

Model
SC12MLX

Sales code:
104L1606

Compressor Data

Refrigerant(s)	R404A / R507
Refr. charge - tech. limit	1300g / 45.86oz
Weight	13.80 kg / 30.42lbs
Displacement	12.87 cm3 / 0.79cu.in
Compressors on pallet	80



General – Configurations With SC12MLX

-	Conf. 1	Conf. 2
Motor configuration	CSIR	CSCR
Power supply (nominal)	115-127 V/60 Hz	115-127 V/60 Hz
Number of phases	1	1
Voltage range	95-135 V	95-135 V
Approvals	UL	UL
Starting torque	HST	HST
Refrigerant	R404A	R404A
Application	MBP	MBP
Hot gas defrost	OK	OK
Long interval pull down	OK	OK

Application Notes

- Protector and cover are included and pre-assembled to compressor.
- Provision for PE Grounding is located at the PE Stamp on the compressor

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Compressor Design

Oil type	POE	Winding resistance main	0.700 Ohm
Oil viscosity	32cSt	Winding resistance aux	2.70 Ohm
Oil quantity	556 / 18.80fl.oz	Max. winding temp.	125 °C
Free gas volume comp.	1,460 cm ³ / 49.37fl.oz	Max. discharge temp.	130°C / 266°F
Motor protection	external		

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

[Find 3D Model here](#)



Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 8.11–8.29 / 0.32–0.33in	øi 6.41–6.59 / 0.25–0.26in	øi 6.41–6.59 / 0.25–0.26in
Material	CU	CU	CU
Horizontal angle ±2°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°
Position l/h/w [mm]	107/193/55 / 4.21/7.60/2.17in	115/110/63 / 4.53/4.33/2.48in	-107/193/55 / -4.21/7.60/2.17in
Straight tube l. [mm]	12 / 0.47in	12 / 0.47in	12 / 0.47in

Mounting Accessories



Bolt joint



Snap-on



Dimensions in mm [in]

	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

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Configuration 1

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Configuration

Motor configuration	CSIR
Power supply (nominal)	115-127 V/60 Hz 1~
Refrigerant	R404A
Application	MBP
Voltage range	95-135 V
Starting torque	HST
Approvals	UL
Starting device type	relay
Run capacitor	-/-
Start capacitor	410 µF
LRA (locked rotor amps / 4s/ U(N))	56.8 A
RLA (rated load amps / 1s/ U(N))	9.8 A
Cut in current (U(N))	56.8 A

Ambient/ machine room temperatures minimum /maximum

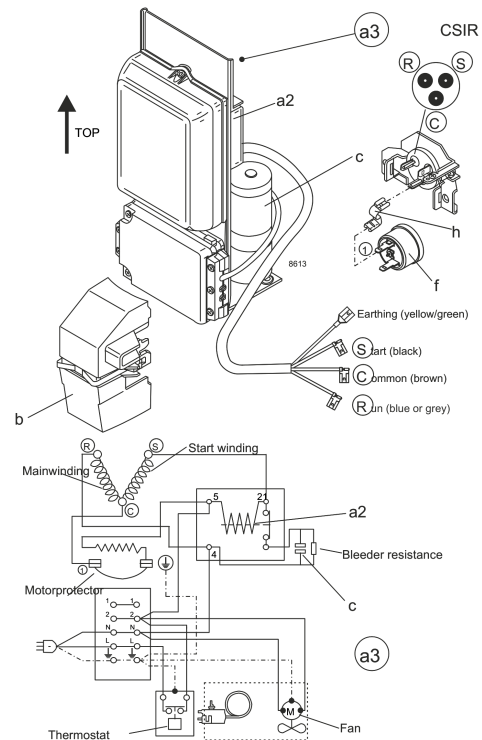
Ambient temperature range: 10 - 43°C / 50 - 109°F

Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



[View full size](#)

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 + clamp 117U1021

Alternative components

a2 potential relay (RVA 7AA3R) 117-7441

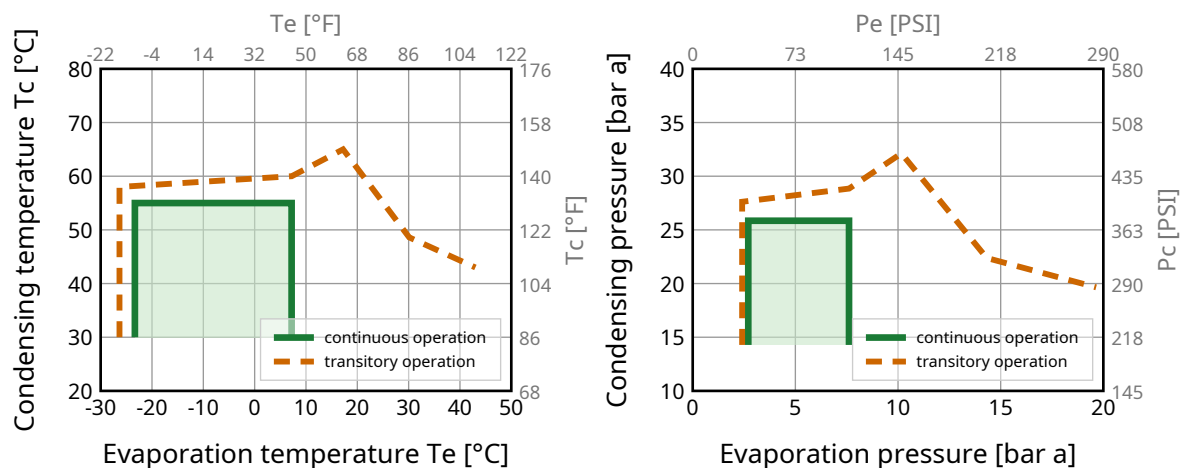
c start capacitor (410µF, 6.3mm) 117U5042

f ext. protector (T0761/46) 117U3212

h protector holder 117U0439

b plastic cover + clamp 117U1021

Operation Pressure Range



Model
SC12MLX

Configuration 1

Sales code:
104L1606

Standard Conditions

R404A, 115 V/60 Hz, CSIR, fan 3m/s

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	m	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-6.7 20	54.4 129.9	35 95	46.1 115	1283	4377	1103	1.52	5.19	843	9.09	35.24	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	951	3243	818	1.20	4.10	791	8.92	30.38	CECOMAF MBP
-10 14	45 113	20 68	45 113	1126	3841	968	1.51	5.14	747	8.30	33.84	EN12900 MBP
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	1174	4005	1009	1.45	4.93	812	8.87	38.25	ARI540 MBP
-10 14	45 113	32 89.6	45 113	1194	4074	1027	1.60	5.45	747	8.30	32.83	opt MBP
-23.3 -10	45 113	32.2 90	32.2 90	763	2603	656	1.32	4.51	577	6.86	17.74	opt LBP

Performance Tables

R404A, 115 V/60 Hz, CSIR, fan 3m/s

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

pe		Cooling capacity			COP	EER	P	I	m
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-23.3	-10	658	2245	566	1.14	3.89	577	6.86	17.75
-20	-4	769	2624	661	1.24	4.24	619	7.38	20.82
-15	5	964	3289	829	1.41	4.82	682	7.90	26.28
-10	14	1194	4074	1027	1.60	5.45	747	8.30	32.83
-5	23	1463	4992	1258	1.80	6.13	814	8.82	40.62
0	32	1774	6054	1526	2.01	6.85	884	9.69	49.82
5	41	2131	7270	1832	2.23	7.60	956	11.17	60.65
7.2	45	2303	7857	1980	2.33	7.94	989	12.07	65.99

pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F

-23.3	-10	498	1698	428	0.88	2.99	568	7.12	15.55
-20	-4	591	2017	508	0.95	3.23	624	7.87	18.56
-15	5	756	2578	650	1.07	3.64	708	8.55	23.92
-10	14	951	3243	818	1.20	4.10	791	8.92	30.38
-5	23	1179	4024	1014	1.35	4.60	875	9.20	38.12
0	32	1445	4931	1243	1.51	5.14	960	9.63	47.35
5	41	1752	5977	1507	1.68	5.72	1046	10.47	58.30
7.2	45	1900	6484	1634	1.75	5.98	1085	11.02	63.75

Model
SC12MLX

Configuration 2

Sales code:
104L1606

Configuration

Motor configuration	CSCR
Power supply (nominal)	115-127 V/60 Hz 1~
Refrigerant	R404A
Application	MBP
Voltage range	95-135 V
Starting torque	HST
Approvals	UL
Starting device type	relay
Run capacitor	23.5 μF
Start capacitor	410 μF
LRA (locked rotor amps / 4s/ U(N))	56.8 A
RLA (rated load amps / 1s/ U(N))	9.8 A
Cut in current (U(N))	56.8 A

Ambient/ machine room temperatures minimum /maximum

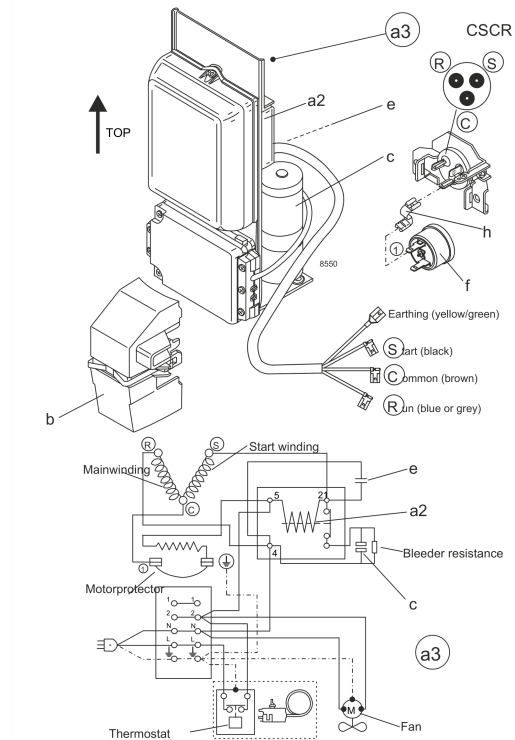
Ambient temperature range: 10 - 43°C / 50 - 109°F

Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



[View full size](#)

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 + clamp 117U1021

Alternative components

a2 potential relay (RVA 7AA3R) 117-7441

f ext. protector (T0761/46) 117U3212

h protector holder 117U0439

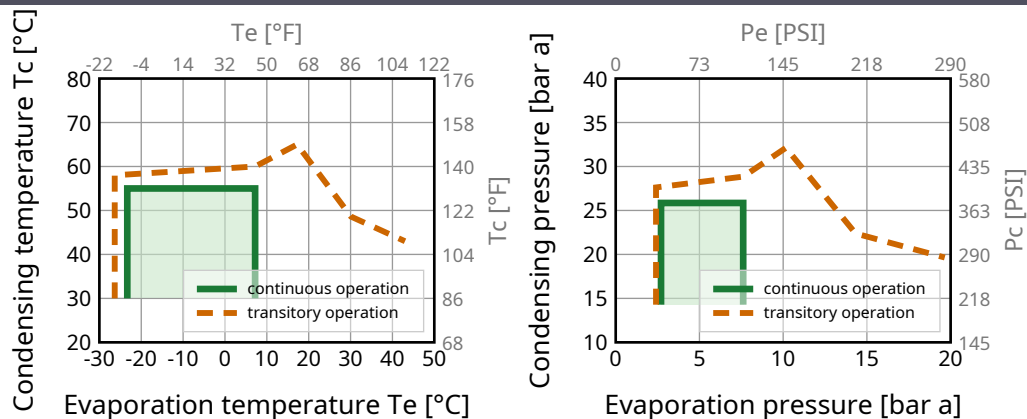
c start capacitor (410 μ F, 6.3mm) 117U5042

c start capacitor (410 μ F, 6.3mm) 117U5379

e run capacitor (23,5 μ F, 6.3mm) 117-7133

b plastic cover + clamp 117U1021

Operation Pressure Range



Model

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Configuration 2

Sales code:

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Standard Conditions

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

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	m	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-6.7 20	54.4 129.9	35 95	46.1 115	1298	4430	1117	1.60	5.48	809	8.05	35.67	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	962	3282	827	1.27	4.32	760	7.70	30.75	CECOMAF MBP
-10 14	45 113	20 68	45 113	1139	3886	979	1.59	5.41	718	7.42	34.24	EN12900 MBP
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	1188	4053	1022	1.52	5.20	779	7.84	38.71	ARI540 MBP
-10 14	45 113	32 89.6	45 113	1208	4122	1039	1.68	5.75	718	7.42	33.22	opt MBP
-23.3 -10	45 113	32.2 90	32.2 90	772	2633	664	1.39	4.74	556	6.29	17.94	opt LBP

Performance Tables

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

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

pe		Cooling capacity			COP	EER	P	I	m
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-23.3	-10	666	2271	572	1.20	4.09	556	6.29	17.95
-20	-4	778	2654	669	1.31	4.46	596	6.56	21.06
-15	5	975	3327	839	1.49	5.07	656	6.98	26.59
-10	14	1208	4122	1039	1.68	5.75	718	7.42	33.22
-5	23	1481	5052	1273	1.90	6.47	781	7.89	41.11
0	32	1796	6128	1545	2.12	7.22	848	8.41	50.43
5	41	2158	7362	1856	2.34	7.99	921	8.98	61.41
7.2	45	2332	7957	2006	2.44	8.34	954	9.26	66.83

pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F

-23.3	-10	503	1717	433	0.92	3.14	548	6.15	15.73
-20	-4	598	2040	514	0.99	3.39	602	6.55	18.77
-15	5	764	2608	657	1.12	3.83	681	7.13	24.20
-10	14	962	3282	827	1.27	4.32	760	7.70	30.75
-5	23	1194	4074	1027	1.42	4.86	839	8.27	38.59
0	32	1464	4994	1259	1.59	5.43	919	8.86	47.95
5	41	1775	6056	1526	1.77	6.04	1003	9.46	59.07
7.2	45	1926	6571	1656	1.85	6.32	1041	9.74	64.60