in	133/102.5/54 / 5.24/4.04/2.13in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

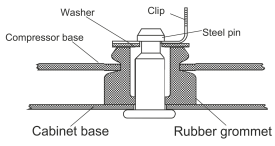


Dimensions in mm [in]

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
NF10FX Configuration 1

Sales code:
105G5941

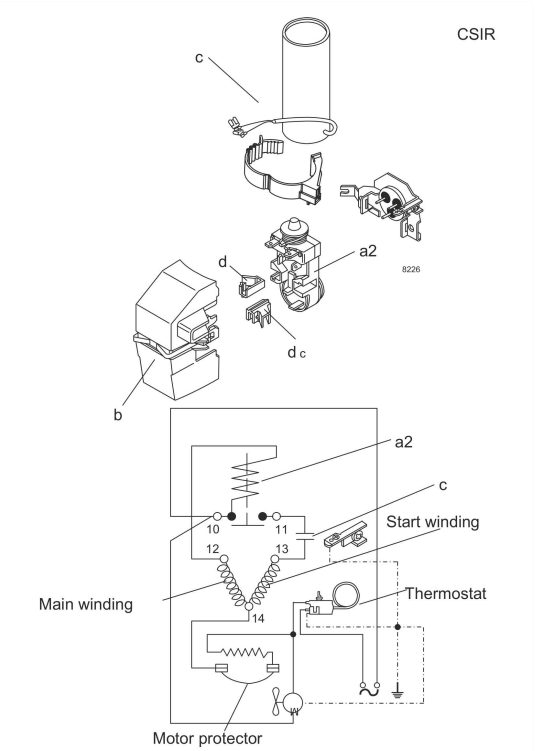
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**115-127 V/60 Hz 1~**
Refrigerant	**R134a**
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 1,5m/s

Electrical Accessories / Wiring Diagram



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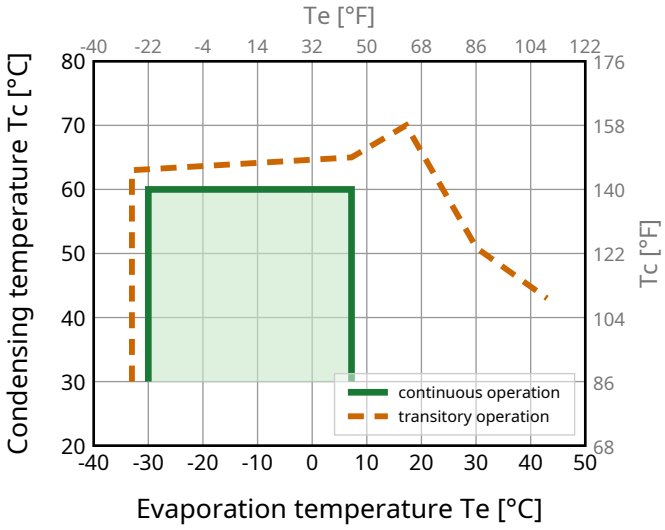
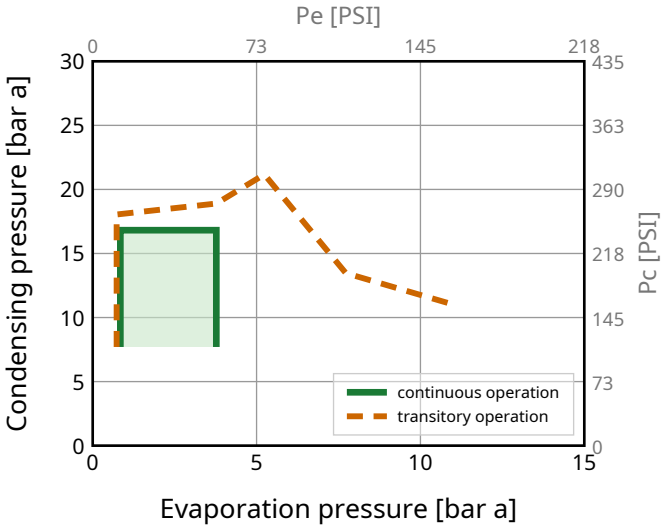
Components
a2 current relay (MRT22AFZ-6) 117U4129
c start capacitor (320µF) 117U5022
b plastic cover + clamp 117U1021
d/dc cord relief 117U0349

Operation Pressure Range





Model
NF10FX Configuration 1

Sales code:
105G5941

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	**307**	1047	264	**1.17**	4.00	262	3.72	5.96	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**227**	773	195	**0.91**	3.09	250	3.64	5.40	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**145**	495	125	**0.81**	2.76	179	3.33	3.17	**EN12900 LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**625**	2133	538	**1.60**	5.47	390	4.55	13.61	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**488**	1666	420	**1.34**	4.58	364	4.38	11.77	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**542**	1849	466	**1.56**	5.33	347	4.24	12.64	**EN12900 MBP**

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]
-30	-22	**190**	647	163	**0.89**	3.05	212	3.46	4.09
-20	-4	**341**	1165	294	**1.23**	4.20	277	3.81	7.40
-10	14	**561**	1915	483	**1.62**	5.52	347	4.24	12.26
0	32	**869**	2965	747	**2.08**	7.09	418	4.73	19.17
7.2	45	**1156**	3943	994	**2.47**	8.42	468	5.12	25.75

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

-30	-22	**165**	564	142	**0.76**	2.58	218	3.43	3.94
-20	-4	**299**	1021	257	**1.05**	3.58	286	3.87	7.16
-10	14	**488**	1666	420	**1.34**	4.58	364	4.38	11.77
0	32	**752**	2567	647	**1.67**	5.71	450	4.95	18.34
7.2	45	**1000**	3412	860	**1.95**	6.64	514	5.40	24.65

Model
NF10FX Configuration 2

Sales code:
105G5941

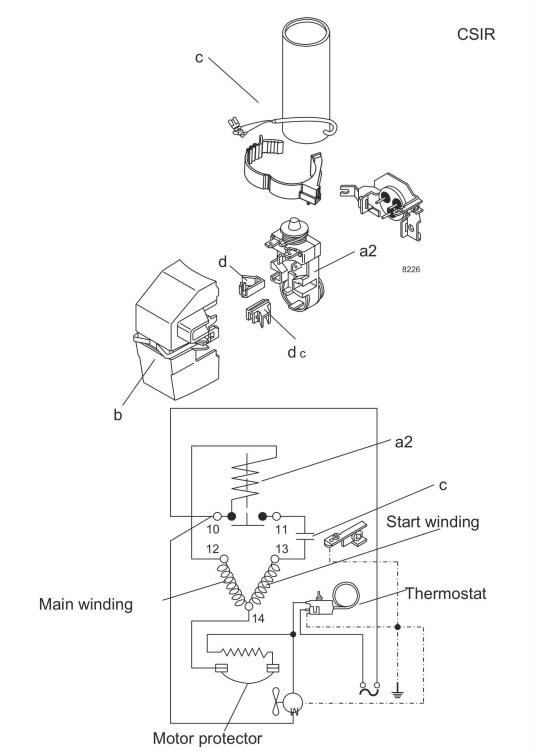
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**115-127 V/60 Hz 1~**
Refrigerant	**R513A**
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 1,5m/s

Electrical Accessories / Wiring Diagram



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Components
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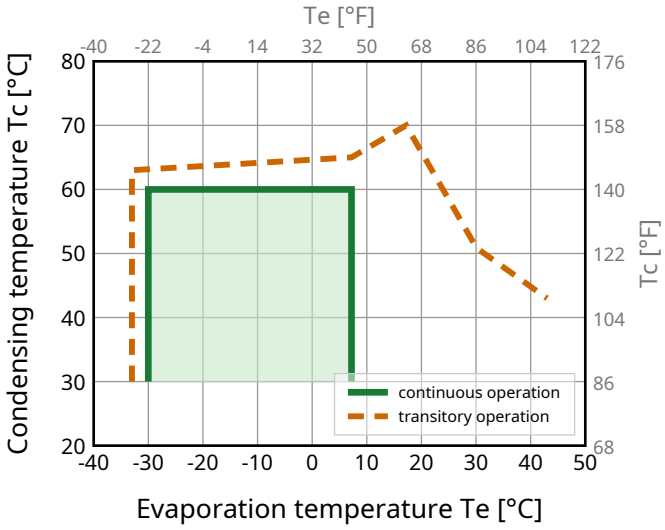
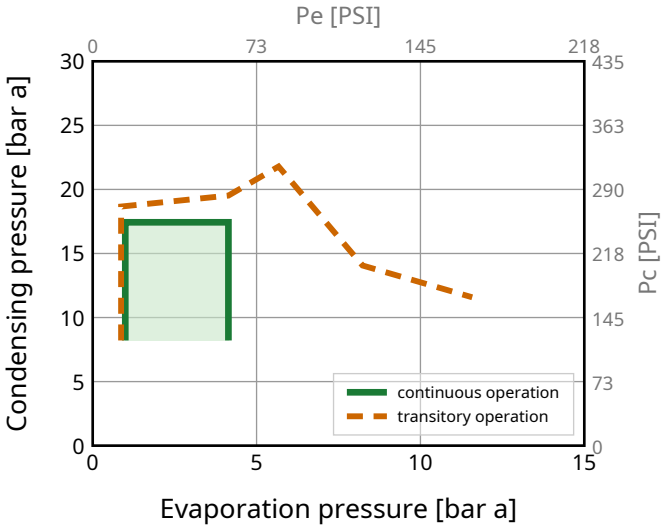
c start capacitor (320µF) 117U5022
b plastic cover + clamp 117U1021
d/dc cord relief 117U0349

Operation Pressure Range





Model
NF10FX Configuration 2

Sales code:
105G5941

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	**338**	1152	290	**1.18**	4.03	286	3.92	7.39	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**243**	830	209	**0.89**	3.02	275	3.85	6.74	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**161**	550	139	**0.81**	2.77	198	3.36	4.05	**EN12900 LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**655**	2235	563	**1.57**	5.37	416	4.75	16.33	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**506**	1726	435	**1.30**	4.44	389	4.58	14.20	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**563**	1921	484	**1.52**	5.18	371	4.47	15.24	**EN12900 MBP**

Performance Tables

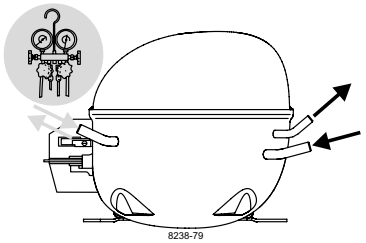
R513A, 115 V/60 Hz, CSIR, fan 1,5m/s

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]
-30	-22	**209**	713	180	**0.90**	3.05	234	3.59	5.16
-20	-4	**366**	1250	315	**1.22**	4.17	300	4.01	9.10
-10	14	**591**	2015	508	**1.59**	5.44	371	4.47	14.79
0	32	**900**	3071	774	**2.04**	6.94	442	4.92	22.80
7.2	45	**1186**	4048	1020	**2.41**	8.23	492	5.24	30.40

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

-30	-22	**181**	617	155	**0.74**	2.54	243	3.65	4.99
-20	-4	**317**	1082	273	**1.02**	3.49	310	4.08	8.81
-10	14	**506**	1726	435	**1.30**	4.44	389	4.58	14.20
0	32	**766**	2615	659	**1.61**	5.50	476	5.14	21.80
7.2	45	**1009**	3442	868	**1.87**	6.37	541	5.55	29.05



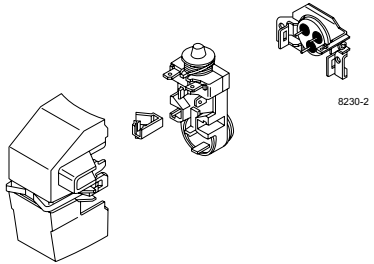
NF Compressors

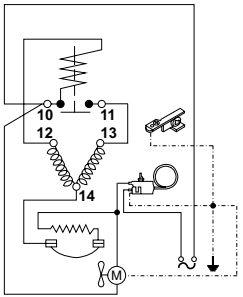
SECOP

Keep electrical equipment clear from oil, chemicals, and water

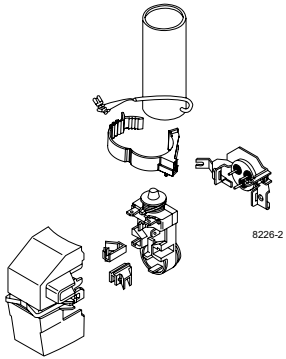
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

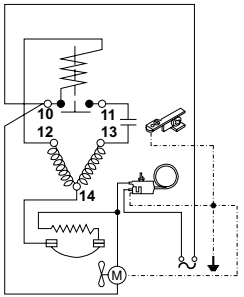
RSIR





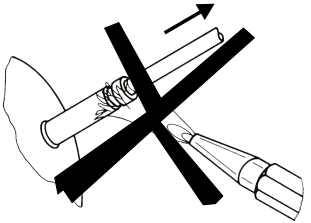
CSIR

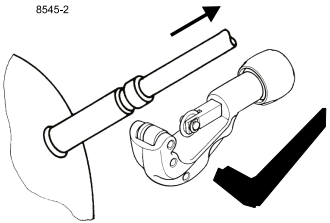


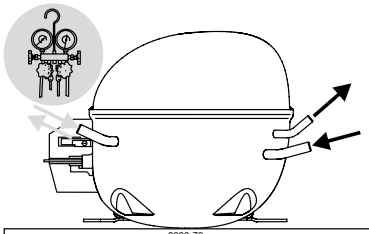


Service/Repair – R1234yf

(applies to all flammable refrigerants)







NF Compressors

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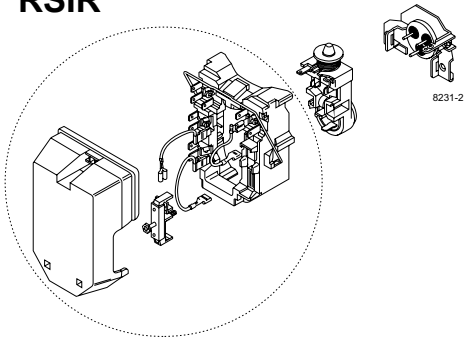
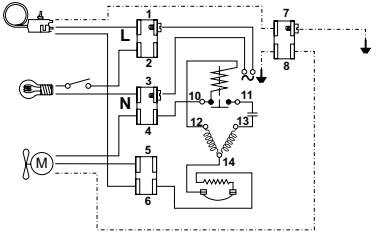
RSIR





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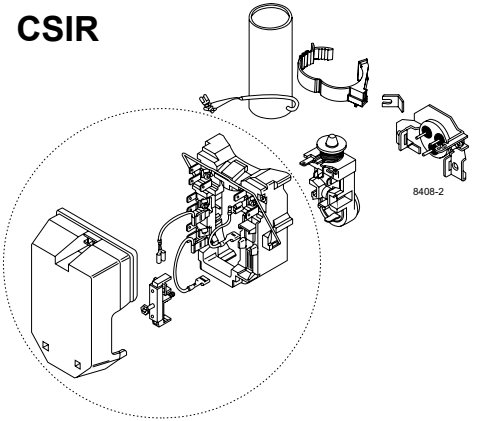
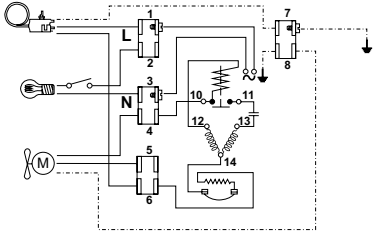
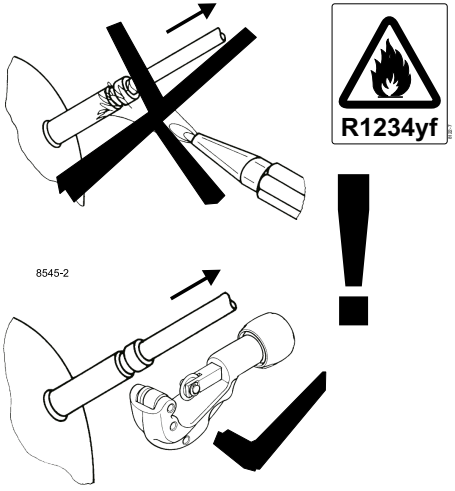




Service/Repair – R1234yf

(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**