

Model

Designation	SC12MLX	115-127V/60Hz 1~	Sales code:	104L1606
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R404A, R507
Oil viscosity	32cST	Displacement	12,87cm ³ / 0,79cu.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	external		
Winding resistance main	0,66Ω (at 25°C)		
Winding resistance aux	2,7Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



General - Configurations with SC12MLX

	Conf. 1	Conf. 2
Motorconfiguration	CSIR	CSCR
Power supply (nominal)	115-127V/60Hz	115-127V/60Hz
Number of phases	1	1
Voltage range	95-135V	95-135V
Approvals	UL	UL
Starting torque	HST	HST
Note	Protector and cover are included and pre-assembled to compressor.	

Applications with SC12MLX

	Conf. 1	Conf. 2
Refrigerant	R404A	R404A
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 SC12MLX

	Conf. 1	Conf. 2
Starting device type	relay	relay
Run capacitor	-/-	23,5μF
Start capacitor	410μF	410μF
LRA (locked rotor amps / 4s)	56,8A	54,2A
RLA (rated load amps / 1s)	9,8A	8,8A
Cut in current	56,8A	54,2A
IP class	21	21

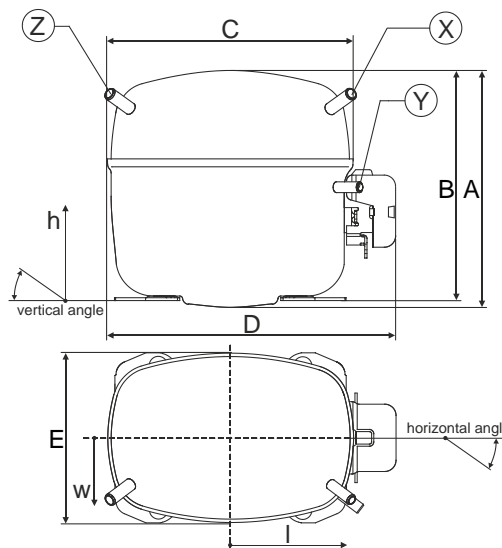
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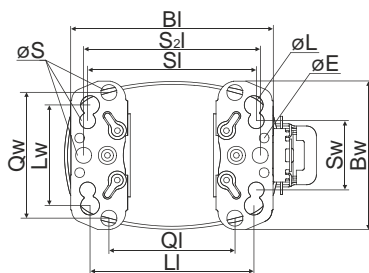
Compressor dimensions

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 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

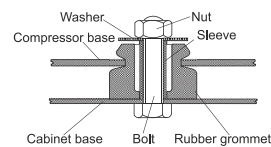


Compressor fixation

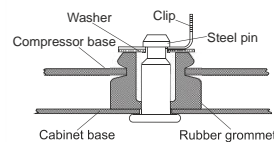


Baseplate	[mm]	[inch]
BI	204	8.03
BW	150	5.9
øE	ø 9.7	ø 0.38
Large holes		
LI	165	6.5
LW	101.6	4
øL	ø 19	ø 0.75
Small holes		
SI	170	6.7
SW	70	2.76
øS	ø 16	ø 0.63
QI	127	5
QW	127	5

Bolt joint



Snap-on



Mounting accessories

	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.

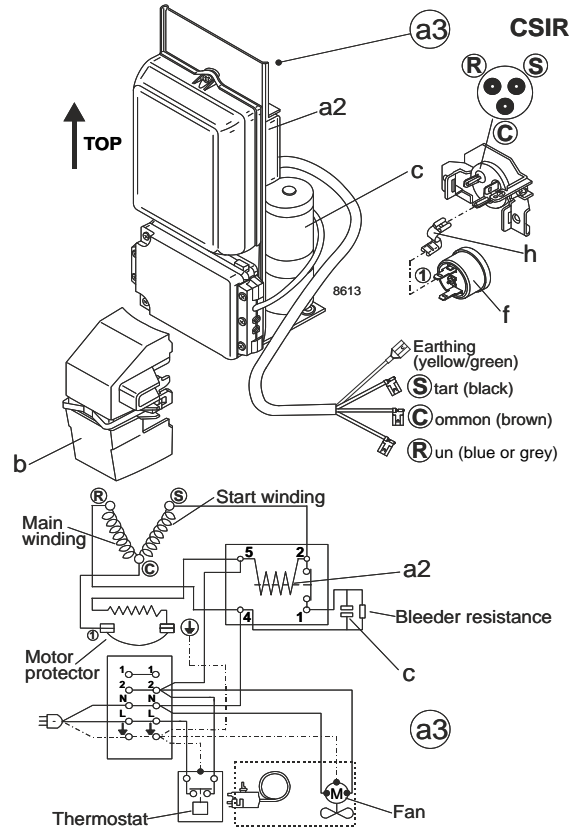
Model

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Configuration

Motorconfiguration	CSIR
Power supply (nominal)	115-127V/60Hz 1~
Refrigerant	R404A
Application	MBP
Voltage range	95-135V
Starting torque	HST
Approvals	UL SA3693

Electrical accessories / wiring diagram

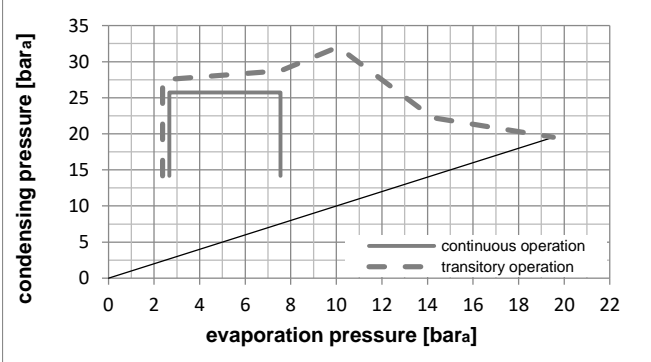
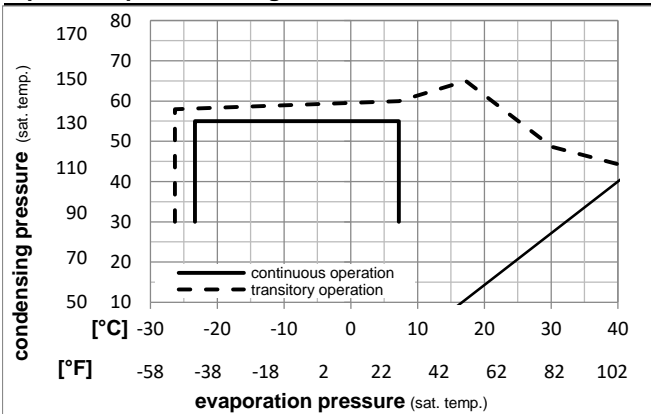


Ambient temperatures / system cooling

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	117-7053
f	ext. protector (T0761/46)	117U3212
h	protector holder	117U0439
b	plastic cover	117U1021

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

a2	potential relay (RVA 7AA3R)	117-7441
c	start capacitor	117U5042
f	ext. protector (T0761/46)	117U3212
h	protector holder	117U0439
b	plastic cover	117U1021

Model

Designation **SC12MLX 115-127V/60Hz** Conf. 1 Sales code: **104L1606**

Optimization + standard conditions

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

Evaporating pressure (saturation temperature)					Condensing pressure (saturation temperature)						Power consumption				ASHRAE MBP
					Return gas temp.						Current consumption				
					Liquid temp.						Ref. mass flow				
pe	pc	RGT	Tliq		Cooling capacity		COP	EER		P1	I	m			
[°C]	[°F]				[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]		
-6,66	54,4	35	46,1		1284,6	4387	1105,6	1,52	5,20	1,31	844,0	9,09	35,35	ASHRAE MBP	
20	130	95	115												
-10	55	32	55		950,6	3246	818,1	1,20	4,10	1,03	791,2	8,92	30,43	cecomaf MBP	
14	131	89,6	131												
-10	45	20	45		1125,2	3843	968,3	1,51	5,14	1,30	747,3	8,30	33,89	EN12900 MBP	
14	113	68	113												
-6,66	48,9	18,3	48,9		1173,2	4007	1009,7	1,44	4,93	1,24	812,9	8,88	38,34	ARI540 MBP	
20	120	65	120												
-10	45	32	45		1194,1	4078	1027,7	1,60	5,46	1,38	747,3	8,30	32,88	opt	
14	113	89,6	113												
-25	45	32	45		606,0	2070	521,6	1,09	3,72	0,94	555,9	6,50	16,35	opt	
-13	113	89,6	113												

Performance tables

115V/60Hz, CSIR, 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	606,0	2070	521,6	1,09	3,72	0,94	555,9	6,50	16,35
cond. pressure	-23,3	-10	657,0	2244	565,4	1,14	3,89	0,98	576,7	6,85	17,75
pc= 45/113	-15	5	963,9	3292	829,5	1,41	4,82	1,22	682,3	7,90	26,33
return gas temp.	-9,4	15	1222,0	4173	1051,7	1,62	5,53	1,39	754,6	8,35	33,69
RGT= 32/90	-3,9	25	1528,5	5220	1315,4	1,84	6,29	1,59	829,5	8,97	42,59
liquid temp	0	32	1774,2	6059	1526,9	2,01	6,86	1,73	883,7	9,69	49,88
Tliq= 45/113	7,2	45	2304,7	7871	1983,4	2,33	7,95	2,00	989,7	12,08	66,09
[°C / °F]	-25	-13	453,7	1549	390,4	0,84	2,88	0,72	538,6	6,61	14,18
cond. pressure	-23,3	-10	496,7	1696	427,4	0,88	2,99	0,75	567,0	7,11	15,56
pc= 55/131	-15	5	755,6	2581	650,3	1,07	3,65	0,92	707,5	8,55	23,96
return gas temp	-9,4	15	974,3	3327	838,5	1,22	4,16	1,05	800,5	8,95	31,22
RGT= 32/90	-3,9	25	1235,1	4218	1062,9	1,38	4,72	1,19	893,9	9,27	40,09
liquid temp	0	32	1445,3	4936	1243,8	1,51	5,14	1,30	959,9	9,63	47,40
Tliq= 55/131	7,2	45	1901,9	6495	1636,8	1,75	5,99	1,51	1085,0	11,03	63,83

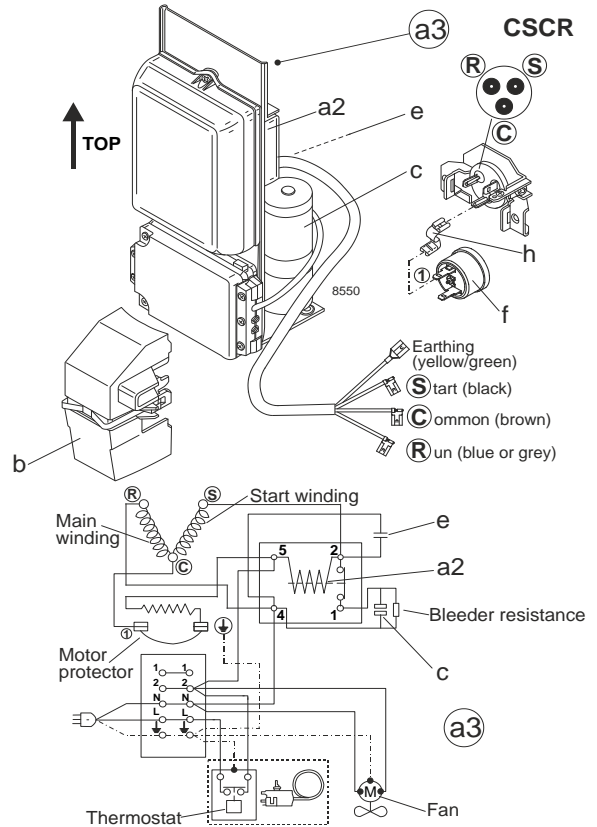
Model

Designation	SC12MLX	115-127V/60Hz	Conf. 2	Sales code:	104L1606
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Configuration

Motorconfiguration	CSCR
Power supply (nominal)	115-127V/60Hz 1~
Refrigerant	R404A
Application	MBP
Voltage range	95-135V
Starting torque	HST
Approvals	UL SA3693

Electrical accessories / wiring diagram

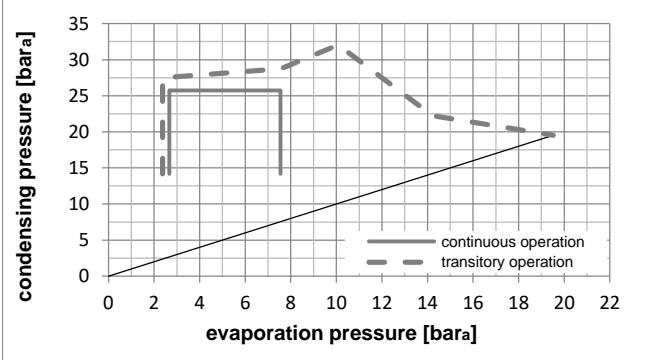
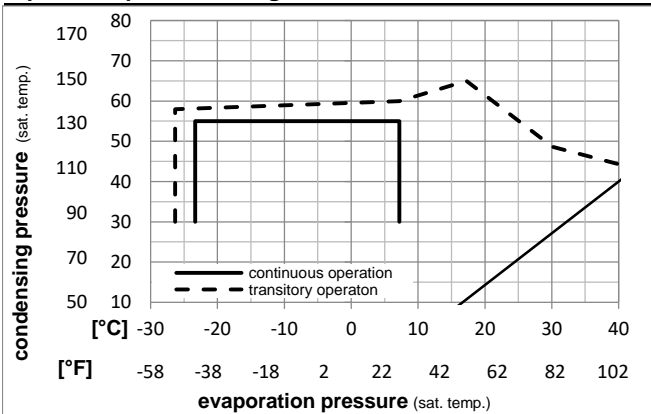


Ambient temperatures / system cooling

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 (T0761/46)	117U3212
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 (T0761/46)	117U3212
h	protector holder	117U0439
c	start capacitor	117U5042
e	run capacitor (23,5μF, 6.3mm)	117-7133
b	plastic cover	117U1021

Model

Designation **SC12MLX 115-127V/60Hz** Conf. 2 Sales code: **104L1606**

Optimization + standard conditions

115V/60Hz, CSCR, fan 3m/s, 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				
pe	pc	RGT	Tliq		[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	m	
[°C]	[°F]	[°C]	[°F]	[°C]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	ASHRAE MBP
-6,66	54,4	35	46,1		1300,3	4441	1119,0	1,61	5,48	1,38	809,6	8,05	35,78	ASHRAE MBP
20	130	95	115											
-10	55	32	55		961,9	3285	827,8	1,27	4,32	1,09	760,0	7,70	30,79	cecomaf MBP
14	131	89,6	131											
-10	45	20	45		1138,4	3888	979,8	1,59	5,42	1,37	717,6	7,42	34,29	EN12900 MBP
14	113	68	113											
-6,66	48,9	18,3	48,9		1187,3	4055	1021,8	1,52	5,20	1,31	780,1	7,84	38,80	ARI540 MBP
20	120	65	120											
-10	45	32	45		1208,2	4126	1039,8	1,68	5,75	1,45	717,6	7,42	33,27	opt
14	113	89,6	113											
-25	45	32	45		613,0	2093	527,5	1,15	3,91	0,99	534,8	6,16	16,53	opt
-13	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]	-25	-13	613,0	2093	527,5	1,15	3,91	0,99	534,8	6,16	16,53
cond. pressure	-23,3	-10	664,5	2269	571,9	1,20	4,09	1,03	555,3	6,29	17,96
pc= 45/113	-15	5	975,1	3330	839,2	1,49	5,07	1,28	656,2	6,98	26,64
return gas temp.	-9,4	15	1236,5	4223	1064,1	1,71	5,83	1,47	724,5	7,47	34,08
RGT= 32/90	-3,9	25	1547,0	5283	1331,3	1,94	6,64	1,67	795,7	8,00	43,11
liquid temp	0	32	1796,0	6134	1545,7	2,12	7,23	1,82	848,4	8,41	50,49
Tliq= 45/113	7,2	45	2334,0	7971	2008,7	2,44	8,35	2,10	954,8	9,26	66,93
[°C / °F]	-25	-13	458,8	1567	394,9	0,88	3,02	0,76	519,1	5,94	14,34
cond. pressure	-23,3	-10	502,3	1716	432,3	0,92	3,14	0,79	547,0	6,15	15,73
pc= 55/131	-15	5	764,4	2610	657,8	1,12	3,83	0,97	681,4	7,13	24,24
return gas temp	-9,4	15	985,9	3367	848,5	1,28	4,38	1,10	768,8	7,76	31,60
RGT= 32/90	-3,9	25	1250,4	4270	1076,1	1,46	4,99	1,26	856,5	8,40	40,58
liquid temp	0	32	1463,7	4999	1259,7	1,59	5,44	1,37	919,3	8,85	48,00
Tliq= 55/131	7,2	45	1927,4	6582	1658,8	1,85	6,32	1,59	1041,0	9,75	64,69