

Single Pack SC21F 220-240V 50Hz CSIR

Single pack code number: **195B4099**

Position	Title	Code	Amount
1	Compressor SC21F	104G8100	1
2	Starting relay	117U6019	1
3	Starting capacitor (80 μ F 220V, 6.3mm)	117U5017	1
4	Cord relief	103N1004	1
5	Cover	103N2009	1
6	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

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	SC21F	220-240V/50Hz 1~	Sales code:	104G8100
-------------	--------------	------------------	-------------	-----------------

Compressor design

Oil type	Polyolester	Refrigerant(s)	R134a
Oil viscosity	22cST	Displacement	20,95cm ³ / 1,28cu.in
Oil quantity	550cm ³ / 18,6fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	1300g / 45,9oz		
Free gas volume comp.	1460cm ³ / 49,4fl.oz		
Weight	13,7kg / 30,2lbs		
Motor protection	1# internal		
Winding resistance main	3,7Ω (at 25°C)		
Winding resistance aux	14Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	135°C / 275°F		



General - Configurations with SC21F

	Conf. 1
Motorconfiguration	CSIR
Power supply (nominal)	220-240V/50Hz
Number of phases	1
Voltage range	198-254V
Approvals	VDE
Starting torque	HST
Note	- / -

Applications with SC21F

	Conf. 1
Refrigerant	R134a
Application	LBP+MBP
System cooling	fan 1,5m/s
Hot gas defrost	OK
Long interval pull down	OK

Electrical data - Configurations with SC21F

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

Model

Designation

SC21F

220-240V/50Hz 1~

Sales code:

104G8100

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 X	Discharge Y	Process 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	SC21F	220-240V/50Hz	Conf. 1	Sales code:	104G8100
-------------	--------------	----------------------	----------------	-------------	-----------------

Configuration

Motorconfiguration	CSIR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R134a
Application	LBP+MBP
Voltage range	198-254V
Starting torque	HST
Approvals	VDE

Electrical accessories / wiring diagram

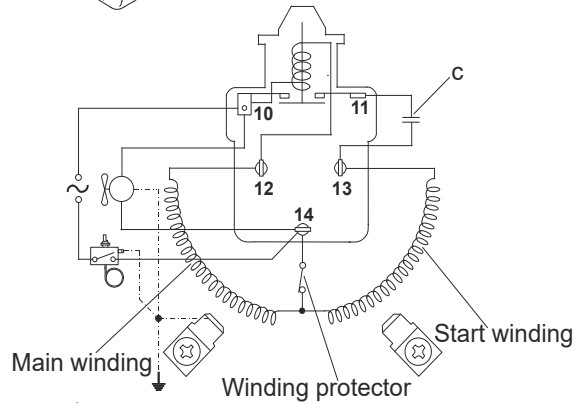


Ambient/ machine room temperatures minimum /maximum

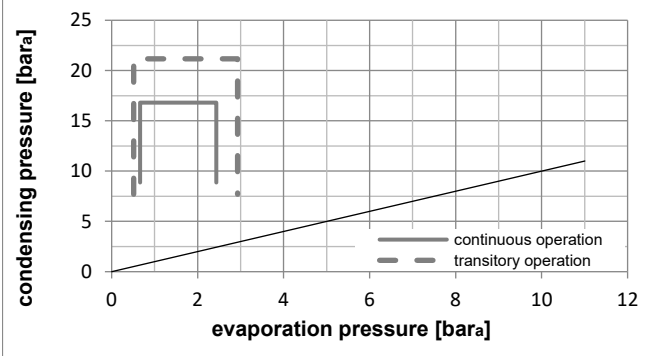
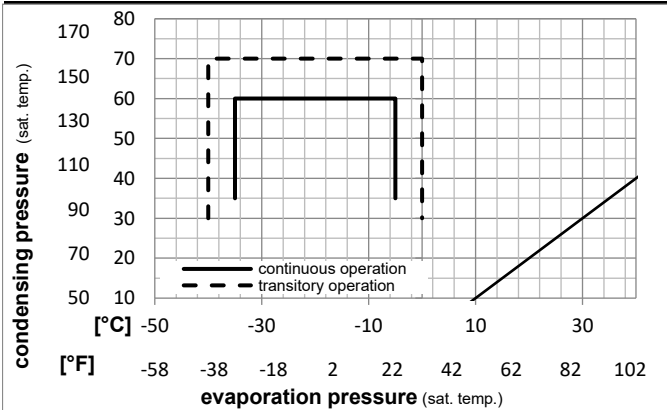
Ambient temperature range:	10 - 38°C / 50 - 101°F
Machine room temperature range:	10 - 43°C / 50 - 110°F
Compressor cooling:	fan 1,5m/s

Operation Limits

Can be used as a HBP compressor with 240V 50Hz mains (216-254V).



Operation pressure range



Components

a2	relay	117U6019
c	start capacitor (80μF)	117U5017
d	cord relief	103N1004
b	plastic cover	103N2009

Model

Designation **SC21F** **220-240V/50Hz** Conf. 1 Sales code: **104G8100**

Optimization + standard conditions

R134a, 220V/50Hz, CSIR, fan 1,5m/s, VDE

	Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)			Return gas temp.	Liquid temp.	Cooling capacity	COP	EER	Power consumption			ASHRAE LBP
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]						P1	I	Ref. mass flow	
	[°C]	[°F]	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]			
	-23	54	32	32	456,9	1560	393,2	1,14	3,88	0,98	402,5	2,80	8,87	ASHRAE LBP		
	-10	130	90	90												
	-25	55	32	55	335,0	1144	288,3	0,88	2,99	0,75	382,1	2,77	8,01	cecomaf LBP		
	-13	131	90	131												
	-35	40	20	40	244,5	835	210,4	0,82	2,79	0,70	298,9	2,57	5,36	EN12900 LBP		
	-31	104	68	104												
	-23	49	4,4	49	367,2	1254	316,0	0,93	3,16	0,80	396,7	2,76	9,70	ARI540 LBP		
	-10	120	40	120												
	-23	41	32	32	506,1	1728	435,5	1,29	4,42	1,11	391,4	2,74	9,83	AHAM LBP		
	-10	105	90	90												
	-35	45	32	45	219,1	748	188,5	0,76	2,60	0,65	288,1	2,52	4,73	opt		
	-31	113	90	113												

Performance tables

R134a, 220V/50Hz, CSIR, fan 1,5m/s, 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]	-35	-31	219,1	748	188,5	0,76	2,60	0,65	288,1	2,52	4,73
cond. pressure	-30	-22	290,3	991	249,8	0,88	3,02	0,76	328,5	2,63	6,27
pc= 45/113	-25	-13	391,0	1335	336,5	1,04	3,55	0,90	375,9	2,71	8,47
return gas temp.	-23	-10	431,9	1475	371,7	1,10	3,75	0,94	393,6	2,75	9,37
RGT= 32/90	-20	-4	521,1	1780	448,5	1,21	4,14	1,04	430,3	2,83	11,32
liquid temp	-15	5	680,9	2325	585,9	1,38	4,73	1,19	492,0	3,03	14,84
Tliq= 45/113	-5	23	1089,0	3719	937,2	1,71	5,83	1,47	637,7	3,89	23,95
[°C / °F]	-35	-31	186,0	635	160,0	0,68	2,33	0,59	272,9	2,50	4,43
cond. pressure	-30	-22	245,8	839	211,5	0,76	2,59	0,65	324,0	2,64	5,86
pc= 55/131	-25	-13	335,0	1144	288,3	0,88	2,99	0,75	382,1	2,77	8,01
return gas temp	-23	-10	372,1	1271	320,2	0,92	3,15	0,79	403,5	2,81	8,91
RGT= 32/90	-20	-4	453,8	1550	390,5	1,01	3,46	0,87	447,4	2,92	10,88
liquid temp	-15	5	602,1	2056	518,2	1,16	3,95	1,00	519,9	3,16	14,49
Tliq= 55/131	-5	23	987,4	3372	849,8	1,44	4,90	1,24	687,7	4,09	24,00



SC Compressors





SC Compressors

Service/Repair – R290



8545



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