

Model

Designation	SC18CLX.2	115V/60Hz 1~	Sales code:	104L2198
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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	14,2kg / 31,3lbs		
Motor protection	external		
Winding resistance main	0,6Ω (at 25°C)		
Winding resistance aux	3,2Ω (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	CSCR	CSCR
Power supply (nominal)	115V/60Hz	115V/60Hz
Number of phases	1	1
Voltage range	103-127V	103-127V
Approvals	UL	UL
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	-/-	-/-

Electrical data - Configurations with SC18CLX.2

	Conf. 1	Conf. 2
Starting device type	relay	relay
Run capacitor	23,5μF	23,5μF
Start capacitor	410μF	410μF
LRA (locked rotor amps / 4s)	63A	63A
RLA (rated load amps / 1s)	9,6A	9,6A
Cut in current	63A	63A
IP class	21	21

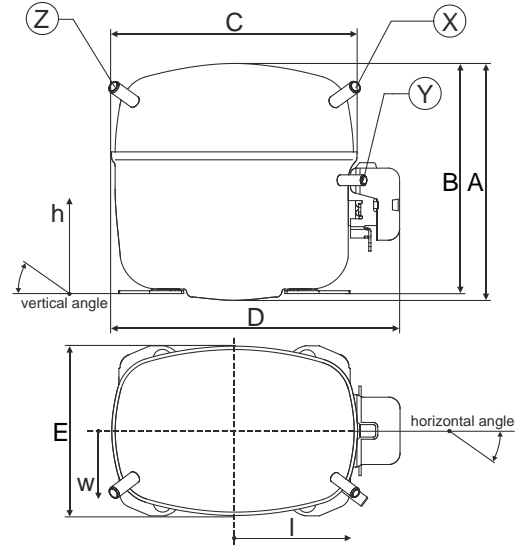
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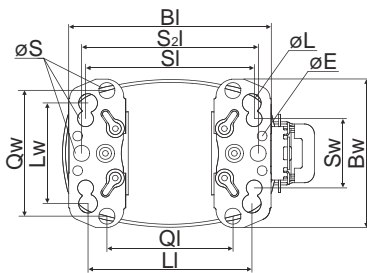
Compressor dimensions

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		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	

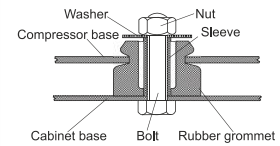


Compressor fixation

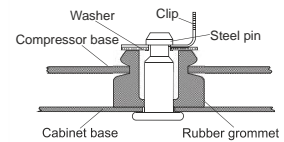


Baseplate	[mm]	[inch]
BI	204	8.03
BW	150	5.9
øE	ø 9.7	ø 0.38
Large holes		
LI	165	6.5
LW	101.6	4
øL	ø 19	ø 0.75
Small holes		
SI	170	6.7
SW	70	2.76
øS	ø 16	ø 0.63
QI	127	5
QW	127	5

Bolt joint



Snap-on



Mounting accessories

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.

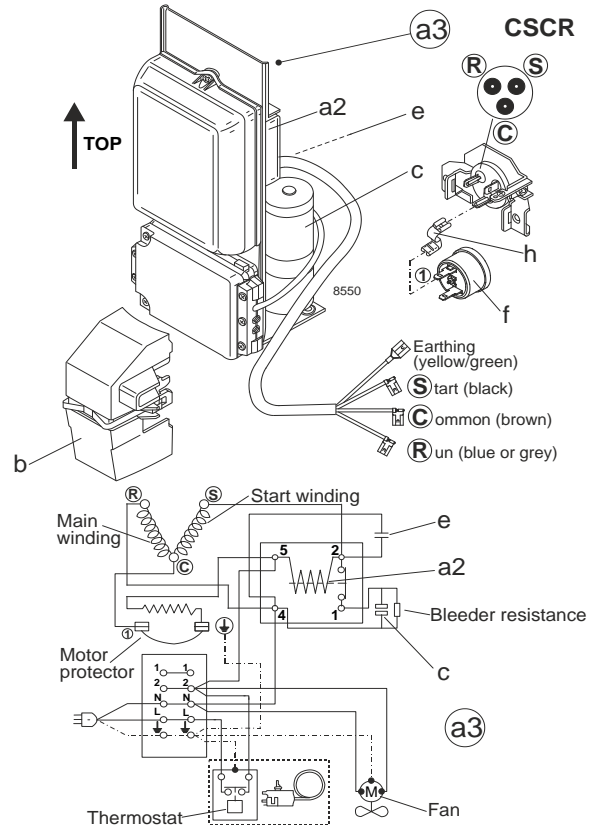
Model

Designation	SC18CLX.2	115V/60Hz	Conf. 1	Sales code:	104L2198
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Configuration

Motorconfiguration	CSCR
Power supply (nominal)	115V/60Hz 1~
Refrigerant	R404A
Application	LBP
Voltage range	103-127V
Starting torque	HST
Approvals	UL

Electrical accessories / wiring diagram

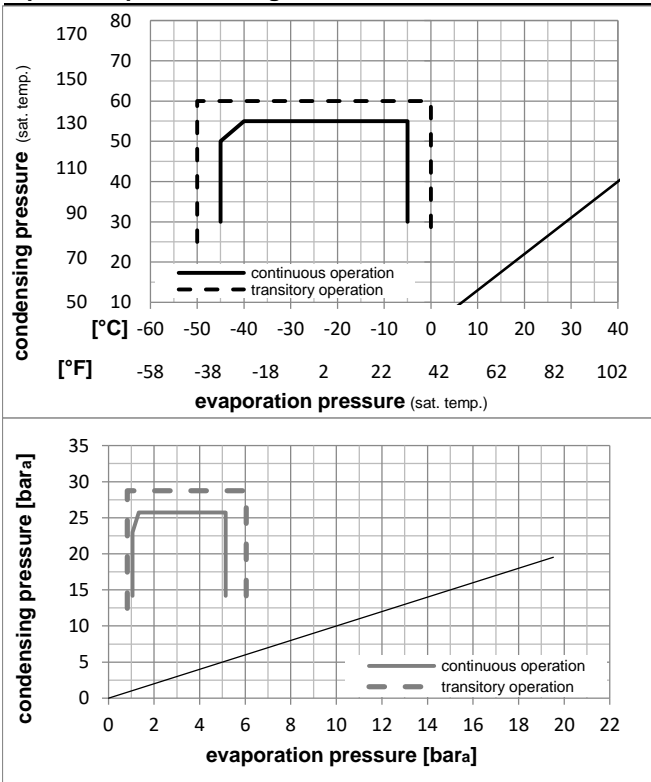


Ambient temperatures / system cooling

Ambient temperature min.:	10°C / 50°F
Ambient temperature max.:	43°C / 110°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 (protector + ~holder + cover: pre assembled)

a3	SC starter kit	117-7045
f	ext. protector (T0761/46)	117U3212
b	plastic cover	117U1021

Alternative comp. (protector + ~holder + cover: pre assemb.)

a2	potential relay (RVA 7AA3R)	117-7441
e	run capacitor (23,5µF, 6.3mm)	117-7114
c	start capacitor (410µF, 6.3mm)	117U5043
f	ext. protector (T0761/46)	117U3212
b	plastic cover	117U1021

Model

Designation **SC18CLX.2 115V/60Hz** Conf. 1 Sales code: **104L2198**

Optimization + standard conditions

115V/60Hz, CSCR, fan 3m/s, 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				
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	m		
[°C]	[°C]	[°C]	[°C]	[°C]							[W]	[A]	[kg/h]		
[°F]	-23,3	54,4	32,2	32,2	1072,9	3664	923,4	1,31	4,48	1,13	818,1	8,99	25,00		
	-10	130	90	90											
[°C]	-25	55	32	55	737,7	2519	634,9	0,94	3,21	0,81	784,8	8,76	23,06	cecomaf LBP	
[°F]	-13	131	89,6	131											
[°C]	-35	40	20	40	569,0	1943	489,6	0,97	3,31	0,83	587,8	7,51	15,46	EN12900 LBP	
[°F]	-31	104	68	104											
[°C]	-23,3	48,9	4,44	48,9	779,8	2663	671,1	0,97	3,30	0,83	807,9	8,92	27,61	ARI540 LBP	
[°F]	-10	120	40	120											
[°C]	-23,3	40,6	32,2	32,2	1156,3	3949	995,1	1,47	5,01	1,26	788,0	8,80	26,94	AHAM LBP	
[°F]	-10	105	90	90											
[°C]	-35	45	32	45	523,1	1787	450,2	0,91	3,10	0,78	577,0	7,47	13,98	opt	
[°F]	-31	113	89,6	113											

Performance tables

115V/60Hz, CSCR, fan 3m/s, UL

	pe	Cooling capacity			COP	EER	P1	I	m		
		[°C]	[°F]	[W]						[Btu/h]	[kcal/h]
[°C / °F]	-45	-49	108,7	371	93,6	0,34	1,16	0,29	320,1	6,25	2,89
cond. pressure	-34,4	-30	544,2	1859	468,4	0,92	3,15	0,80	589,1	7,54	14,55
pc= 45/113	-28,9	-20	753,6	2574	648,6	1,08	3,67	0,93	700,8	8,21	20,25
return gas temp.	-23,3	-10	973,0	3323	837,4	1,22	4,16	1,05	799,3	8,87	26,29
RGT= 32/90	-20,6	-5	1092,1	3730	939,9	1,29	4,41	1,11	845,3	9,20	29,61
liquid temp	-15	5	1360,3	4646	1170,7	1,46	4,97	1,25	934,3	9,85	37,16
Tliq= 45/113	-5	23	1994,5	6812	1716,5	1,81	6,19	1,56	1099,9	11,02	55,45
[°C / °F]	-45	-49	-101,7	-347	-87,5	-0,43	-1,47	-0,37	236,6	5,93	-3,12
cond. pressure	-34,4	-30	391,4	1337	336,8	0,69	2,37	0,60	563,6	7,43	12,11
pc= 55/131	-28,9	-20	599,8	2048	516,2	0,86	2,93	0,74	700,0	8,22	18,66
return gas temp	-23,3	-10	796,6	2721	685,6	0,97	3,32	0,84	819,0	8,99	24,95
RGT= 32/90	-20,6	-5	896,3	3061	771,4	1,03	3,50	0,88	873,7	9,38	28,18
liquid temp	-15	5	1109,6	3790	955,0	1,14	3,88	0,98	977,1	10,15	35,19
Tliq= 55/131	-5	23	1590,7	5432	1368,9	1,37	4,69	1,18	1158,5	11,51	51,49

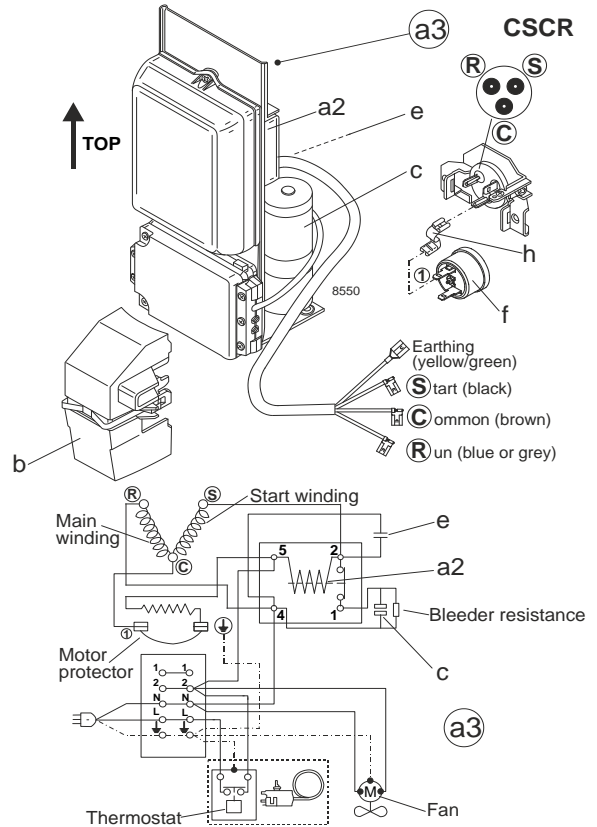
Model

Designation	SC18CLX.2	115V/60Hz	Conf. 2	Sales code:	104L2198
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Configuration

Motorconfiguration	CSCR
Power supply (nominal)	115V/60Hz 1~
Refrigerant	R452A
Application	LBP
Voltage range	103-127V
Starting torque	HST
Approvals	UL

Electrical accessories / wiring diagram

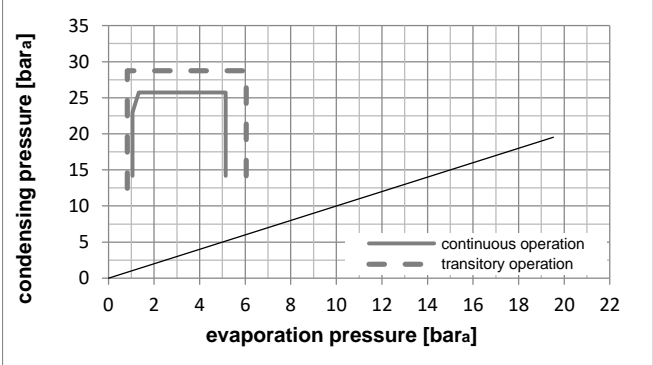
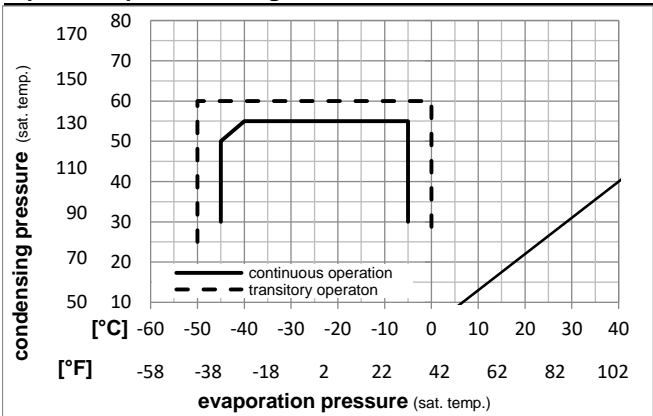


Ambient temperatures / system cooling

Ambient temperature min.:	10°C / 50°F
Ambient temperature max.:	43°C / 110°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 (protector + ~holder + cover: pre assembled)

a3	SC starter kit	117-7045
f	ext. protector (T0761/46)	117U3212
b	plastic cover	117U1021

Alternative comp. (protector + ~holder + cover: pre assemb.)

a2	potential relay (RVA 7AA3R)	117-7441
e	run capacitor (23,5µF, 6.3mm)	117-7114
c	start capacitor (410µF, 6.3mm)	117U5043
f	ext. protector (T0761/46)	117U3212
b	plastic cover	117U1021

Model

Designation **SC18CLX.2 115V/60Hz** Conf. **2** Sales code: **104L2198**

Optimization + standard conditions

115V/60Hz, CSCR, fan 3m/s, UL

Evaporating pressure (saturation temperature)					Condensing pressure (saturation temperature)						Power consumption				ASHRAE LBP
Return gas temp.					Liquid temp.						Current consumption			Ref. mass flow m	
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	979,6	3346	843,1	1,27	4,33	1,09	773,4	8,83	23,55	ASHRAE LBP	
[°F]	-10	130	90	90											
[°C]	-25	55	32	55	679,6	2321	584,9	0,92	3,14	0,79	740,0	8,62	21,63	cecomaf LBP	
[°F]	-13	131	89,6	131											
[°C]	-35	40	20	40	513,3	1753	441,7	0,93	3,18	0,80	551,5	7,41	14,33	EN12900 LBP	
[°F]	-31	104	68	104											
[°C]	-23,3	48,9	4,44	48,9	723,0	2469	622,2	0,94	3,22	0,81	765,6	8,78	25,99	ARI540 LBP	
[°F]	-10	120	40	120											
[°C]	-23,3	40,6	32,2	32,2	1061,2	3624	913,3	1,42	4,84	1,22	748,5	8,67	25,51	AHAM LBP	
[°F]	-10	105	90	90											
[°C]	-35	45	32	45	471,1	1609	405,5	0,87	2,98	0,75	540,2	7,34	12,93	opt	
[°F]	-31	113	89,6	113											

Performance tables

115V/60Hz, CSCR, fan 3m/s, 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	87,0	297	74,9	0,29	1,00	0,25	296,1	5,78	2,37
cond. pressure	-34,4	-30	490,8	1676	422,4	0,89	3,04	0,77	551,9	7,41	13,48
pc= 45/113	-28,9	-20	687,9	2349	592,0	1,04	3,56	0,90	660,7	8,11	18,96
return gas temp.	-23,3	-10	896,8	3063	771,8	1,18	4,04	1,02	758,4	8,73	24,85
RGT= 32/90	-20,6	-5	1011,2	3453	870,2	1,26	4,29	1,08	804,5	9,03	28,10
liquid temp	-15	5	1270,6	4339	1093,5	1,42	4,85	1,22	894,6	9,61	35,54
Tliq= 45/113	-5	23	1888,6	6450	1625,4	1,78	6,07	1,53	1063,4	10,69	53,67
[°C / °F]	-45	-49	-104,7	-358	-90,1	-0,49	-1,68	-0,42	213,0	5,24	-3,28
cond. pressure	-34,4	-30	352,5	1204	303,3	0,67	2,30	0,58	523,9	7,23	11,12
pc= 55/131	-28,9	-20	548,4	1873	472,0	0,84	2,85	0,72	656,4	8,08	17,38
return gas temp	-23,3	-10	736,1	2514	633,5	0,95	3,25	0,82	774,0	8,83	23,47
RGT= 32/90	-20,6	-5	832,3	2842	716,2	1,00	3,43	0,86	828,7	9,18	26,62
liquid temp	-15	5	1040,2	3552	895,2	1,11	3,81	0,96	933,2	9,85	33,53
Tliq= 55/131	-5	23	1514,9	5174	1303,8	1,35	4,63	1,17	1118,5	11,04	49,72