

Model

Designation	SC18CLX.2	220-240V/50Hz 1~	Sales code:	104L2173
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R404A, R452A, R507
Oil viscosity	32cST	Displacement	17,69cm ³ / 1,08cu.in
Oil quantity	556cm ³ / 18,8fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	1300g / 45,9oz		
Free gas volume comp.	1460cm ³ / 49,4fl.oz		
Weight	13,8kg / 30,4lbs		
Motor protection	1# internal		
Winding resistance main	3,3Ω (at 25°C)		
Winding resistance aux	16,5Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



General - Configurations with SC18CLX.2

	Conf. 1	Conf. 2
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, EAC
Starting torque	HST	HST
Note	Protector and cover are included and pre-assembled to compressor.	

Applications with SC18CLX.2

	Conf. 1	Conf. 2
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 SC18CLX.2

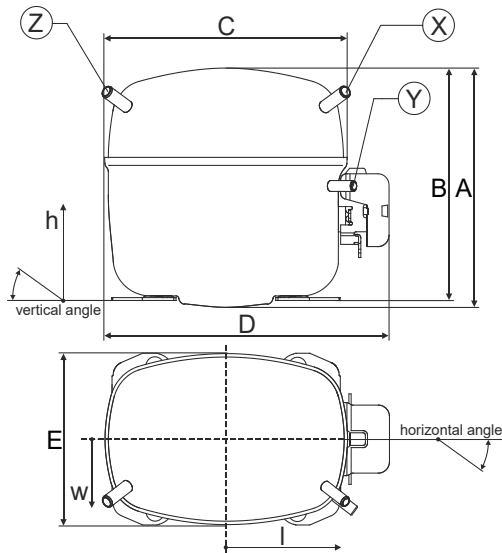
	Conf. 1	Conf. 2
Starting device type	relay	relay
Run capacitor	-/-	-/-
Start capacitor	125μF	125μF
LRA (locked rotor amps / 4s)	23,5A	23,5A
RLA (rated load amps / 1s)	4,5A	4,5A
Cut in current	23,5A	23,5A

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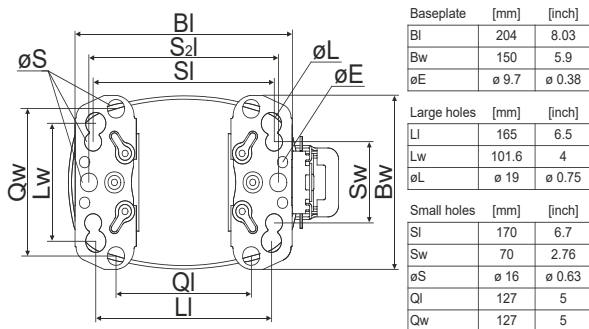
Compressor dimensions

Housing	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



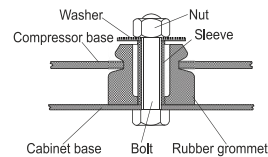
Connectors		Suction	Discharge	Process
		X	Y	Z
Diameter	[mm]	øi 9,54-9,72	øi 6,41-6,59	øi 6,41-6,59
(i:inside, o:outside)	[in]	øi 0,38-0,38	øi 0,25-0,26	øi 0,25-0,26
Material		copper	copper	copper
Horizontal angle	±2°	37°	37°	143°
Vertical angle	±2°	30°	0°	150°
Position l/h/w	[mm]	107/193/55	115/110/63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

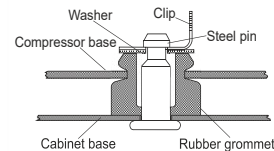


Baseplate	[mm]	[inch]
BI	204	8.03
Bw	150	5.9
øE	ø 9.7	ø 0.38
Large holes	[mm]	[inch]
LI	165	6.5
LW	101.6	4
øL	ø 19	ø 0.75
Small holes	[mm]	[inch]
SI	170	6.7
Sw	70	2.76
øS	ø 16	ø 0.63
QI	127	5
Qw	127	5

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

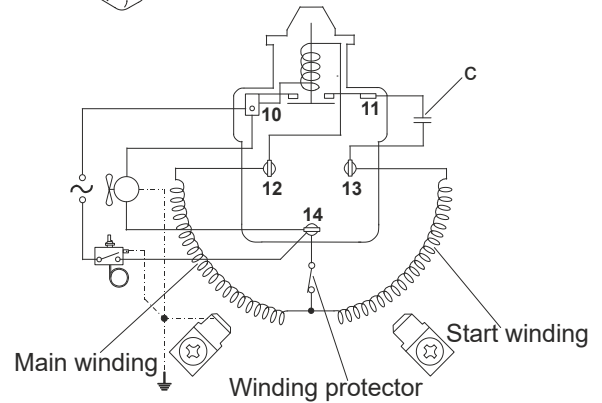
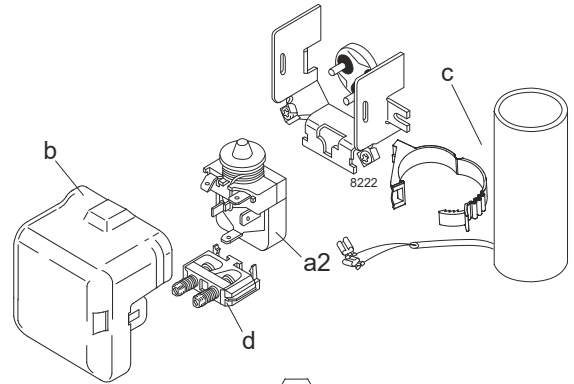
Designation	SC18CLX.2	220-240V/50Hz	Conf. 1	Sales code:	104L2173
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Configuration

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

Electrical accessories / wiring diagram

CSIR



Ambient/ machine room temperatures minimum /maximum

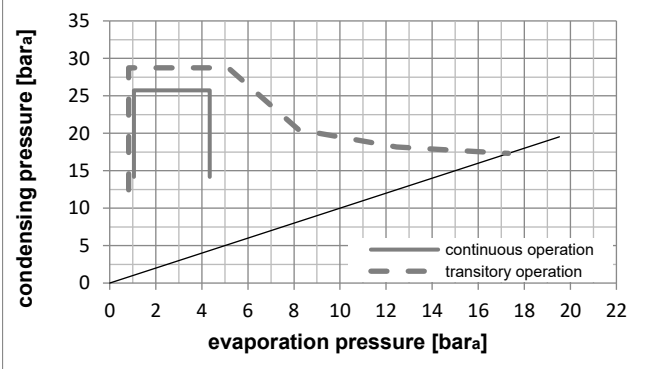
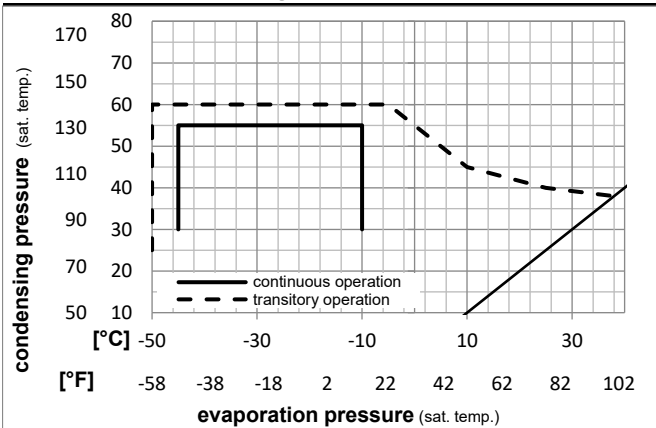
Ambient temperature range: 10 - 38°C / 50 - 101°F

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

Compressor cooling: fan 3m/s

Operation Limits

Operation pressure range



Components (protector + ~holder + cover: pre assembled)

a2	relay	117U6013
c	start capacitor (125µF)	117U5012
d	cord relief	103N1004
b	plastic cover	103N2009

Model

Designation **SC18CLX.2** **220-240V/50Hz** Conf. 1 Sales code: **104L2173**

Optimization + standard conditions

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

Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)			Return gas temp.			Liquid temp.			Cooling capacity			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	[W]	[A]	m	[kg/h]					
[°C]	-23	54	32	32	884,0	3019	760,8	1,20	4,09	1,03	738,5	4,46	20,60								
[°F]	-10	130	90	90																	
[°C]	-25	55	32	55	595,0	2032	512,1	0,84	2,87	0,72	708,4	4,34	18,60								cecomaf LBP
[°F]	-13	131	90	131																	
[°C]	-35	40	20	40	480,2	1640	413,3	0,93	3,19	0,80	514,4	3,68	13,05								EN12900 LBP
[°F]	-31	104	68	104																	
[°C]	-23	49	4,4	49	667,9	2281	574,8	0,93	3,17	0,80	720,0	4,42	23,65								ARI540 LBP
[°F]	-10	120	40	120																	
[°C]	-23	41	32	32	1021,9	3490	879,5	1,47	5,03	1,27	694,5	4,34	23,81								AHAM LBP
[°F]	-10	105	90	90																	
[°C]	-35	45	32	45	438,6	1498	377,5	0,85	2,90	0,73	517,2	3,68	11,73								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	194,5	664	167,4	0,55	1,88	0,47	354,1	3,13	5,17
cond. pressure	-35	-31	438,6	1498	377,5	0,85	2,90	0,73	517,2	3,68	11,73
pc= 45/113	-30	-22	595,4	2033	512,4	1,00	3,40	0,86	597,7	3,98	15,98
return gas temp.	-25	-13	779,8	2663	671,1	1,15	3,92	0,99	679,7	4,28	21,03
RGT= 32/90	-20	-4	995,1	3399	856,4	1,30	4,44	1,12	764,6	4,60	27,00
liquid temp	-15	5	1244,8	4251	1071,2	1,46	4,98	1,25	854,0	4,92	34,00
Tliq= 45/113	-10	14	1532,0	5232	1318,4	1,61	5,51	1,39	949,3	5,26	42,19
[°C / °F]	-45	-49	93,2	318	80,2	0,29	0,99	0,25	320,5	3,01	2,86
cond. pressure	-35	-31	304,7	1041	262,2	0,59	2,01	0,51	517,6	3,65	9,43
pc= 55/131	-30	-22	438,4	1497	377,3	0,72	2,44	0,62	613,0	3,99	13,62
return gas temp	-25	-13	595,0	2032	512,1	0,84	2,87	0,72	708,4	4,34	18,60
RGT= 32/90	-20	-4	778,0	2657	669,6	0,97	3,30	0,83	805,1	4,70	24,48
liquid temp	-15	5	990,8	3384	852,7	1,10	3,74	0,94	904,8	5,07	31,42
Tliq= 55/131	-10	14	1236,5	4223	1064,1	1,23	4,19	1,05	1009,0	5,45	39,58

Model

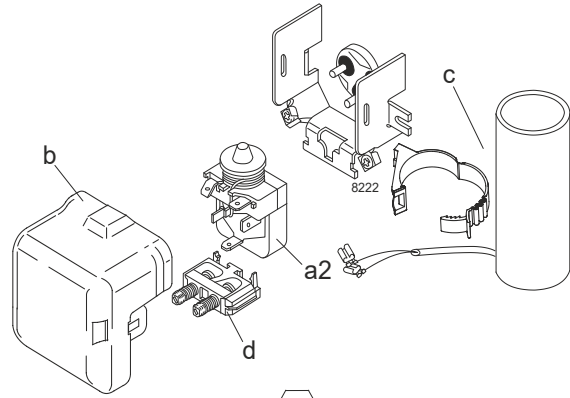
Designation	SC18CLX.2	220-240V/50Hz	Conf. 2	Sales code:	104L2173
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Configuration

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

Electrical accessories / wiring diagram

CSIR

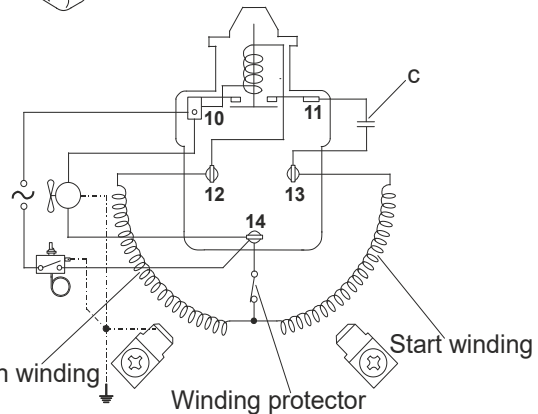


Ambient/ machine room temperatures minimum /maximum

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

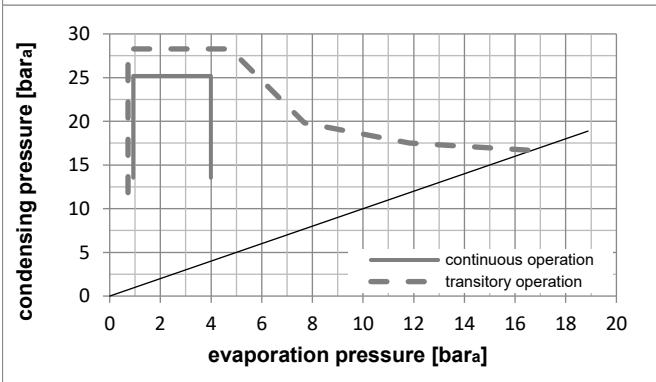
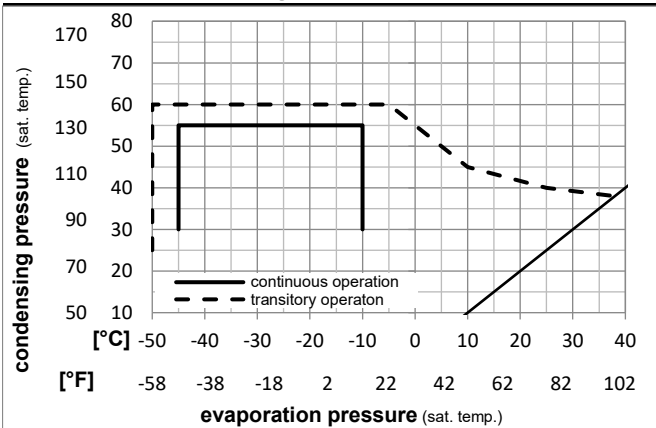
Machine room temperature range: 10 - 43°C / 50 - 110°F

Compressor cooling: fan 3m/s



Operation Limits

Operation pressure range



Components (protector + ~holder + cover: pre assembled)

a2	relay	117U6013
c	start capacitor (125µF)	117U5012
d	cord relief	103N1004
b	plastic cover	103N2009

Model

Designation **SC18CLX.2** **220-240V/50Hz** Conf. 2 Sales code: **104L2173**

Optimization + standard conditions

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

		Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)						Power consumption			
		Return gas temp.		Liquid temp.		Cooling capacity		COP	EER		P1	I	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	808,1	2760	695,5	1,18	4,02	1,01	685,7	4,27	19,42	ASHRAE LBP	
[°F]	-10	130	90	90											
[°C]	-25	55	32	55	548,3	1873	471,9	0,84	2,86	0,72	655,4	4,16	17,45	cecomaf LBP	
[°F]	-13	131	90	131											
[°C]	-35	40	20	40	432,8	1478	372,4	0,92	3,13	0,79	472,0	3,52	12,08	EN12900 LBP	
[°F]	-31	104	68	104											
[°C]	-23	49	4,4	49	620,4	2119	533,9	0,93	3,16	0,80	670,4	4,22	22,30	ARI540 LBP	
[°F]	-10	120	40	120											
[°C]	-23	41	32	32	940,6	3212	809,5	1,45	4,96	1,25	648,2	4,14	22,61	AHAM LBP	
[°F]	-10	105	90	90											
[°C]	-35	45	32	45	393,9	1345	339,0	0,83	2,85	0,72	472,7	3,52	10,81	opt	
[°F]	-31	113	90	113											

Performance tables

R452A, 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	164,5	562	141,6	0,52	1,78	0,45	315,4	2,97	4,49
cond. pressure	-35	-31	393,9	1345	339,0	0,83	2,85	0,72	472,7	3,52	10,81
pc= 45/113	-30	-22	542,4	1852	466,8	0,98	3,36	0,85	551,5	3,80	14,94
return gas temp.	-25	-13	718,2	2453	618,1	1,14	3,88	0,98	632,2	4,08	19,87
RGT= 32/90	-20	-4	924,8	3158	795,9	1,29	4,41	1,11	716,1	4,38	25,72
liquid temp	-15	5	1165,9	3982	1003,4	1,45	4,95	1,25	804,7	4,69	32,61
Tliq= 45/113	-10	14	1444,9	4935	1243,5	1,61	5,49	1,38	899,2	5,02	40,71
[°C / °F]	-45	-49	72,5	248	62,4	0,26	0,90	0,23	276,4	2,84	2,27
cond. pressure	-35	-31	271,4	927	233,6	0,58	1,98	0,50	467,7	3,51	8,56
pc= 55/131	-30	-22	398,3	1360	342,8	0,71	2,42	0,61	561,3	3,83	12,61
return gas temp	-25	-13	548,3	1873	471,9	0,84	2,86	0,72	655,4	4,16	17,45
RGT= 32/90	-20	-4	724,9	2476	623,9	0,96	3,29	0,83	751,4	4,50	23,20
liquid temp	-15	5	931,7	3182	801,8	1,10	3,74	0,94	850,7	4,85	30,03
Tliq= 55/131	-10	14	1172,2	4003	1008,8	1,23	4,19	1,06	954,5	5,21	38,10