

**Model**

Designation	<b>SC12CLX.2</b>	<b>220-240V/60Hz 1~ 220-240V/50Hz 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	500cm <sup>3</sup> / 16,9fl.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**

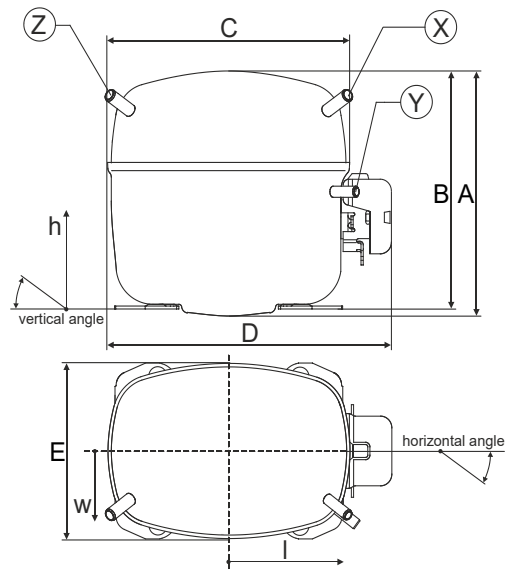
	<b>Conf. 1</b>	<b>Conf. 2</b>
Starting device type	relay	relay
Run capacitor	-/-	-/-
Start capacitor	80μF	80μF
LRA (locked rotor amps / 4s)	23,4A	23,4A
RLA (rated load amps / 1s)	4,3A	4,3A
Cut in current	23,4A	23,4A
IP class	21	21

**Model**

Designation **SC12CLX.2** 220-240V/60Hz 1~ 220-240V/50Hz 1~ Sales code: **104L2673**

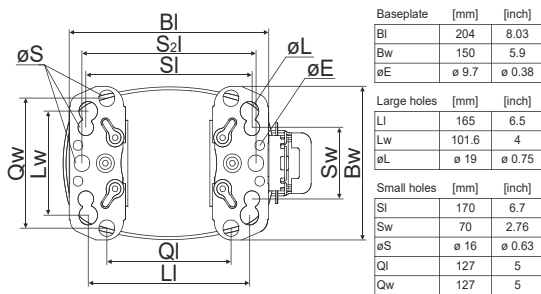
**Compressor dimensions**

<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

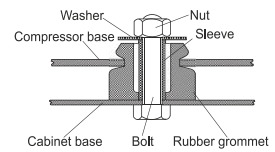


Connectors		Suction	Discharge	Process
		X	Y	Z
Diameter	[mm]	øi 9,54-9,72	øi 6,41-6,59	øi 6,41-6,59
	(i:inside, o:outside) [in]	øi 0,38-0,38	øi 0,25-0,26	øi 0,25-0,26
Material		copper	copper	copper
Horizontal angle	±2°	37°	37°	143°
Vertical angle	±2°	30°	0°	150°
Position l/h/w	[mm]	107/193/55	115/110/63	-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

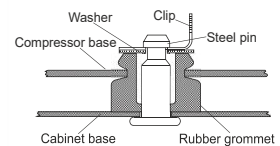
**Compressor fixation**



**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.

**Model**

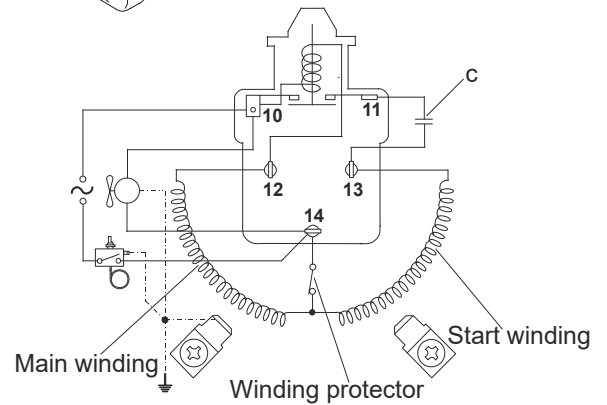
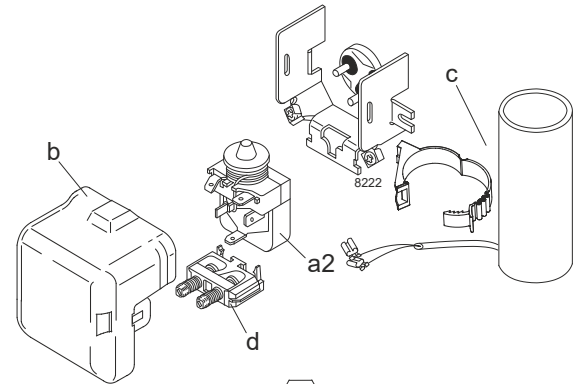
Designation	<b>SC12CLX.2</b>	<b>220-240V/50Hz</b>	<b>Conf. 1</b>	Sales code:	<b>104L2673</b>
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**Configuration**

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

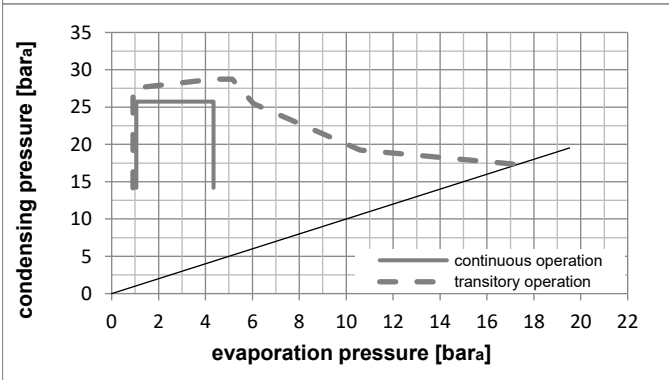
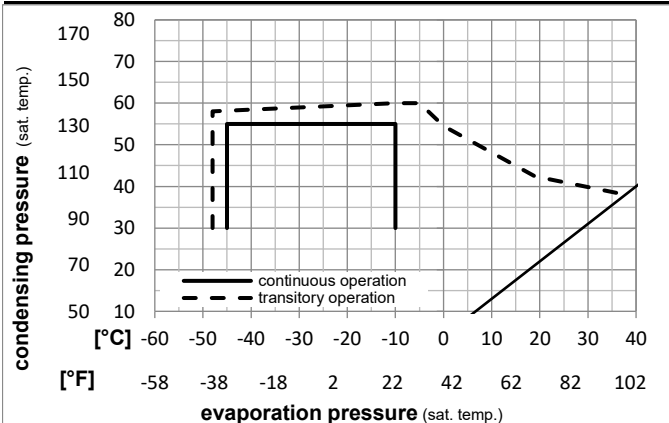


**Ambient temperatures / system cooling**

Ambient temperature min.:	10°C / 50°F
Ambient temperature max.:	38°C / 101°F

System cooling (n/a: outside limits)			
T ambient	LBP	MBP	HBP
32°C / 90°F	fan 3m/s	n/a	n/a
38°C / 100°F	fan 3m/s	n/a	n/a
43°C / 110°F	n/a	n/a	n/a

**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**

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

	Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)						Power consumption			ASHRAE LBP
	pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P1	I	Ref. mass flow		
	[°C]	[°C]	[°C]	[°C]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
	-23,3	54,4	32,2	32,2	591,9	2022	509,4	1,15	3,92	0,99	515,6	3,35	13,79	ASHRAE LBP
	[-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
	[-13]	131	89,6	131										
	-35	40	20	40	321,6	1098	276,7	0,89	3,03	0,76	362,6	3,02	8,74	EN12900 LBP
	[-31]	104	68	104										
	-23,3	48,9	4,44	48,9	447,2	1527	384,9	0,89	3,04	0,77	503,0	3,35	15,83	ARI540 LBP
	[-10]	120	40	120										
	-23,3	40,6	32,2	32,2	684,3	2337	588,9	1,41	4,81	1,21	485,6	3,33	15,95	AHAM LBP
	[-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
	[-31]	113	89,6	113										

**Performance tables**

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]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]
[°C / °F]	-45	-49	130,2	445	112,1	0,51	1,76	0,44	253,2	2,77	3,46
cond. pressure	-34,4	-30	304,5	1040	262,1	0,82	2,81	0,71	370,6	3,01	8,14
pc= 45/113	-28,9	-20	424,5	1450	365,3	0,98	3,36	0,85	431,9	3,17	11,41
return gas temp.	-23,3	-10	567,8	1939	488,7	1,15	3,92	0,99	494,5	3,35	15,35
RGT= 32/90	-20,6	-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	-34,4	-30	213,3	728	183,6	0,57	1,96	0,49	372,1	2,94	6,60
pc= 55/131	-28,9	-20	315,4	1077	271,5	0,71	2,42	0,61	444,4	3,14	9,81
return gas temp	-23,3	-10	437,2	1493	376,3	0,85	2,89	0,73	516,9	3,35	13,69
RGT= 32/90	-20,6	-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

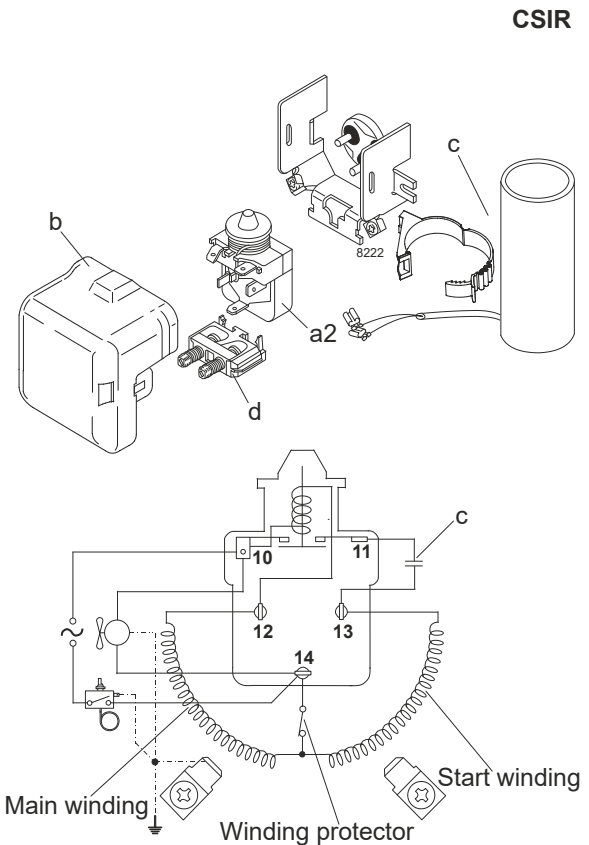
**Model**

Designation	<b>SC12CLX.2</b>	<b>208-230V/60Hz</b>	<b>Conf. 2</b>	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**

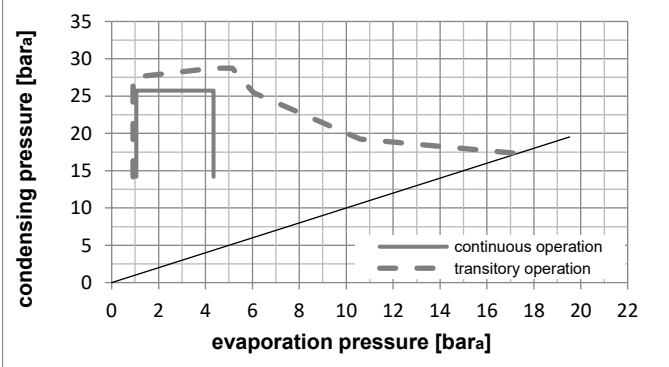
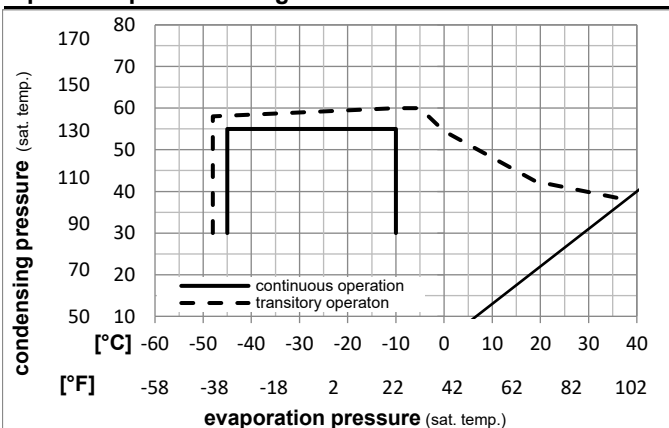


**Ambient temperatures / system cooling**

Ambient temperature min.:	10°C / 50°F
Ambient temperature max.:	38°C / 101°F

System cooling (n/a: outside limits)			
T ambient	LBP	MBP	HBP
32°C / 90°F	fan 3m/s	n/a	n/a
38°C / 100°F	fan 3m/s	n/a	n/a
43°C / 110°F	fan 3m/s	n/a	n/a

**Operation pressure range**



**Components**

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

**Alternative components**

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c	start capacitor i-pack 40# (80µF)	117U5067
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**Model**

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**Optimization + standard conditions**

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.						Current consumption		Ref. mass flow	
		Cooling capacity				COP		EER		P1	I	m			
		pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
[°C]	-23,3	54,4	32,2	32,2	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	89,6	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]	-23,3	48,9	4,44	48,9	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]	-23,3	40,6	32,2	32,2	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	89,6	113											

**Performance tables**

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		-34,4	-30	356,5	1217	306,8	0,88	3,00	0,76	405,9	2,62	9,53
pc= 45/113		-28,9	-20	504,8	1724	434,4	1,04	3,56	0,90	484,5	2,84	13,56
return gas temp.		-23,3	-10	682,0	2329	587,0	1,21	4,12	1,04	565,0	3,09	18,43
RGT= 32/90		-20,6	-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		-34,4	-30	243,7	832	209,7	0,60	2,04	0,51	407,8	2,53	7,54
pc= 55/131		-28,9	-20	370,0	1264	318,4	0,74	2,52	0,64	500,6	2,79	11,51
return gas temp		-23,3	-10	520,6	1778	448,0	0,88	2,99	0,75	593,7	3,09	16,30
RGT= 32/90		-20,6	-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