

## Single Pack SC15F 220-240V 50Hz CSIR

Single pack code number: **195B4110**

Position	Title	Code	Amount
1	Compressor SC15F	104G8500	1
2	Starting relay	117U6003	1
3	Starting capacitor (80 $\mu$ 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](http://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	<b>SC15F</b>	220-240V/50Hz 1~	Sales code:	<b>104G8500</b>
-------------	--------------	------------------	-------------	-----------------

## Compressor design

Oil type	Polyolester	Refrigerant(s)	<b>R134a</b>
Oil viscosity	22cST	Displacement	15,28cm <sup>3</sup> / 0,93cu.in
Oil quantity	550cm <sup>3</sup> / 18,6fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	1300g / 45,9oz		
Free gas volume comp.	1410cm <sup>3</sup> / 47,7fl.oz		
Weight	12,6kg / 27,8lbs		
Motor protection	1# internal		
Winding resistance main	6,9Ω (at 25°C)		
Winding resistance aux	11Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	135°C / 275°F		



## General - Configurations with SC15F

	<b>Conf. 1</b>	<b>Conf. 2</b>
Motorconfiguration	CSIR	RSIR
Power supply (nominal)	220-240V/50Hz	220-240V/50Hz
Number of phases	1	1
Voltage range	198-254V	198-254V
Approvals	VDE, EAC	VDE, EAC
Starting torque	HST	LST
Note	- / -	

## Applications with SC15F

	<b>Conf. 1</b>	<b>Conf. 2</b>
Refrigerant	R134a	R134a
Application	LBP+MBP	LBP+MBP
System cooling	fan 1,5m/s	fan 1,5m/s
Hot gas defrost	OK	OK
Long interval pull down	OK	OK

## Electrical data - Configurations with SC15F

	<b>Conf. 1</b>	<b>Conf. 2</b>
Starting device type	relay	PTC
Run capacitor	-/-	-/-
Start capacitor	80μF	-/-
LRA (locked rotor amps / 4s)		
RLA (rated load amps / 1s)	-/A	-/A
Cut in current		

## Model

Designation

**SC15F**

220-240V/50Hz 1~

Sales code:

**104G8500**

## Compressor dimensions

Housing	A Height	209mm / 8,23in
	B Height	203mm / 7,99in
	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]	ø 8,11-8,29	ø 6,11-6,29	ø 6,11-6,29
(i:inside, o:outside) [in]	ø 0,32-0,33	ø 0,24-0,25	ø 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]	107/183/55	115/100/63	-107/183/55
[in]	4,2/7,2/2,2	4,5/3,9/2,5	-4,2/7,2/2,2
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

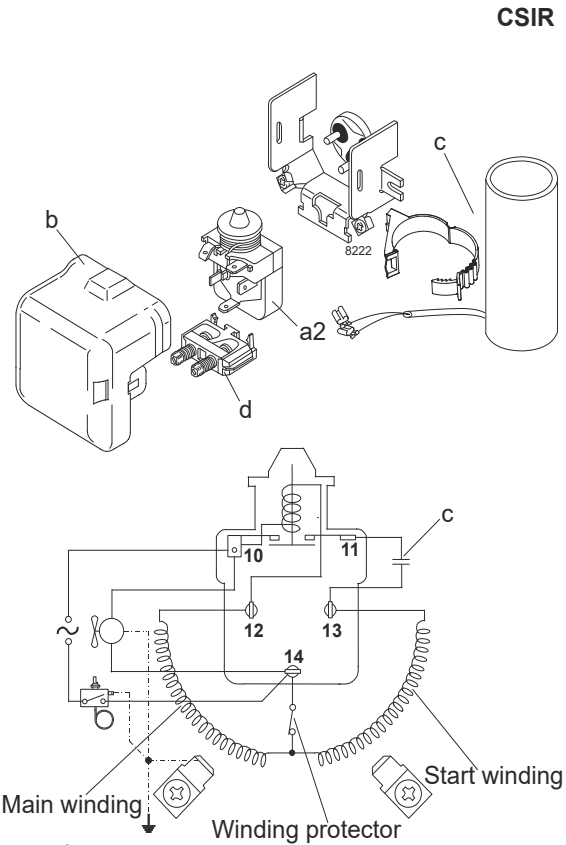
## Model

Designation	<b>SC15F</b>	<b>220-240V/50Hz</b>	<b>Conf. 1</b>	Sales code:	<b>104G8500</b>
-------------	--------------	----------------------	----------------	-------------	-----------------

## Configuration

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

## Electrical accessories / wiring diagram



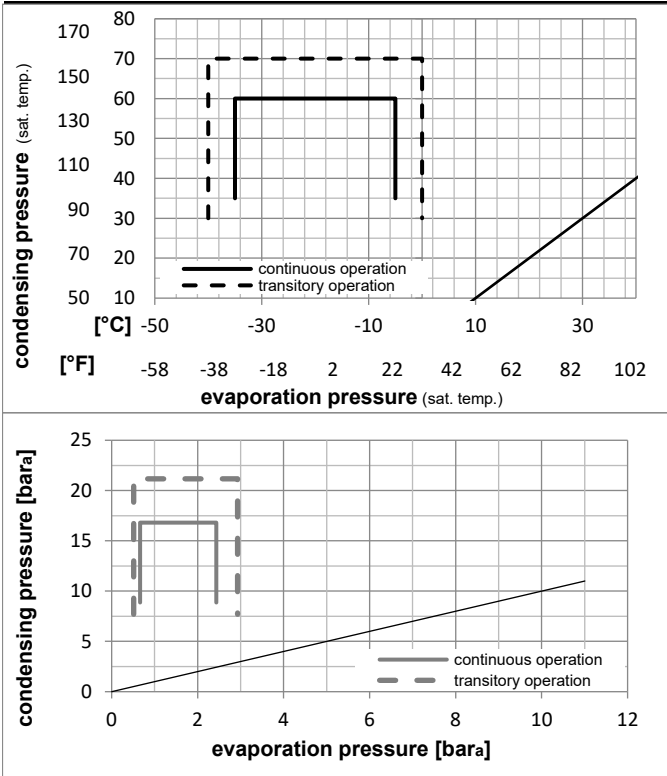
## Ambient/ machine room temperatures minimum /maximum

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	assy. relay	117U6003
c	start capacitor (80μF)	117U5017
d	cord relief	103N1004
b	plastic cover	103N2009

### Model

Designation **SC15F** **220-240V/50Hz** Conf. 1 Sales code: **104G8500**

### Optimization + standard conditions

R134a, 220V/50Hz, CSIR, fan 1,5m/s, VDE, 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	Ref. mass flow	[W]	[A]	m	[kg/h]					
[°C]	[°F]																						
-23	-10	54	130	32	90	323,1	1103	278,0	1,11	3,78	0,95	292,2	1,99	6,27								ASHRAE LBP	
-25	-13	55	131	32	90	229,9	785	197,9	0,84	2,86	0,72	275,1	1,93	5,50								cecomaf LBP	
-35	-31	40	104	20	68	161,1	550	138,6	0,78	2,67	0,67	206,3	1,72	3,53								EN12900 LBP	
-23	-10	49	120	4,4	40	280,8	959	241,7	0,95	3,23	0,81	296,7	1,99	7,42								ARI540 LBP	
-23	-10	41	105	32	90	392,1	1339	337,4	1,35	4,60	1,16	290,9	2,00	7,61								AHAM LBP	
-35	-31	45	113	32	90	147,0	502	126,5	0,72	2,46	0,62	203,9	1,70	3,17								opt	

### Performance tables

R134a, 220V/50Hz, CSIR, fan 1,5m/s, VDE, 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]	-35	-31	147,0	502	126,5	0,72	2,46	0,62	203,9	1,70	3,17
cond. pressure	-30	-22	214,5	733	184,6	0,89	3,04	0,77	240,9	1,81	4,64
pc= 45/113	-25	-13	301,9	1031	259,9	1,07	3,67	0,92	281,0	1,95	6,54
return gas temp.	-23	-10	336,2	1148	289,3	1,14	3,89	0,98	295,4	2,00	7,29
RGT= 32/90	-20	-4	409,2	1398	352,2	1,26	4,31	1,09	324,2	2,10	8,89
liquid temp	-15	5	536,2	1831	461,5	1,45	4,95	1,25	370,1	2,24	11,69
Tliq= 45/113	-5	23	849,0	2900	730,7	1,81	6,17	1,55	470,2	2,42	18,67
[°C / °F]	-35	-31	100,0	342	86,1	0,54	1,84	0,46	186,0	1,67	2,38
cond. pressure	-30	-22	155,0	529	133,4	0,68	2,31	0,58	228,9	1,78	3,70
pc= 55/131	-25	-13	229,9	785	197,9	0,84	2,86	0,72	275,1	1,93	5,50
return gas temp	-23	-10	259,9	888	223,7	0,89	3,05	0,77	291,5	1,99	6,22
RGT= 32/90	-20	-4	324,6	1109	279,4	1,00	3,42	0,86	324,4	2,11	7,79
liquid temp	-15	5	439,0	1499	377,8	1,17	3,98	1,00	376,8	2,28	10,57
Tliq= 55/131	-5	23	726,5	2481	625,2	1,48	5,06	1,28	490,2	2,56	17,66

## Model

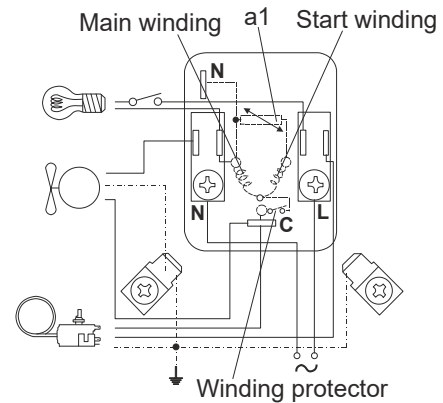
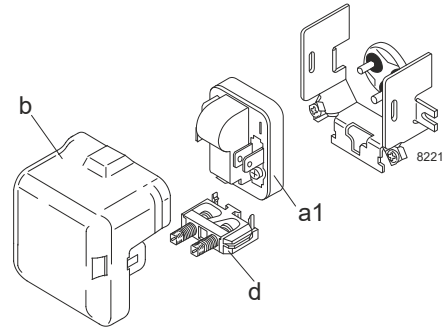
Designation	<b>SC15F</b>	<b>220-240V/50Hz</b>	<b>Conf. 2</b>	Sales code:	<b>104G8500</b>
-------------	--------------	----------------------	----------------	-------------	-----------------

## Configuration

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

## Electrical accessories / wiring diagram

RSIR



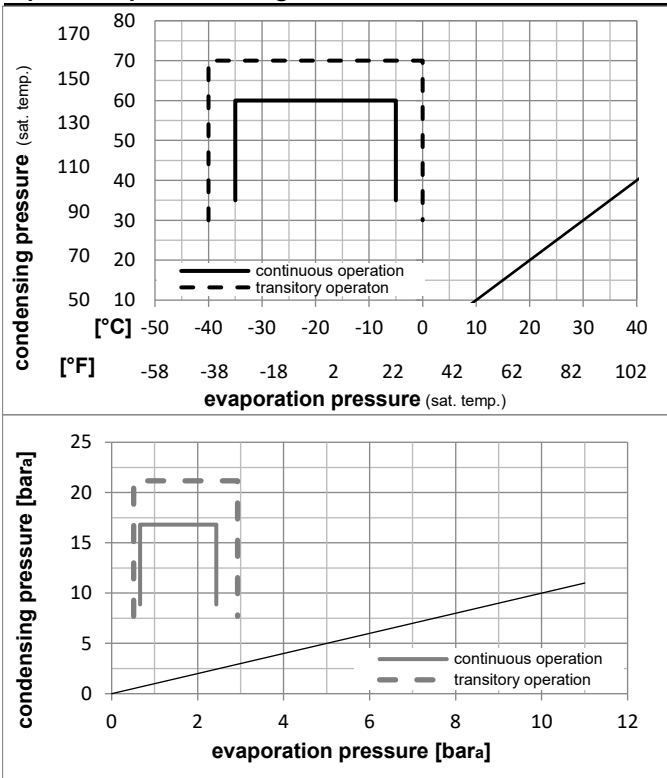
## Ambient/ machine room temperatures minimum /maximum

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

a1	PTC starter (220V, 25Ohm, 6.3mm)	103N0011
d	cord relief	103N1004
b	plastic cover	103N2009

### Model

Designation **SC15F** **220-240V/50Hz** Conf. 2 Sales code: **104G8500**

### Optimization + standard conditions

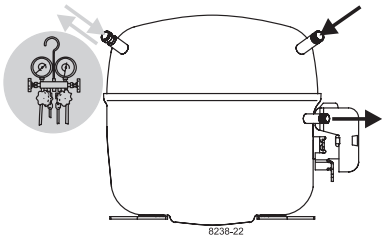
R134a, 220V/50Hz, RSIR, fan 1,5m/s, VDE, EAC

		Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)					Power consumption				
		Return gas temp.			Liquid temp.		Cooling capacity			COP	EER	Current consumption		Ref. mass flow	
		pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	m	
[°C]	[°F]	[°C]	[°F]	[°C]	[°C]							[W]	[A]	[kg/h]	
-23	54	32	32		323,1	1103	278,0	1,11	3,78	0,95	292,2	1,99	6,27	ASHRAE LBP	
-10	130	90	90												
-25	55	32	55		229,9	785	197,9	0,84	2,86	0,72	275,1	1,93	5,50	cecomaf LBP	
-13	131	90	131												
-35	40	20	40		161,1	550	138,6	0,78	2,67	0,67	206,3	1,72	3,53	EN12900 LBP	
-31	104	68	104												
-23	49	4,4	49		280,8	959	241,7	0,95	3,23	0,81	296,7	1,99	7,42	ARI540 LBP	
-10	120	40	120												
-23	41	32	32		392,1	1339	337,4	1,35	4,60	1,16	290,9	2,00	7,61	AHAM LBP	
-10	105	90	90												
-35	45	32	45		147,0	502	126,5	0,72	2,46	0,62	203,9	1,70	3,17	opt	
-31	113	90	113												

### Performance tables

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

	pe		Cooling capacity			COP	EER	P1	I	m	
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]				[kcal/Wh]
[°C / °F]	-35	-31	147,0	502	126,5	0,72	2,46	0,62	203,9	1,70	3,17
cond. pressure	-30	-22	214,5	733	184,6	0,89	3,04	0,77	240,9	1,81	4,64
pc= 45/113	-25	-13	301,9	1031	259,9	1,07	3,67	0,92	281,0	1,95	6,54
return gas temp.	-23	-10	336,2	1148	289,3	1,14	3,89	0,98	295,4	2,00	7,29
RGT= 32/90	-20	-4	409,2	1398	352,2	1,26	4,31	1,09	324,2	2,10	8,89
liquid temp	-15	5	536,2	1831	461,5	1,45	4,95	1,25	370,1	2,24	11,69
Tliq= 45/113	-5	23	849,0	2900	730,7	1,81	6,17	1,55	470,2	2,42	18,67
[°C / °F]	-35	-31	100,0	342	86,1	0,54	1,84	0,46	186,0	1,67	2,38
cond. pressure	-30	-22	155,0	529	133,4	0,68	2,31	0,58	228,9	1,78	3,70
pc= 55/131	-25	-13	229,9	785	197,9	0,84	2,86	0,72	275,1	1,93	5,50
return gas temp	-23	-10	259,9	888	223,7	0,89	3,05	0,77	291,5	1,99	6,22
RGT= 32/90	-20	-4	324,6	1109	279,4	1,00	3,42	0,86	324,4	2,11	7,79
liquid temp	-15	5	439,0	1499	377,8	1,17	3,98	1,00	376,8	2,28	10,57
Tliq= 55/131	-5	23	726,5	2481	625,2	1,48	5,06	1,28	490,2	2,56	17,66



# 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](http://www.secop.com)