

## Model

Designation	<b>SC12CLX.2</b>	<b>220-240V/50Hz 1~</b>	<b>220-240V/60Hz 1~</b>	Sales code:	<b>104L2673</b>
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## Compressor design

Oil type	Polyolester	Refrigerant(s)	<b>R404A, R507</b>
Oil viscosity	32cST	Displacement	12,87cm <sup>3</sup> / 0,79cu.in
Oil quantity	506cm <sup>3</sup> / 17,1fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	1300g / 45,9oz		
Free gas volume comp.	1510cm <sup>3</sup> / 51,1fl.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.	130°C / 266°F		



## General - Configurations with SC12CLX.2

	<b>Conf. 1</b>	<b>Conf. 2</b>
Motorconfiguration	CSIR	CSIR
Power supply (nominal)	220-240V/50Hz	208-230V/60Hz
Number of phases	1	1
Voltage range	198-254V	198-254V
Approvals	UL, VDE, CCC, KC	UL, VDE, CCC, KC
Starting torque	HST	HST
Note	Compressor with noise optimization kit.	

## Applications with SC12CLX.2

	<b>Conf. 1</b>	<b>Conf. 2</b>
Refrigerant	R404A	R404A
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 SC12CLX.2

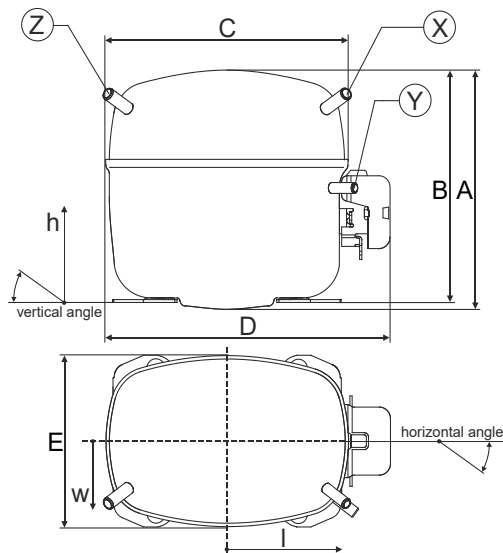
	<b>Conf. 1</b>	<b>Conf. 2</b>
Starting device type	relay	relay
Run capacitor	-/-	-/-
Start capacitor	80μF	80μF
LRA (locked rotor amps / 4s)	23,4A	23,4A
RLA (rated load amps / 1s)	4,3A	4,3A
Cut in current	23,4A	23,4A

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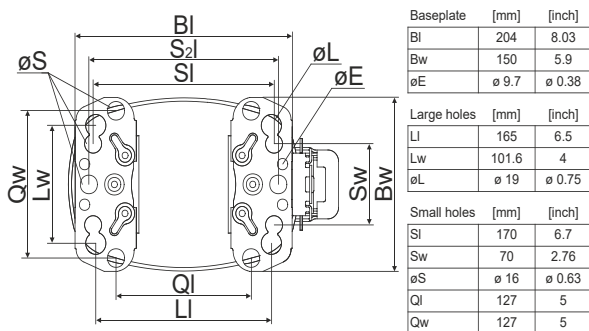
## Compressor dimensions

<b>Housing</b>	A Height	219mm / 8,62in
	B Height	213mm / 8,39in
	C Length shell	239mm / 9,41in
	D Length w. cover	255mm / 10,04in
	E Width	151mm / 5,94in

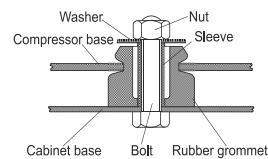


Connectors	Suction		Discharge		Process	
	X		Y		Z	
Diameter [mm]	øi 9,54-9,72		øi 6,41-6,59		øi 6,41-6,59	
(i:inside, o:outside) [in]	øi 0,38-0,38		øi 0,25-0,26		øi 0,25-0,26	
Material	copper		copper		copper	
Horizontal angle ±2°	37°		37°		143°	
Vertical angle ±2°	30°		0°		150°	
Position l/h/w [mm]	107/193/55		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	

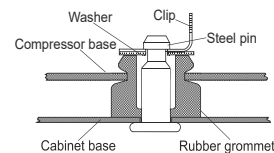
## Compressor fixation



## Bolt joint



## Snap-on



## Mounting accessories

	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

LRA value on compressor label and datasheet may differ due to different test conditions for UL approval.

Provision for PE Grounding is located at the PE Stamp on the compressor

### Model

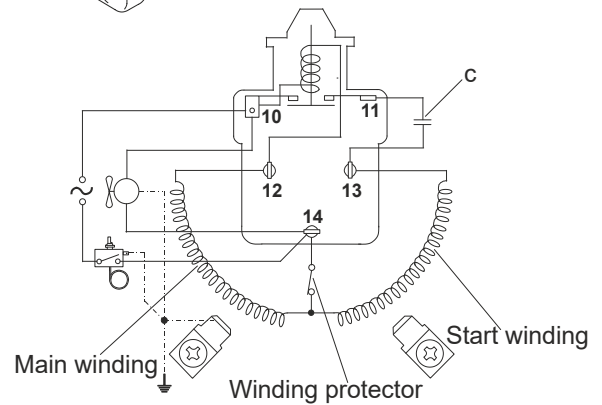
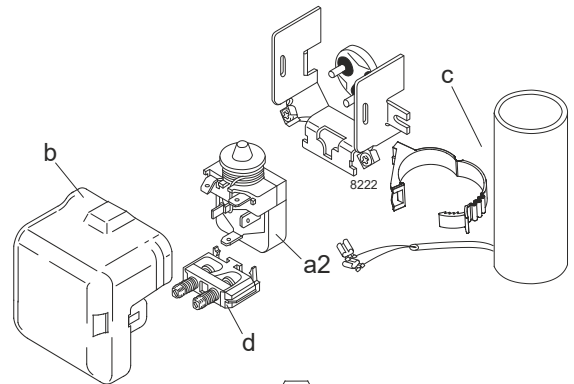
Designation	<b>SC12CLX.2</b>	<b>220-240V/50Hz</b>	Conf. 1	Sales code:	<b>104L2673</b>
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### Configuration

Motorconfiguration	CSIR	
Power supply (nominal)	220-240V/50Hz 1~	
Refrigerant	R404A	
Application	LBP	
Voltage range	198-254V	
Starting torque	HST	
Approvals	UL	SA3693
	VDE	
	CCC	
	KC	

### Electrical accessories / wiring diagram

CSIR



### Ambient/ machine room temperatures minimum /maximum

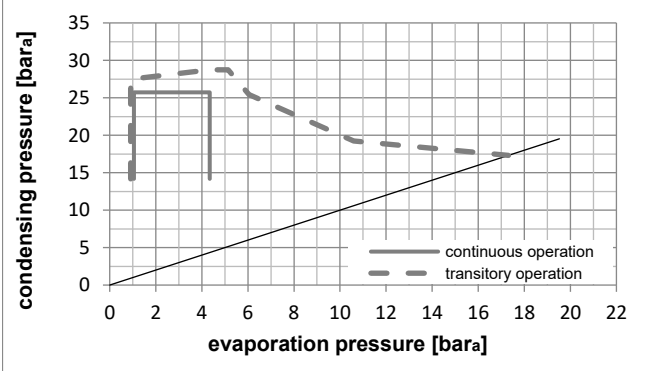
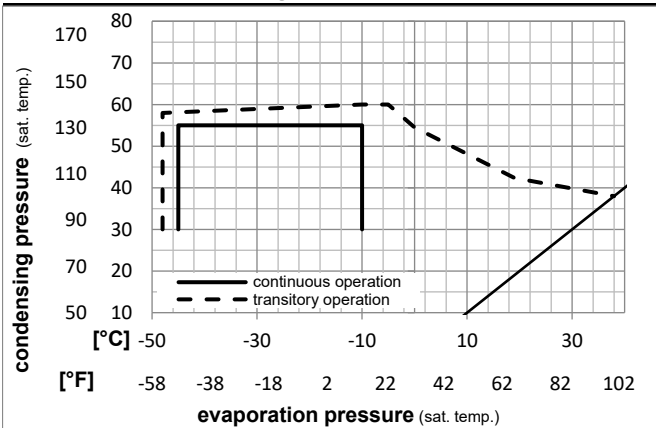
Ambient temperature range: 10 - 38°C / 50 - 101°F

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

Compressor cooling: fan 3m/s

### Operation Limits

### Operation pressure range



### Components

a2	relay	117U6019
c	start capacitor (80µF)	117U5017
d	cord relief	103N1004
b	plastic cover	103N2008

### Alternative components

a2	relay	117U6019
c	start capacitor i-pack 40# (80µF)	117U5067
d	cord relief	103N1004
b	plastic cover	103N2008

## Model

Designation **SC12CLX.2** **220-240V/50Hz** Conf. 1 Sales code: **104L2673**

## Optimization + standard conditions

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

	Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)			COP	EER	Cooling capacity	Power consumption			ASHRAE LBP
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]				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	591,9	2022	509,4	1,15	3,92	0,99	515,6	3,35	13,79	ASHRAE LBP
	[°F]													
	-10	130	90	90										
	-25	55	32	55	398,5	1361	342,9	0,80	2,75	0,69	495,0	3,28	12,45	cecomaf LBP
	[°F]													
	-13	131	90	131										
	-35	40	20	40	321,6	1098	276,7	0,89	3,03	0,76	362,6	3,02	8,74	EN12900 LBP
	[°F]													
	-31	104	68	104										
	-23	49	4,4	49	447,2	1527	384,9	0,89	3,04	0,77	503,0	3,35	15,83	ARI540 LBP
	[°F]													
	-10	120	40	120										
	-23	41	32	32	684,3	2337	588,9	1,41	4,81	1,21	485,6	3,33	15,95	AHAM LBP
	[°F]													
	-10	105	90	90										
	-35	45	32	45	293,7	1003	252,8	0,81	2,75	0,69	364,5	3,00	7,85	opt
	[°F]													
	-31	113	90	113										

## Performance tables

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

	pe		Cooling capacity			COP	EER		P1	I	m
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]		[Btu/Wh]	[kcal/Wh]			
[°C / °F]	-45	-49	130,2	445	112,1	0,51	1,76	0,44	253,2	2,77	3,46
cond. pressure	-34	-30	304,5	1040	262,1	0,82	2,81	0,71	370,6	3,01	8,14
pc= 45/113	-29	-20	424,5	1450	365,3	0,98	3,36	0,85	431,9	3,17	11,41
return gas temp.	-23	-10	567,8	1939	488,7	1,15	3,92	0,99	494,5	3,35	15,35
RGT= 32/90	-21	-5	649,3	2217	558,8	1,23	4,21	1,06	526,9	3,44	17,60
liquid temp	-15	5	833,5	2847	717,3	1,40	4,79	1,21	594,4	3,65	22,77
Tliq= 45/113	-10	14	1025,9	3503	882,9	1,56	5,31	1,34	659,4	3,86	28,25
[°C / °F]	-45	-49	62,4	213	53,7	0,27	0,93	0,23	230,3	2,64	1,92
cond. pressure	-34	-30	213,3	728	183,6	0,57	1,96	0,49	372,1	2,94	6,60
pc= 55/131	-29	-20	315,4	1077	271,5	0,71	2,42	0,61	444,4	3,14	9,81
return gas temp	-23	-10	437,2	1493	376,3	0,85	2,89	0,73	516,9	3,35	13,69
RGT= 32/90	-21	-5	506,4	1730	435,9	0,91	3,12	0,79	553,6	3,46	15,92
liquid temp	-15	5	663,4	2266	571,0	1,05	3,60	0,91	629,1	3,71	21,04
Tliq= 55/131	-10	14	828,0	2828	712,6	1,18	4,04	1,02	700,2	3,95	26,51

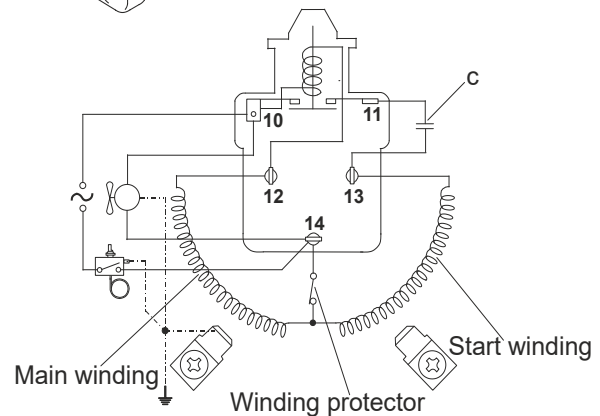
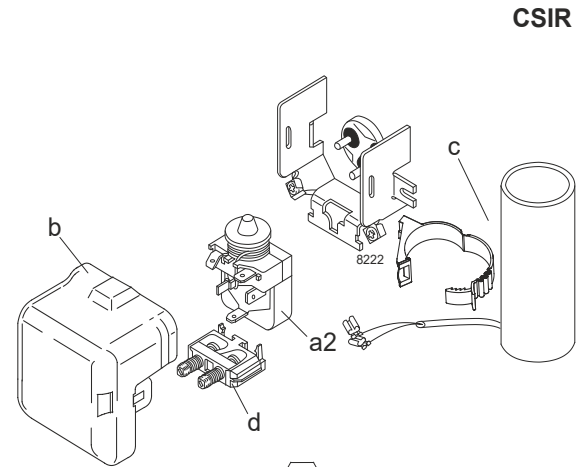
### Model

Designation	<b>SC12CLX.2</b>	<b>208-230V/60Hz</b>	Conf. 2	Sales code:	<b>104L2673</b>
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### Configuration

Motorconfiguration	CSIR	
Power supply (nominal)	208-230V/60Hz 1~	
Refrigerant	R404A	
Application	LBP	
Voltage range	198-254V	
Starting torque	HST	
Approvals	UL	SA3693
	VDE	
	CCC	
	KC	

### Electrical accessories / wiring diagram



### Ambient/ machine room temperatures minimum /maximum

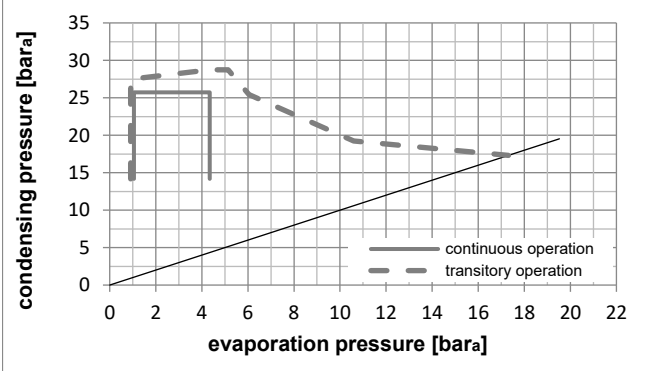
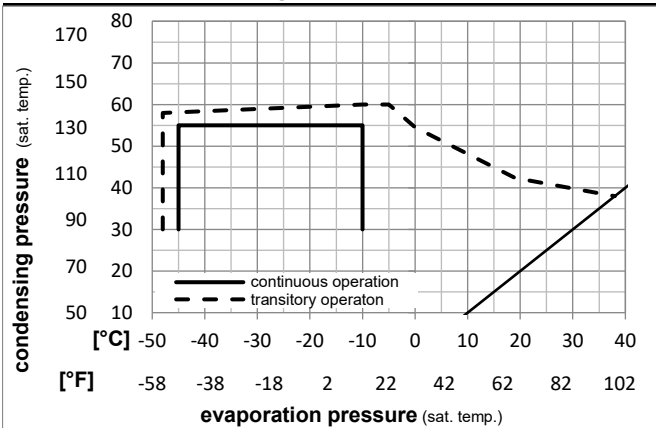
Ambient temperature range: 10 - 38°C / 50 - 101°F

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

Compressor cooling: fan 3m/s

### Operation Limits

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### Components

a2	relay	117U6019
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d	cord relief	103N1004
b	plastic cover	103N2008

### Alternative components

a2	relay	117U6019
c	start capacitor i-pack 40# (80µF)	117U5067
d	cord relief	103N1004
b	plastic cover	103N2008

## Model

Designation **SC12CLX.2** **208-230V/60Hz** Conf. 2 Sales code: **104L2673**

## Optimization + standard conditions

R404A, 220V/60Hz, CSIR, fan 3m/s, UL, VDE, CCC, KC

		Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)					Power consumption				
		Return gas temp.		Liquid temp.		Cooling capacity			COP	EER	P1		Current consumption	Ref. mass flow	
		pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
[°C]	-23	54	32	32	705,2	2408	606,9	1,19	4,07	1,03	592,0	3,09	16,43	ASHRAE LBP	
[°F]	-10	130	90	90											
[°C]	-25	55	32	55	472,6	1614	406,7	0,84	2,85	0,72	565,6	3,00	14,77	cecomaf LBP	
[°F]	-13	131	90	131											
[°C]	-35	40	20	40	378,5	1293	325,7	0,96	3,27	0,82	395,7	2,62	10,28	EN12900 LBP	
[°F]	-31	104	68	104											
[°C]	-23	49	4,4	49	535,6	1829	461,0	0,93	3,18	0,80	575,8	3,09	18,96	ARI540 LBP	
[°F]	-10	120	40	120											
[°C]	-23	41	32	32	824,1	2814	709,2	1,49	5,08	1,28	553,5	3,07	19,20	AHAM LBP	
[°F]	-10	105	90	90											
[°C]	-35	45	32	45	343,1	1172	295,3	0,86	2,94	0,74	398,1	2,60	9,17	opt	
[°F]	-31	113	90	113											

## Performance tables

R404A, 220V/60Hz, CSIR, fan 3m/s, UL, VDE, CCC, KC

	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	141,0	482	121,3	0,55	1,89	0,48	255,2	2,28	3,75
cond. pressure	-34	-30	356,5	1217	306,8	0,88	3,00	0,76	405,9	2,62	9,53
pc= 45/113	-29	-20	504,8	1724	434,4	1,04	3,56	0,90	484,5	2,84	13,56
return gas temp.	-23	-10	682,0	2329	587,0	1,21	4,12	1,04	565,0	3,09	18,43
RGT= 32/90	-21	-5	782,7	2673	673,6	1,29	4,41	1,11	606,5	3,22	21,22
liquid temp	-15	5	1010,5	3451	869,7	1,46	4,98	1,25	693,2	3,52	27,60
Tliq= 45/113	-10	14	1248,3	4263	1074,3	1,61	5,49	1,38	776,8	3,81	34,38
[°C / °F]	-45	-49	57,1	195	49,2	0,25	0,86	0,22	225,7	2,10	1,75
cond. pressure	-34	-30	243,7	832	209,7	0,60	2,04	0,51	407,8	2,53	7,54
pc= 55/131	-29	-20	370,0	1264	318,4	0,74	2,52	0,64	500,6	2,79	11,51
return gas temp	-23	-10	520,6	1778	448,0	0,88	2,99	0,75	593,7	3,09	16,30
RGT= 32/90	-21	-5	606,1	2070	521,7	0,95	3,23	0,81	640,9	3,25	19,06
liquid temp	-15	5	800,2	2733	688,7	1,08	3,70	0,93	737,8	3,59	25,38
Tliq= 55/131	-10	14	1003,7	3428	863,8	1,21	4,13	1,04	829,1	3,92	32,13