

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	550cm ³ / 18,6fl.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

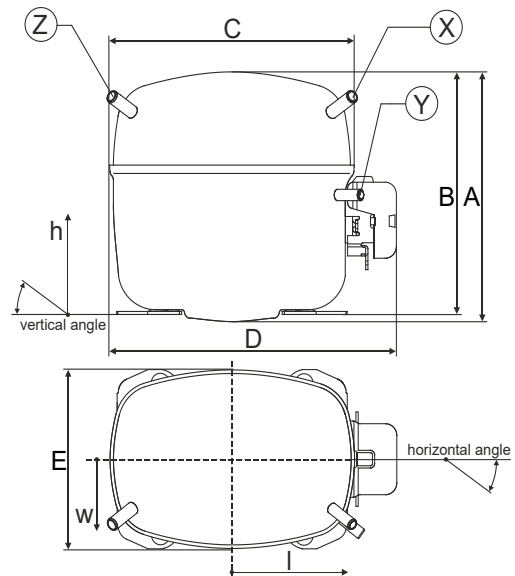
	Conf. 1	Conf. 2
Starting device type	relay	relay
Run capacitor	-/-	-/-
Start capacitor	125μF	125μF
LRA (locked rotor amps / 4s)	23,5A	23,5A
RLA (rated load amps / 1s)	4,5A	4,5A
Cut in current	23,5A	23,5A
IP class	21	21

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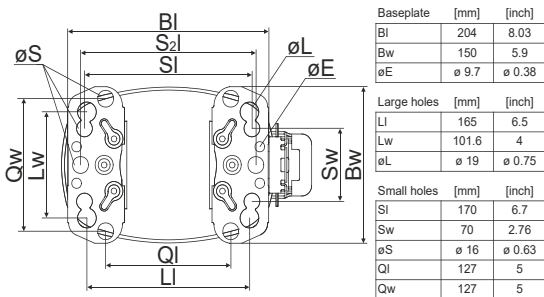
Compressor dimensions

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

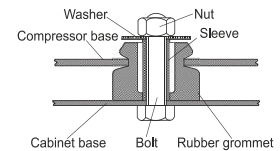


Connectors		Suction	Discharge	Process
		X	Y	Z
Diameter	[mm]	øi 9,54-9,72	øi 6,41-6,59	øi 6,41-6,59
	(i:inside, o:outside) [in]	øi 0,38-0,38	øi 0,25-0,26	øi 0,25-0,26
Material		copper	copper	copper
Horizontal angle	±2°	37°	37°	143°
Vertical angle	±2°	30°	0°	150°
Position l/h/w	[mm]	107/193/55	115/110/63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

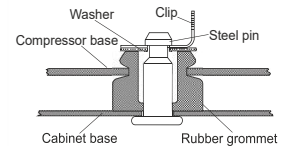
Compressor fixation



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

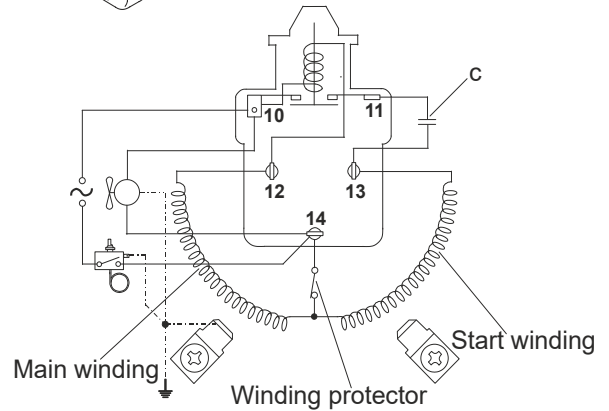
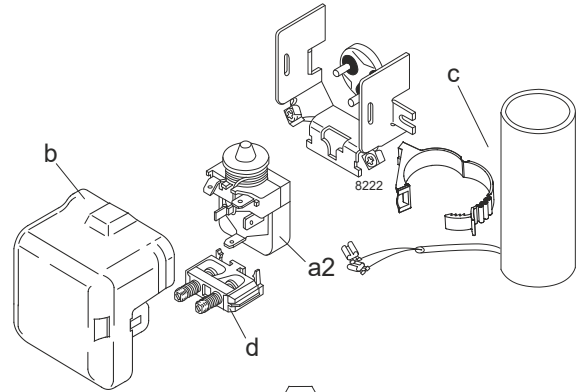
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Configuration

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

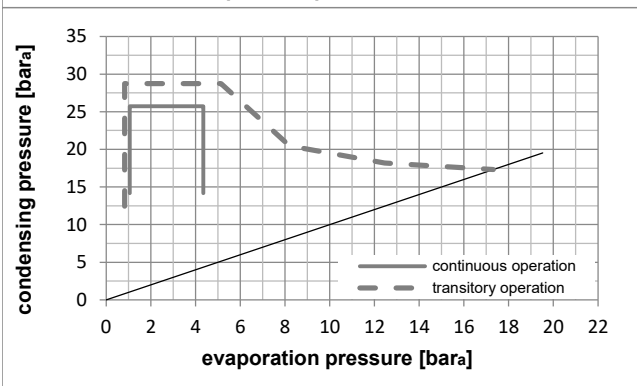
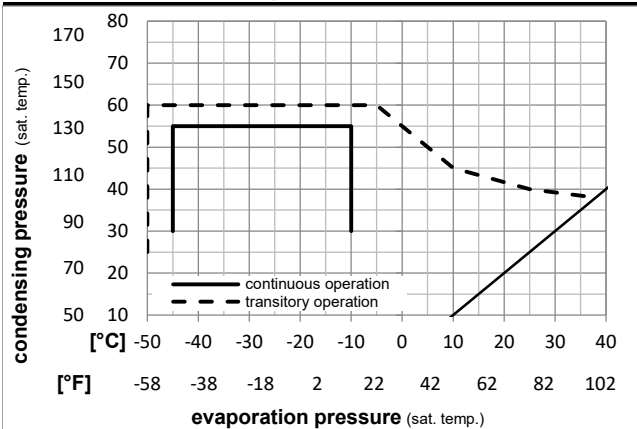


Ambient temperatures / system cooling

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 (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
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Optimization + standard conditions

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

		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]	-23,3	54,4	32,2	32,2	884,0	3019	760,8	1,20	4,09	1,03	738,5	4,46	20,60	ASHRAE LBP			
[°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	89,6	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]	-23,3	48,9	4,44	48,9	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]	-23,3	40,6	32,2	32,2	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	89,6	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		

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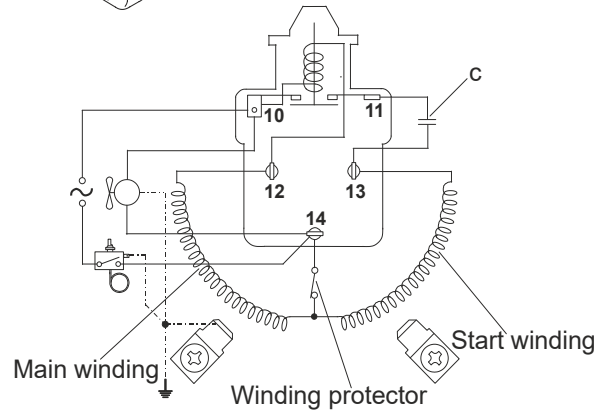
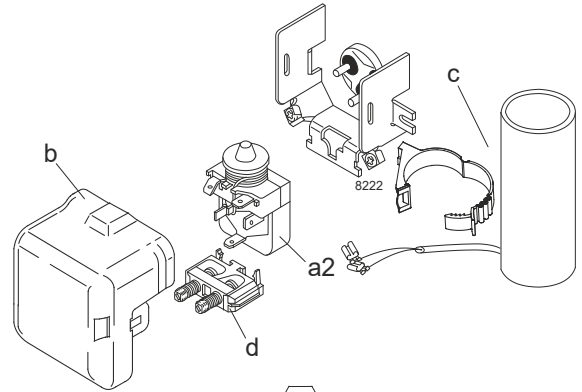
Designation	SC18CLX.2	220-240V/50Hz	Conf. 2	Sales code:	104L2173
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Configuration

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

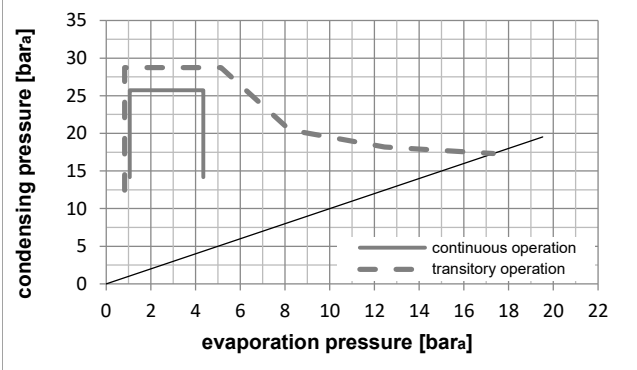
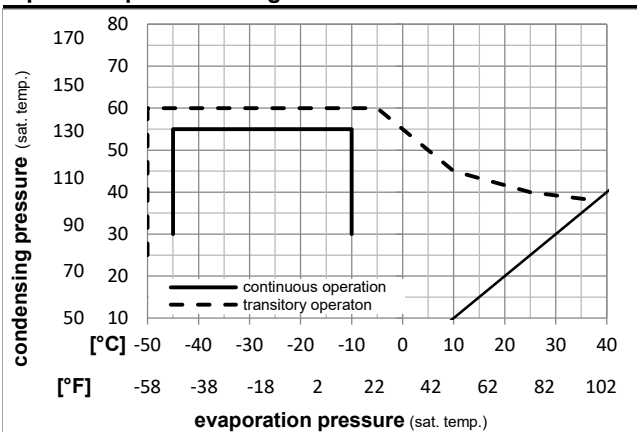


Ambient temperatures / system cooling

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 (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)				Cooling capacity						Power consumption			Ref. mass flow m	
pe	pc	RGT	Tliq									P1	I			
[°C]	[°C]	[°C]	[°C]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]				
-23	54,4	32,2	32,2	808,1	2760	695,5	1,18	4,02	1,01	685,7	4,27	19,42	ASHRAE	LBP		
[°F]	-10	130	90													
-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	89,6													
-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													
-23	48,9	4,44	48,9	620,4	2119	533,9	0,93	3,16	0,80	670,4	4,22	22,30	ARI540	LBP		
[°F]	-10	120	40													
-23	40,6	32,2	32,2	940,6	3212	809,5	1,45	4,96	1,25	648,2	4,14	22,61	AHAM	LBP		
[°F]	-10	105	90													
-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	89,6													

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			