

Single Pack SCE21MNX 220-240V 50Hz CSCR

Single pack code number: **195B4235**

Position	Title	Code	Amount
1	Compressor SCE21MNX	104H8160	1
2	SC starting device (550mm)	117-7800	1
3	Bolt joint for one compressor M6 ø16mm	118-1917	1

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Model

Designation	SCE21MNX	220-240V/50Hz 1~	Sales code:	104H8160
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R290
Oil viscosity	32cSt	Displacement	20,95cm ³ / 1,28cu.in
Oil quantity	569cm ³ / 19,2fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	550g / 19,4oz		
Free gas volume comp.	1460cm ³ / 49,4fl.oz		
Weight	14,2kg / 31,3lbs		
Motor protection	external		
Winding resistance main	3,65Ω (at 25°C)		
Winding resistance aux	14,16Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	140°C / 284°F		



General - Configurations with SCE21MNX

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

Applications with SCE21MNX

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

Electrical data - Configurations with SCE21MNX

	Conf. 1
Starting device type	relay
Run capacitor	10μF
Start capacitor	80μF
LRA (locked rotor amps / 4s/ U(N))	22,3A
RLA (rated load amps / 1s/ U(N))	3,69A
Cut in current (U(N))	22,3A

Model

Designation

SCE21MNX

220-240V/50Hz 1~

Sales code:

104H8160

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

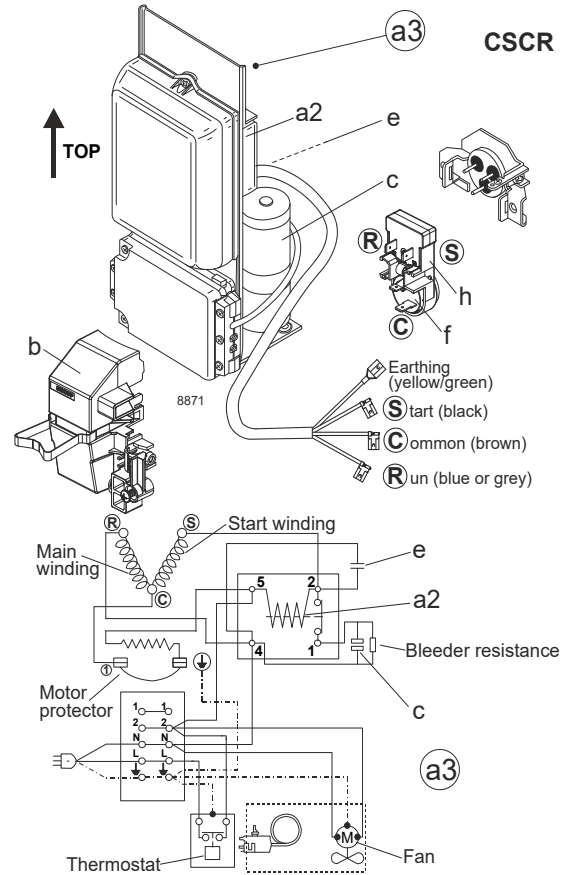
Model

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Configuration

Motor configuration	CSCR
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Application	MBP
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Starting torque	HST
Approvals	VDE CCC EAC

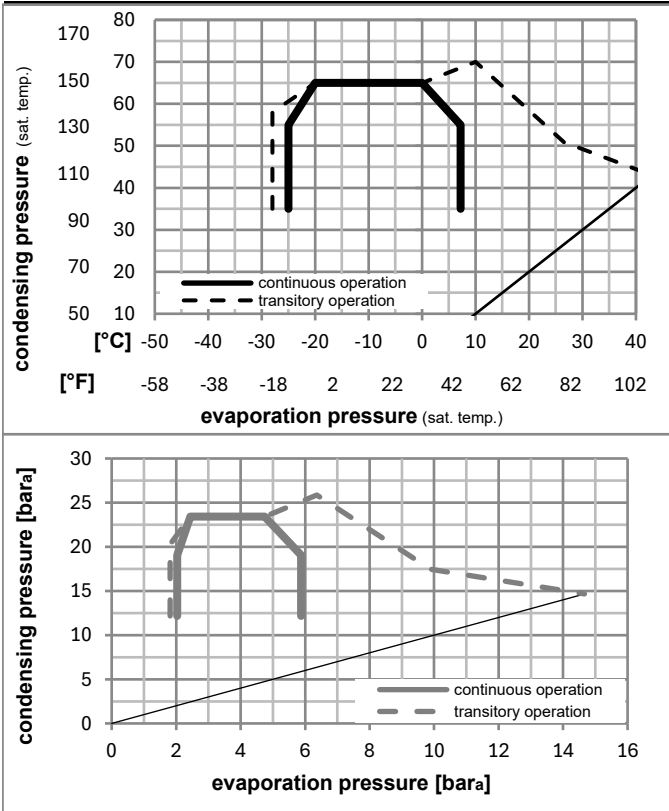
Electrical accessories / wiring diagram



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	117-7800
f / h	motor protector assy. (T1070/46)	117U8000
b	plastic cover + clamp	117U1028

Alternative comp.

a2	potential relay (RVA 6M3R 339)	117-7425
e	run capacitor (10μF, 6.3mm)	117-7112
c	start capacitor (80μF)	117U5373

Model

Designation **SCE21MNX** **220-240V/50Hz** Conf. 1 Sales code: **104H8160**

Optimization + standard conditions

R290, 220V/50Hz, CSCR, fan 3m/s, VDE, CCC, EAC

		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]	[°C]	[°F]	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[A]	[A]	[kg/h]				
-7	20	54	130	35	95	1763,6	6023	1517,7	2,12	7,22	1,82	833,8	4,06			20,12	ASHRAE MBP			
-10	14	55	131	32	90	1408,7	4811	1212,3	1,77	6,04	1,52	796,2	3,89			17,82	cecomaf MBP			
-10	14	45	113	20	68	1572,3	5370	1353,1	2,17	7,42	1,87	723,9	3,57			19,30	EN12900 MBP			
-7	20	49	120	18	65	1664,2	5683	1432,2	2,12	7,23	1,82	786,4	3,85			21,61	ARI540 MBP			
-10	14	45	113	32	90	1636,8	5590	1408,7	2,26	7,72	1,95	723,9	3,57			18,73	opt			
-25	-13	45	113	32	90	897,3	3064	772,2	1,60	5,48	1,38	559,6	2,88			10,12	opt			

Performance tables

R290, 220V/50Hz, CSCR, fan 3m/s, VDE, CCC, EAC

	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	897,3	3064	772,2	1,60	5,48	1,38	559,6	2,88	10,12
cond. pressure	-20	-4	1115,0	3808	959,6	1,81	6,18	1,56	615,8	3,11	12,63
pc= 45/113	-15	5	1358,3	4639	1169,0	2,02	6,91	1,74	671,1	3,34	15,45
return gas temp.	-10	14	1636,8	5590	1408,7	2,26	7,72	1,95	723,9	3,57	18,73
RGT= 32/90	-5	23	1960,1	6694	1686,9	2,54	8,66	2,18	773,2	3,79	22,57
liquid temp	0	32	2338,0	7985	2012,1	2,86	9,77	2,46	817,4	3,98	27,12
Tliq= 45/113	7,2	45	2997,5	10237	2579,7	3,45	11,77	2,97	869,6	4,22	35,22
[°C / °F]	-25	-13	739,2	2524	636,1	1,25	4,27	1,08	590,7	3,00	9,20
cond. pressure	-20	-4	945,1	3228	813,3	1,43	4,89	1,23	660,6	3,30	11,82
pc= 55/131	-15	5	1165,0	3979	1002,6	1,60	5,45	1,37	729,6	3,60	14,65
return gas temp	-10	14	1408,7	4811	1212,3	1,77	6,04	1,52	796,2	3,89	17,82
RGT= 32/90	-5	23	1685,6	5757	1450,7	1,96	6,70	1,69	859,2	4,17	21,47
liquid temp	0	32	2005,6	6850	1726,1	2,19	7,47	1,88	917,3	4,43	25,76
Tliq= 55/131	7,2	45	2561,5	8748	2204,5	2,59	8,84	2,23	989,4	4,76	33,37



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

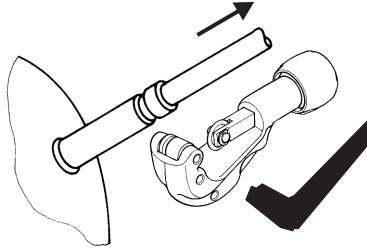
	S	C	R
ENGLISH	Black	Brown	Blue or grey
DEUTSCH	Schwarz	Braun	Blau od. grau
FRANÇAIS	Noir	Marron	Bleu ou gris
ESPAÑOL	Negro	Marrón	Azul o gris
ITALIANO	Nero	Marrone	Blu o grigio
NEDERLANDS	Zwart	Bruin	Blauw of grijs
РУССКИЙ	Чёрный	Коричневый	Синий или серый
中文	黑色	棕色	蓝色或灰色



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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