Single
Packs

SECOP

Single Pack SC12G 115V 60Hz CSIR

Single pack code number: **195B4120**

Position	Title	Code	Amount
1	Compressor SC12G	104G7250	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
SC12G

Sales code:
104G7250

Compressor Data

Refrigerant(s)	**R134a / R513A**
Refr. charge - tech. limit	**1300g / 45.86oz**
Weight	**13.10 kg / 28.88lbs**
Displacement	**12.87 cm3 / 0.79cu.in**
Compressors on pallet	**80**

General – Configurations With SC12G

–	**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	R134a	R513A
Application	LBP+MBP+HBP	LBP+MBP+HBP
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
SC12G

Sales code:
104G7250

Compressor Design

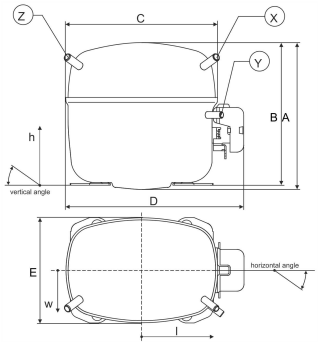
Oil type	**POE**	Winding resistance main	**1 Ohm**
Oil viscosity	**22cSt**	Winding resistance aux	**4.2 Ohm**
Oil quantity	**500 / 16.91fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**1,460 cm3 / 49.37fl.oz**	Max. discharge temp.	**135°C / 275°F**
Motor protection	**internal**		

Compressor Dimensions

Housing

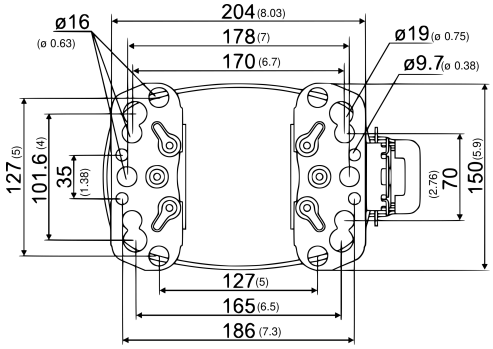
A Height	**209mm / 8.23in**
B Height	**203mm / 7.99in**
C Length shell	**218mm / 8.58in**
D Length w. cover	**255mm / 10.04in**
E Width	**151mm / 5.94in**

Find 3D Model here



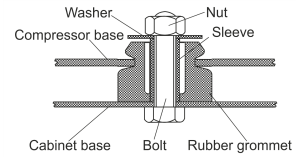
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.41–6.59 / 0.25–0.26in	øi 6.41–6.59 / 0.25–0.26in
Material	CU	CU	CU
Horizontal angle ±2°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°
Position l/h/w [mm]	107/183/55 / 4.21/7.20/2.17in	115/100/63 / 4.53/3.94/2.48in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

Mounting Accessories

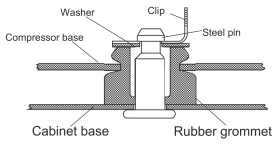


Dimensions in mm [in]

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
SC12G Configuration 1

Sales code:
104G7250

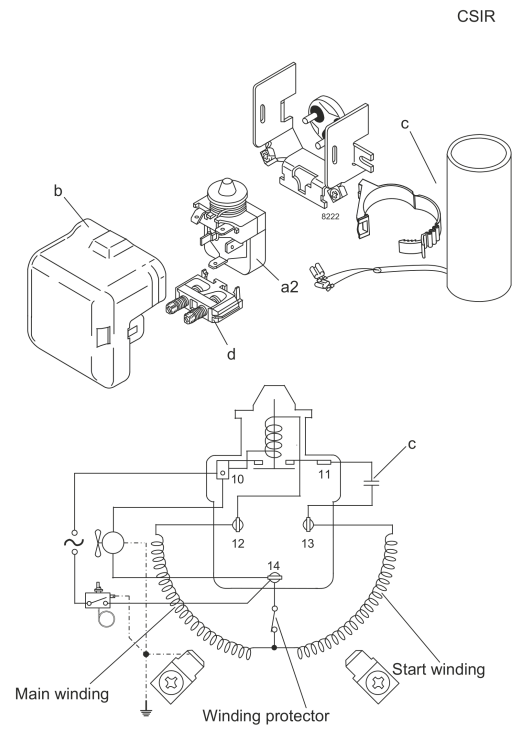
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**115 V/60 Hz 1~**
Refrigerant	**R134a**
Application	**LBP+MBP+HBP**
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))	**23.4 A**
RLA (rated load amps / 1s/ U(N))	**4.3 A**
Cut in current (U(N))	**23.4 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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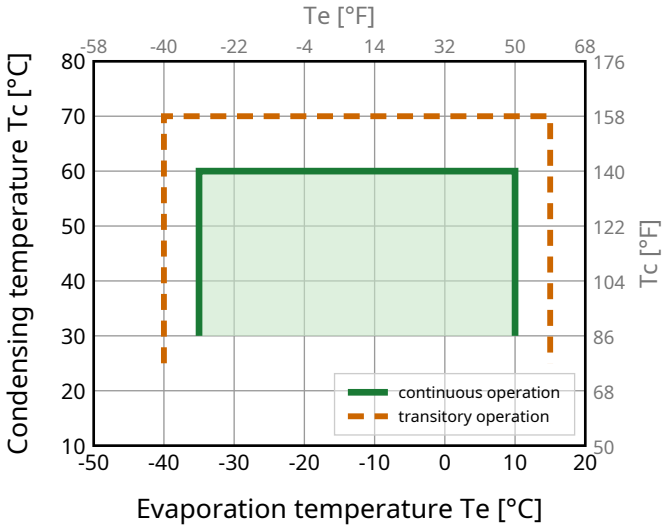
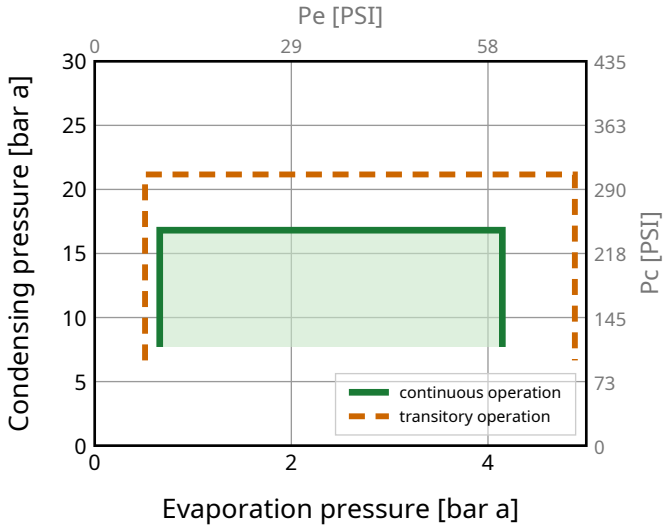
Components
a2 relay 117U6020
c start capacitor (240µF) 117U5023
d cord relief 103N1004
b plastic cover 103N2008

Operation Pressure Range





Model
SC12G Configuration 1

Sales code:
104G7250

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	**296**	1009	254	**0.99**	3.38	298	5.07	5.74	**ASHRAE LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**745**	2541	640	**1.56**	5.32	478	6.04	16.21	**ASHRAE MBP**
7.2 45	54.4 129.9	35 95	46.1 115	**1402**	4783	1206	**2.24**	7.63	627	7.18	31.03	**ASHRAE HBP**
-35 -31	40 104	20 68	40 104	**131**	448	113	**0.64**	2.20	204	4.92	2.87	**EN12900 LBP**
-10 14	45 113	20 68	45 113	**670**	2288	577	**1.59**	5.44	420	5.71	15.64	**EN12900 MBP**
5 41	50 122	20 68	50 122	**1206**	4116	1038	**2.09**	7.14	577	6.85	30.26	**EN12900 HBP**

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	**118**	403	101	**0.61**	2.08	194	4.81	2.54
-30	-22	**197**	673	170	**0.81**	2.75	244	4.92	4.25
-20	-4	**403**	1374	346	**1.20**	4.09	336	5.24	8.73
-10	14	**694**	2370	597	**1.65**	5.64	420	5.71	15.17
0	32	**1100**	3753	946	**2.17**	7.42	506	6.34	24.27
10	50	**1646**	5618	1416	**2.74**	9.36	600	7.11	36.85

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

-35	-31	**43**	145	37	**0.28**	0.97	150	4.61	1.01
-30	-22	**117**	398	100	**0.54**	1.85	216	4.78	2.77
-20	-4	**303**	1033	260	**0.90**	3.08	335	5.23	7.24
-10	14	**562**	1919	484	**1.27**	4.32	444	5.82	13.56
0	32	**924**	3151	794	**1.68**	5.72	551	6.57	22.52
10	50	**1414**	4823	1216	**2.13**	7.27	663	7.47	35.02

Model
SC12G Configuration 2

Sales code:
104G7250

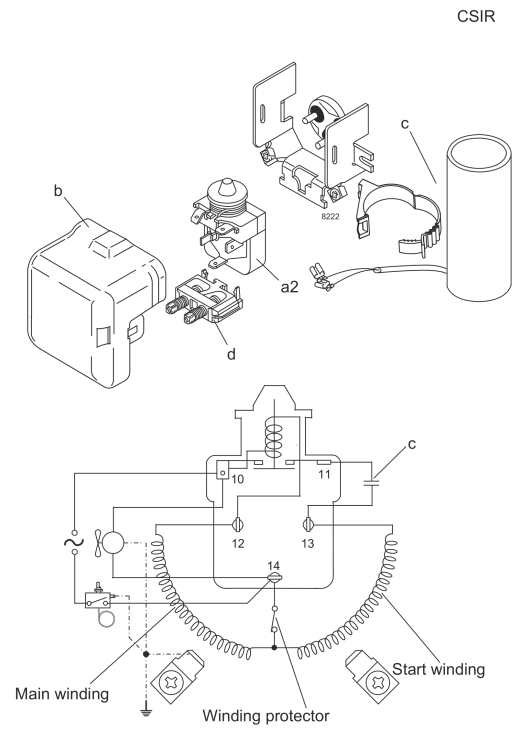
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**115 V/60 Hz 1~**
Refrigerant	**R513A**
Application	**LBP+MBP+HBP**
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))	**23.4 A**
RLA (rated load amps / 1s/ U(N))	**4.3 A**
Cut in current (U(N))	**23.4 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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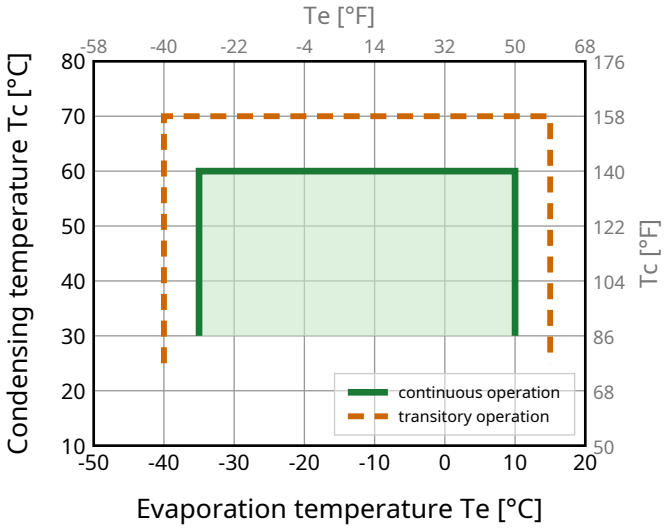
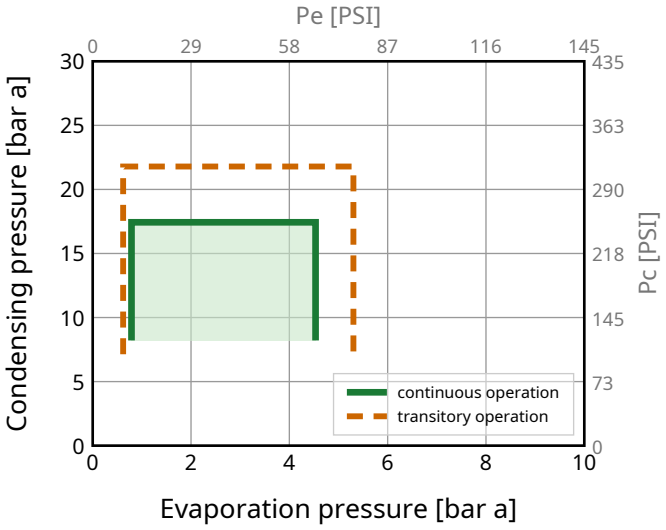
Components
a2 relay 117U6020
c start capacitor (240µF) 117U5023
d cord relief 103N1004
b plastic cover 103N2008

Operation Pressure Range





Model

SC12G Configuration 2

Sales code:

104G7250

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	**320**	1092	275	**1.04**	3.56	307	4.22	7.01	**ASHRAE LBP**
-6.7 20	54.4 129.9	35 95	46.1 115	**752**	2567	647	**1.58**	5.39	476	5.34	18.76	**ASHRAE MBP**
7.2 45	54.4 129.9	35 95	46.1 115	**1405**	4795	1208	**2.25**	7.67	625	6.32	35.70	**ASHRAE HBP**
-35 -31	40 104	20 68	40 104	**162**	552	139	**0.76**	2.61	212	3.59	4.07	**EN12900 LBP**
-10 14	45 113	20 68	45 113	**666**	2274	573	**1.58**	5.38	422	4.98	18.05	**EN12900 MBP**
5 41	50 122	20 68	50 122	**1174**	4004	1009	**2.02**	6.89	581	6.03	34.60	**EN12900 HBP**

Performance Tables

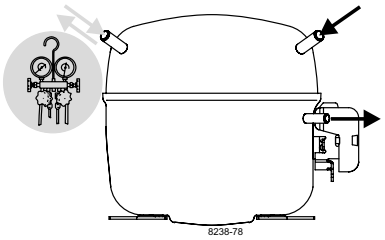
R513A, 115 V/60 Hz, CSIR, fan 1,5m/s

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	**136**	464	117	**0.67**	2.27	204	3.55	3.35
-30	-22	**209**	712	180	**0.85**	2.89	247	3.83	5.15
-20	-4	**409**	1395	352	**1.23**	4.18	334	4.40	10.15
-10	14	**699**	2386	601	**1.66**	5.65	422	4.98	17.50
0	32	**1101**	3756	947	**2.15**	7.33	513	5.58	27.89
10	50	**1635**	5578	1406	**2.71**	9.24	604	6.18	42.10

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

-35	-31	**86**	294	74	**0.45**	1.52	194	3.48	2.37
-30	-22	**146**	498	125	**0.60**	2.06	242	3.79	4.03
-20	-4	**314**	1070	270	**0.92**	3.14	341	4.44	8.71
-10	14	**563**	1921	484	**1.27**	4.33	443	5.12	15.80
0	32	**916**	3124	787	**1.67**	5.68	550	5.82	26.04
10	50	**1392**	4750	1197	**2.11**	7.21	659	6.54	40.33



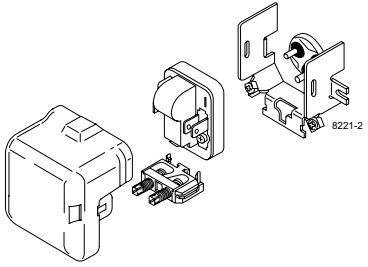
SC Compressors

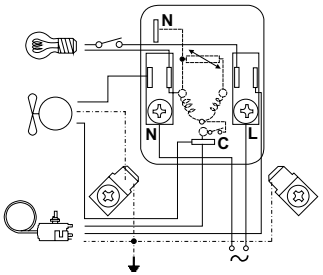
SECOP

Keep electrical equipment clear from oil, chemicals, and water

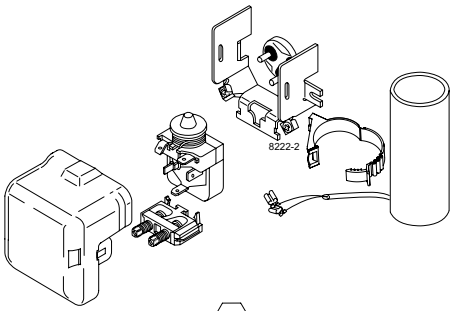
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

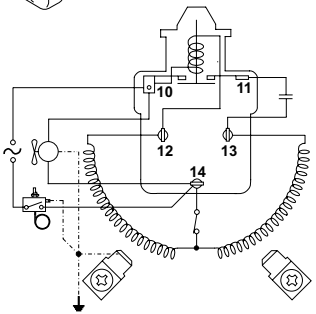
RSIR



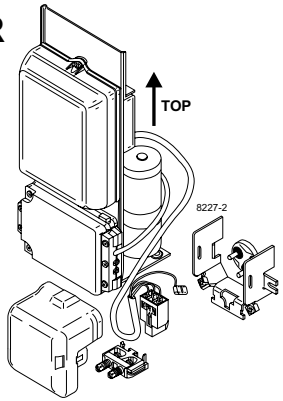


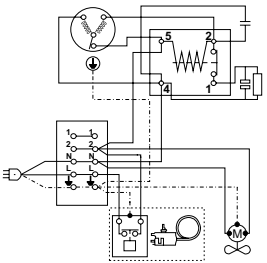
CSIR

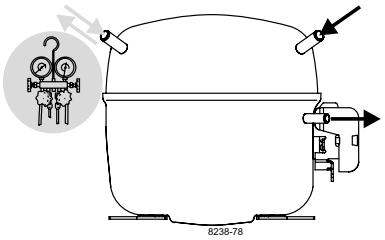




CSCR







SC Compressors

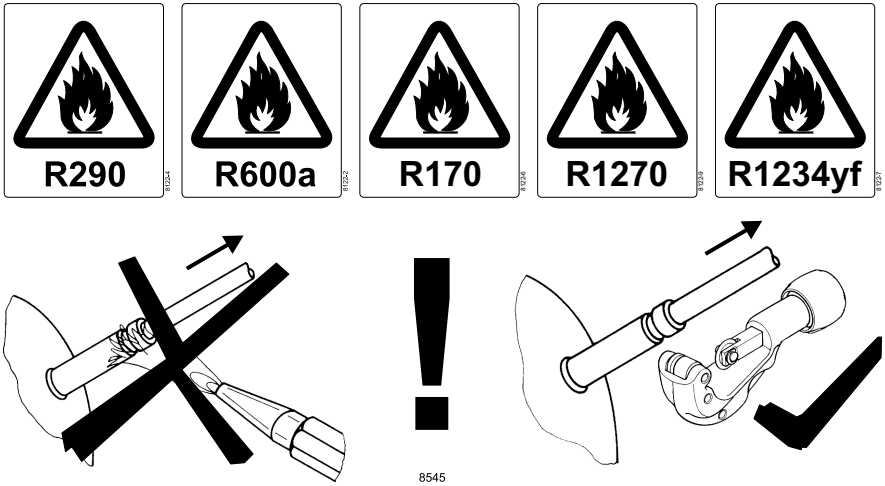
SECOP

Keep electrical equipment clear from oil, chemicals, and water

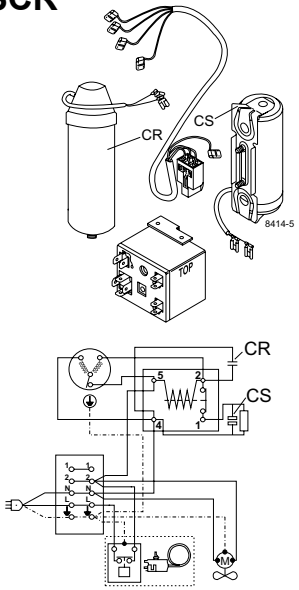
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

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

(applies to all flammable refrigerants)



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**