

Single Pack SCE15MNX 115-127V 60Hz CSCR

Single pack code number: **195B4434**

Position	Title	Code	Amount
1	Compressor SCE15MNX	104H7579	1
2	SC starting device (600mm)	117-7801	1
3	Bolt joint for one compressor M6 ø16mm	118-1917	1

Secop GmbH • Lise-Meitner-Straße 29 • 24941 Flensburg, Germany • Tel: +49 461 4941 0 • 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	SCE15MNX	115-127V/60Hz 1~	Sales code:	104H7579
-------------	-----------------	------------------	-------------	-----------------

Compressor design

Oil type	Polyolester	Refrigerant(s)	R290
Oil viscosity	32cSt	Displacement	15,28cm ³ / 0,93cu.in
Oil quantity	541cm ³ / 18,3fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	450g / 15,9oz		
Free gas volume comp.	1460cm ³ / 49,4fl.oz		
Weight	14,2kg / 31,3lbs		
Motor protection	external		
Winding resistance main	0,82Ω (at 25°C)		
Winding resistance aux	2,9Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	135°C / 275°F		



General - Configurations with SCE15MNX

	Conf. 1	Conf. 2
Motorconfiguration	CSCR	CSIR
Power supply (nominal)	115V/60Hz	115V/60Hz
Number of phases	1	1
Voltage range	103-127V	103-127V
Approvals	UL	UL
Starting torque	HST	HST
Note	Protector and cover are included and pre-assembled to compressor.	

Applications with SCE15MNX

	Conf. 1	Conf. 2
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 SCE15MNX

	Conf. 1	Conf. 2
Starting device type	relay	relay
Run capacitor	23,5μF	-/-
Start capacitor	280μF	280μF
LRA (locked rotor amps / 4s/ U(N))	44,12A	43,13A
RLA (rated load amps / 1s/ U(N))	7,48A	8,3A
Cut in current (U(N))	44,12A	43,13A

Model

Designation

SCE15MNX

115-127V/60Hz 1~

Sales code:

104H7579

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 9,54-9,72	øi 6,41-6,59	øi 6,41-6,59
(i:inside, o:outside)	[in]	øi 0,38-0,38	øi 0,25-0,26	øi 0,25-0,26
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	SCE15MNX	115V/60Hz	Conf. 1	Sales code:	104H7579
-------------	-----------------	------------------	----------------	-------------	-----------------

Configuration

Motorconfiguration	CSCR
Power supply (nominal)	115V/60Hz 1~
Refrigerant	R290
Application	MBP
Voltage range	103-127V
Starting torque	HST
Approvals	UL

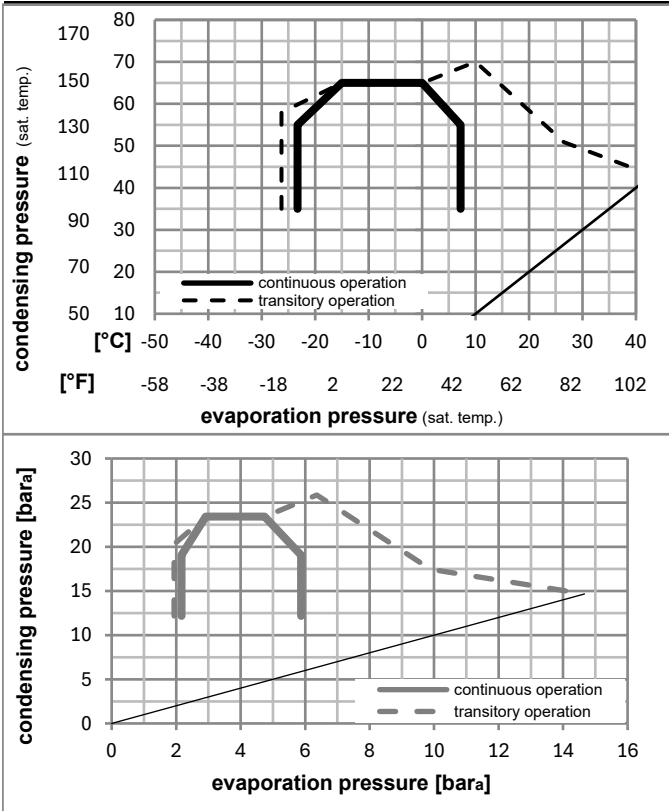
Electrical accessories / wiring diagram



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 (protector (f)+ holder (h)+ cover (b): pre assembled)

a3	SC starter kit (550mm)	117-7801
h	protector holder	117U0439
f	ext. protector (T1069/46)	117U3216
b	plastic cover + clamp	117U1021

Alternative comp.

a2	potential relay (RVA 7AA3R)	117-7441
e	run capacitor (23,5μF, 6.3mm)	117-7133
c	start capacitor (280μF, 6.3mm)	117U5350

Model

Designation **SCE15MNX** **115V/60Hz** Conf. 1 Sales code: **104H7579**

Optimization + standard conditions

R290, 115V/60Hz, CSCR, fan 3m/s, UL

		Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)						Power consumption					
		Return gas temp.				Liquid temp.						Current consumption			Ref. mass flow		
		Cooling capacity				COP		EER		P1	I	m					
		pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]			
[°C]	[°F]																
-7	20	54	130	35	95	46	115	1552,7	5303	1336,2	2,16	7,39	1,86	717,9	7,11	17,71	ASHRAE MBP
-10	14	55	131	32	90	55	131	1219,0	4163	1049,1	1,79	6,10	1,54	682,8	6,82	15,42	cecomaf MBP
-10	14	45	113	20	68	45	113	1376,7	4702	1184,8	2,19	7,46	1,88	630,0	6,43	16,90	EN12900 MBP
-7	20	49	120	18	65	49	120	1469,8	5020	1264,9	2,15	7,33	1,85	685,1	6,86	19,08	ARI540 MBP
-10	14	45	113	32	90	45	113	1433,2	4895	1233,5	2,27	7,77	1,96	630,0	6,43	16,40	opt
-25	-13	45	113	32	90	45	113	719,0	2455	618,8	1,46	4,99	1,26	492,4	5,44	8,11	opt

Performance tables

R290, 115V/60Hz, CSCR, fan 3m/s, UL

	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]	-25	-13	719,0	2455	618,8	1,46	4,99	1,26	492,4	5,44	8,11
cond. pressure	-23	-10	783,2	2675	674,0	1,54	5,27	1,33	507,3	5,53	8,84
pc= 45/113	-15	5	1161,6	3967	999,7	1,99	6,79	1,71	584,0	6,07	13,22
return gas temp.	-9	15	1465,4	5005	1261,2	2,31	7,88	1,99	635,1	6,47	16,78
RGT= 32/90	-4	25	1809,3	6179	1557,1	2,64	9,03	2,28	684,2	6,87	20,86
liquid temp	0	32	2073,1	7080	1784,1	2,89	9,88	2,49	716,5	7,14	24,05
Tliq= 45/113	7,2	45	2612,2	8921	2248,1	3,39	11,59	2,92	769,9	7,57	30,69
[°C / °F]	-25	-13	577,9	1974	497,4	1,21	4,15	1,05	475,9	5,25	7,20
cond. pressure	-23	-10	635,1	2169	546,6	1,27	4,33	1,09	501,0	5,43	7,92
pc= 55/131	-15	5	974,2	3327	838,4	1,57	5,37	1,35	619,4	6,31	12,25
return gas temp	-9	15	1248,1	4262	1074,1	1,81	6,18	1,56	689,4	6,87	15,80
RGT= 32/90	-4	25	1558,9	5324	1341,6	2,08	7,09	1,79	750,4	7,38	19,89
liquid temp	0	32	1797,9	6140	1547,3	2,28	7,80	1,97	786,9	7,68	23,09
Tliq= 55/131	7,2	45	2287,0	7811	1968,2	2,73	9,31	2,35	838,6	8,12	29,80

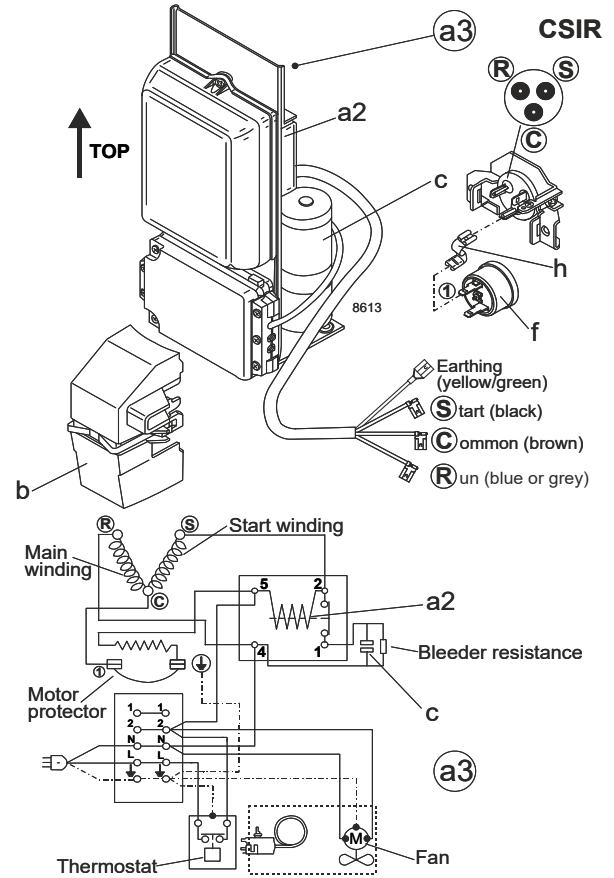
Model

Designation	SCE15MNX	115V/60Hz	Conf. 2	Sales code:	104H7579
-------------	-----------------	------------------	----------------	-------------	-----------------

Configuration

Motor configuration	CSIR
Power supply (nominal)	115V/60Hz 1~
Refrigerant	R290
Application	MBP
Voltage range	103-127V
Starting torque	HST
Approvals	UL

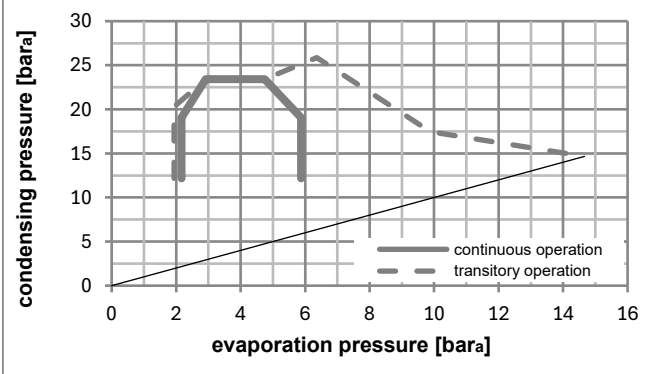
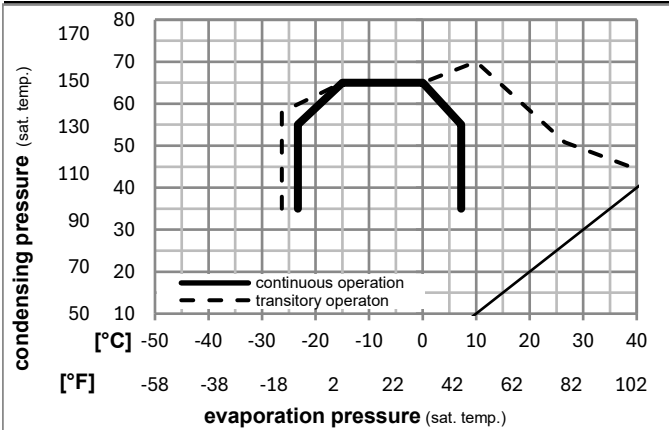
Electrical accessories / wiring diagram



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 (protector (f)+ holder (h)+ cover (b): pre assembled)

a3	SC starter kit (550mm)	117-7802
h	protector holder	117U0439
f	ext. protector (T1069/46)	117U3216
b	plastic cover + clamp	117U1021

Alternative comp.

a2	potential relay (RVA 7AA3R)	117-7441
c	start capacitor (280µF, 6.3mm)	117U5350

Model

Designation **SCE15MNX** **115V/60Hz** Conf. 2 Sales code: **104H7579**

Optimization + standard conditions

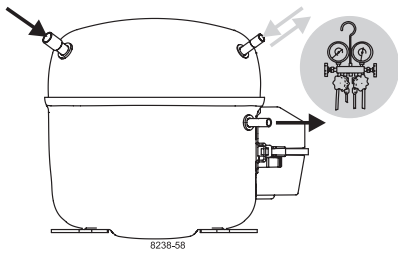
R290, 115V/60Hz, CSIR, fan 3m/s, UL

	Evaporating pressure (saturation temperature)				Cooling capacity	COP	EER	Power consumption			ASHRAE MBP							
	pe	pc	RGT	Tliq				P1	I	m								
	[°C]	[°F]	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]					
	-7	20	54	130	35	95	46	115	1535,1	5243	1321,1	2,05	6,99	1,76	749,7	7,42	17,51	ASHRAE MBP
	-10	14	55	131	32	90	55	131	1205,2	4116	1037,2	1,69	5,77	1,45	713,0	7,12	15,25	cecomaf MBP
	-10	14	45	113	20	68	45	113	1361,1	4648	1171,4	2,07	7,07	1,78	657,9	6,72	16,71	EN12900 MBP
	-7	20	49	120	18	65	49	120	1453,2	4963	1250,6	2,03	6,94	1,75	715,4	7,16	18,87	ARI540 MBP
	-10	14	45	113	32	90	45	113	1417,0	4839	1219,5	2,15	7,36	1,85	657,9	6,72	16,21	opt
	-25	-13	45	113	32	90	45	113	710,8	2428	611,7	1,38	4,72	1,19	514,2	5,68	8,02	opt

Performance tables

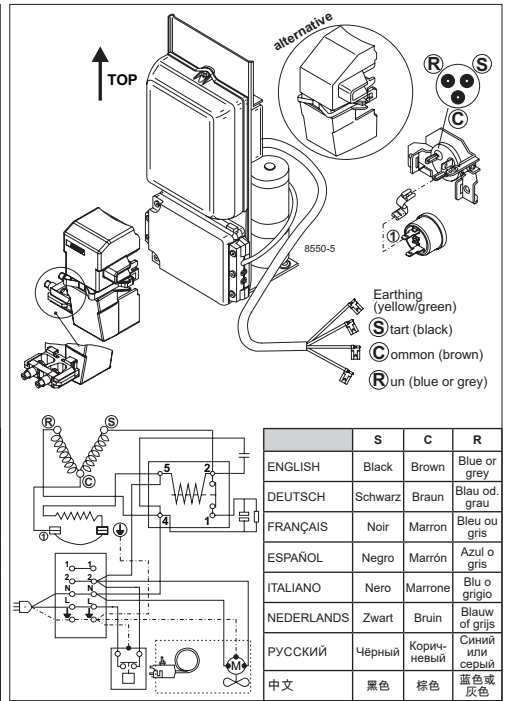
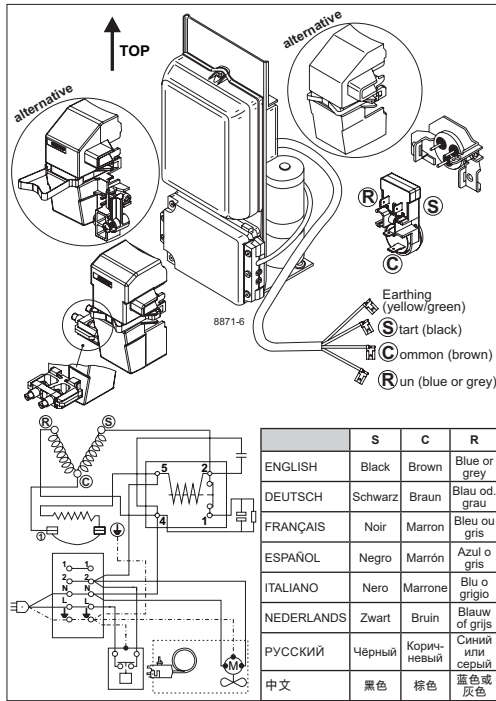
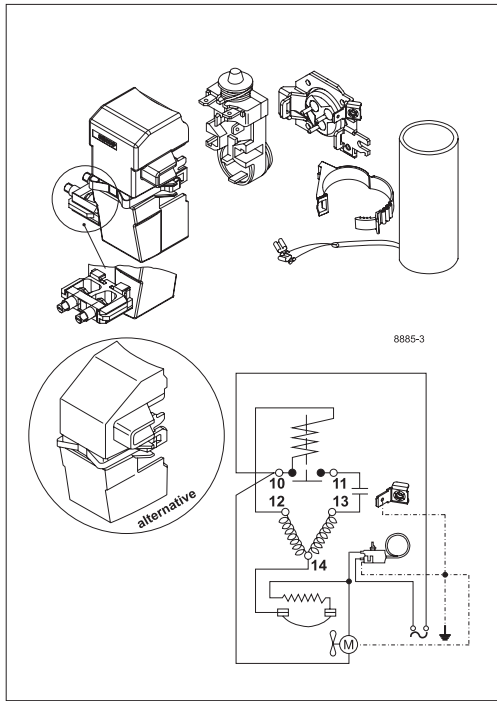
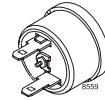
R290, 115V/60Hz, CSIR, fan 3m/s, UL

	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]	-25	-13	710,8	2428	611,7	1,38	4,72	1,19	514,2	5,68	8,02
cond. pressure	-23	-10	774,3	2645	666,4	1,46	4,99	1,26	529,8	5,78	8,74
pc= 45/113	-15	5	1148,4	3922	988,3	1,88	6,43	1,62	609,8	6,34	13,07
return gas temp.	-9	15	1448,8	4948	1246,9	2,18	7,46	1,88	663,2	6,76	16,59
RGT= 32/90	-4	25	1788,8	6109	1539,4	2,50	8,55	2,15	714,5	7,18	20,63
liquid temp	0	32	2049,6	7000	1763,9	2,74	9,36	2,36	748,2	7,46	23,77
Tliq= 45/113	7,2	45	2582,6	8820	2222,6	3,21	10,97	2,76	803,9	7,91	30,34
[°C / °F]	-25	-13	571,4	1951	491,7	1,15	3,93	0,99	496,9	5,48	7,11
cond. pressure	-23	-10	627,9	2144	540,4	1,20	4,10	1,03	523,2	5,67	7,83
pc= 55/131	-15	5	963,1	3289	828,9	1,49	5,09	1,28	646,8	6,59	12,11
return gas temp	-9	15	1233,9	4214	1061,9	1,71	5,85	1,48	719,9	7,18	15,62
RGT= 32/90	-4	25	1541,3	5264	1326,4	1,97	6,72	1,69	783,6	7,70	19,67
liquid temp	0	32	1777,5	6071	1529,8	2,16	7,39	1,86	821,7	8,02	22,83
Tliq= 55/131	7,2	45	2261,1	7722	1945,9	2,58	8,82	2,22	875,7	8,47	29,46



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

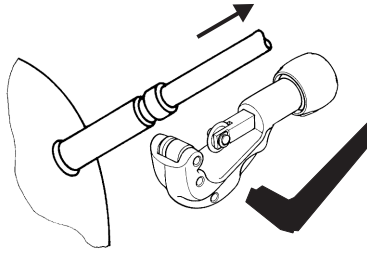
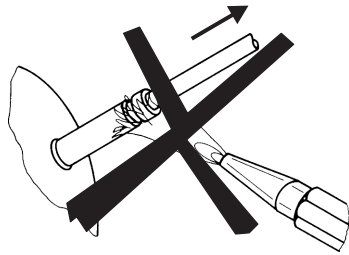
	S	C	R
ENGLISH	Black	Brown	Blue or grey
DEUTSCH	Schwarz	Braun	Blau od. grau
FRANÇAIS	Noir	Marron	Bleu ou gris
ESPAÑOL	Negro	Marrón	Azul o gris
ITALIANO	Nero	Marrone	Blu o grigio
NEDERLANDS	Zwart	Bruin	Blauw of grijs
РУССКИЙ	Чёрный	Коричневый	Синий или серый
中文	黑色	棕色	蓝色或灰色



SCE Compressors (External Protector)

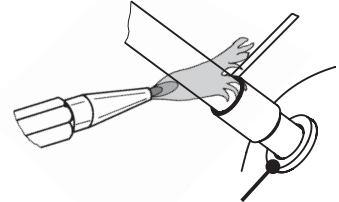


Service/Repair – R290



8545

Brazing on Suction Connectors (Direct Intake)



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

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 subsequential 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