Single
Packs

Single Pack SCE18MNX 115V 60Hz CSCR

Single pack code number: **195B4279**

Position	Title	Code	Amount
1	Compressor SCE18MNX	104H7879	1
2	SC starting device (600mm)	117-7805	1
3	Bolt joint for one compressor | M6 | ø16mm	118-1917	1
Below electrical equipment is pre-assembled on the compressor:			
4	Overload protector T0803/46	117U3220	1
5	Protector holder	117U0439	1
6	Cover	117U1021	1

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Model
SCE18MNX

Sales code:
104H7879

Compressor Data

Refrigerant(s)	**R290**
Refr. charge - tech. limit	**450g / 15.87oz**
Weight	**14.20 kg / 31.31lbs**
Displacement	**17.68 cm3 / 1.08cu.in**
Compressors on pallet	**80**

General – Configurations With SCE18MNX

–	**Conf. 1**	**Conf. 2**
Motor configuration	CSCR	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, EAC	UL, EAC
Starting torque	HST	HST
Refrigerant	R290	R290
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
SCE18MNX

Sales code:
104H7879

Compressor Design

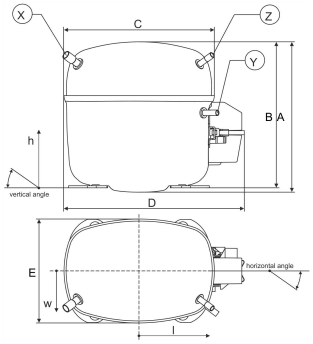
Oil type	**POE**	Winding resistance main	**0.7 Ohm**
Oil viscosity	**32cSt**	Winding resistance aux	**2.81 Ohm**
Oil quantity	**550 / 18.60fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**1,460 cm3 / 49.37fl.oz**	Max. discharge temp.	**135°C / 275°F**
Motor protection	**external**		

Compressor Dimensions

Housing

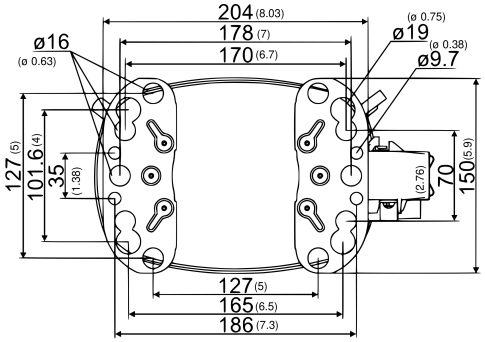
A Height	**219mm / 8.62in**
B Height	**213mm / 8.39in**
C Length shell	**218mm / 8.58in**
D Length w. cover	**255mm / 10.04in**
E Width	**151mm / 5.94in**

Find 3D Model here



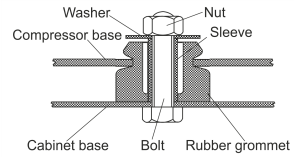
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 9.54–9.72 / 0.38–0.38in	øi 6.41–6.59 / 0.25–0.26in	øi 6.41–6.59 / 0.25–0.26in
Material	CU	CU	CU
Horizontal angle ±2°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°
Position l/h/w [mm]	107/193/55 / 4.21/7.60/2.17in	115/110/63 / 4.53/4.33/2.48in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

Mounting Accessories

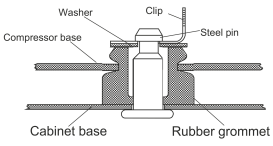


Dimensions in mm [in]

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
SCE18MNX Configuration 1

Sales code:
104H7879

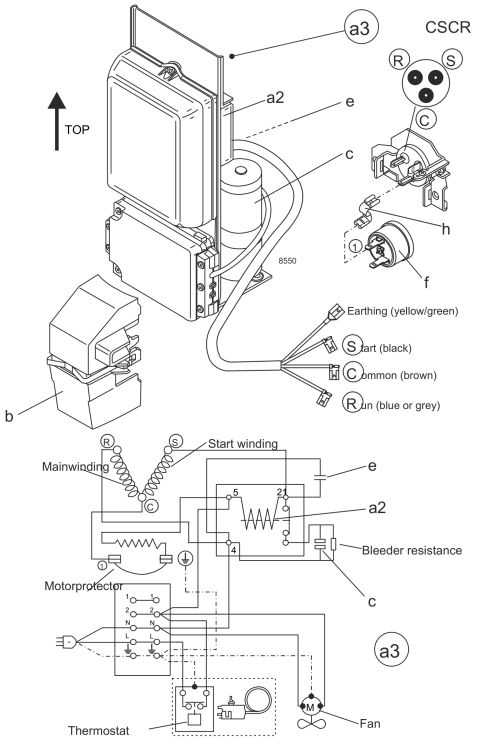
Configuration

Motor configuration	**CSCR**
Power supply (nominal)	**115 V/60 Hz 1~**
Refrigerant	**R290**
Application	**MBP**
Voltage range	**103-127 V**
Starting torque	**HST**
Approvals	**UL, EAC**
Starting device type	**relay**
Run capacitor	**23.5 µF**
Start capacitor	**410 µF**
LRA (locked rotor amps / 4s/ U(N))	**56.6 A**
RLA (rated load amps / 1s/ U(N))	**8.98 A**
Cut in current (U(N))	**56.6 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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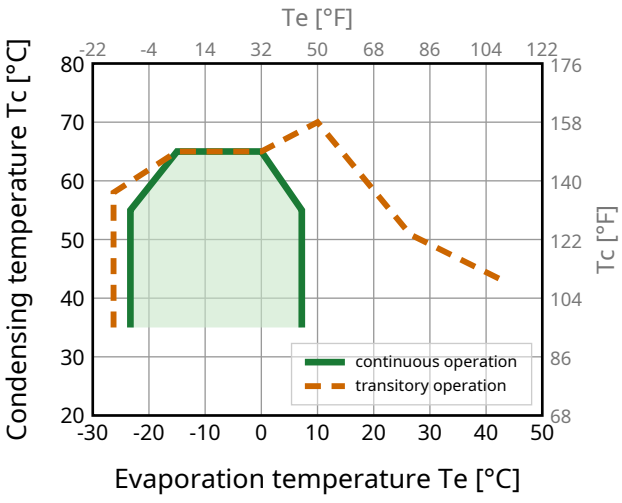
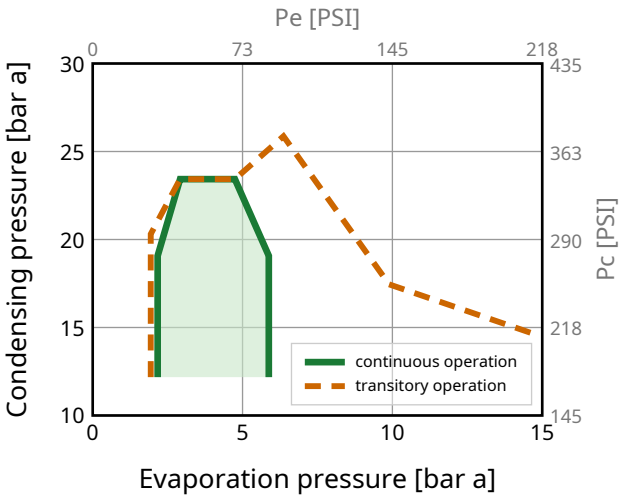
Components (protector + ~holder + cover: pre assembled)
a3 SC starter kit (600mm) 117-7805
h protector holder 117U0439
f ext. protector (T0803) 117U3220
b plastic cover + clamp 117U1021

Alternative components
a3 SC starter kit (600mm) 117-7823
a2 potential relay (RVA 7AB3R A39) 117-7443
e run capacitor (23,5µF, 6.3mm) 117-7133
c start capacitor (410µF, 6.3mm) 117U5379

Operation Pressure Range





Model
SCE18MNX Configuration 1

Sales code:
104H7879

Standard Conditions

R290, 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	**1796**	6129	1545	**2.13**	7.26	844	8.43	20.57	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**1421**	4850	1222	**1.76**	6.02	806	8.13	18.08	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**1598**	5451	1374	**2.16**	7.38	738	7.73	19.66	**EN12900 MBP**
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	**1700**	5800	1462	**2.13**	7.26	798	8.17	22.10	**ARI540 MBP**
-10 14	45 113	32 89.6	45 113	**1661**	5667	1428	**2.25**	7.68	738	7.73	19.07	**opt MBP 1**
-25 -13	45 113	32 89.6	45 113	**848**	2893	729	**1.48**	5.04	574	6.28	9.61	**opt MBP 2**

Performance Tables

R290, 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	**928**	3165	798	**1.56**	5.31	596	6.49	10.53
-20	-4	**1090**	3719	937	**1.71**	5.85	636	6.85	12.40
-15	5	**1359**	4637	1169	**1.97**	6.72	690	7.33	15.53
-10	14	**1661**	5667	1428	**2.25**	7.68	738	7.73	19.07
-5	23	**2002**	6833	1722	**2.56**	8.75	781	8.07	23.13
0	32	**2390**	8153	2055	**2.92**	9.97	818	8.37	27.79
5	41	**2828**	9651	2433	**3.32**	11.34	851	8.61	33.15
7.2	45	**3040**	10371	2614	**3.52**	12.00	864	8.71	35.76

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

-23.3	-10	**737**	2516	634	**1.25**	4.28	588	6.57	9.25
-20	-4	**895**	3054	770	**1.38**	4.71	649	7.00	11.27
-15	5	**1147**	3915	987	**1.57**	5.35	732	7.60	14.51
-10	14	**1421**	4850	1222	**1.76**	6.02	806	8.13	18.08
-5	23	**1723**	5879	1482	**1.98**	6.76	869	8.61	22.05
0	32	**2059**	7025	1771	**2.23**	7.60	925	9.04	26.55
5	41	**2435**	8309	2094	**2.51**	8.55	972	9.44	31.68
7.2	45	**2615**	8922	2249	**2.64**	9.01	990	9.61	34.16

Model
SCE18MNX Configuration 2

Sales code:
104H7879

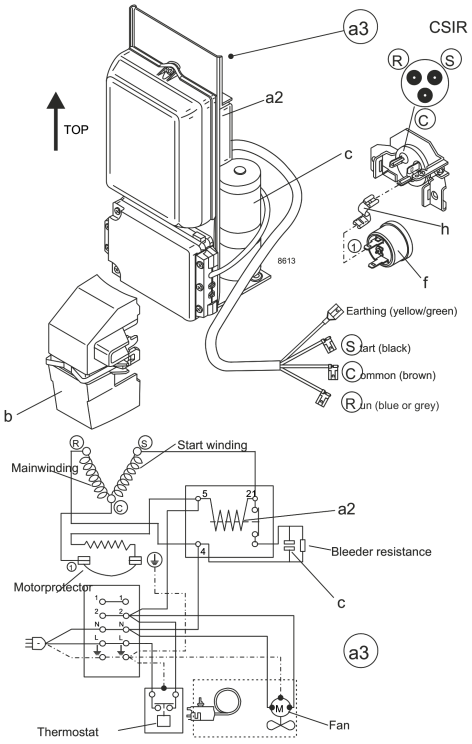
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**115 V/60 Hz 1~**
Refrigerant	**R290**
Application	**MBP**
Voltage range	**103-127 V**
Starting torque	**HST**
Approvals	**UL, EAC**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**410 µF**
LRA (locked rotor amps / 4s/ U(N))	**56.6 A**
RLA (rated load amps / 1s/ U(N))	**8.98 A**
Cut in current (U(N))	**56.6 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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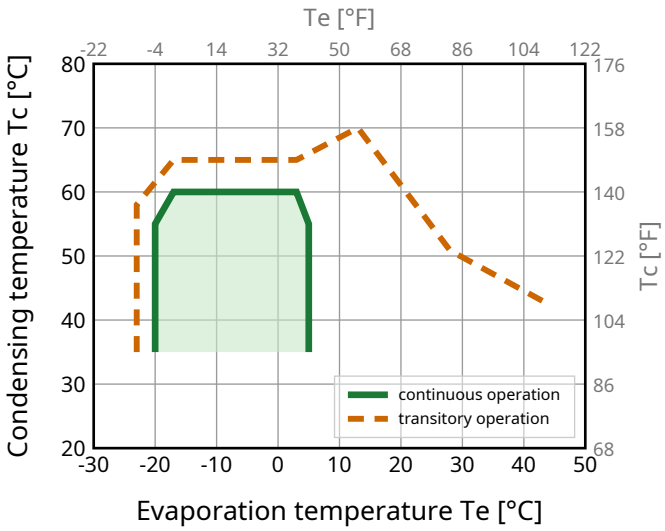
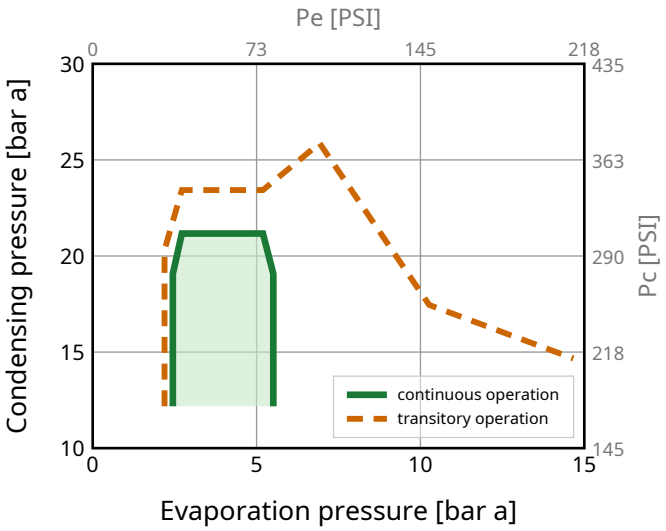
Components (protector + ~holder + cover: pre assembled)
a3 SC starter kit (600mm) 117-7803
h protector holder 117U0439
f ext. protector (T0803) 117U3220
b plastic cover + clamp 117U1021

Alternative components
a2 potential relay (RVA 7AB3R A39) 117-7443
c start capacitor (410µF, 6.3mm) 117U5379

Operation Pressure Range





Model

SCE18MNX Configuration 2

Sales code:

104H7879

Standard Conditions

R290, 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	**1784**	6085	1534	**1.99**	6.78	898	10.38	20.42	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**1411**	4815	1214	**1.65**	5.62	857	10.01	17.95	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**1586**	5412	1364	**2.02**	6.89	785	9.52	19.52	**EN12900 MBP**
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	**1688**	5758	1451	**1.99**	6.78	849	10.06	21.94	**ARI540 MBP**
-10 14	45 113	32 89.6	45 113	**1649**	5626	1418	**2.10**	7.17	785	9.52	18.93	**opt MBP 1**
-25 -13	45 113	32 89.6	45 113	**842**	2872	724	**1.38**	4.70	611	7.74	9.54	**opt MBP 2**

Performance Tables

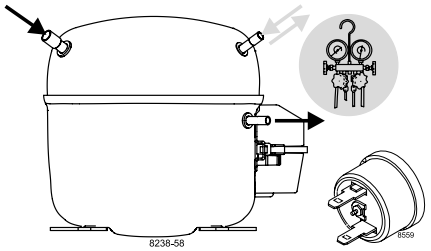
R290, 115 V/60 Hz, CSIR, fan 3m/s

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]
-20	-4	**1082**	3692	931	**1.60**	5.46	676	8.43	12.31
-15	5	**1349**	4603	1160	**1.84**	6.27	734	9.02	15.41
-10	14	**1649**	5626	1418	**2.10**	7.17	785	9.52	18.93
-5	23	**1988**	6783	1710	**2.39**	8.17	830	9.95	22.96
0	32	**2372**	8094	2040	**2.73**	9.30	870	10.30	27.59
5	41	**2808**	9581	2415	**3.10**	10.58	905	10.61	32.91

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

-20	-4	**889**	3032	764	**1.29**	4.39	690	8.62	11.18
-15	5	**1139**	3887	980	**1.46**	4.99	779	9.36	14.41
-10	14	**1411**	4815	1214	**1.65**	5.62	857	10.01	17.95
-5	23	**1711**	5837	1471	**1.85**	6.31	925	10.60	21.90
0	32	**2044**	6974	1758	**2.08**	7.09	984	11.14	26.36
5	41	**2418**	8249	2079	**2.34**	7.98	1034	11.63	31.45



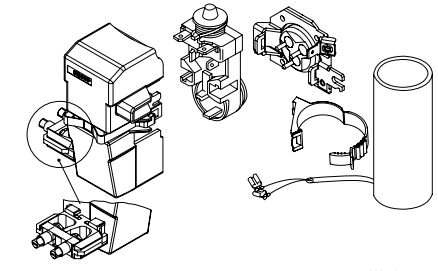
SCE Compressors
(External Protector)

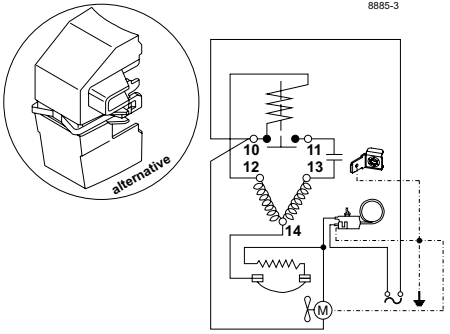
SECOP

Keep electrical equipment clear from <u>oil, chemicals, and water</u>

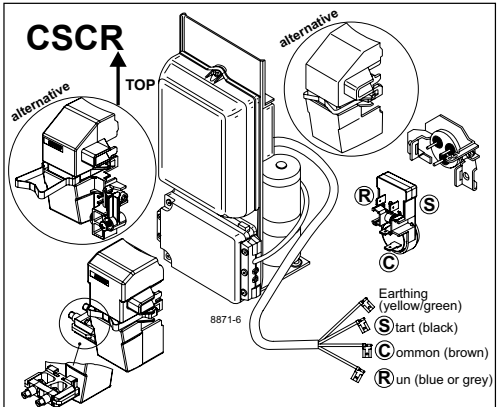
When operated with a <u>flammable refrigerant,</u> only <u>spark-proof starting equipment</u> is allowed.

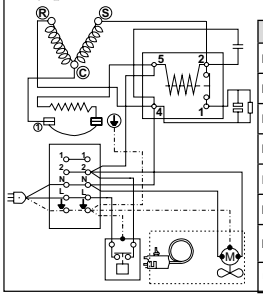
CSIR





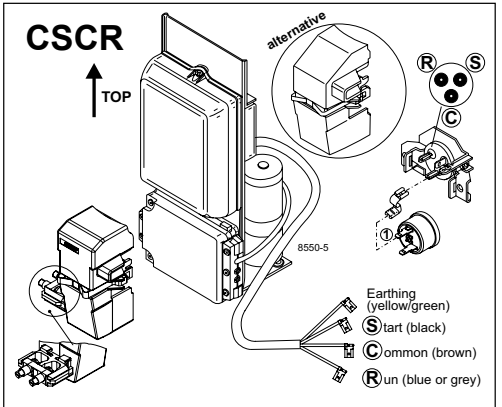
CSCR

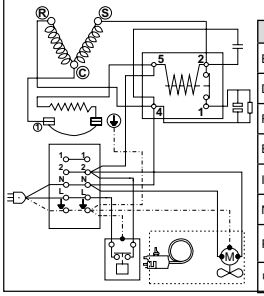




	S	C	R
ENGLISH	Black	Brown	Blue or grey
DEUTSCH	Schwarz	Braun	Blau od. grau
FRANÇAIS	Noir	Marron	Bleu ou gris
ESPAÑOL	Negro	Marrón	Azul o gris
ITALIANO	Nero	Marrone	Blu o grigio
NEDERLANDS	Zwart	Bruin	Blauw of grijs
РУССКИЙ	Чёрный	Корич-невый	Синий или серый
中文	黑色	棕色	蓝色或灰色

CSCR





	S	C	R
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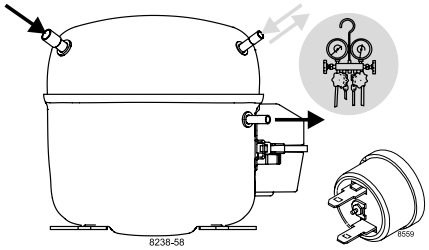


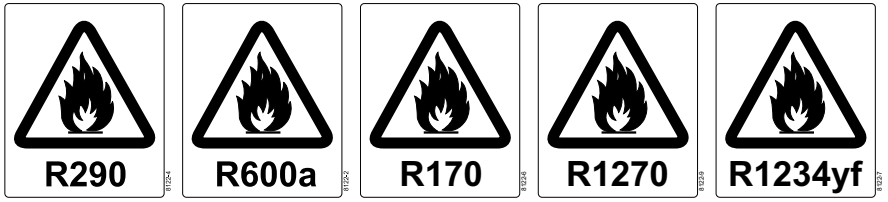
SCE Compressors
(External Protector)

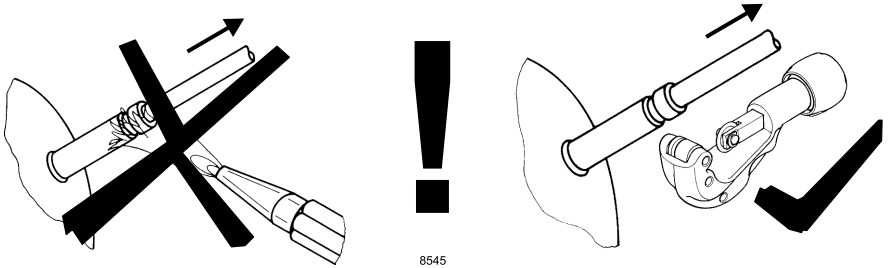
SECOP

Keep electrical equipment clear from oil, chemicals, and water

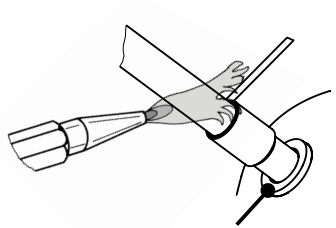
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

Service/Repair – R290, R600a, R170, R1270, R1234yf
(applies to all flammable refrigerants)





Brazing on Suction Connectors (Direct Intake)



! max. 350°C/662°F !
at socket

brazing solder: phosphor (LP7) or silver

Refer to Product Bulletin:
Brazing on Suction Connectors
(SCE Compressors with Direct Suction Intake)

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**