

## Single Pack SC12CL 220-240V 50Hz CSIR

Single pack code number: **195B4084**

Position	Title	Code	Amount
1	Compressor SC12CL	104L2623	1
2	Starting relay	117U6005	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>SC12CL</b>	220-240V/50Hz 1~	Sales code:	<b>104L2623</b>
-------------	---------------	------------------	-------------	-----------------

## Compressor design

Oil type	Polyolester	Refrigerant(s)	<b>R404A, R452A, R507</b>
Oil viscosity	32cST	Displacement	12,87cm <sup>3</sup> / 0,79cu.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.	1460cm <sup>3</sup> / 49,4fl.oz		
Weight	13,1kg / 28,9lbs		
Motor protection	1# internal		
Winding resistance main	5,13Ω (at 25°C)		
Winding resistance aux	13,51Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



## General - Configurations with SC12CL

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

## Applications with SC12CL

	<b>Conf. 1</b>	<b>Conf. 2</b>
Refrigerant	R404A	R452A
Application	LBP	LBP
System cooling	fan 3m/s	fan 3m/s
Hot gas defrost	OK	OK
Long interval pull down	OK	OK

## Electrical data - Configurations with SC12CL

	<b>Conf. 1</b>	<b>Conf. 2</b>
Starting device type	relay	relay
Run capacitor	- / -	- / -
Start capacitor	80μF	80μF
LRA (locked rotor amps / 4s)	23,4A	16,2A
RLA (rated load amps / 1s)	4,3A	3,1A
Cut in current	23,4A	16,2A

## Model

Designation

**SC12CL**

220-240V/50Hz 1~

Sales code:

**104L2623**

## 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

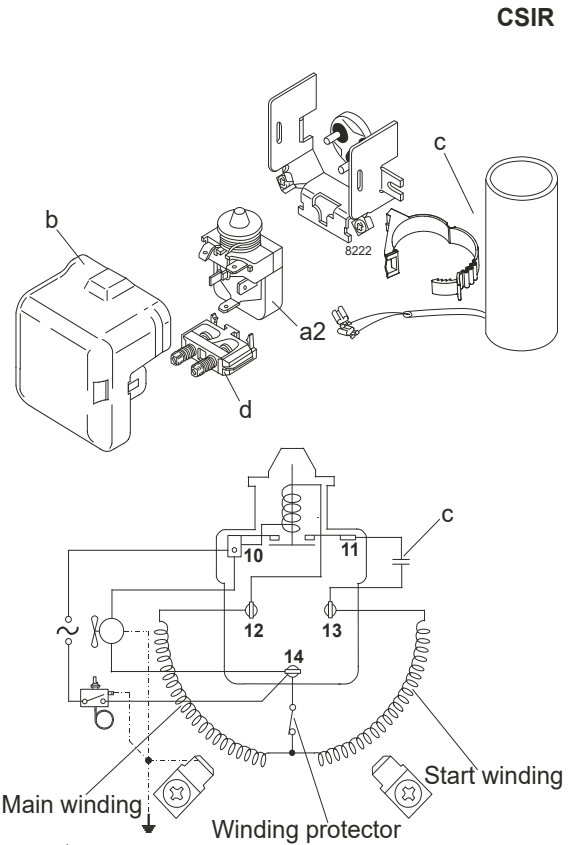
## Model

Designation	<b>SC12CL</b>	<b>220-240V/50Hz</b>	<b>Conf. 1</b>	Sales code:	<b>104L2623</b>
-------------	---------------	----------------------	----------------	-------------	-----------------

## Configuration

Motorconfiguration	CSIR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R404A
Application	LBP
Voltage range	198-254V
Starting torque	HST
Approvals	VDE CCC EAC

## Electrical accessories / wiring diagram

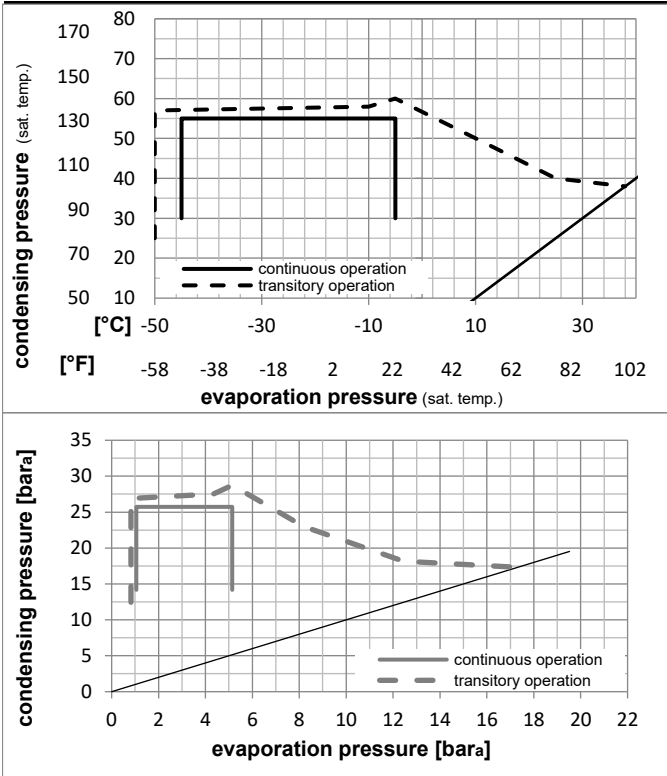


## Ambient/ machine room temperatures minimum /maximum

Ambient temperature range:	10 - 38°C / 50 - 101°F
Machine room temperature range:	10 - 43°C / 50 - 110°F
Compressor cooling:	fan 3m/s

## Operation Limits

## Operation pressure range



## Components

a2	relay	117U6005
c	start capacitor (80μF)	117U5017
d	cord relief	103N1004
b	plastic cover	103N2009

### Model

Designation **SC12CL** **220-240V/50Hz** Conf. 1 Sales code: **104L2623**

### Optimization + standard conditions

R404A, 220V/50Hz, CSIR, fan 3m/s, VDE, CCC, EAC

	Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)			COP	EER			Power consumption			ASHRAE LBP
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]		[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	Ref. mass flow	
	[°C]	[°C]	[°C]	[°C]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]		
	-23	54	32	32	514,5	1757	442,8	1,10	3,75	0,94	468,9	2,89	11,99	ASHRAE LBP	
	[°F]														
	-10	130	90	90											
	-25	55	32	55	335,9	1147	289,1	0,76	2,59	0,65	443,0	2,80	10,50	cecomaf LBP	
	[°F]														
	-13	131	90	131											
	-35	40	20	40	279,2	953	240,2	0,87	2,97	0,75	321,5	2,43	7,59	EN12900 LBP	
	[°F]														
	-31	104	68	104											
	-23	49	4,4	49	410,0	1400	352,9	0,88	2,99	0,75	468,3	2,91	14,52	ARI540 LBP	
	[°F]														
	-10	120	40	120											
	-23	41	32	32	665,5	2273	572,7	1,44	4,92	1,24	461,8	2,87	15,51	AHAM LBP	
	[°F]														
	-10	105	90	90											
	-35	45	32	45	238,8	816	205,5	0,76	2,59	0,65	315,3	2,43	6,38	opt	
	[°F]														
	-31	113	90	113											

### Performance tables

R404A, 220V/50Hz, CSIR, 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]	-45	-49	78,4	268	67,5	0,41	1,40	0,35	191,6	2,15	2,08
cond. pressure	-35	-31	238,8	816	205,5	0,76	2,59	0,65	315,3	2,43	6,38
pc= 45/113	-30	-22	350,6	1197	301,7	0,93	3,16	0,80	378,7	2,61	9,41
return gas temp.	-25	-13	485,6	1659	417,9	1,09	3,74	0,94	443,8	2,82	13,10
RGT= 32/90	-20	-4	645,6	2205	555,6	1,26	4,31	1,09	511,1	3,06	17,52
liquid temp	-15	5	832,2	2842	716,2	1,43	4,89	1,23	581,0	3,34	22,73
Tliq= 45/113	-5	23	1291,8	4412	1111,8	1,77	6,04	1,52	730,5	3,97	35,91
[°C / °F]	-45	-49	22,2	76	19,1	0,15	0,51	0,13	148,0	1,98	0,68
cond. pressure	-35	-31	138,7	474	119,3	0,47	1,62	0,41	293,1	2,33	4,29
pc= 55/131	-30	-22	226,3	773	194,8	0,62	2,11	0,53	367,2	2,55	7,03
return gas temp	-25	-13	335,9	1147	289,1	0,76	2,59	0,65	443,0	2,80	10,50
RGT= 32/90	-20	-4	468,9	1601	403,5	0,90	3,07	0,77	520,9	3,08	14,75
liquid temp	-15	5	627,1	2142	539,7	1,04	3,56	0,90	601,3	3,39	19,89
Tliq= 55/131	-5	23	1025,7	3503	882,7	1,33	4,54	1,14	771,9	4,09	33,20

## Model

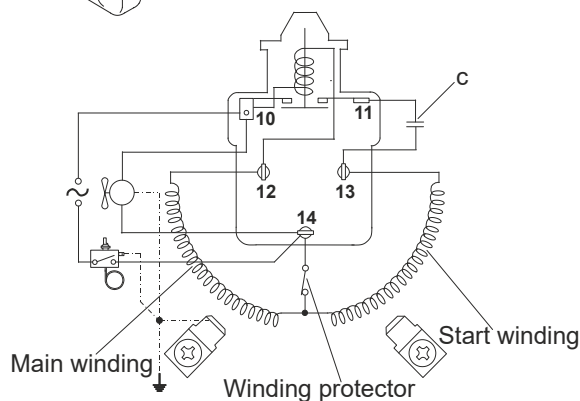
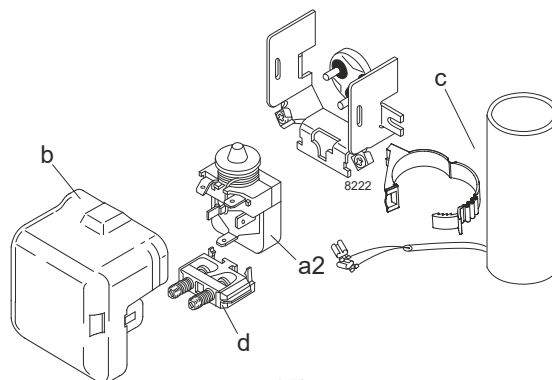
Designation	<b>SC12CL</b>	<b>220-240V/50Hz</b>	<b>Conf. 2</b>	Sales code:	<b>104L2623</b>
-------------	---------------	----------------------	----------------	-------------	-----------------

## Configuration

Motorconfiguration	CSIR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R452A
Application	LBP
Voltage range	198-254V
Starting torque	HST
Approvals	VDE CCC

## Electrical accessories / wiring diagram

CSIR



## Ambient/ machine room temperatures minimum /maximum

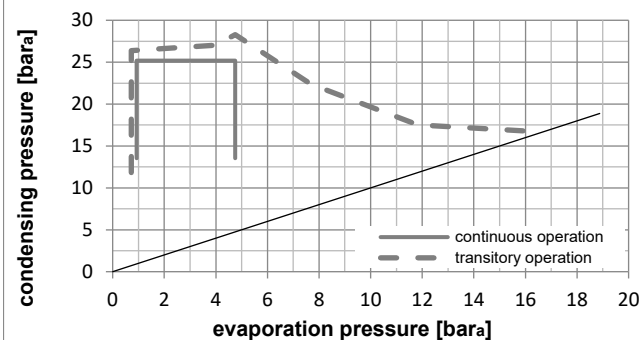
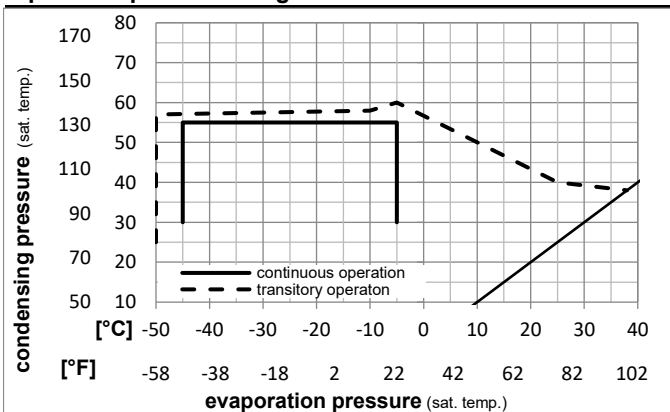
Ambient temperature range: 10 - 38°C / 50 - 101°F

Machine room temperature range: 10 - 43°C / 50 - 110°F

Compressor cooling: fan 3m/s

## Operation Limits

## Operation pressure range



## Components

a2	relay	117U6005
c	start capacitor (80μF)	117U5017
d	cord relief	103N1004
b	plastic cover	103N2009

## Model

Designation **SC12CL** **220-240V/50Hz** Conf. 2 Sales code: **104L2623**

## Optimization + standard conditions

R452A, 220V/50Hz, CSIR, fan 3m/s, VDE, CCC

	Evaporating pressure (saturation temperature)				Cooling capacity			COP	EER	P1	Power consumption			ASHRAE LBP
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]				Current consumption	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	463,8	1584	399,1	1,07	3,66	0,92	432,3	2,87	11,15	ASHRAE LBP
	-10	130	90	90										
	-25	55	32	55	304,6	1040	262,2	0,75	2,56	0,64	406,7	2,78	9,69	cecomaf LBP
	-13	131	90	131										
	-35	40	20	40	246,2	841	211,9	0,84	2,87	0,72	293,1	2,37	6,88	EN12900 LBP
	-31	104	68	104										
	-23	49	4,4	49	376,3	1285	323,9	0,87	2,96	0,75	433,7	2,88	13,53	ARI540 LBP
	-10	120	40	120										
	-23	41	32	32	607,3	2074	522,7	1,41	4,82	1,21	430,4	2,87	14,60	AHAM LBP
	-10	105	90	90										
	-35	45	32	45	208,6	712	179,5	0,73	2,49	0,63	285,6	2,35	5,73	opt
	-31	113	90	113										

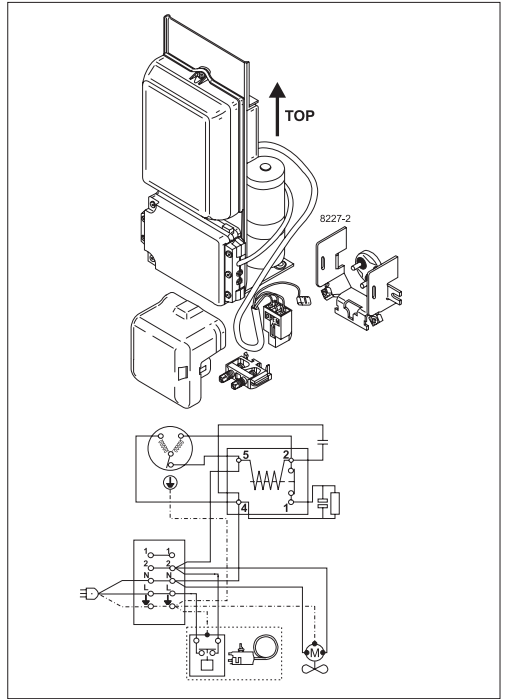
## Performance tables

R452A, 220V/50Hz, CSIR, fan 3m/s, VDE, CCC

	pe		Cooling capacity			COP	EER	P1	I	m	
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]						
[°C / °F]	-45	-49	60,4	206	52,0	0,36	1,22	0,31	168,5	1,92	1,65
cond. pressure	-35	-31	208,6	712	179,5	0,73	2,49	0,63	285,6	2,35	5,73
pc= 45/113	-30	-22	313,8	1072	270,0	0,90	3,09	0,78	347,1	2,57	8,64
return gas temp.	-25	-13	442,0	1509	380,4	1,08	3,67	0,93	410,9	2,80	12,23
RGT= 32/90	-20	-4	595,0	2032	512,1	1,25	4,26	1,07	477,5	3,04	16,55
liquid temp	-15	5	774,8	2646	666,8	1,42	4,84	1,22	547,1	3,29	21,67
Tliq= 45/113	-5	23	1221,4	4171	1051,1	1,75	5,99	1,51	696,9	3,83	34,71
[°C / °F]	-45	-49	15,4	53	13,2	0,12	0,41	0,10	126,7	1,77	0,48
cond. pressure	-35	-31	119,7	409	103,0	0,46	1,56	0,39	262,0	2,26	3,77
pc= 55/131	-30	-22	201,2	687	173,1	0,60	2,06	0,52	333,0	2,52	6,37
return gas temp	-25	-13	304,6	1040	262,2	0,75	2,56	0,64	406,7	2,78	9,69
RGT= 32/90	-20	-4	431,8	1475	371,6	0,89	3,05	0,77	483,4	3,06	13,82
liquid temp	-15	5	584,6	1996	503,1	1,04	3,54	0,89	563,4	3,35	18,84
Tliq= 55/131	-5	23	973,8	3326	838,1	1,33	4,53	1,14	734,9	3,96	31,96



# 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)