

## 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

## Model

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

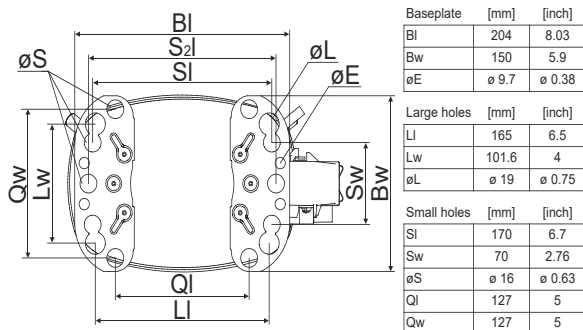
## Compressor dimensions

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	X	Y	Z
Diameter [mm]	øi 10,11-10,29	øi 6,11-6,29	øi 6,11-6,29	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	øi 0,4-0,41	øi 0,24-0,25	øi 0,24-0,25
Material	copper	copper	copper	copper	copper	copper
Horizontal angle ±2°	37°	37°	143°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°	30°	0°	150°
Position l/h/w [mm]	107/193/55	115/110/63	-107/193/55	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	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	12	12	12
[in]	0,5	0,5	0,5	0,5	0,5	0,5



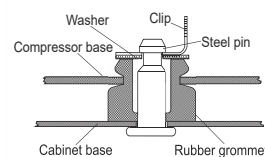
## Compressor fixation



## 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

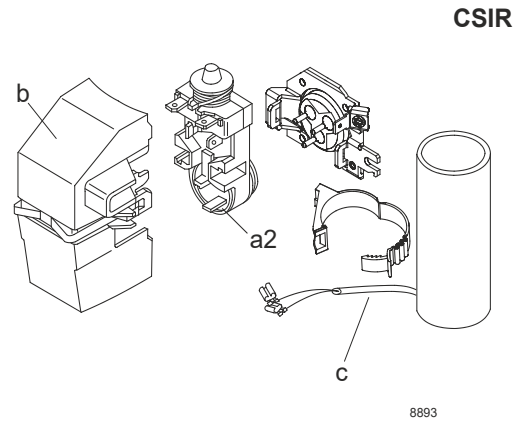
## Model

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

## Configuration

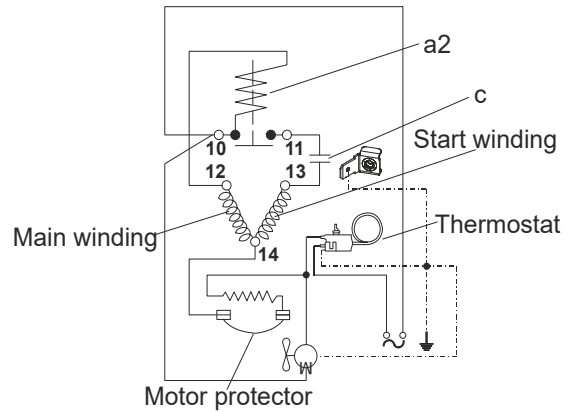
Motor configuration CSIR  
 Power supply (nominal) 220-240V/50Hz 1~  
 Refrigerant R290  
 Application MBP  
 Voltage range 198-254V  
 Starting torque HST  
 Approvals VDE  
 CCC  
 EAC  
 CB

## Electrical accessories / wiring diagram

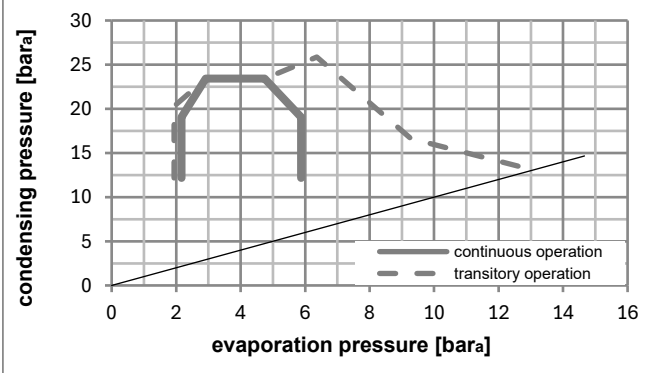
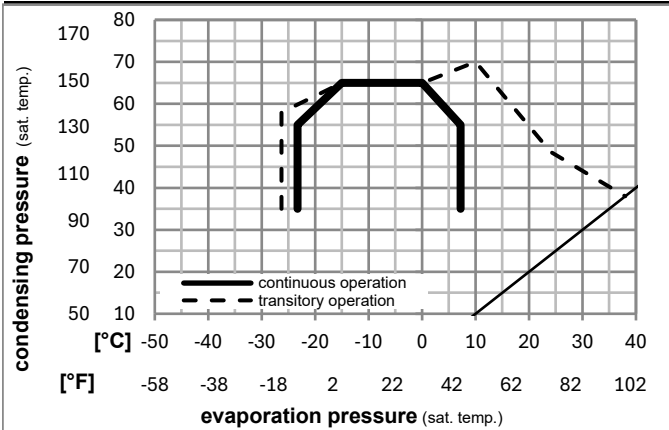


## Ambient/ machine room temperatures minimum /maximum

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

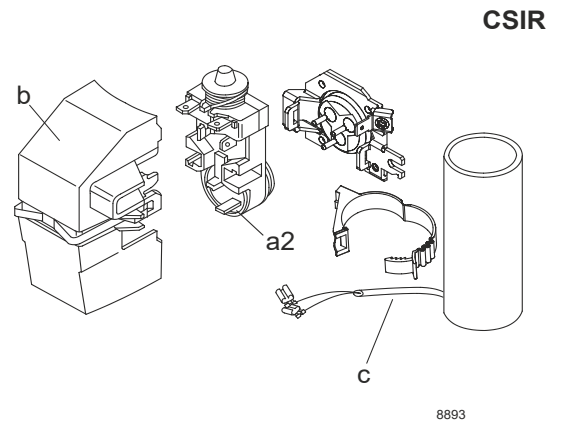
## Model

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

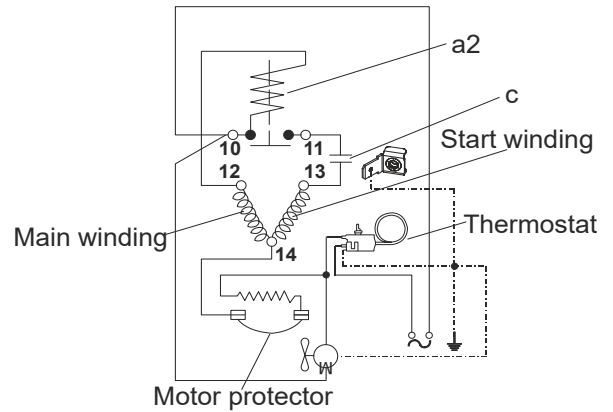
Motor configuration	CSIR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R290
Application	MBP
Voltage range	198-254V
Starting torque	HST
Approvals	VDE
	CCC
	EAC
	CB

## Electrical accessories / wiring diagram

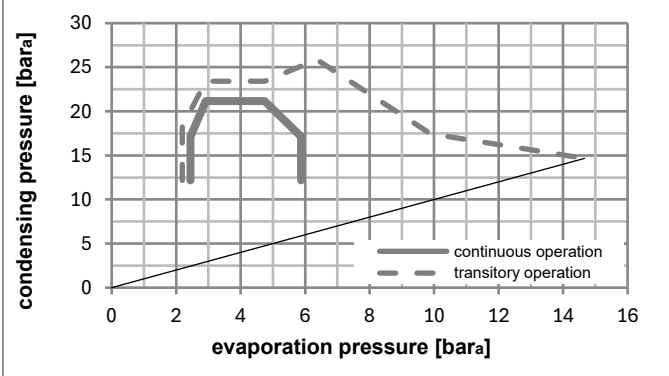
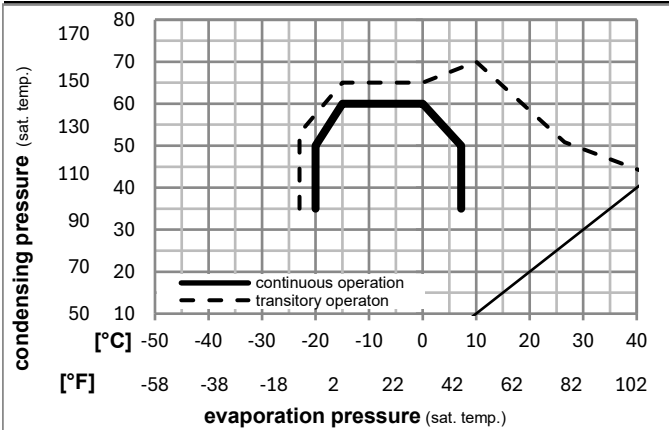


## Ambient/ machine room temperatures minimum /maximum

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

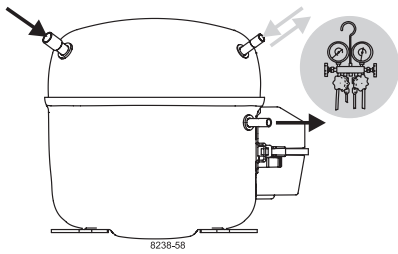
R290, 230V/50Hz, CSIR, fan 3m/s, VDE, CCC, EAC, CB

		Evaporating pressure (saturation temperature)				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	m	[W]	[A]	[kg/h]						
[°C]	[°F]	[°C]	[°F]	[°C]	[°F]																		
-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

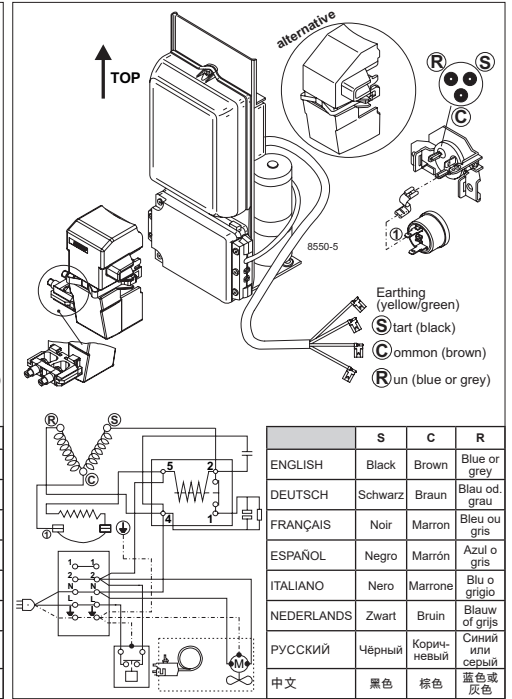
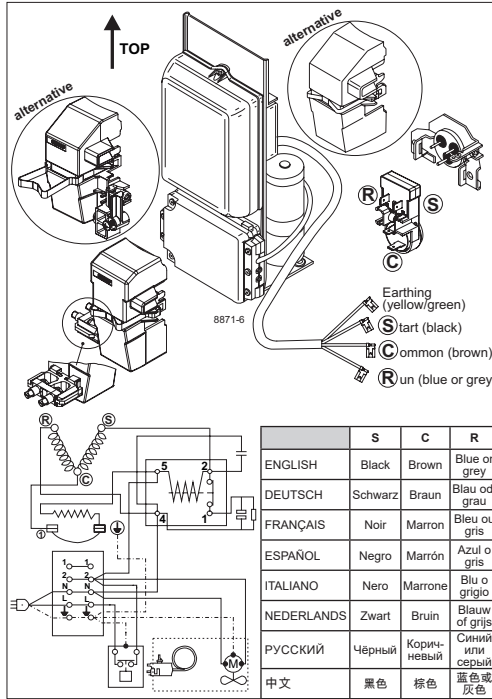
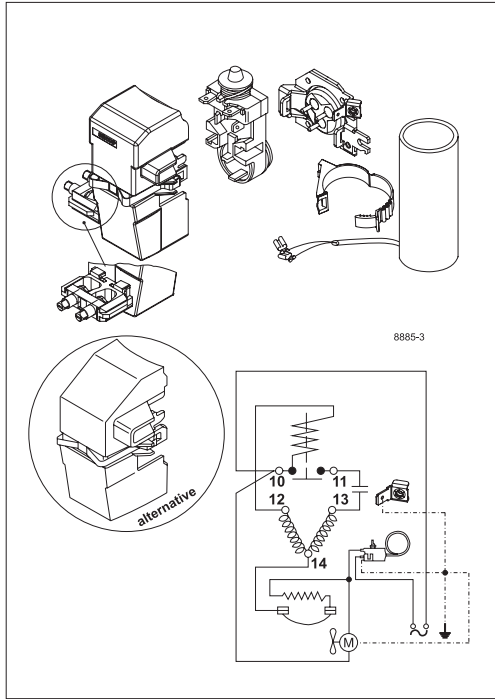
R290, 230V/50Hz, CSIR, fan 3m/s, VDE, CCC, EAC, CB

	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]	-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

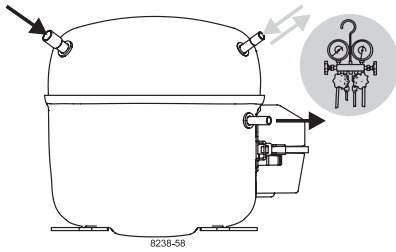
## (External Protector)



	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

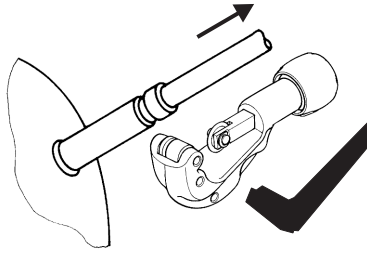
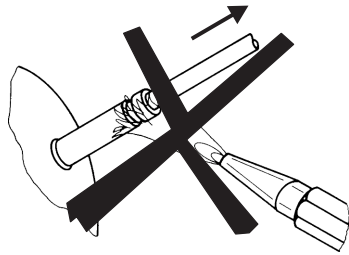




# SCE Compressors (External Protector)

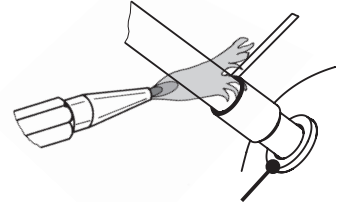


## Service/Repair – R290



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)**

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