Single
Packs

Single Pack SC18MLX 115V 60Hz CSCR

Single pack code number: **195B4159**

Position	Title	Code	Amount
1	Compressor SC18MLX	104L2105	1
2	Starting relay (RVA 7AA3R435)	117-7441	1
3	Run capacitor (23.5µF 190V, 6.3mm)	117-7114	1
4	Starting capacitor (410µF 125V, 6.3mm)	117U5043	1
5	Bolt joint for one compressor | M6 | ø16mm	118-1917	1

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Model
SC18MLX

Sales code:
104L2105

Compressor Data

Refrigerant(s)	**R404A / R452A / R507**
Refr. charge - tech. limit	**1300g / 45.86oz**
Weight	**14.00 kg / 30.86lbs**
Displacement	**17.69 cm3 / 1.08cu.in**
Compressors on pallet	**80**

General – Configurations With SC18MLX

–	**Conf. 1**	**Conf. 2**
Motor configuration	CSCR	CSCR
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	R404A	R452A
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
SC18MLX

Sales code:
104L2105

Compressor Design

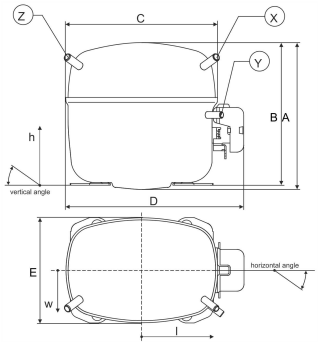
Oil type	**POE**	Winding resistance main	**0.6 Ohm**
Oil viscosity	**32cSt**	Winding resistance aux	**2.6 Ohm**
Oil quantity	**556 / 18.80fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**1,460 cm3 / 49.37fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**external**		

Compressor Dimensions

Housing

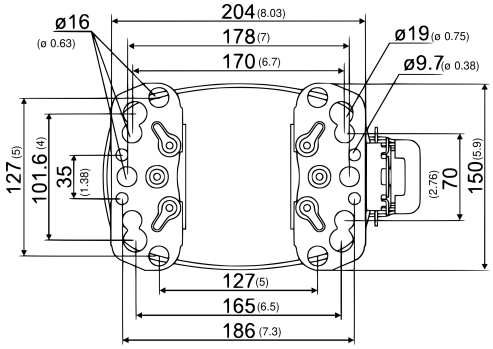
A Height	**219mm / 8.62in**
B Height	**213mm / 8.39in**
C Length shell	**218mm / 8.58in**
D Length w. cover	**255mm / 10.04in**
E Width	**151mm / 5.94in**

Find 3D Model here



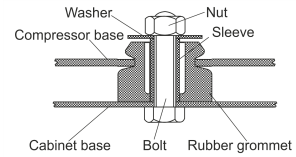
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 9.54–9.72 / 0.38–0.38in	øi 6.41–6.59 / 0.25–0.26in	øi 6.41–6.59 / 0.25–0.26in
Material	CU	CU	CU
Horizontal angle ±2°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°
Position l/h/w [mm]	107/193/55 / 4.21/7.60/2.17in	115/110/63 / 4.53/4.33/2.48in	-107/193/55 / -4.21/7.60/2.17in
Straight tube l. [mm]	12 / 0.47in	12 / 0.47in	12 / 0.47in

Mounting Accessories

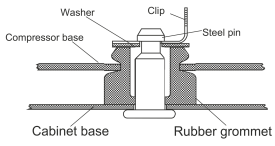


Dimensions in mm [in]

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
SC18MLX Configuration 1

Sales code:
104L2105

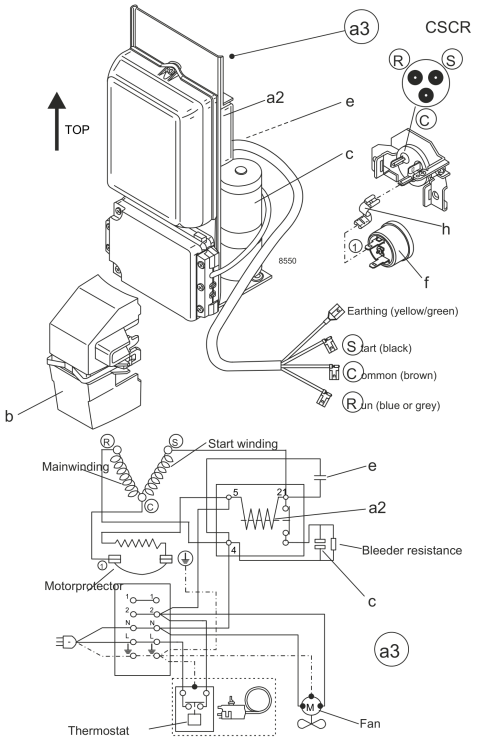
Configuration

Motor configuration	**CSCR**
Power supply (nominal)	**115 V/60 Hz 1~**
Refrigerant	**R404A**
Application	**MBP**
Voltage range	**103-127 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))	**69 A**
RLA (rated load amps / 1s/ U(N))	**13 A**
Cut in current (U(N))	**69 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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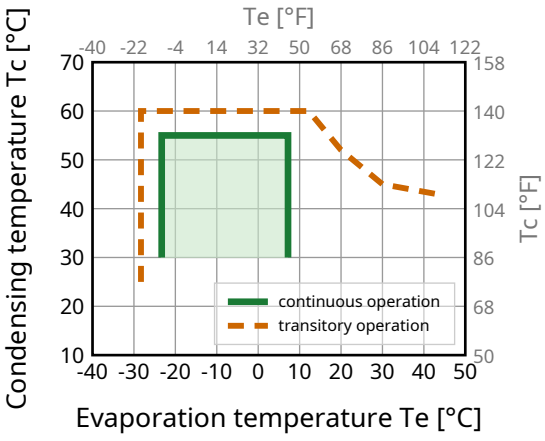
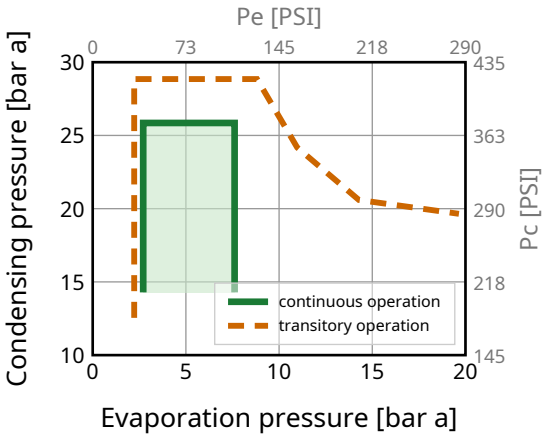
Components (protector + ~holder + cover: pre assembled)
a3 SC starter kit 117-7045
f ext. protector (T0777/46) 117U3188
h protector holder 117U0439
b plastic cover + clamp 117U1021

Alternative components
a2 potential relay (RVA 7AA3R) 117-7441
f ext. protector (T0777/46) 117U3188
h protector holder 117U0439
c start capacitor (410µF, 6.3mm) 117U5043
e run capacitor (23,5µF, 6.3mm) 117-7114
b plastic cover + clamp 117U1021

Operation Pressure Range





Model
SC18MLX Configuration 1

Sales code:
104L2105

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	**1866**	6365	1604	**1.47**	5.02	1267	12.74	51.25	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**1393**	4752	1198	**1.17**	3.98	1194	12.22	44.52	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**1632**	5570	1404	**1.44**	4.92	1131	11.79	49.09	**EN12900 MBP**
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	**1698**	5795	1461	**1.39**	4.74	1223	12.44	55.34	**ARI540 MBP**
-10 14	45 113	32 89.6	45 113	**1732**	5909	1489	**1.53**	5.22	1131	11.79	47.61	**opt MBP 1**
-25 -13	45 113	32 89.6	45 113	**914**	3118	786	**1.06**	3.63	860	10.14	24.59	**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	**986**	3365	848	**1.11**	3.78	890	10.30	26.59
-20	-4	**1140**	3891	981	**1.20**	4.10	949	10.62	30.88
-15	5	**1412**	4816	1214	**1.36**	4.63	1039	11.18	38.49
-10	14	**1732**	5909	1489	**1.53**	5.22	1131	11.79	47.61
-5	23	**2106**	7186	1811	**1.72**	5.86	1226	12.47	58.46
0	32	**2538**	8661	2183	**1.92**	6.54	1325	13.21	71.28
5	41	**3034**	10352	2609	**2.12**	7.24	1429	14.02	86.36
7.2	45	**3273**	11168	2815	**2.22**	7.56	1477	14.40	93.79

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

-23.3	-10	**763**	2602	656	**0.87**	2.97	877	10.29	23.84
-20	-4	**893**	3046	768	**0.93**	3.18	957	10.73	28.03
-15	5	**1122**	3827	965	**1.04**	3.56	1076	11.44	35.51
-10	14	**1393**	4752	1198	**1.17**	3.98	1194	12.22	44.52
-5	23	**1711**	5838	1471	**1.30**	4.45	1312	13.07	55.31
0	32	**2080**	7099	1789	**1.45**	4.96	1432	13.97	68.16
5	41	**2506**	8552	2156	**1.61**	5.50	1555	14.94	83.42
7.2	45	**2713**	9256	2333	**1.69**	5.75	1610	15.39	91.00

Model
SC18MLX Configuration 2

Sales code:
104L2105

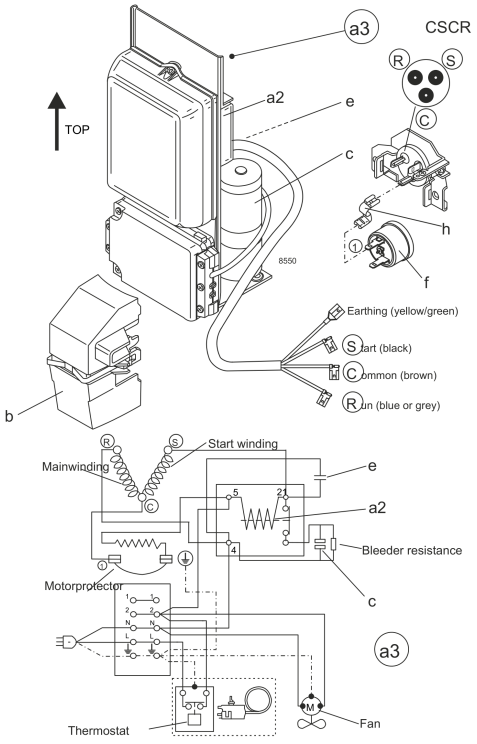
Configuration

Motor configuration	**CSCR**
Power supply (nominal)	**115 V/60 Hz 1~**
Refrigerant	**R452A**
Application	**MBP**
Voltage range	**103-127 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))	**69 A**
RLA (rated load amps / 1s/ U(N))	**13 A**
Cut in current (U(N))	**69 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 (protector + ~holder + cover: pre assembled)
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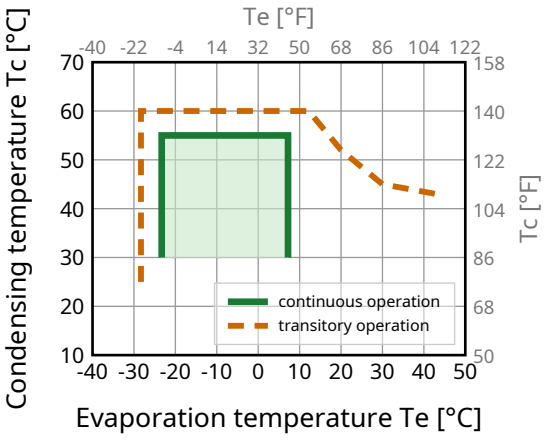
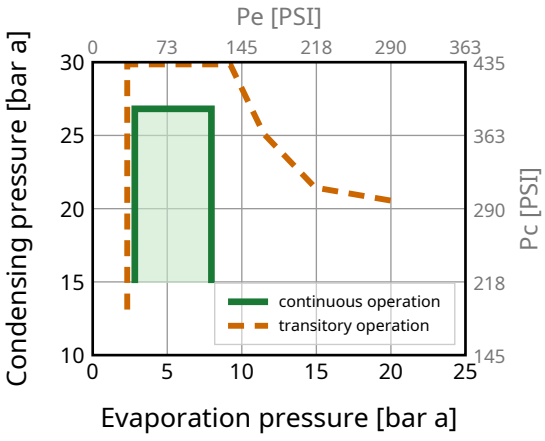
f ext. protector (T0777/46) 117U3188
h protector holder 117U0439
b plastic cover + clamp 117U1021

Alternative components
a2 potential relay (RVA 7AA3R) 117-7441
f ext. protector (T0777/46) 117U3188
h protector holder 117U0439
c start capacitor (410µF, 6.3mm) 117U5043
e run capacitor (23,5µF, 6.3mm) 117-7114
b plastic cover + clamp 117U1021

Operation Pressure Range





Model
SC18MLX Configuration 2

Sales code:
104L2105

Standard Conditions

R452A, 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	**1769**	6035	1521	**1.47**	5.03	1201	12.43	50.45	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**1320**	4503	1135	**1.17**	4.00	1127	11.93	43.62	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**1541**	5257	1325	**1.44**	4.92	1069	11.53	48.06	**EN12900 MBP**
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	**1613**	5505	1388	**1.39**	4.75	1160	12.15	54.45	**ARI540 MBP**
-10 14	45 113	32 89.6	45 113	**1633**	5571	1404	**1.53**	5.21	1069	11.53	46.62	**opt MBP 1**
-25 -13	45 113	32 89.6	45 113	**842**	2872	724	**1.06**	3.60	797	9.68	23.53	**opt MBP 2**

Performance Tables

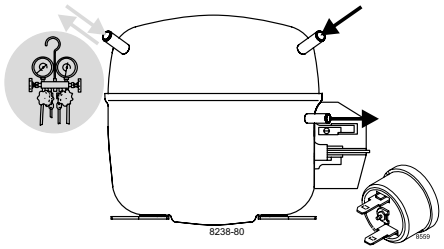
R452A, 115 V/60 Hz, CSCR, fan 3m/s

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	**911**	3109	784	**1.10**	3.76	827	9.89	25.52
-20	-4	**1060**	3616	911	**1.20**	4.08	886	10.29	29.80
-15	5	**1322**	4510	1137	**1.35**	4.62	977	10.90	37.43
-10	14	**1633**	5571	1404	**1.53**	5.21	1069	11.53	46.62
-5	23	**1998**	6816	1718	**1.72**	5.85	1165	12.19	57.59
0	32	**2421**	8261	2082	**1.91**	6.53	1266	12.87	70.60
5	41	**2908**	9923	2501	**2.12**	7.23	1373	13.60	85.95
7.2	45	**3144**	10728	2704	**2.21**	7.54	1422	13.93	93.54

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

-23.3	-10	**705**	2407	607	**0.87**	2.96	812	9.79	22.80
-20	-4	**832**	2837	715	**0.93**	3.18	891	10.32	27.01
-15	5	**1054**	3598	907	**1.04**	3.57	1009	11.12	34.52
-10	14	**1320**	4503	1135	**1.17**	4.00	1127	11.93	43.62
-5	23	**1633**	5571	1404	**1.31**	4.47	1246	12.74	54.57
0	32	**1998**	6818	1719	**1.46**	4.98	1368	13.57	67.68
5	41	**2421**	8261	2082	**1.62**	5.53	1494	14.42	83.29
7.2	45	**2627**	8962	2259	**1.69**	5.78	1551	14.81	91.06



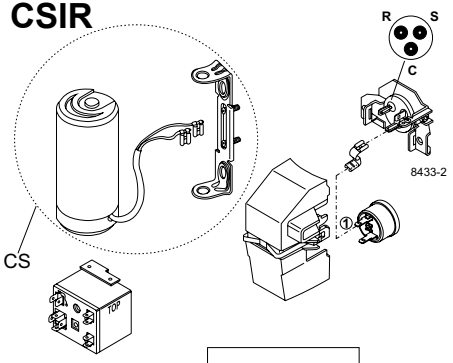
SC Compressors
(External Protector)

SECOP

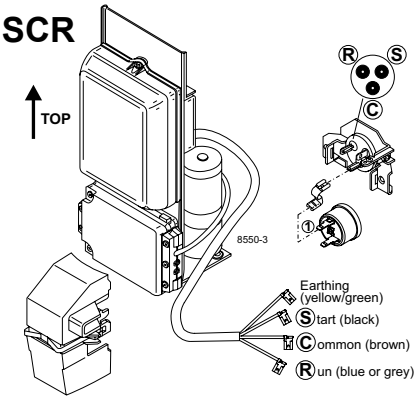
Keep electrical equipment clear from oil, chemicals, and water

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

CSIR

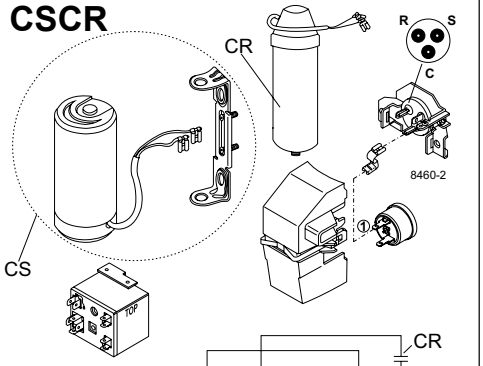


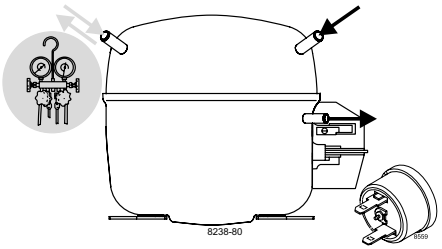
CSCR



	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)

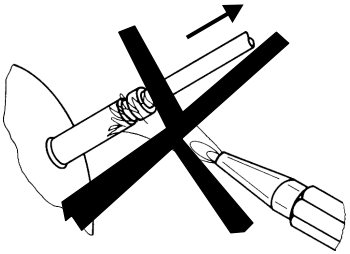
SECOP

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)



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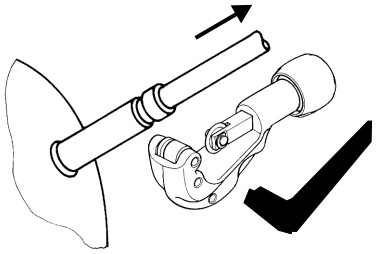

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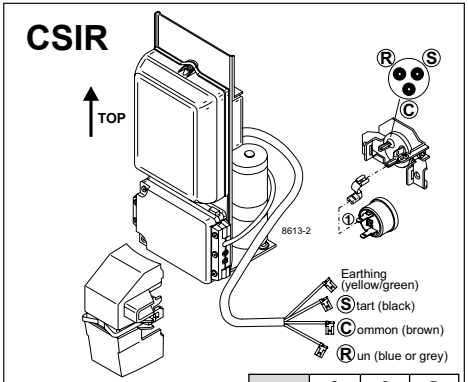

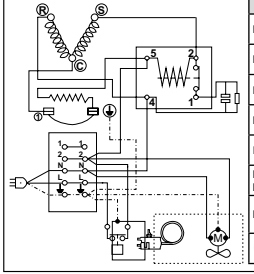

	S	C	R
ENGLISH	Black	Brown	Blue or grey
DEUTSCH	Schwarz	Braun	Blau od. grau
FRANÇAIS	Noir	Marron	Bleu ou gris
ESPAÑOL	Negro	Marrón	Azul o gris
ITALIANO	Nero	Marrone	Blu o grigio
NEDER-LANDS	Zwart	Bruin	Blauw of grijs
РУССКИЙ	Чёрный	Корич-невый	Синий или серый
中文	黑色	棕色	蓝色或灰色

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**