

Single Pack SCE21MFX 220-230V 50Hz CSIR

Single pack code number: **195B4372**

Position	Title	Code	Amount
1	Compressor SCE21MFX	104G8150	1
2	Starting capacitor (80 μ 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	SCE21MFX	220-230V/50Hz 1~	Sales code:	104G8150
-------------	-----------------	------------------	-------------	-----------------

Compressor design

Oil type	Polyolester	Refrigerant(s)	R134a
Oil viscosity	22cSt	Displacement	20,95cm ³ / 1,28cu.in
Oil quantity	500cm ³ / 16,9fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	700g / 24,7oz		
Free gas volume comp.	1460cm ³ / 49,4fl.oz		
Weight	13,1kg / 28,9lbs		
Motor protection	external		
Winding resistance main	4,7Ω (at 25°C)		
Winding resistance aux	15,9Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	140°C / 284°F		



General - Configurations with SCE21MFX

	Conf. 1
Motorconfiguration	CSIR
Power supply (nominal)	220-230V/50Hz
Number of phases	1
Voltage range	198-244V
Approvals	CCC, VDE
Starting torque	HST
Note	Protector, relay and cover are included and pre-assembled to compressor.

Applications with SCE21MFX

	Conf. 1
Refrigerant	R134a
Application	MBP
System cooling	fan 3m/s
Hot gas defrost	OK
Long interval pull down	OK

Electrical data - Configurations with SCE21MFX

	Conf. 1
Starting device type	relay
Run capacitor	-/-
Start capacitor	80μF
LRA (locked rotor amps / 4s/ U(N))	18A
RLA (rated load amps / 1s/ U(N))	3,5A
Cut in current (U(N))	18A

Model

Designation

SCE21MFX

220-230V/50Hz 1~

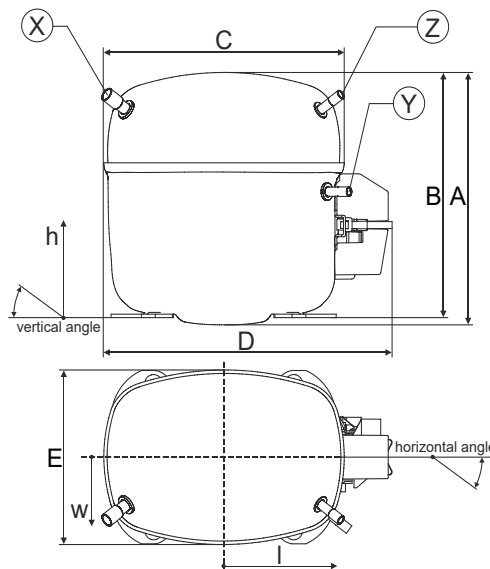
Sales code:

104G8150

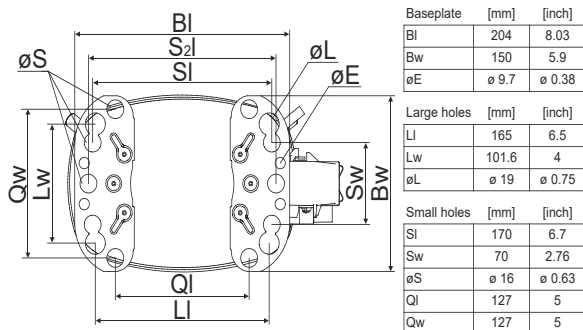
Compressor dimensions

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



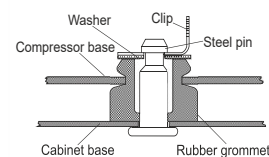
Compressor fixation



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

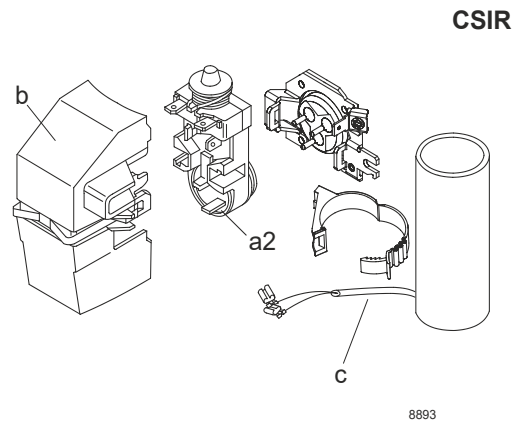
Model

Designation	SCE21MFX	220-230V/50Hz	Conf. 1	Sales code:	104G8150
-------------	-----------------	----------------------	----------------	-------------	-----------------

Configuration

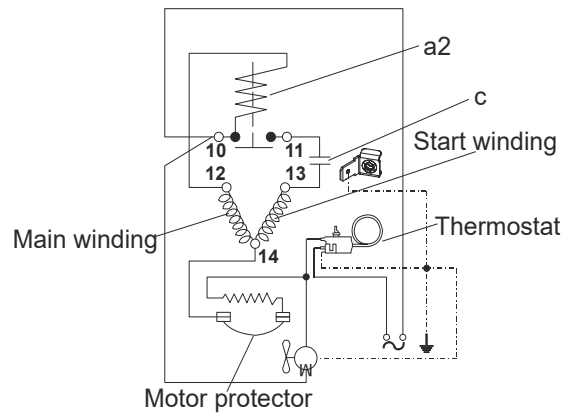
Motor configuration	CSIR
Power supply (nominal)	220-230V/50Hz 1~
Refrigerant	R134a
Application	MBP
Voltage range	198-244V
Starting torque	HST
Approvals	CCC VDE

Electrical accessories / wiring diagram

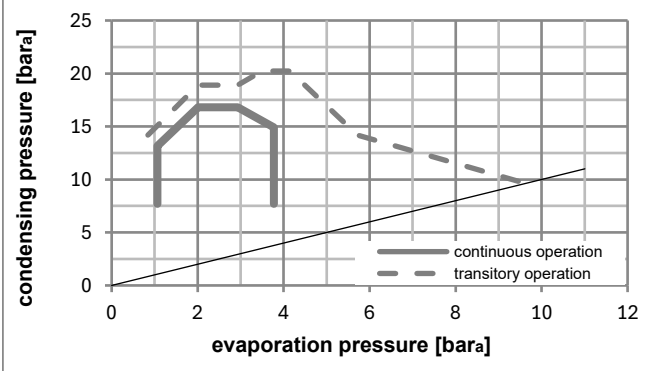
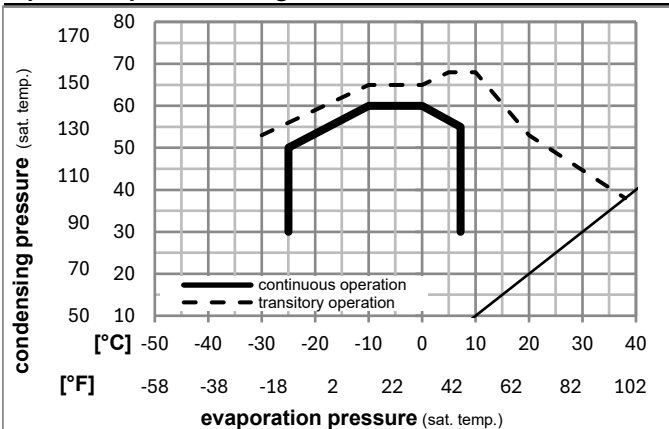


Ambient/ machine room temperatures minimum /maximum

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 (T1134)	117U7411
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):	55dB(A)

Model

Designation **SCE21MFX** **220-230V/50Hz** Conf. 1 Sales code: **104G8150**

Optimization + standard conditions

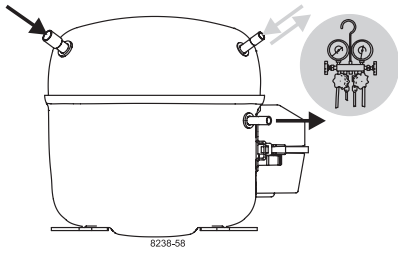
R134a, 220V/50Hz, CSIR, fan 3m/s, CCC, VDE

		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]	[kg/h]					
-7	20	54	130	35	95	1131,9	3866	974,1	1,82	6,21	1,57	622,4	3,43	24,70					ASHRAE MBP	
-10	14	55	131	32	90	864,5	2952	744,0	1,51	5,16	1,30	572,2	3,23	20,90					cecomaf MBP	
-10	14	45	113	20	68	995,9	3401	857,1	1,78	6,09	1,54	558,2	3,22	23,31					EN12900 MBP	
-7	20	49	120	18	65	1085,4	3707	934,1	1,79	6,12	1,54	605,8	3,37	26,81					ARI540 MBP	
-10	14	45	113	32	90	1033,2	3529	889,2	1,85	6,32	1,59	558,2	3,22	22,61					opt	
-25	-13	45	113	32	90	446,9	1526	384,6	1,23	4,18	1,05	364,8	2,63	9,68					opt	

Performance tables

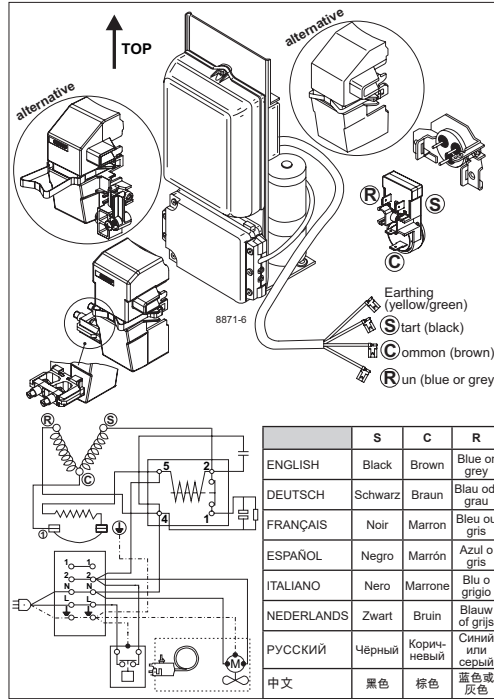
R134a, 220V/50Hz, CSIR, fan 3m/s, CCC, VDE

	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	446,9	1526	384,6	1,23	4,18	1,05	364,8	2,63	9,68
cond. pressure	-20	-4	605,3	2067	520,9	1,39	4,74	1,19	436,2	2,82	13,15
pc= 45/113	-15	5	800,3	2733	688,8	1,60	5,47	1,38	500,0	3,01	17,45
return gas temp.	-10	14	1033,2	3529	889,2	1,85	6,32	1,59	558,2	3,22	22,61
RGT= 32/90	-5	23	1305,3	4458	1123,3	2,13	7,28	1,83	612,6	3,43	28,70
liquid temp	0	32	1617,7	5525	1392,2	2,43	8,30	2,09	665,3	3,65	35,77
Tliq= 45/113	7,2	45	2140,9	7312	1842,5	2,89	9,85	2,48	742,0	3,99	47,82
[°C / °F]	-25	-13	340,7	1164	293,2	0,98	3,35	0,84	347,2	2,52	8,15
cond. pressure	-20	-4	483,7	1652	416,2	1,15	3,91	0,99	422,2	2,71	11,60
pc= 55/131	-15	5	657,8	2247	566,1	1,32	4,52	1,14	496,6	2,95	15,84
return gas temp	-10	14	864,5	2952	744,0	1,51	5,16	1,30	572,2	3,23	20,90
RGT= 32/90	-5	23	1104,9	3773	950,9	1,70	5,79	1,46	651,2	3,55	26,86
liquid temp	0	32	1380,2	4714	1187,8	1,88	6,41	1,62	735,3	3,92	33,76
Tliq= 55/131	7,2	45	1840,7	6286	1584,1	2,12	7,23	1,82	869,4	4,51	45,52



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

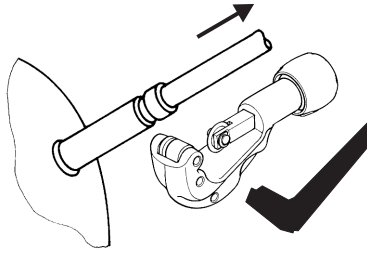
	S	C	R
ENGLISH	Black	Brown	Blue or grey
DEUTSCH	Schwarz	Braun	Blau od. grau
FRANÇAIS	Noir	Marron	Bleu ou gris
ESPAÑOL	Negro	Marrón	Azul o gris
ITALIANO	Nero	Marrone	Blu o grigio
NEDERLANDS	Zwart	Bruin	Blauw of grijs
РУССКИЙ	Чёрный	Коричневый	Синий или серый
中文	黑色	棕色	蓝色或灰色



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