Single
Packs

Single Pack SC12MLX 115-127V 60Hz CSIR

Single pack code number: **195B4077**

Position	Title	Code	Amount
1	Compressor SC12MLX	104L1606	1
2	SC starting device (600mm)	117-7053	1
3	Bolt joint for one compressor | M6 | ø16mm	118-1917	1
Below electrical equipment is pre-assembled on the compressor:			
4	Overload protector T0761/46	117U3212	1
5	Protector holder	117U0439	1
6	Cover	117U1021	1

Secop GmbH • Lise-Meitner-Straße 29 • 24941 Flensburg, Germany • Tel: +49 461 4941 0 • **www.secop.com**

Secop accepts no responsibility for possible errors in catalogs, brochures, and other printed material. Secop reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary to specifications already agreed. All trademarks in this material are the property of the respective companies. Secop and the Secop logotype are trademarks of Secop GmbH. All rights reserved.

Model
SC12MLX

Sales code:
104L1606

Compressor Data

Refrigerant(s)	**R404A / R507**
Refr. charge - tech. limit	**1300g / 45.86oz**
Weight	**13.80 kg / 30.42lbs**
Displacement	**12.87 cm3 / 0.79cu.in**
Compressors on pallet	**80**

General – Configurations With SC12MLX

–	**Conf. 1**	**Conf. 2**
Motor configuration	CSIR	CSCR
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	UL
Starting torque	HST	HST
Refrigerant	R404A	R404A
Application	MBP	MBP
Hot gas defrost	OK	OK
Long interval pull down	OK	OK

Application Notes

- Protector and cover are included and pre-assembled to compressor.
- Provision for PE Grounding is located at the PE Stamp on the compressor

Model
SC12MLX

Sales code:
104L1606

Compressor Design

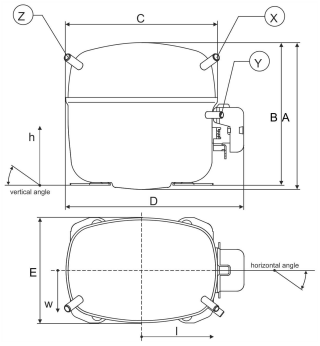
Oil type	**POE**	Winding resistance main	**0.66 Ohm**
Oil viscosity	**32cSt**	Winding resistance aux	**2.7 Ohm**
Oil quantity	**556 / 18.80fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**1,460 cm3 / 49.37fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**external**		

Compressor Dimensions

Housing

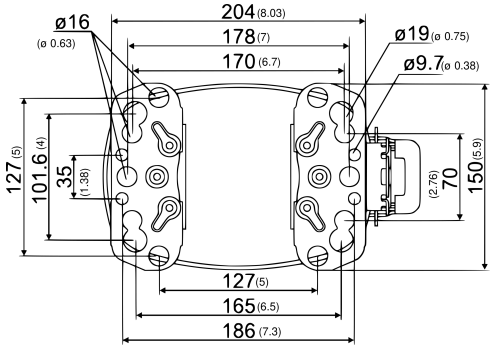
A Height	**219mm / 8.62in**
B Height	**213mm / 8.39in**
C Length shell	**218mm / 8.58in**
D Length w. cover	**255mm / 10.04in**
E Width	**151mm / 5.94in**

Find 3D Model here



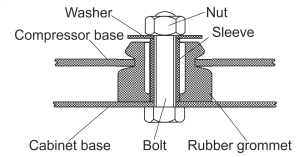
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.41–6.59 / 0.25–0.26in	øi 6.41–6.59 / 0.25–0.26in
Material	CU	CU	CU
Horizontal angle ±2°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°
Position l/h/w [mm]	107/193/55 / 4.21/7.60/2.17in	115/110/63 / 4.53/4.33/2.48in	-107/193/55 / -4.21/7.60/2.17in
Straight tube l. [mm]	12 / 0.47in	12 / 0.47in	12 / 0.47in

Mounting Accessories

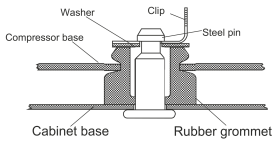


Dimensions in mm [in]

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
SC12MLX Configuration 1

Sales code:
104L1606

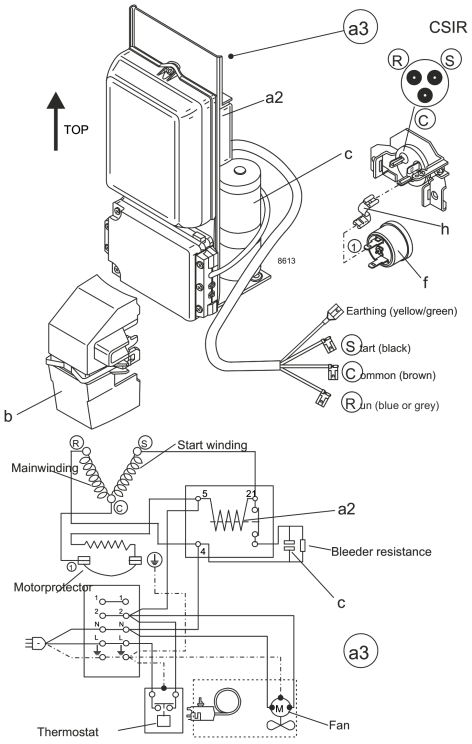
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**115-127 V/60 Hz 1~**
Refrigerant	**R404A**
Application	**MBP**
Voltage range	**95-135 V**
Starting torque	**HST**
Approvals	**UL**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**410 µF**
LRA (locked rotor amps / 4s/ U(N))	**56.8 A**
RLA (rated load amps / 1s/ U(N))	**9.8 A**
Cut in current (U(N))	**56.8 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

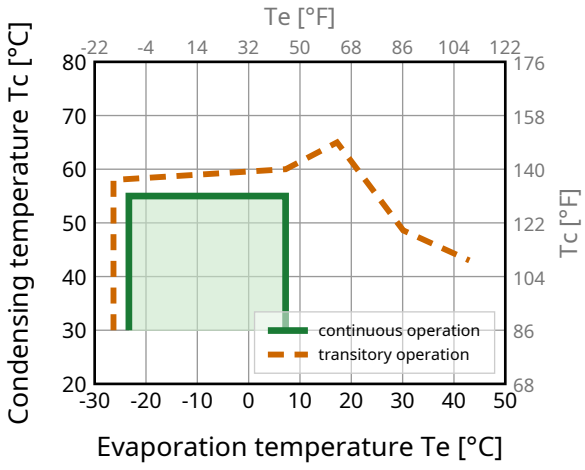


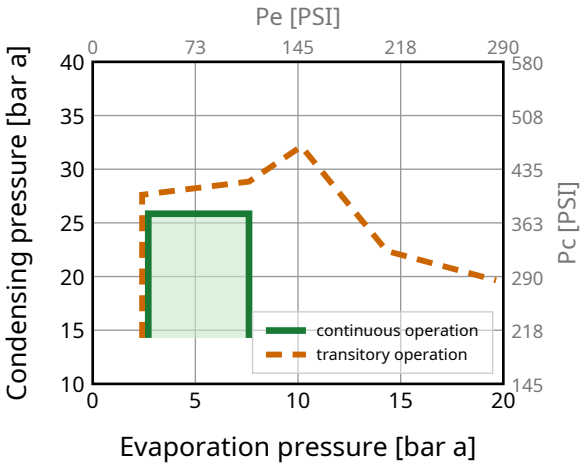
View full size

Components (protector + ~holder + cover: pre assembled)
a3 SC starter kit 117-7053
f ext. protector (T0761/46) 117U3212
h protector holder 117U0439
b plastic cover + clamp 117U1021

Alternative components
a2 potential relay (RVA 7AA3R) 117-7441
c start capacitor (410µF, 6.3mm) 117U5042
f ext. protector (T0761/46) 117U3212
h protector holder 117U0439
b plastic cover + clamp 117U1021

Operation Pressure Range





Model
SC12MLX Configuration 1

Sales code:
104L1606

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]	
-6.7 20	54.4 129.9	35 95	46.1 115	**1283**	4377	1103	**1.52**	5.19	843	9.09	35.24	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**951**	3243	818	**1.20**	4.10	791	8.92	30.38	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**1126**	3841	968	**1.51**	5.14	747	8.30	33.84	**EN12900 MBP**
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	**1174**	4005	1009	**1.45**	4.93	812	8.87	38.25	**ARI540 MBP**
-10 14	45 113	32 89.6	45 113	**1194**	4074	1027	**1.60**	5.45	747	8.30	32.83	**opt MBP 1**
-25 -13	45 113	32 89.6	45 113	**606**	2068	521	**1.09**	3.72	556	6.50	16.31	**opt MBP 2**

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]
-23.3	-10	**658**	2245	566	**1.14**	3.89	577	6.86	17.75
-20	-4	**769**	2624	661	**1.24**	4.24	619	7.38	20.82
-15	5	**964**	3289	829	**1.41**	4.82	682	7.90	26.28
-10	14	**1194**	4074	1027	**1.60**	5.45	747	8.30	32.83
-5	23	**1463**	4992	1258	**1.80**	6.13	814	8.82	40.62
0	32	**1774**	6054	1526	**2.01**	6.85	884	9.69	49.82
5	41	**2131**	7270	1832	**2.23**	7.60	956	11.17	60.65
7.2	45	**2303**	7857	1980	**2.33**	7.94	989	12.07	65.99

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

-23.3	-10	**498**	1698	428	**0.88**	2.99	568	7.12	15.55
-20	-4	**591**	2017	508	**0.95**	3.23	624	7.87	18.56
-15	5	**756**	2578	650	**1.07**	3.64	708	8.55	23.92
-10	14	**951**	3243	818	**1.20**	4.10	791	8.92	30.38
-5	23	**1179**	4024	1014	**1.35**	4.60	875	9.20	38.12
0	32	**1445**	4931	1243	**1.51**	5.14	960	9.63	47.35
5	41	**1752**	5977	1507	**1.68**	5.72	1046	10.47	58.30
7.2	45	**1900**	6484	1634	**1.75**	5.98	1085	11.02	63.75

Model
SC12MLX Configuration 2

Sales code:
104L1606

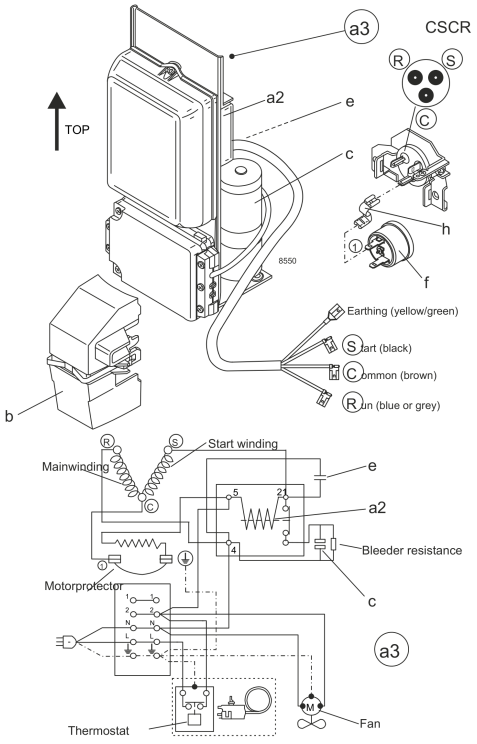
Configuration

Motor configuration	**CSCR**
Power supply (nominal)	**115-127 V/60 Hz 1~**
Refrigerant	**R404A**
Application	**MBP**
Voltage range	**95-135 V**
Starting torque	**HST**
Approvals	**UL**
Starting device type	**relay**
Run capacitor	**23.5 µF**
Start capacitor	**410 µF**
LRA (locked rotor amps / 4s/ U(N))	**56.8 A**
RLA (rated load amps / 1s/ U(N))	**9.8 A**
Cut in current (U(N))	**56.8 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

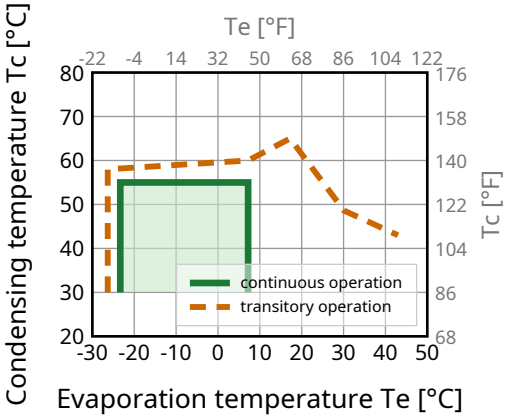


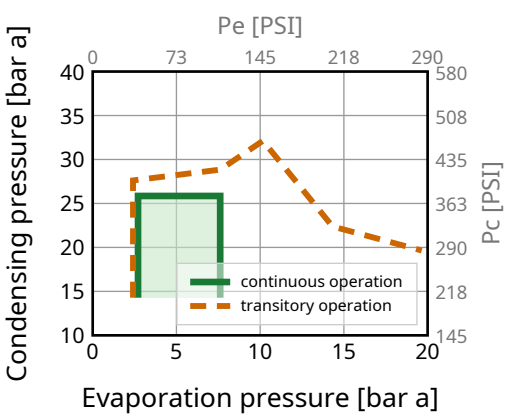
View full size

Components (protector + ~holder + cover: pre assembled)
a3 SC starter kit 117-7045
f ext. protector (T0761/46) 117U3212
h protector holder 117U0439
b plastic cover + clamp 117U1021

Alternative components
a2 potential relay (RVA 7AA3R) 117-7441
f ext. protector (T0761/46) 117U3212
h protector holder 117U0439
c start capacitor (410µF, 6.3mm) 117U5042
c start capacitor (410µF, 6.3mm) 117U5379
e run capacitor (23,5µF, 6.3mm) 117-7133
b plastic cover + clamp 117U1021

Operation Pressure Range





Model
SC12MLX Configuration 2

Sales code:
104L1606

Standard Conditions

R404A, 115 V/60 Hz, CSCR, 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]	
-6.7 20	54.4 129.9	35 95	46.1 115	**1298**	4430	1117	**1.60**	5.48	809	8.05	35.67	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**962**	3282	827	**1.27**	4.32	760	7.70	30.75	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**1139**	3886	979	**1.59**	5.41	718	7.42	34.24	**EN12900 MBP**
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	**1188**	4053	1022	**1.52**	5.20	779	7.84	38.71	**ARI540 MBP**
-10 14	45 113	32 89.6	45 113	**1208**	4122	1039	**1.68**	5.75	718	7.42	33.22	**opt MBP 1**
-25 -13	45 113	32 89.6	45 113	**613**	2092	527	**1.15**	3.91	535	6.16	16.50	**opt MBP 2**

Performance Tables

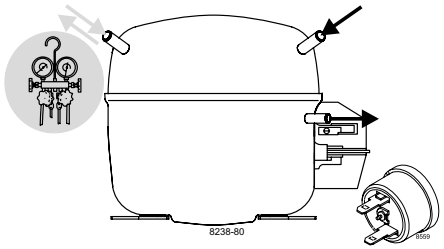
R404A, 115 V/60 Hz, CSCR, fan 3m/s

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]
-23.3	-10	**666**	2271	572	**1.20**	4.09	556	6.29	17.95
-20	-4	**778**	2654	669	**1.31**	4.46	596	6.56	21.06
-15	5	**975**	3327	839	**1.49**	5.07	656	6.98	26.59
-10	14	**1208**	4122	1039	**1.68**	5.75	718	7.42	33.22
-5	23	**1481**	5052	1273	**1.90**	6.47	781	7.89	41.11
0	32	**1796**	6128	1545	**2.12**	7.22	848	8.41	50.43
5	41	**2158**	7362	1856	**2.34**	7.99	921	8.98	61.41
7.2	45	**2332**	7957	2006	**2.44**	8.34	954	9.26	66.83

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

-23.3	-10	**503**	1717	433	**0.92**	3.14	548	6.15	15.73
-20	-4	**598**	2040	514	**0.99**	3.39	602	6.55	18.77
-15	5	**764**	2608	657	**1.12**	3.83	681	7.13	24.20
-10	14	**962**	3282	827	**1.27**	4.32	760	7.70	30.75
-5	23	**1194**	4074	1027	**1.42**	4.86	839	8.27	38.59
0	32	**1464**	4994	1259	**1.59**	5.43	919	8.86	47.95
5	41	**1775**	6056	1526	**1.77**	6.04	1003	9.46	59.07
7.2	45	**1926**	6571	1656	**1.85**	6.32	1041	9.74	64.60



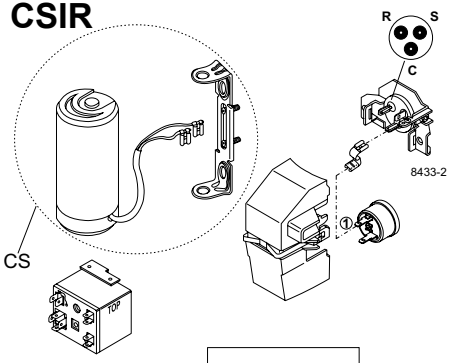
SC Compressors
(External Protector)

SECOP

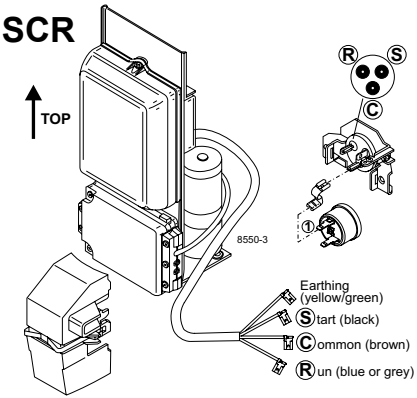
Keep electrical equipment clear from oil, chemicals, and water

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

CSIR

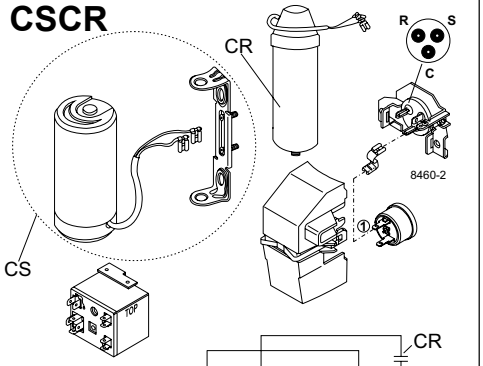


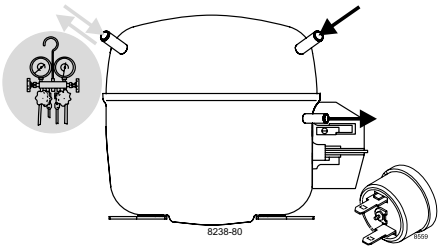
CSCR



	S	C	R
ENGLISH	Black	Brown	Blue or grey
DEUTSCH	Schwarz	Braun	Blau od. grau
FRANÇAIS	Noir	Marron	Bleu ou gris
ESPAÑOL	Negro	Marrón	Azul o gris
ITALIANO	Nero	Marrone	Blu o grigio
NEDERLANDS	Zwart	Bruin	Blauw of grijs
РУССКИЙ	Чёрный	Корич-невый	Синий или серый
中文	黑色	棕色	蓝色或灰色

CSCR





SC Compressors
(External Protector)

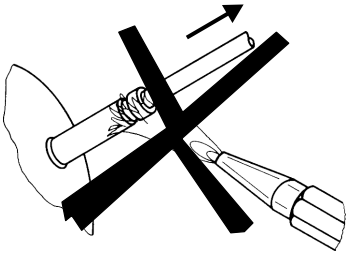
SECOP

Keep electrical equipment clear from oil, chemicals, and water

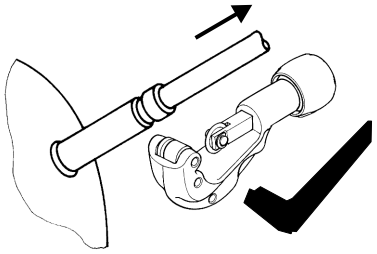
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

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

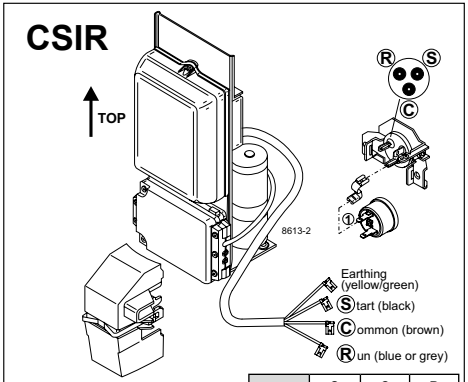
(applies to all flammable refrigerants)

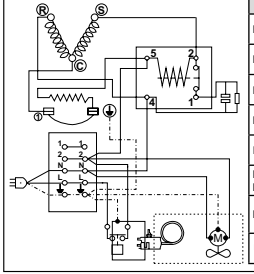


8545



CSIR





	S	C	R
ENGLISH	Black	Brown	Blue or grey
DEUTSCH	Schwarz	Braun	Blau od. grau
FRANÇAIS	Noir	Marron	Bleu ou gris
ESPAÑOL	Negro	Marrón	Azul o gris
ITALIANO	Nero	Marrone	Blu o grigio
NEDER-LANDS	Zwart	Bruin	Blauw of grijs
РУССКИЙ	Чёрный	Корич-невый	Синий или серый
中文	黑色	棕色	蓝色或灰色

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**