

Single Pack SC18MLX 115V 60Hz CSCR

Single pack code number: **195B4159**

Position	Title	Code	Amount
1	Compressor SC18MLX	104L2105	1
2	Starting relay (RVA 7AA3R435)	117-7441	1
3	Run capacitor (23.5 μ F 190V, 6.3mm)	117-7114	1
4	Starting capacitor (410 μ F 125V, 6.3mm)	117U5043	1
5	Bolt joint for one compressor M6 \varnothing 16mm	118-1917	1

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Model

Designation	SC18MLX	115V/60Hz 1~	Sales code:	104L2105
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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	14kg / 30,9lbs		
Motor protection	external		
Winding resistance main	0,6Ω (at 25°C)		
Winding resistance aux	2,6Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



General - Configurations with SC18MLX

	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 SC18MLX

	Conf. 1	Conf. 2
Refrigerant	R404A	R452A
Application	MBP	MBP
System cooling	fan 3m/s	fan 3m/s
Hot gas defrost	OK	OK
Long interval pull down	OK	OK

Electrical data - Configurations with SC18MLX

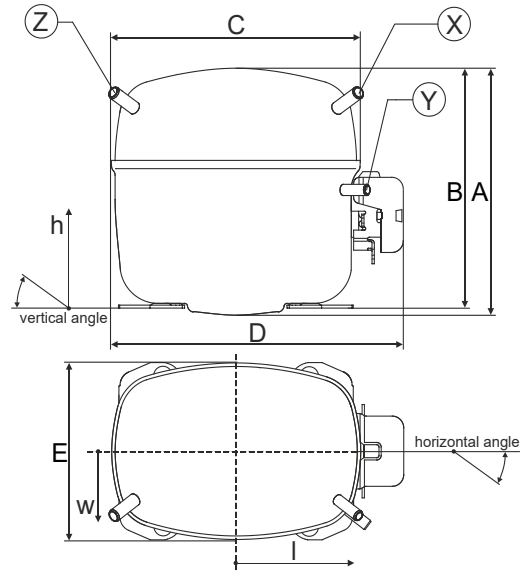
	Conf. 1	Conf. 2
Starting device type	relay	relay
Run capacitor	23,5μF	23,5μF
Start capacitor	410μF	410μF
LRA (locked rotor amps / 4s)	69A	69A
RLA (rated load amps / 1s)	13A	13A
Cut in current	69A	69A

Model

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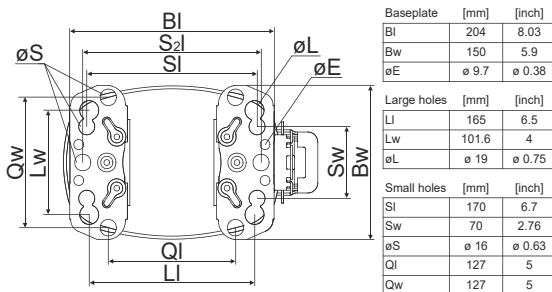
Compressor dimensions

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

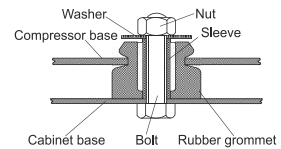


Connectors		Suction	Discharge	Process
		X	Y	Z
Diameter	[mm]	øi 9,54-9,72	øi 6,41-6,59	øi 6,41-6,59
	(i:inside, o:outside) [in]	øi 0,38-0,38	øi 0,25-0,26	øi 0,25-0,26
Material		copper	copper	copper
Horizontal angle	±2°	37°	37°	143°
Vertical angle	±2°	30°	0°	150°
Position l/h/w	[mm]	107/193/55	115/110/63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

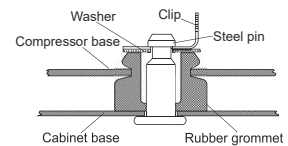
Compressor fixation



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.

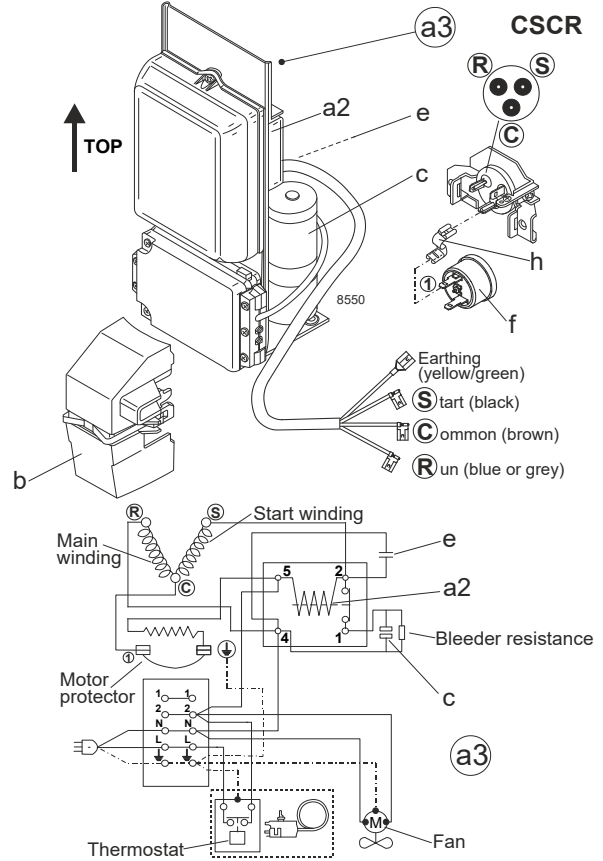
Model

Designation	SC18MLX	115V/60Hz	Conf. 1	Sales code:	104L2105
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Configuration

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

Electrical accessories / wiring diagram

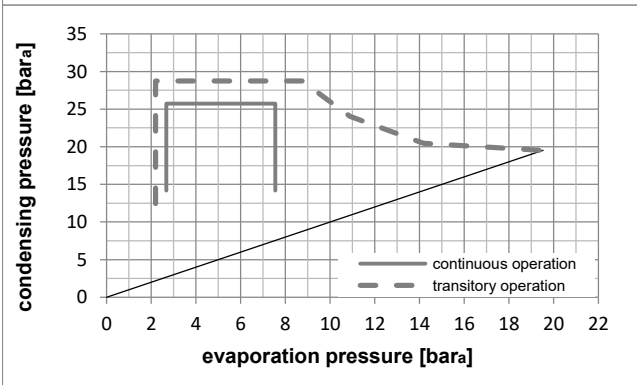
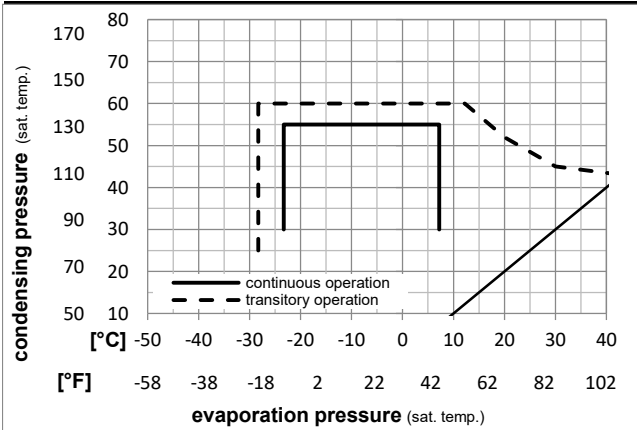


Ambient temperatures / system cooling

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	n/a	fan 3m/s	n/a
38°C / 100°F	n/a	fan 3m/s	n/a
43°C / 110°F	n/a	fan 3m/s	n/a

Operation pressure range



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

a3	SC starter kit	117-7045
f	ext. protector (T0777/46)	117U3188
h	protector holder	117U0439
b	plastic cover	117U1021

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

a2	potential relay (RVA 7AA3R)	117-7441
f	ext. protector (T0777/46)	117U3188
h	protector holder	117U0439
c	start capacitor (410µF, 6.3mm)	117U5043
e	run capacitor (23,5µF, 6.3mm)	117-7114
b	plastic cover	117U1021

Model

Designation	SC18MLX	115V/60Hz	Conf. 1	Sales code:	104L2105
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Optimization + standard conditions

R404A, 115V/60Hz, CSCR, fan 3m/s, UL

		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]	-6,66	54,4	35	46,1	1868,1	6380	1607,7	1,47	5,03	1,27	1268,3	12,75	51,40	ASHRAE			
[°F]	20	130	95	115										MBP			
[°C]	-10	55	32	55	1392,8	4757	1198,7	1,17	3,98	1,00	1193,7	12,22	44,59	cecomaf			
[°F]	14	131	89,6	131										MBP			
[°C]	-10	45	20	45	1631,9	5573	1404,4	1,44	4,93	1,24	1131,2	11,79	49,15	EN12900			
[°F]	14	113	68	113										MBP			
[°C]	-6,66	48,9	18,3	48,9	1697,4	5797	1460,8	1,39	4,73	1,19	1224,2	12,45	55,46	ARI540			
[°F]	20	120	65	120										MBP			
[°C]	-10	45	32	45	1731,9	5915	1490,5	1,53	5,23	1,32	1131,2	11,79	47,69	opt			
[°F]	14	113	89,6	113													
[°C]	-25	45	32	45	913,7	3120	786,3	1,06	3,63	0,91	859,8	10,14	24,65	opt			
[°F]	-13	113	89,6	113													

Performance tables

R404A, 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]	-25	-13	913,7	3120	786,3	1,06	3,63	0,91	859,8	10,14	24,65	
cond. pressure	-23,3	-10	984,6	3363	847,4	1,11	3,78	0,95	889,6	10,29	26,61	
pc= 45/113	-15	5	1411,6	4821	1214,8	1,36	4,64	1,17	1039,3	11,18	38,56	
return gas temp.	-9,4	15	1770,7	6047	1523,9	1,55	5,30	1,33	1141,6	11,87	48,81	
RGT= 32/90	-3,9	25	2196,9	7503	1890,6	1,76	6,01	1,52	1247,6	12,63	61,22	
liquid temp	0	32	2538,5	8669	2184,6	1,92	6,54	1,65	1324,9	13,21	71,36	
Tliq= 45/113	7,2	45	3275,7	11187	2819,1	2,22	7,57	1,91	1477,2	14,40	93,94	
[°C / °F]	-25	-13	701,6	2396	603,8	0,84	2,87	0,72	835,8	10,08	21,93	
cond. pressure	-23,3	-10	761,4	2600	655,3	0,87	2,97	0,75	876,4	10,29	23,85	
pc= 55/131	-15	5	1121,6	3831	965,3	1,04	3,56	0,90	1075,5	11,44	35,57	
return gas temp	-9,4	15	1425,7	4869	1227,0	1,18	4,03	1,02	1206,8	12,31	45,69	
RGT= 32/90	-3,9	25	1788,4	6108	1539,1	1,34	4,56	1,15	1338,7	13,26	58,04	
liquid temp	0	32	2080,5	7105	1790,5	1,45	4,96	1,25	1432,2	13,97	68,23	
Tliq= 55/131	7,2	45	2715,0	9272	2336,6	1,69	5,76	1,45	1610,4	15,39	91,12	

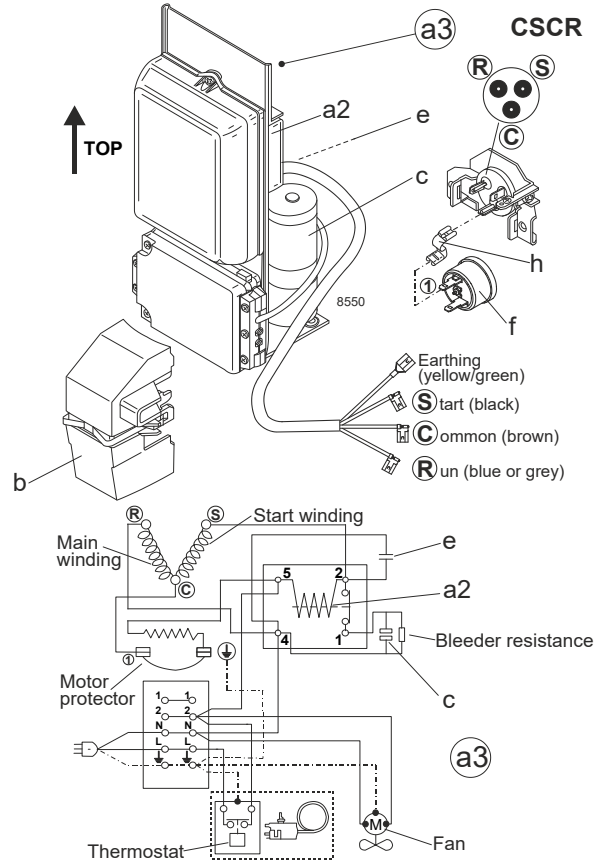
Model

Designation	SC18MLX	115V/60Hz	Conf. 2	Sales code:	104L2105
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Configuration

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

Electrical accessories / wiring diagram

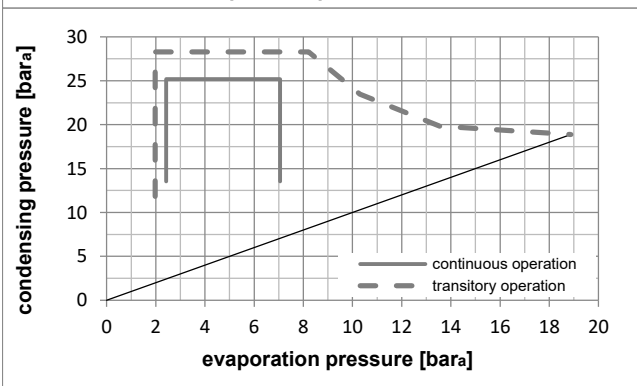
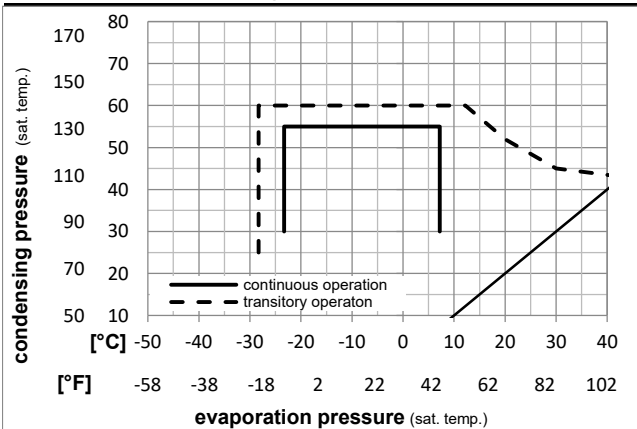


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38°C / 100°F	n/a	fan 3m/s	n/a
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Operation pressure range



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

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Model

Designation **SC18MLX 115V/60Hz** Conf. 2 Sales code: **104L2105**

Optimization + standard conditions

R452A, 115V/60Hz, CSCR, fan 3m/s, UL

Evaporating pressure (saturation temperature)					Condensing pressure (saturation temperature)						Power consumption				ASHRAE MBP
					Return gas temp.			Liquid temp.			Current consumption			Ref. mass flow ṁ	
											P1	I			
pe	pc	RGT	Tliq		[W]	[Btu/h]	[kcal/h]	COP	EER		[W]	[A]	[kg/h]		
[°C]	[°F]							[W/W]	[Btu/Wh]	[kcal/Wh]					
-6,7	54,4	35	46,1		1767,3	6036	1521,0	1,47	5,02	1,27	1202,0	12,44	49,72		
20	130	95	115												
-10	55	32	55		1319,9	4508	1135,9	1,17	4,00	1,01	1126,7	11,92	42,90	cecomaf MBP	
14	131	89,6	131												
-10	45	20	45		1540,9	5262	1326,1	1,44	4,92	1,24	1069,0	11,53	47,35	EN12900 MBP	
14	113	68	113												
-6,7	48,9	18,3	48,9		1613,7	5511	1388,8	1,39	4,75	1,20	1161,0	12,16	53,54	ARI540 MBP	
20	120	65	120												
-10	45	32	45		1632,9	5576	1405,2	1,53	5,22	1,31	1069,0	11,53	46,01	opt	
14	113	89,6	113												
-25	45	32	45		841,6	2874	724,3	1,06	3,61	0,91	796,7	9,68	23,28	opt	
-13	113	89,6	113												

Performance tables

R452A, 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]	-25	-13	841,6	2874	724,3	1,06	3,61	0,91	796,7	9,68	23,28			
cond. pressure	-23	-10	909,7	3107	782,9	1,10	3,76	0,95	826,6	9,88	25,21			
pc= 45/113	-15	5	1321,9	4514	1137,6	1,35	4,62	1,16	976,6	10,90	36,98			
return gas temp.	-9,4	15	1670,6	5706	1437,8	1,55	5,29	1,33	1079,5	11,60	47,11			
RGT= 32/90	-3,9	25	2086,5	7126	1795,7	1,76	6,00	1,51	1186,9	12,33	59,41			
liquid temp	0	32	2421,2	8269	2083,7	1,91	6,53	1,65	1265,8	12,87	69,49			
Tliq= 45/113	7,2	45	3146,7	10747	2708,1	2,21	7,55	1,90	1422,7	13,94	91,93			
[°C / °F]	-25	-13	646,3	2207	556,2	0,84	2,86	0,72	771,7	9,51	20,57			
cond. pressure	-23	-10	704,2	2405	606,0	0,87	2,96	0,75	811,6	9,78	22,45			
pc= 55/131	-15	5	1054,4	3601	907,4	1,05	3,57	0,90	1008,8	11,12	33,99			
return gas temp	-9,4	15	1352,2	4618	1163,7	1,19	4,05	1,02	1139,8	12,01	43,99			
RGT= 32/90	-3,9	25	1709,4	5838	1471,1	1,34	4,59	1,16	1272,8	12,92	56,24			
liquid temp	0	32	1998,3	6825	1719,8	1,46	4,99	1,26	1368,0	13,57	66,35			
Tliq= 55/131	7,2	45	2628,9	8978	2262,4	1,69	5,79	1,46	1551,9	14,82	89,10			



SC Compressors (External Protector)





SC Compressors (External Protector)



Service/Repair – R290



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