

Model

Designation	SC12CLX.2	220-240V/50Hz 1~	220-240V/60Hz 1~	Sales code:	104L2663
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R404A, R507
Oil viscosity	32cST	Displacement	12,87cm³ / 0,79cu.in
Oil quantity	499cm³ / 16,9fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	1300g / 45,9oz		
Free gas volume comp.	1510cm³ / 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.	140°C / 284°F		



General - Configurations with SC12CLX.2

	Conf. 1	Conf. 2
Motorconfiguration	CSIR	CSIR
Power supply (nominal)	220-240V/50Hz	208-230V/60Hz
Number of phases	1	1
Voltage range	198-254V	198-254V
Approvals	CCC, VDE, UL	CCC, VDE, UL
Starting torque	HST	HST
Note	Electrical equipment will be pre-assembled to compressor.	

Applications with SC12CLX.2

	Conf. 1	Conf. 2
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

	Conf. 1	Conf. 2
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

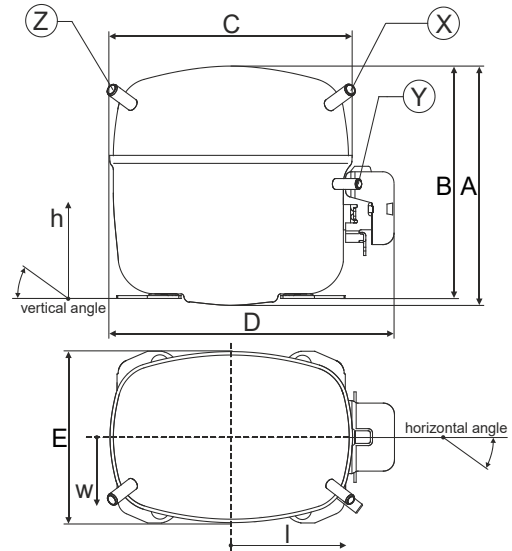
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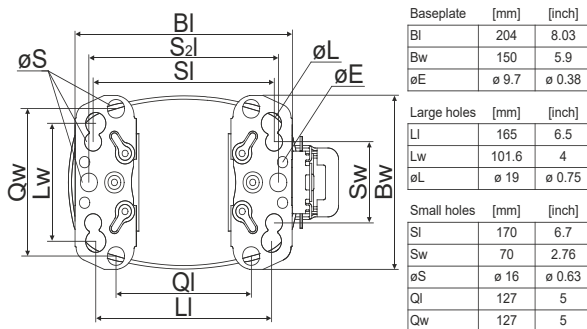
Compressor dimensions

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

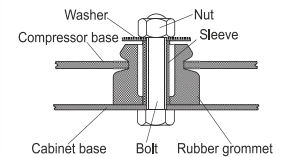
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8,11-8,29	øi 6,41-6,59	øi 6,41-6,59
(i:inside, o:outside) [in]	øi 0,32-0,33	øi 0,25-0,26	øi 0,25-0,26
Material	copper	copper	copper
Horizontal angle ±2°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°
Position l/h/w [mm]	107/193/55	115/110/63	-107/193/55
[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



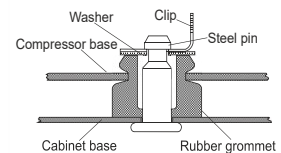
Compressor fixation



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

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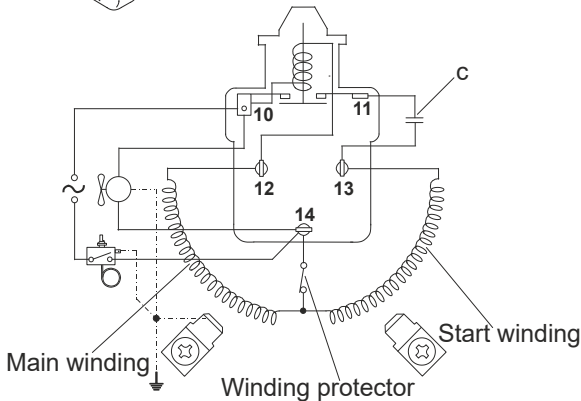
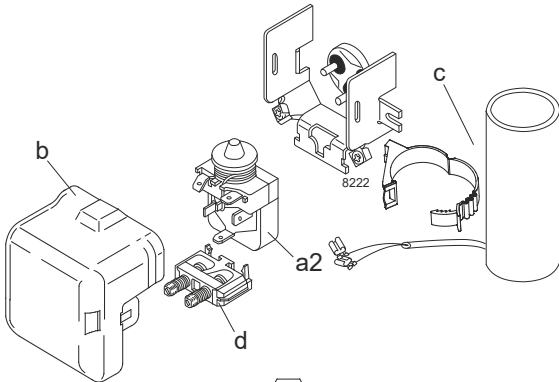
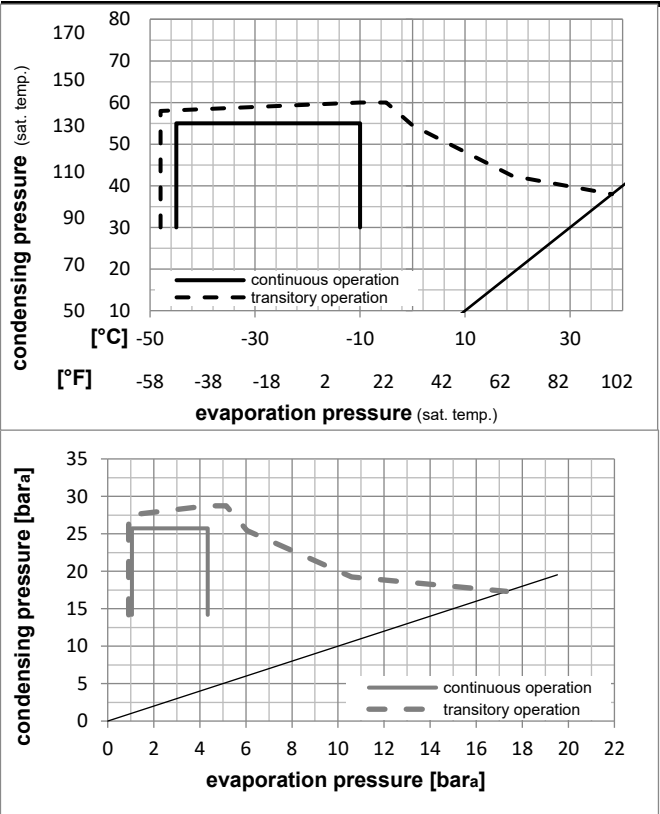
Configuration		Electrical accessories / wiring diagram		
Motorconfiguration	CSIR	CSIR		
Power supply (nominal)	220-240V/50Hz 1~			
Refrigerant	R404A			
Application	LBP			
Voltage range	198-254V			
Starting torque	HST			
Approvals	CCC			
	VDE			
	UL			

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 (will be pre-assembled)

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:	104L2663
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Optimization + standard conditions

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

Evaporating pressure (saturation temperature)					Condensing pressure (saturation temperature)						Power consumption				ASHRAE LBP
Return gas temp.					Current consumption										
Liquid temp.					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	54	32	32	591,9	2022	509,4	1,15	3,92	0,99	515,6	3,35	13,79		
[°F]	-10	130	90	90											
														ASHRAE LBP	
[°C]	-25	55	32	55	398,5	1361	342,9	0,80	2,75	0,69	495,0	3,28	12,45		
[°F]	-13	131	90	131											
														cecomaf LBP	
[°C]	-35	40	20	40	321,6	1098	276,7	0,89	3,03	0,76	362,6	3,02	8,74		
[°F]	-31	104	68	104											
														EN12900 LBP	
[°C]	-23	49	4,4	49	447,2	1527	384,9	0,89	3,04	0,77	503,0	3,35	15,83		
[°F]	-10	120	40	120											
														ARI540 LBP	
[°C]	-23	41	32	32	684,3	2337	588,9	1,41	4,81	1,21	485,6	3,33	15,95		
[°F]	-10	105	90	90											
														AHAM LBP	
[°C]	-35	45	32	45	293,7	1003	252,8	0,81	2,75	0,69	364,5	3,00	7,85		
[°F]	-31	113	90	113											
														opt	
[°C]	-35	45	32	45	293,7	1003	252,8	0,81	2,75	0,69	364,5	3,00	7,85		
[°F]	-31	113	90	113											

Performance tables

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

	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	-35	-31	293,7	1003	252,8	0,81	2,75	0,69	364,5	3,00	7,85
pc= 45/113	-30	-22	398,7	1362	343,1	0,95	3,25	0,82	419,5	3,13	10,70
return gas temp.	-25	-13	522,2	1783	449,4	1,10	3,75	0,95	475,5	3,29	14,09
RGT= 32/90	-20	-4	666,4	2276	573,5	1,25	4,27	1,08	533,4	3,46	18,08
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	-35	-31	204,1	697	175,6	0,56	1,91	0,48	364,9	2,93	6,31
pc= 55/131	-30	-22	293,5	1003	252,6	0,68	2,33	0,59	430,0	3,10	9,12
return gas temp	-25	-13	398,5	1361	342,9	0,80	2,75	0,69	495,0	3,28	12,45
RGT= 32/90	-20	-4	521,0	1779	448,4	0,93	3,17	0,80	561,0	3,49	16,39
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	SC12CLX.2	208-230V/60Hz	Conf. 2	Sales code: 104L2663

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

Ambient/ machine room temperatures minimum /maximum

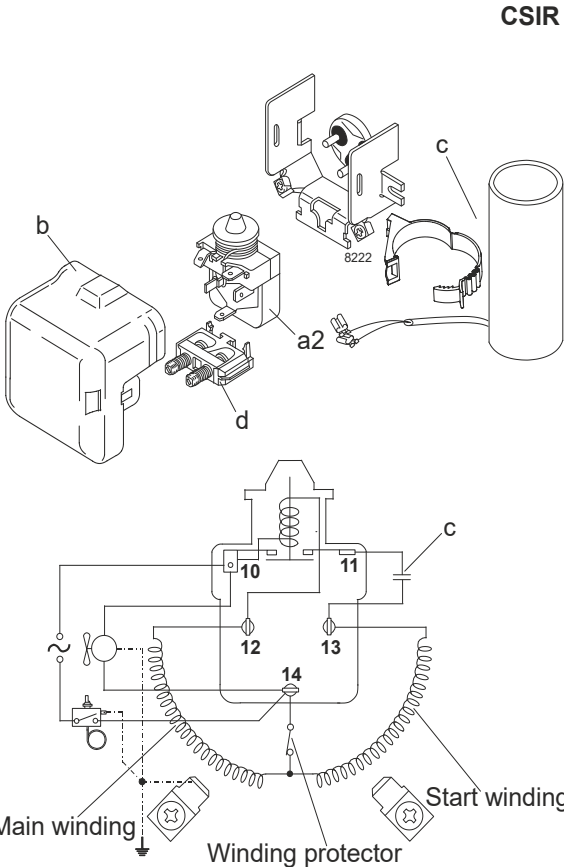
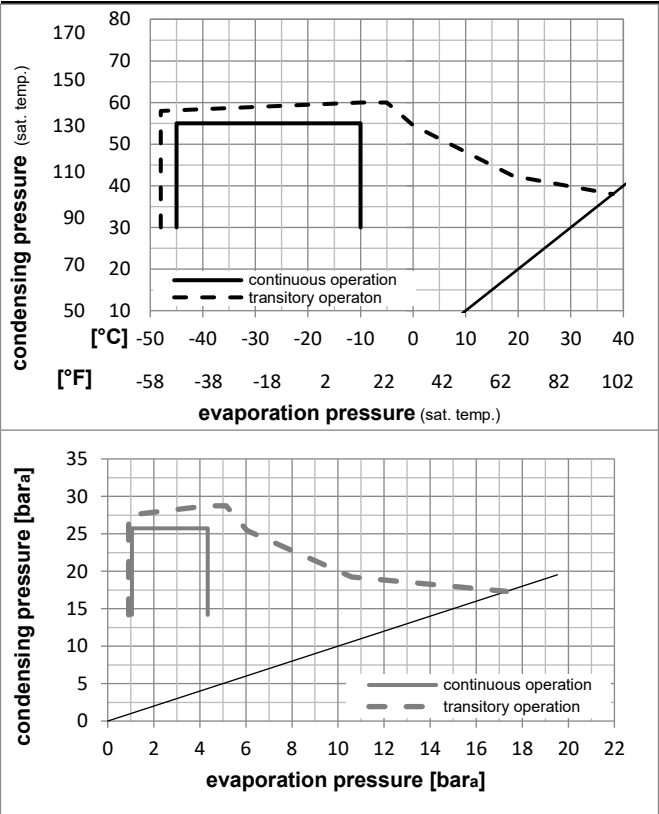
Ambient temperature range: 10 - 38°C / 50 - 101°F

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

Compressor cooling: fan 3m/s

Operation Limits

Operation pressure range



Components (will be pre-assembled)

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	208-230V/60Hz	Conf. 2	Sales code:	104L2663
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Optimization + standard conditions

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

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

Performance tables

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

	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	-35	-31	343,1	1172	295,3	0,86	2,94	0,74	398,1	2,60	9,17
pc= 45/113	-30	-22	472,9	1615	407,0	1,01	3,45	0,87	468,7	2,79	12,70
return gas temp.	-25	-13	625,6	2137	538,4	1,16	3,95	1,00	540,6	3,01	16,88
RGT= 32/90	-20	-4	803,9	2745	691,8	1,31	4,46	1,12	615,0	3,25	21,81
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	-35	-31	232,3	793	199,9	0,58	1,99	0,50	398,5	2,50	7,18
pc= 55/131	-30	-22	342,9	1171	295,1	0,71	2,43	0,61	482,1	2,74	10,66
return gas temp	-25	-13	472,6	1614	406,7	0,84	2,85	0,72	565,6	3,00	14,77
RGT= 32/90	-20	-4	624,1	2132	537,1	0,96	3,28	0,83	650,4	3,28	19,64
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