

Model
SC18MLX

Sales code:
104L2105

Compressor Data

Refrigerant(s)	R404A / R452A / R507
Refr. charge - tech. limit	1300g / 45.86oz
Weight	14.00 kg / 30.86lbs
Displacement	17.69 cm3 / 1.08cu.in
Compressors on pallet	80



General – Configurations With SC18MLX

-	Conf. 1	Conf. 2
Motor configuration	CSCR	CSCR
Power supply (nominal)	115 V/60 Hz	115 V/60 Hz
Number of phases	1	1
Voltage range	103-127 V	103-127 V
Approvals	UL	UL
Starting torque	HST	HST
Refrigerant	R404A	R452A
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

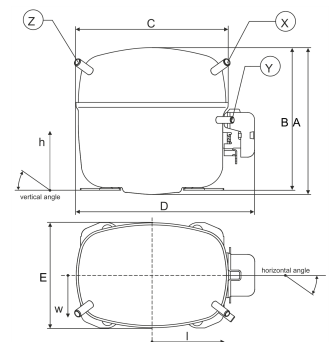
Oil type	POE	Winding resistance main	0.600 Ohm
Oil viscosity	32cSt	Winding resistance aux	2.60 Ohm
Oil quantity	556 / 18.80fl.oz	Max. winding temp.	125 °C
Free gas volume comp.	1,460 cm ³ / 49.37fl.oz	Max. discharge temp.	130°C / 266°F
Motor protection	external		

Compressor Dimensions

Housing

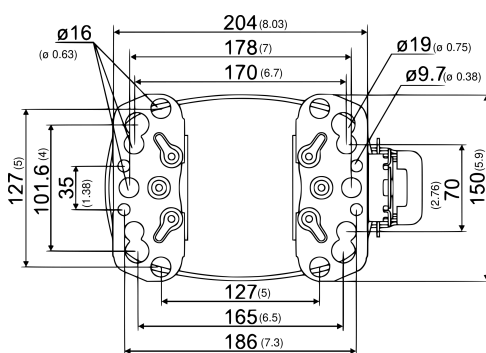
A Height	219mm / 8.62in
B Height	213mm / 8.39in
C Length shell	218mm / 8.58in
D Length w. cover	255mm / 10.04in
E Width	151mm / 5.94in

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Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 9.54–9.72 / 0.38–0.38in	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

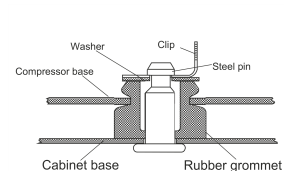
Mounting Accessories



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

Model
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Configuration 1

Sales code:
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Configuration

Motor configuration	CSCR
Power supply (nominal)	115 V/60 Hz 1~
Refrigerant	R404A
Application	MBP
Voltage range	103-127 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))	69 A
RLA (rated load amps / 1s/ U(N))	13 A
Cut in current (U(N))	69 A

Ambient/ machine room temperatures minimum /maximum

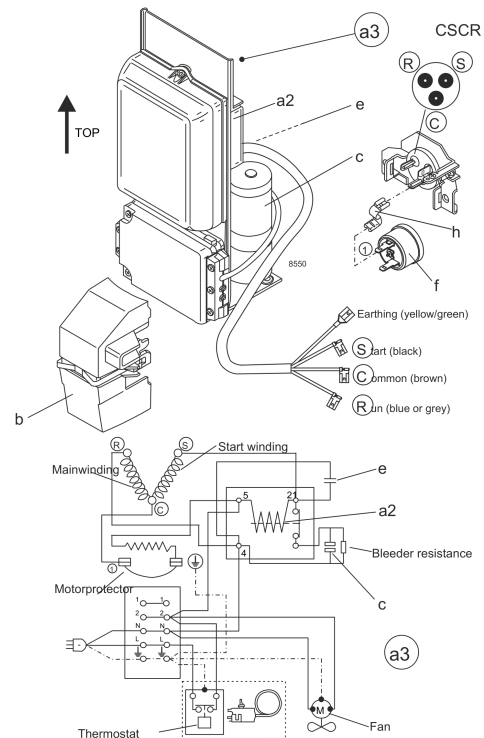
Ambient temperature range: 10 - 43°C / 50 - 109°F

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

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



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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 + clamp 117U1021

Alternative components

a2 potential relay (RVA 7AA3R) 117-7441

f ext. protector (T0777/46) 117U3188

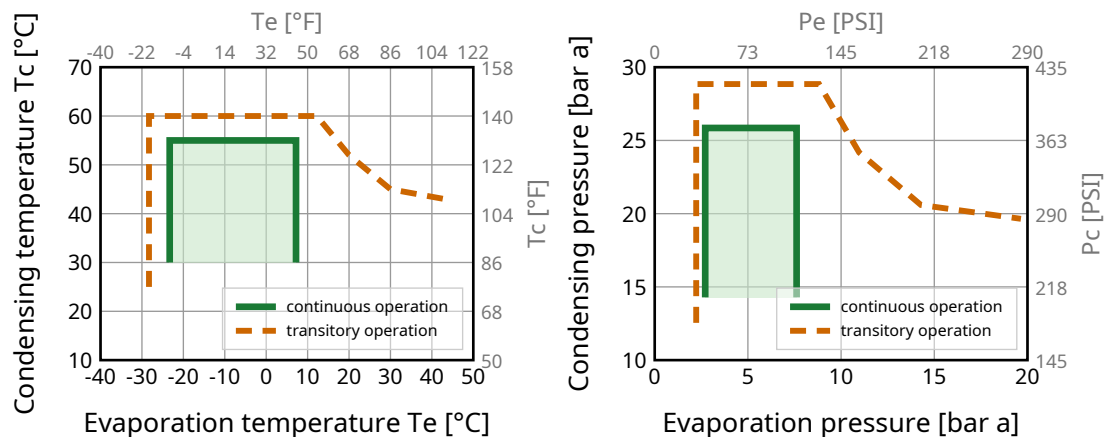
h protector holder 117U0439

c start capacitor (410 μ F, 6.3mm) 117U5043

e run capacitor (23,5 μ F, 6.3mm) 117-7114

b plastic cover + clamp 117U1021

Operation Pressure Range



Model
SC18MLX

Configuration 1

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	1866	6365	1604	1.47	5.02	1267	12.74	51.25	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	1393	4752	1198	1.17	3.98	1194	12.22	44.52	CECOMAF MBP
-10 14	45 113	20 68	45 113	1632	5570	1404	1.44	4.92	1131	11.79	49.09	EN12900 MBP
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	1698	5795	1461	1.39	4.74	1223	12.44	55.34	ARI540 MBP
-10 14	45 113	32 89.6	45 113	1732	5909	1489	1.53	5.22	1131	11.79	47.61	opt MBP
-23.3 -10	45 113	32.2 90	32.2 90	1143	3901	983	1.28	4.38	890	10.30	26.58	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	986	3365	848	1.11	3.78	890	10.30	26.59
-20	-4	1140	3891	981	1.20	4.10	949	10.62	30.88
-15	5	1412	4816	1214	1.36	4.63	1039	11.18	38.49
-10	14	1732	5909	1489	1.53	5.22	1131	11.79	47.61
-5	23	2106	7186	1811	1.72	5.86	1226	12.47	58.46
0	32	2538	8661	2183	1.92	6.54	1325	13.21	71.28
5	41	3034	10352	2609	2.12	7.24	1429	14.02	86.36
7.2	45	3273	11168	2815	2.22	7.56	1477	14.40	93.79

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

-23.3	-10	763	2602	656	0.87	2.97	877	10.29	23.84
-20	-4	893	3046	768	0.93	3.18	957	10.73	28.03
-15	5	1122	3827	965	1.04	3.56	1076	11.44	35.51
-10	14	1393	4752	1198	1.17	3.98	1194	12.22	44.52
-5	23	1711	5838	1471	1.30	4.45	1312	13.07	55.31
0	32	2080	7099	1789	1.45	4.96	1432	13.97	68.16
5	41	2506	8552	2156	1.61	5.50	1555	14.94	83.42
7.2	45	2713	9256	2333	1.69	5.75	1610	15.39	91.00

Model
SC18MLX

Configuration 2

Sales code:
104L2105

Configuration

Motor configuration	CSCR
Power supply (nominal)	115 V/60 Hz 1~
Refrigerant	R452A
Application	MBP
Voltage range	103-127 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))	69 A
RLA (rated load amps / 1s/ U(N))	13 A
Cut in current (U(N))	69 A

Ambient/ machine room temperatures minimum /maximum

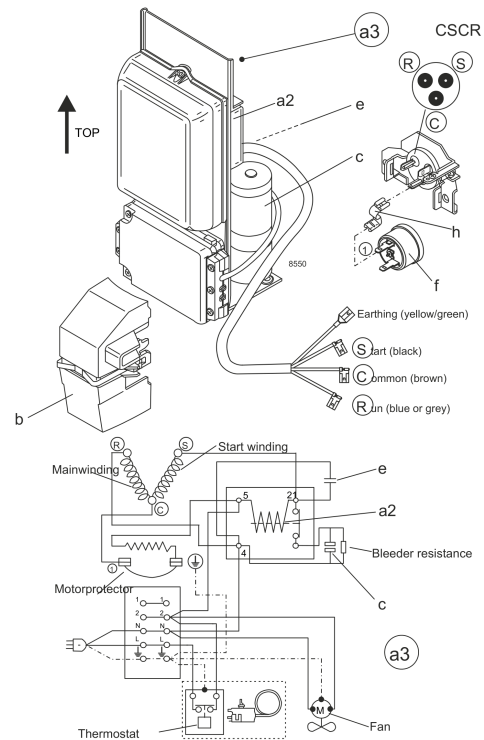
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Electrical Accessories / Wiring Diagram



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h protector holder 117U0439

b plastic cover + clamp 117U1021

Alternative components

a2 potential relay (RVA 7AA3R) 117-7441

f ext. protector (T0777/46) 117U3188

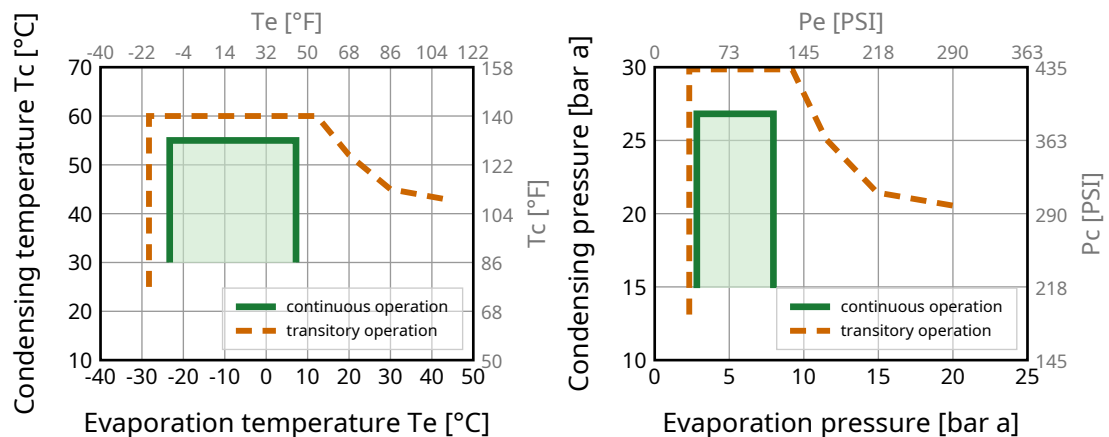
h protector holder 117U0439

c start capacitor (410 μ F, 6.3mm) 117U5043

e run capacitor (23,5 μ F, 6.3mm) 117-7114

b plastic cover + clamp 117U1021

Operation Pressure Range



Model
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Configuration 2

Sales code:
104L2105

Standard Conditions

R452A, 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	1769	6035	1521	1.47	5.03	1201	12.43	50.45	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	1320	4503	1135	1.17	4.00	1127	11.93	43.62	CECOMAF MBP
-10 14	45 113	20 68	45 113	1541	5257	1325	1.44	4.92	1069	11.53	48.06	EN12900 MBP
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	1613	5505	1388	1.39	4.75	1160	12.15	54.45	ARI540 MBP
-10 14	45 113	32 89.6	45 113	1633	5571	1404	1.53	5.21	1069	11.53	46.62	opt MBP
-23.3 -10	45 113	32.2 90	32.2 90	1054	3597	907	1.27	4.35	827	9.89	25.51	opt LBP

Performance Tables

R452A, 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	911	3109	784	1.10	3.76	827	9.89	25.52
-20	-4	1060	3616	911	1.20	4.08	886	10.29	29.80
-15	5	1322	4510	1137	1.35	4.62	977	10.90	37.43
-10	14	1633	5571	1404	1.53	5.21	1069	11.53	46.62
-5	23	1998	6816	1718	1.72	5.85	1165	12.19	57.59
0	32	2421	8261	2082	1.91	6.53	1266	12.87	70.60
5	41	2908	9923	2501	2.12	7.23	1373	13.60	85.95
7.2	45	3144	10728	2704	2.21	7.54	1422	13.93	93.54

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

-23.3	-10	705	2407	607	0.87	2.96	812	9.79	22.80
-20	-4	832	2837	715	0.93	3.18	891	10.32	27.01
-15	5	1054	3598	907	1.04	3.57	1009	11.12	34.52
-10	14	1320	4503	1135	1.17	4.00	1127	11.93	43.62
-5	23	1633	5571	1404	1.31	4.47	1246	12.74	54.57
0	32	1998	6818	1719	1.46	4.98	1368	13.57	67.68
5	41	2421	8261	2082	1.62	5.53	1494	14.42	83.29
7.2	45	2627	8962	2259	1.69	5.78	1551	14.81	91.06