Single
Packs

Single Pack SCE18MNX 220-240V 50Hz CSIR

Single pack code number: **195B4381**

Position	Title	Code	Amount
1	Compressor SCE18MNX	104H8849	1
2	Starting capacitor (80µF 220V, 6.3mm)	117U5017	1
3	Cord relief	103N1004	1
4	Bolt joint for one compressor | M6 | ø16mm	118-1917	1

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Model
SCE18MNX

Sales code:
104H8849

Compressor Data

Refrigerant(s)	**R290**
Refr. charge - tech. limit	**550g / 19.40oz**
Weight	**14.20 kg / 31.31lbs**
Displacement	**17.69 cm3 / 1.08cu.in**
Compressors on pallet	**80**

General – Configurations With SCE18MNX

–	**Conf. 1**	**Conf. 2**
Motor configuration	CSIR	CSIR
Power supply (nominal)	220-240 V/50 Hz	220-240 V/50 Hz
Number of phases	1	1
Voltage range	198-254 V	198-254 V
Approvals	VDE, CCC, EAC, CB	VDE, CCC, EAC, CB
Starting torque	HST	HST
Refrigerant	R290	R290
Application	MBP	MBP
Hot gas defrost	OK	OK
Long interval pull down	OK	OK

Application Notes

- Protector, relay 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:
104H8849

Compressor Design

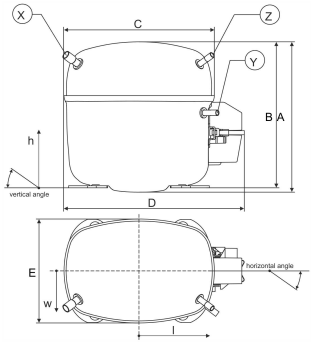
Oil type	**POE**	Winding resistance main	**3.44 Ohm**
Oil viscosity	**32cSt**	Winding resistance aux	**9.4 Ohm**
Oil quantity	**550 / 18.60fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**1,460 cm3 / 49.37fl.oz**	Max. discharge temp.	**135°C / 275°F**
Motor protection	**external**		

Compressor Dimensions

Housing

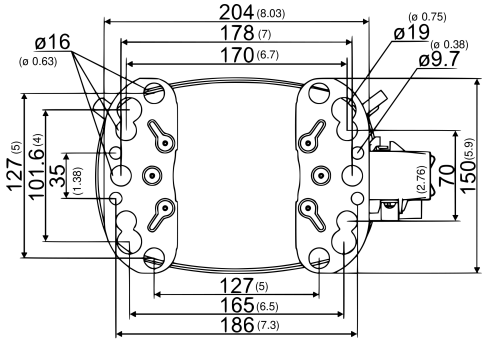
A Height	**219mm / 8.62in**
B Height	**213mm / 8.39in**
C Length shell	**218mm / 8.58in**
D Length w. cover	**255mm / 10.04in**
E Width	**151mm / 5.94in**

Find 3D Model here



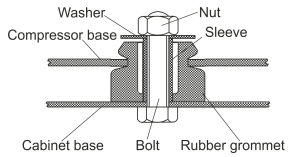
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 10.11–10.29 / 0.40–0.41in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°
Position l/h/w [mm]	107/193/55 / 4.21/7.60/2.17in	115/110/63 / 4.53/4.33/2.48in	-107/193/55 / -4.21/7.60/2.17in
Straight tube l. [mm]	12 / 0.47in	12 / 0.47in	12 / 0.47in

Mounting Accessories

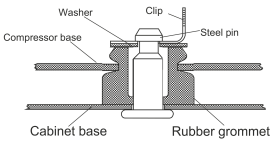


Dimensions in mm [in]

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:
104H8849

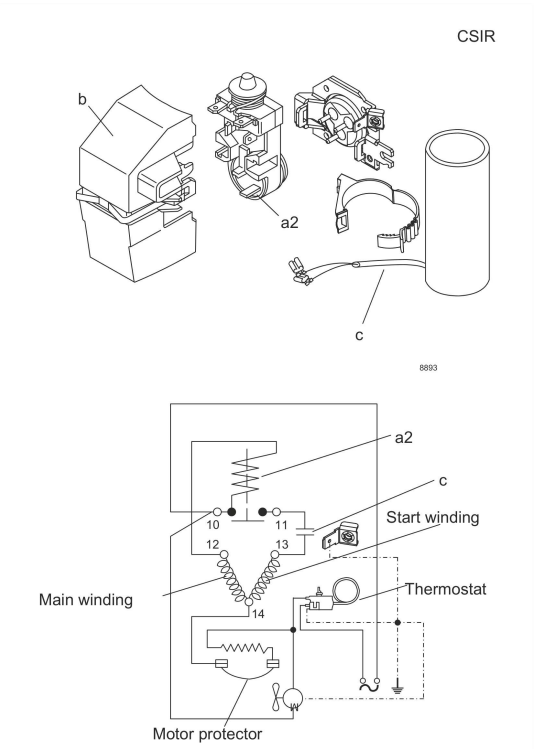
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R290**
Application	**MBP**
Voltage range	**198-254 V**
Starting torque	**HST**
Approvals	**VDE, CCC, EAC, CB**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**19.13 A**
RLA (rated load amps / 1s/ U(N))	**2.2 A**
Cut in current (U(N))	**19.13 A**

Ambient/ machine room temperatures minimum /maximum
Ambient temperature range: 10 - 38°C / 50 - 100°F
Machine room temp. compressor: 10 - 43°C / 50 - 109°F

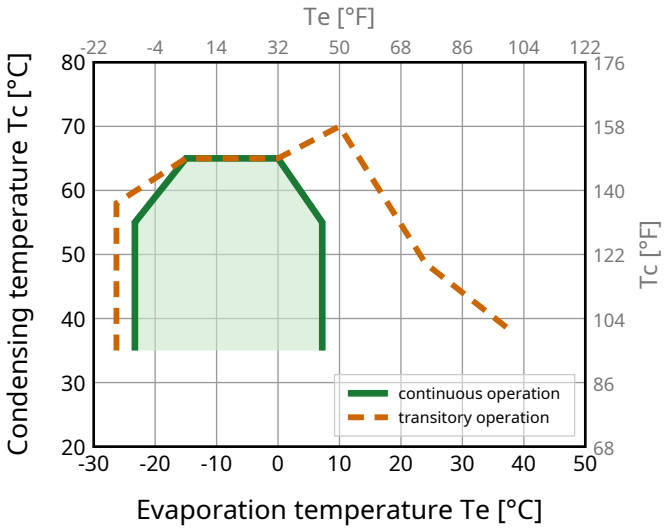
System Cooling
fan 3m/s

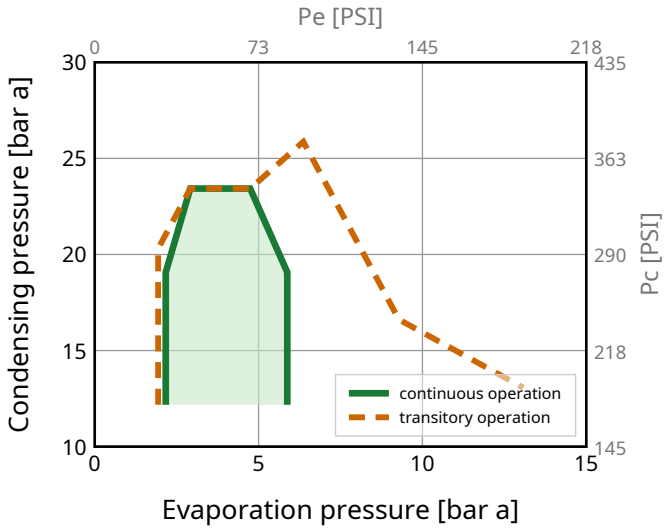
Electrical Accessories / Wiring Diagram



Components (relay + cover: pre-assembled)
a2 assy. relay + ext. protector (T0214) 117U7406
c start capacitor (80µF) 117U5017
d cord relief 103N1004
b plastic cover + clamp 117U1033

Operation Pressure Range





Model
SCE18MNX Configuration 1

Sales code:
104H8849

Standard Conditions

R290, 230 V/50 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	**1503**	5128	1293	**1.98**	6.75	760	4.42	17.21	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**1190**	4060	1023	**1.64**	5.61	724	4.30	15.13	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**1322**	4512	1137	**1.99**	6.78	665	4.12	16.27	**EN12900 MBP**
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	**1412**	4818	1214	**1.95**	6.66	723	4.30	18.36	**ARI540 MBP**
-10 14	45 113	32 89.6	45 113	**1375**	4690	1182	**2.07**	7.05	665	4.12	15.79	**opt MBP 1**
-25 -13	45 113	32 89.6	45 113	**719**	2454	618	**1.39**	4.76	516	3.67	8.15	**opt MBP 2**

Performance Tables

R290, 230 V/50 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	**777**	2652	668	**1.46**	4.98	532	3.71	8.82
-20	-4	**902**	3077	776	**1.60**	5.45	564	3.80	10.26
-15	5	**1120**	3822	963	**1.82**	6.21	616	3.95	12.80
-10	14	**1375**	4690	1182	**2.07**	7.05	665	4.12	15.79
-5	23	**1666**	5685	1433	**2.35**	8.01	710	4.27	19.25
0	32	**1996**	6809	1716	**2.68**	9.13	746	4.39	23.20
5	41	**2363**	8063	2032	**3.08**	10.50	768	4.47	27.69
7.2	45	**2537**	8656	2182	**3.28**	11.20	773	4.48	29.85

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

-23.3	-10	**654**	2231	562	**1.17**	4.01	557	3.78	8.21
-20	-4	**768**	2621	661	**1.29**	4.39	596	3.89	9.67
-15	5	**965**	3292	830	**1.46**	4.99	660	4.09	12.20
-10	14	**1190**	4060	1023	**1.64**	5.61	724	4.30	15.13
-5	23	**1444**	4927	1242	**1.84**	6.28	784	4.51	18.48
0	32	**1728**	5897	1486	**2.06**	7.05	837	4.70	22.29
5	41	**2043**	6971	1757	**2.33**	7.93	879	4.85	26.58
7.2	45	**2191**	7477	1885	**2.46**	8.38	892	4.90	28.63

Model
SCE18MNX Configuration 2

Sales code:
104H8849

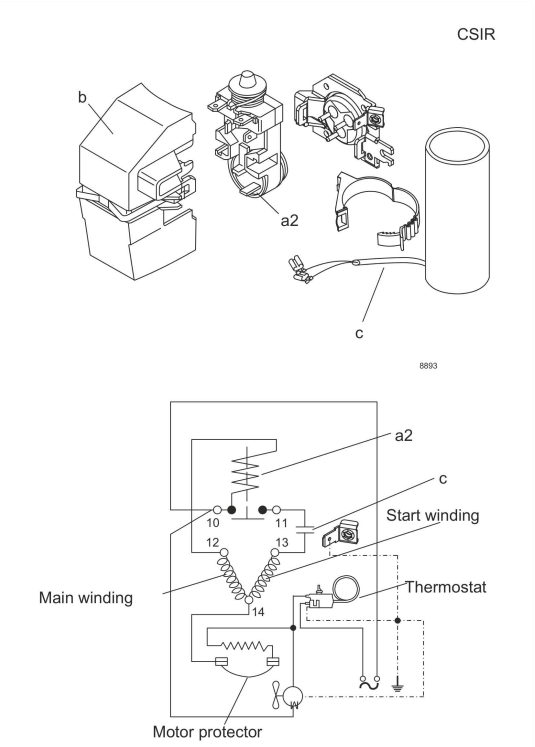
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R290**
Application	**MBP**
Voltage range	**198-254 V**
Starting torque	**HST**
Approvals	**VDE, CCC, EAC, CB**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**19.13 A**
RLA (rated load amps / 1s/ U(N))	**2.2 A**
Cut in current (U(N))	**19.13 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



Components (relay + cover: pre-assembled)
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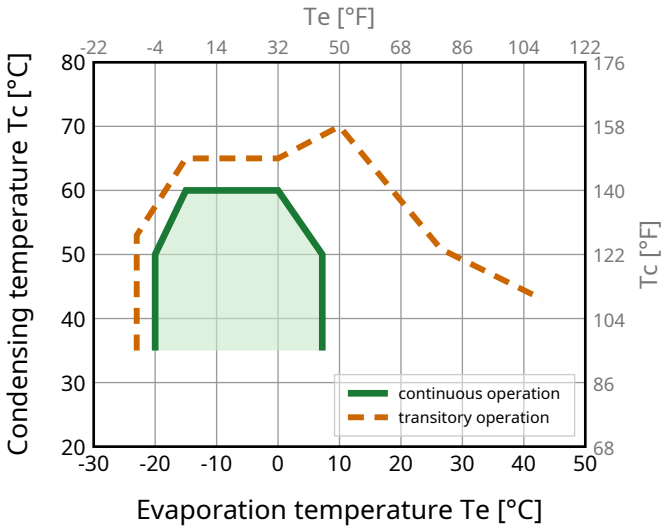
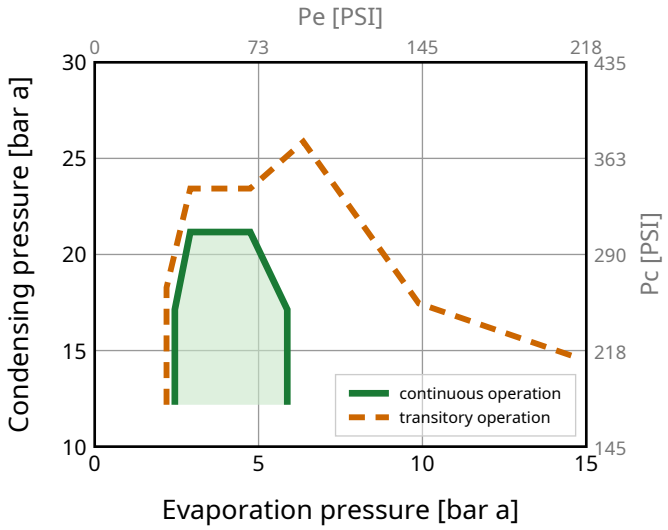
c start capacitor (80µF) 117U5017
d cord relief 103N1004
b plastic cover + clamp 117U1033

Operation Pressure Range





Model
SCE18MNX Configuration 2

Sales code:
104H8849

Standard Conditions

R290, 230 V/50 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]	
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-10 14	55 131	32 89.6	55 131	**1190**	4060	1023	**1.64**	5.61	724	4.30	15.13	**CECOMAF MBP**
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-10 14	45 113	32 89.6	45 113	**1375**	4690	1182	**2.07**	7.05	665	4.12	15.79	**opt MBP 1**
-25 -13	45 113	32 89.6	45 113	**719**	2454	618	**1.39**	4.76	516	3.67	8.15	**opt MBP 2**

Performance Tables

R290, 230 V/50 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	**902**	3077	776	**1.60**	5.45	564	3.80	10.26
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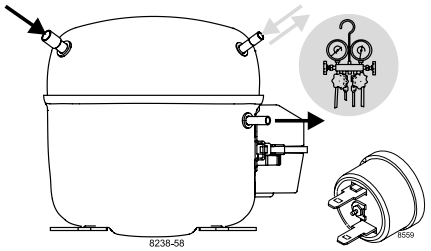


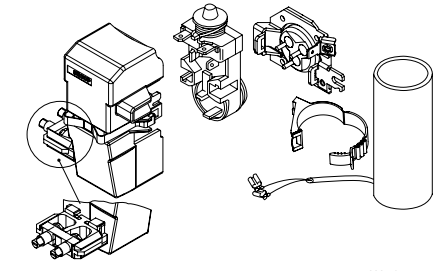
SCE Compressors
(External Protector)

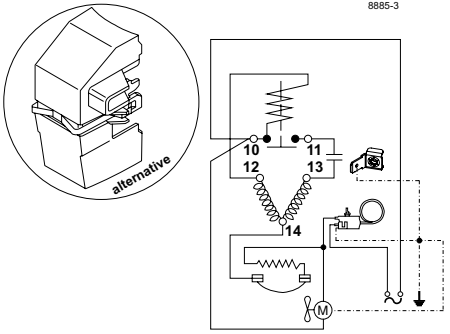
SECOP

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

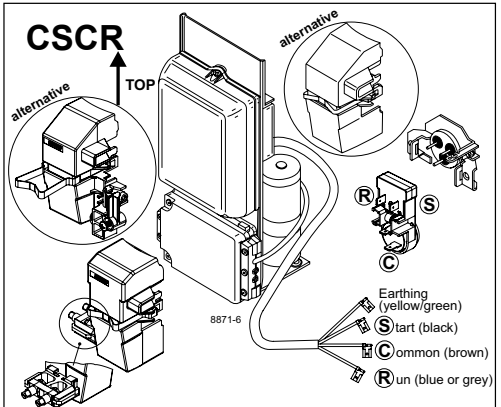
When operated with a <u>flammable refrigerant,</u> only <u>spark-proof starting equipment</u> is allowed.

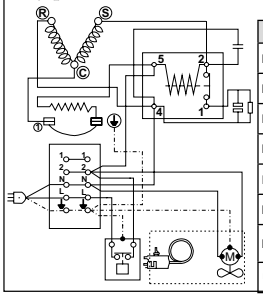
CSIR





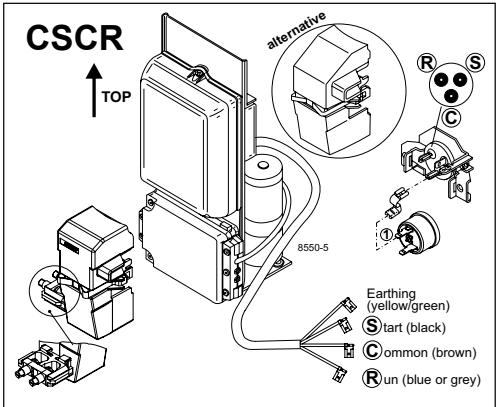
CSCR

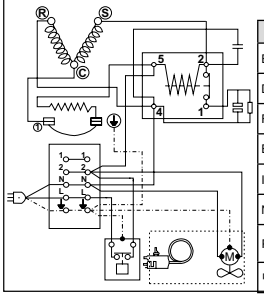




	S	C	R
ENGLISH	Black	Brown	Blue or grey
DEUTSCH	Schwarz	Braun	Blau od. grau
FRANÇAIS	Noir	Marron	Bleu ou gris
ESPAÑOL	Negro	Marrón	Azul o gris
ITALIANO	Nero	Marrone	Blu o grigio
NEDERLANDS	Zwart	Bruin	Blauw of grijs
РУССКИЙ	Чёрный	Корич-невый	Синий или серый
中文	黑色	棕色	蓝色或灰色

CSCR





	S	C	R
ENGLISH	Black	Brown	Blue or grey
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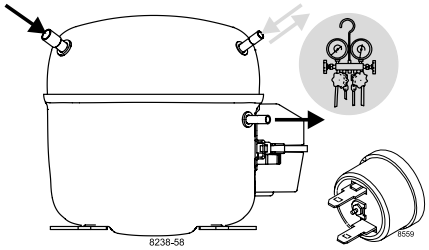


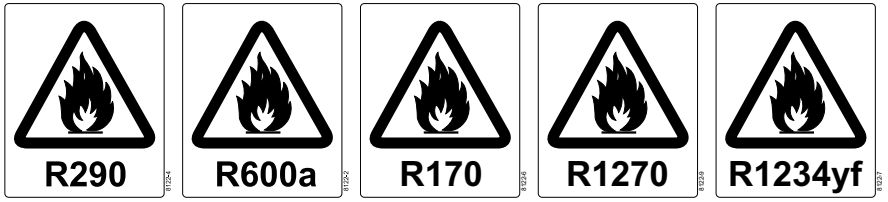
SCE Compressors
(External Protector)

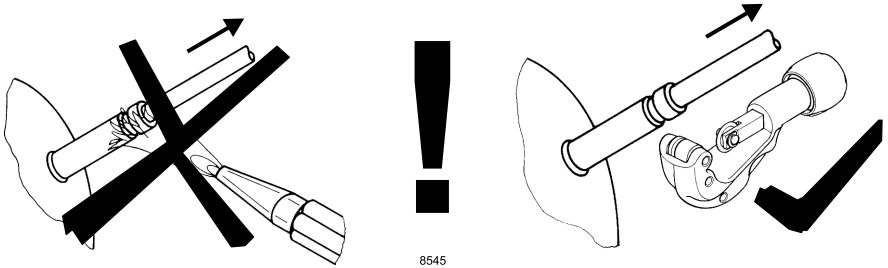
SECOP

Keep electrical equipment clear from oil, chemicals, and water

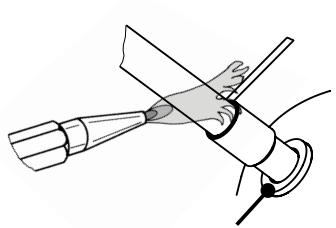
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

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**