

## Single Pack SCE18MNX 220-240V 50Hz CSIR

Single pack code number: **195B4381**

Position	Title	Code	Amount
1	Compressor SCE18MNX	104H8849	1
2	Starting capacitor (80 $\mu$ F 220V, 6.3mm)	117U5017	1
3	Cord relief	103N1004	1
4	Bolt joint for one compressor   M6   $\varnothing$ 16mm	118-1917	1

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

Designation	<b>SCE18MNX</b>	220-240V/50Hz 1~	Sales code:	<b>104H8849</b>
-------------	-----------------	------------------	-------------	-----------------

## Compressor design

Oil type	Polyolester	Refrigerant(s)	<b>R290</b>
Oil viscosity	32cSt	Displacement	17,69cm <sup>3</sup> / 1,08cu.in
Oil quantity	550cm <sup>3</sup> / 18,6fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	550g / 19,4oz		
Free gas volume comp.	1460cm <sup>3</sup> / 49,4fl.oz		
Weight	14,2kg / 31,3lbs		
Motor protection	external		
Winding resistance main	3,44Ω (at 25°C)		
Winding resistance aux	9,4Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	135°C / 275°F		



## General - Configurations with SCE18MNX

	<b>Conf. 1</b>	<b>Conf. 2</b>
Motorconfiguration	CSIR	CSIR
Power supply (nominal)	220-240V/50Hz	220-240V/50Hz
Number of phases	1	1
Voltage range	198-254V	198-254V
Approvals	VDE, CCC, EAC, CB	VDE, CCC, EAC, CB
Starting torque	HST	HST
Note	Protector, relay and cover are included and pre-assembled to compressor.	

## Applications with SCE18MNX

	<b>Conf. 1</b>	<b>Conf. 2</b>
Refrigerant	R290	R290
Application	MBP	MBP
System cooling	fan 3m/s	fan 3m/s
Hot gas defrost	OK	OK
Long interval pull down	OK	OK

## Electrical data - Configurations with SCE18MNX

	<b>Conf. 1</b>	<b>Conf. 2</b>
Starting device type	relay	relay
Run capacitor	-/-	-/-
Start capacitor	80μF	80μF
LRA (locked rotor amps / 4s/ U(N))	21,07A	21,07A
RLA (rated load amps / 1s/ U(N))	3,75A	3,75A
Cut in current (U(N))	21,07A	21,07A

## Model

Designation

**SCE18MNX**

220-240V/50Hz 1~

Sales code:

**104H8849**

## 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

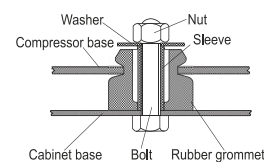
Connectors		Suction	Discharge	Process
		X	Y	Z
Diameter	[mm]	øi 10,11-10,29	øi 6,11-6,29	øi 6,11-6,29
(i:inside, o:outside)	[in]	øi 0,4-0,41	øi 0,24-0,25	øi 0,24-0,25
Material		copper	copper	copper
Horizontal angle	±2°	37°	37°	143°
Vertical angle	±2°	30°	0°	150°
Position l/h/w	[mm]	107/193/55	115/110/63	-107/193/55
	[in]	4,2/7,6/2,2	4,5/4,3/2,5	-4,2/7,6/2,2
Straight tube l.	[mm]	12	12	12
	[in]	0,5	0,5	0,5



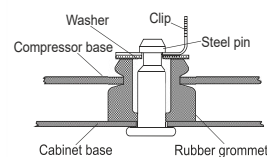
## Compressor fixation



## Bolt joint



## Snap-on



## Mounting accessories

Mounting accessories	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

## Application notes

Provision for PE Grounding is located at the PE Stamp on the compressor

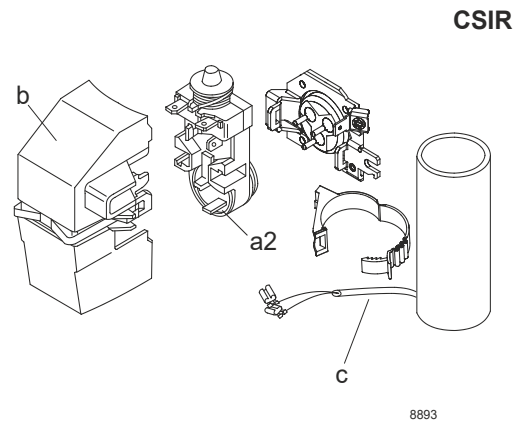
## Model

Designation	<b>SCE18MNX</b>	<b>220-240V/50Hz</b>	<b>Conf. 1</b>	Sales code:	<b>104H8849</b>
-------------	-----------------	----------------------	----------------	-------------	-----------------

## Configuration

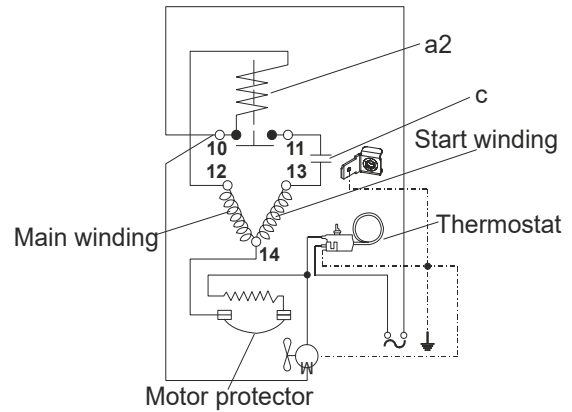
Motor configuration	CSIR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R290
Application	MBP
Voltage range	198-254V
Starting torque	HST
Approvals	VDE
	CCC
	EAC
	CB

## Electrical accessories / wiring diagram

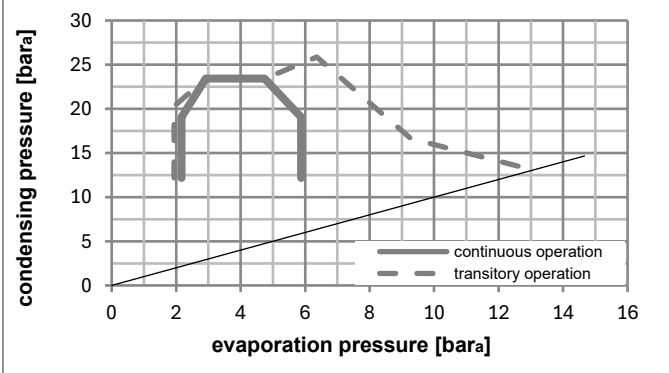
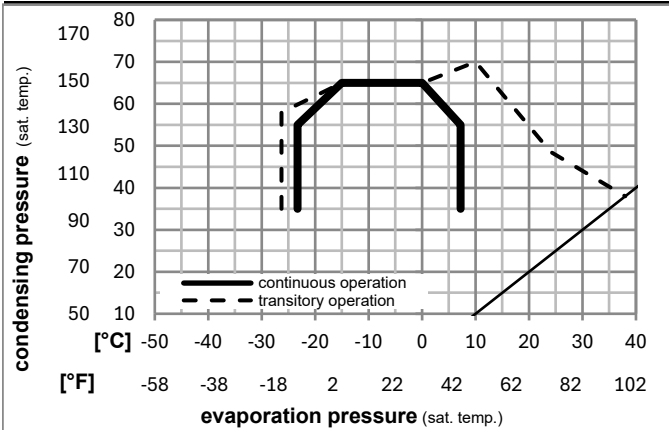


## Ambient/ machine room temperatures minimum /maximum

Ambient temperature range:	10 - 38°C / 50 - 101°F
Machine room temperature range:	10 - 43°C / 50 - 110°F
Compressor cooling:	fan 3m/s



## Operation pressure range



## Components (relay (a2)+ cover (b): pre-assembled)

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

## Noise emission

Operation pressures:	pe: -10°C / 14°F
	pc: 45°C / 113°F
Motor speed appr.:	2900rpm
Lw(A):	58dB(A)

### Model

Designation **SCE18MNX** **220-240V/50Hz** Conf. 1 Sales code: **104H8849**

### Optimization + standard conditions

R290, 230V/50Hz, CSIR, fan 3m/s, VDE, CCC, EAC, CB

		Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)			Return gas temp.		Liquid temp.		Cooling capacity			COP	EER	Power consumption		
		pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	Current consumption		Ref. mass flow				
[°C]	[°F]											[W]	[A]	[kg/h]						
-7	20	54	130	35	95	46	115	1503,3	5134	1293,8	1,98	6,75	1,70	761,1	4,43	17,15	ASHRAE MBP			
-10	14	55	131	32	90	55	131	1189,8	4063	1023,9	1,64	5,61	1,41	723,7	4,30	15,05	cecomaf MBP			
-10	14	45	113	20	68	45	113	1320,5	4510	1136,5	1,98	6,78	1,71	665,4	4,11	16,21	EN12900 MBP			
-7	20	49	120	18	65	49	120	1410,0	4816	1213,5	1,95	6,65	1,68	724,1	4,31	18,31	ARI540 MBP			
-10	14	45	113	32	90	45	113	1374,7	4695	1183,1	2,07	7,06	1,78	665,4	4,11	15,73	opt			
-25	-13	45	113	32	90	45	113	719,1	2456	618,9	1,39	4,76	1,20	515,9	3,68	8,11	opt			

### Performance tables

R290, 230V/50Hz, CSIR, fan 3m/s, VDE, CCC, EAC, CB

	pe		Cooling capacity			COP	EER	P1	I	m	
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]
[°C / °F]	-23	-10	777,3	2655	668,9	1,46	4,99	1,26	531,8	3,71	8,78
cond. pressure	-20	-4	901,8	3080	776,1	1,60	5,46	1,38	564,4	3,80	10,21
pc= 45/113	-15	5	1120,1	3825	964,0	1,82	6,21	1,57	615,5	3,95	12,74
return gas temp.	-10	14	1374,7	4695	1183,1	2,07	7,06	1,78	665,4	4,11	15,73
RGT= 32/90	-5	23	1666,3	5691	1434,0	2,35	8,01	2,02	710,1	4,27	19,19
liquid temp	0	32	1995,5	6815	1717,4	2,68	9,14	2,30	745,6	4,39	23,15
Tliq= 45/113	7,2	45	2537,0	8664	2183,3	3,28	11,21	2,83	772,7	4,48	29,81
[°C / °F]	-23	-10	653,8	2233	562,7	1,17	4,01	1,01	557,0	3,78	8,15
cond. pressure	-20	-4	768,2	2623	661,1	1,29	4,40	1,11	596,5	3,89	9,61
pc= 55/131	-15	5	964,7	3295	830,2	1,46	4,99	1,26	659,8	4,09	12,13
return gas temp	-10	14	1189,8	4063	1023,9	1,64	5,61	1,41	723,7	4,30	15,05
RGT= 32/90	-5	23	1444,1	4932	1242,8	1,84	6,29	1,59	784,0	4,51	18,40
liquid temp	0	32	1728,3	5902	1487,4	2,06	7,05	1,78	837,0	4,70	22,20
Tliq= 55/131	7,2	45	2191,4	7484	1885,9	2,46	8,39	2,11	892,4	4,90	28,55

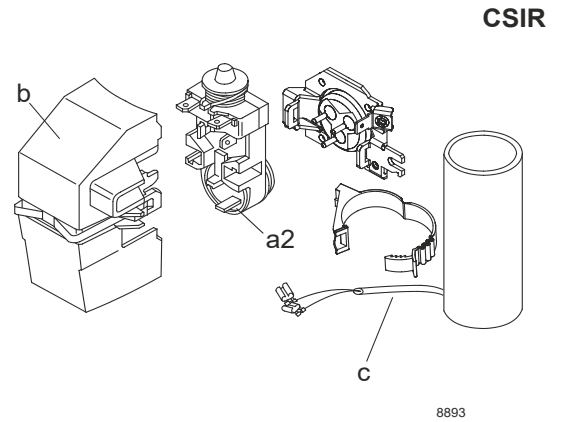
## Model

Designation	<b>SCE18MNX</b>	<b>220-240V/50Hz</b>	<b>Conf. 2</b>	Sales code:	<b>104H8849</b>
-------------	-----------------	----------------------	----------------	-------------	-----------------

## Configuration

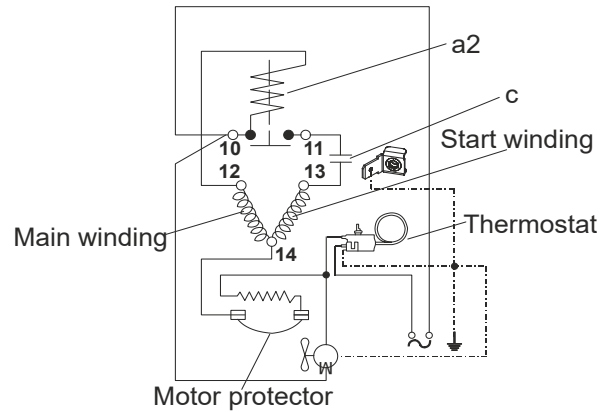
Motor configuration	CSIR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R290
Application	MBP
Voltage range	198-254V
Starting torque	HST
Approvals	VDE
	CCC
	EAC
	CB

## Electrical accessories / wiring diagram

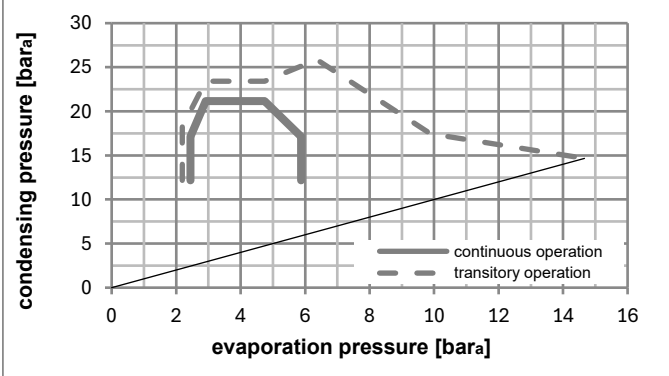
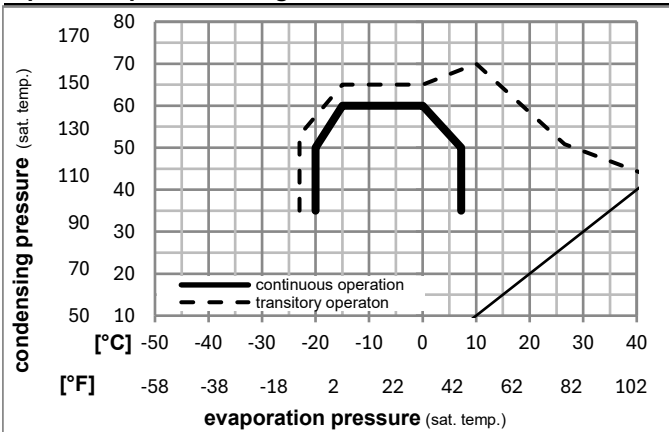


## Ambient/ machine room temperatures minimum /maximum

Ambient temperature range:	10 - 43°C / 50 - 110°F
Machine room temperature range:	10 - 48°C / 50 - 119°F
Compressor cooling:	fan 3m/s



## Operation pressure range



## Components (relay (a2)+ cover (b): pre-assembled)

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

## Noise emission

Operation pressures:	pe: -10°C / 14°F
	pc: 45°C / 113°F
Motor speed appr.:	2900rpm
Lw(A):	58dB(A)

### Model

Designation **SCE18MNX** **220-240V/50Hz** Conf. 2 Sales code: **104H8849**

### Optimization + standard conditions

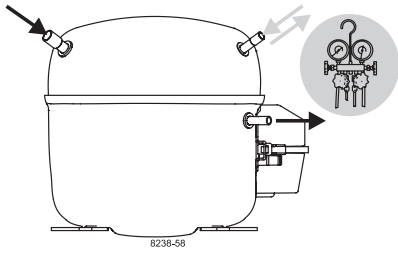
R290, 230V/50Hz, CSIR, fan 3m/s, VDE, CCC, EAC, CB

	Evaporating pressure (saturation temperature)				Cooling capacity			COP	EER	P1	Power consumption		Ref. mass flow	
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]				I	m		
[°C]	-7	54	35	46	1503,3	5134	1293,8	1,98	6,75	1,70	761,1	4,43	17,15	ASHRAE MBP
[°F]	20	130	95	115										
[°C]	-10	55	32	55	1189,8	4063	1023,9	1,64	5,61	1,41	723,7	4,30	15,05	cecomaf MBP
[°F]	14	131	90	131										
[°C]	-10	45	20	45	1320,5	4510	1136,5	1,98	6,78	1,71	665,4	4,11	16,21	EN12900 MBP
[°F]	14	113	68	113										
[°C]	-7	49	18	49	1410,0	4816	1213,5	1,95	6,65	1,68	724,1	4,31	18,31	ARI540 MBP
[°F]	20	120	65	120										
[°C]	-10	45	32	45	1374,7	4695	1183,1	2,07	7,06	1,78	665,4	4,11	15,73	opt
[°F]	14	113	90	113										
[°C]	-25	45	32	45	719,1	2456	618,9	1,39	4,76	1,20	515,9	3,68	8,11	opt
[°F]	-13	113	90	113										

### Performance tables

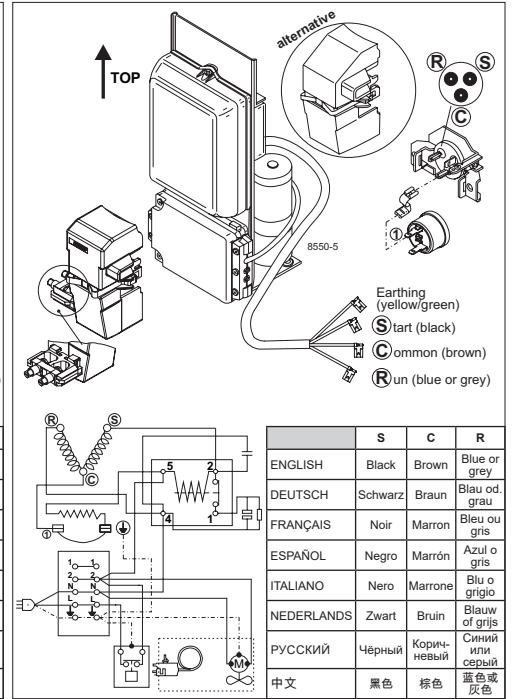
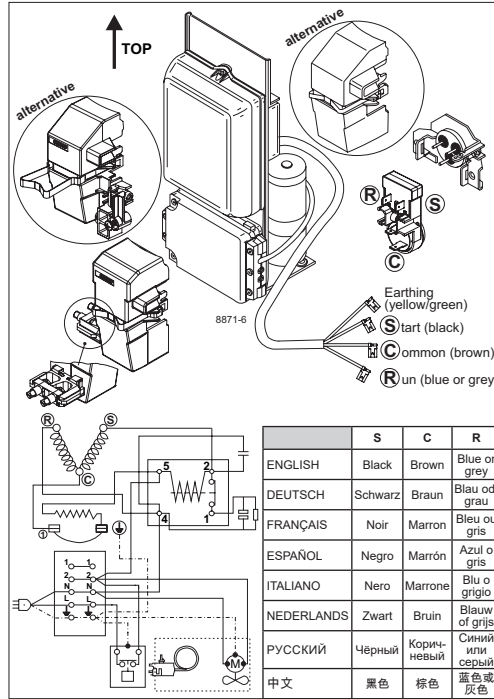
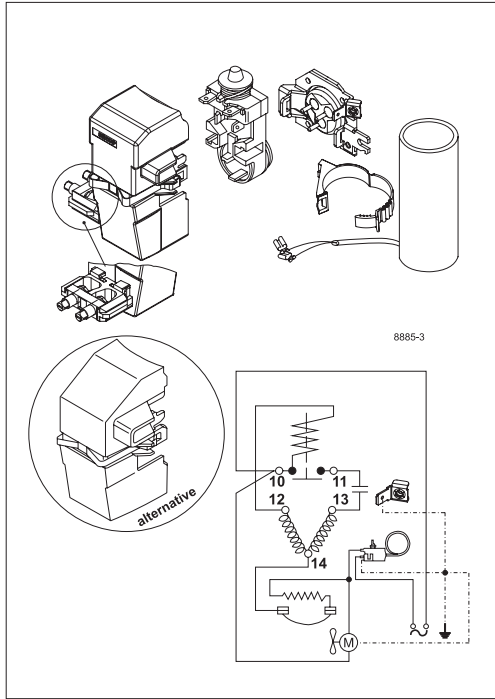
R290, 230V/50Hz, CSIR, fan 3m/s, VDE, CCC, EAC, CB

	pe		Cooling capacity			COP	EER		P1	I	m
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]
[°C / °F]	-20	-4	901,8	3080	776,1	1,60	5,46	1,38	564,4	3,80	10,21
cond. pressure	-15	5	1120,1	3825	964,0	1,82	6,21	1,57	615,5	3,95	12,74
pc= 45/113	-10	14	1374,7	4695	1183,1	2,07	7,06	1,78	665,4	4,11	15,73
return gas temp.	-7	20	1563,0	5338	1345,1	2,25	7,67	1,93	695,7	4,22	17,95
RGT= 32/90	-5	23	1666,3	5691	1434,0	2,35	8,01	2,02	710,1	4,27	19,19
liquid temp	0	32	1995,5	6815	1717,4	2,68	9,14	2,30	745,6	4,39	23,15
Tliq= 45/113	7,2	45	2537,0	8664	2183,3	3,28	11,21	2,83	772,7	4,48	29,81
[°C / °F]	-20	-4	768,2	2623	661,1	1,29	4,40	1,11	596,5	3,89	9,61
cond. pressure	-15	5	964,7	3295	830,2	1,46	4,99	1,26	659,8	4,09	12,13
pc= 55/131	-10	14	1189,8	4063	1023,9	1,64	5,61	1,41	723,7	4,30	15,05
return gas temp	-7	20	1354,3	4625	1165,5	1,77	6,05	1,53	764,1	4,44	17,21
RGT= 32/90	-5	23	1444,1	4932	1242,8	1,84	6,29	1,59	784,0	4,51	18,40
liquid temp	0	32	1728,3	5902	1487,4	2,06	7,05	1,78	837,0	4,70	22,20
Tliq= 55/131	7,2	45	2191,4	7484	1885,9	2,46	8,39	2,11	892,4	4,90	28,55



# SCE Compressors

## (External Protector)



	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	Коричневый	Синий или серый
中文	黑色	棕色	蓝色或灰色

	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	Коричневый	Синий или серый
中文	黑色	棕色	蓝色或灰色

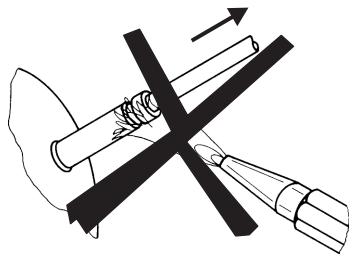




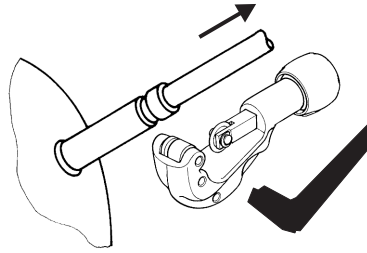
# SCE Compressors (External Protector)



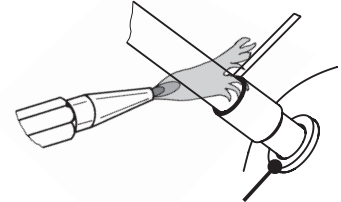
## Service/Repair – R290



8545



## Brazing on Suction Connectors (Direct Intake)



**! max. 350°C/662°F !  
at socket**  
brazing solder: phosphor (LP7) or silver

8882

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

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 subsequent 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. [www.secop.com](http://www.secop.com)