

Model
SC15MNX

Sales code:
104H7570

Compressor Data

Refrigerant(s)	R290
Refr. charge - tech. limit	150g / 5.29oz
Weight	14.20 kg / 31.31lbs
Displacement	15.28 cm3 / 0.93cu.in
Compressors on pallet	80



General – Configurations With SC15MNX

-	Conf. 1	Conf. 2
Motor configuration	CSIR	CSCR
Power supply (nominal)	115 V/60 Hz	115 V/60 Hz
Number of phases	1	1
Voltage range	100-127 V	100-127 V
Approvals	UL	UL
Starting torque	HST	HST
Refrigerant	R290	R290
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	506 / 17.11fl.oz	Max. winding temp.	125 °C
Free gas volume comp.	1,460 cm³ / 49.37fl.oz	Max. discharge temp.	135°C / 275°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

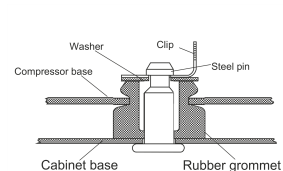
Mounting Accessories



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
SC15MNX

Configuration 1

Sales code:
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Configuration

Motor configuration	CSIR
Power supply (nominal)	115 V/60 Hz 1~
Refrigerant	R290
Application	MBP
Voltage range	100-127 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

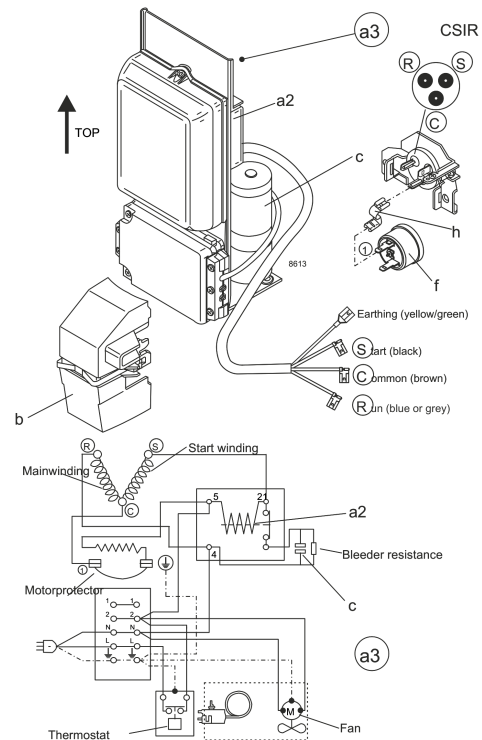
Ambient temperature range: 10 - 43°C / 50 - 109°F

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

b plastic cover + clamp 117U1021

Alternative components

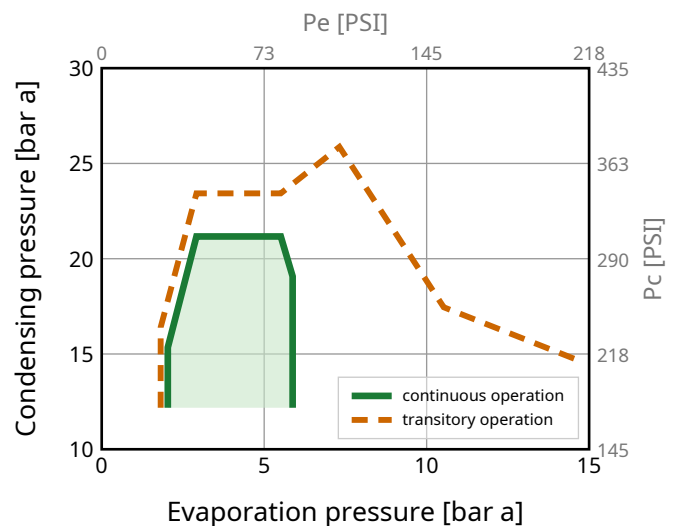
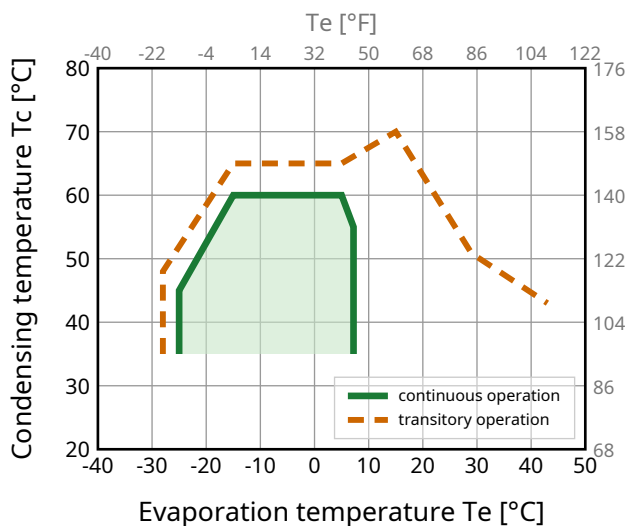
a2 potential relay (RVA 7AA3R) 117-7441

c start capacitor (410µF, 6.3mm) 117U5043

f ext. protector (T0761/46) 117U3212

b plastic cover + clamp 117U1021

Operation Pressure Range



Model
SC15MNX

Configuration 1

Sales code:
104H7570

Standard Conditions

R290, 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	1404	4791	1208	1.77	6.05	793	9.31	16.08	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	1129	3853	971	1.48	5.06	762	9.09	14.36	CECOMAF MBP
-10 14	45 113	20 68	45 113	1231	4202	1059	1.76	6.00	701	8.73	15.15	EN12900 MBP
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	1310	4468	1126	1.74	5.92	754	9.07	17.03	ARI540 MBP
-10 14	45 113	32 89.6	45 113	1280	4368	1101	1.83	6.23	701	8.73	14.70	opt MBP
-23.3 -10	45 113	32.2 90	32.2 90	804	2742	691	1.44	4.90	560	7.87	8.16	opt LBP

Performance Tables

R290, 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]
-25	-13	642	2191	552	1.20	4.09	535	7.74	7.28
-20	-4	861	2937	740	1.43	4.87	603	8.11	9.79
-15	5	1065	3634	916	1.62	5.53	657	8.44	12.17
-10	14	1280	4368	1101	1.83	6.23	701	8.73	14.70
-5	23	1532	5226	1317	2.08	7.08	738	8.99	17.69
0	32	1845	6295	1587	2.39	8.15	772	9.25	21.45
5	41	2246	7662	1931	2.78	9.48	808	9.50	26.32
7.2	45	2456	8380	2112	2.98	10.15	826	9.62	28.89

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

-25	-13	483	1647	415	0.90	3.05	540	7.78	6.05
-20	-4	726	2477	624	1.15	3.94	629	8.27	9.14
-15	5	933	3183	802	1.33	4.54	702	8.70	11.80
-10	14	1129	3853	971	1.48	5.06	762	9.09	14.36
-5	23	1340	4572	1152	1.65	5.63	813	9.45	17.15
0	32	1591	5429	1368	1.85	6.32	859	9.79	20.52
5	41	1908	6509	1641	2.11	7.20	904	10.13	24.82
7.2	45	2074	7078	1784	2.24	7.66	924	10.28	27.10

Model
SC15MNX

Configuration 2

Sales code:
104H7570

Configuration

Motor configuration	CSCR
Power supply (nominal)	115 V/60 Hz 1~
Refrigerant	R290
Application	MBP
Voltage range	100-127 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))	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

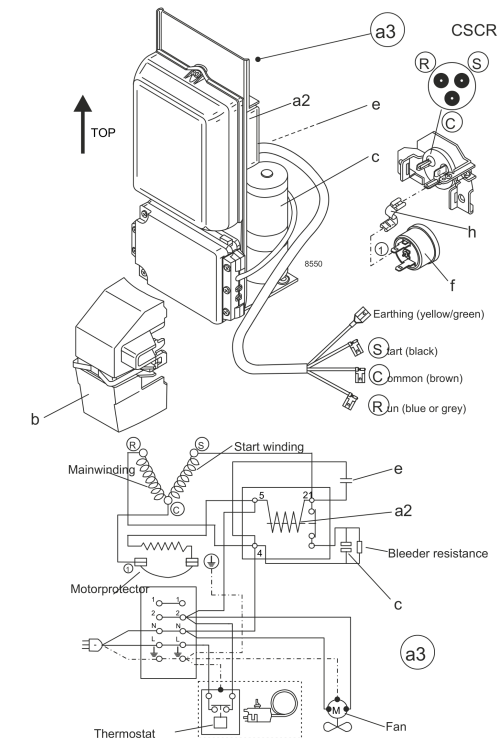
Ambient temperature range: 10 - 43°C / 50 - 109°F

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

b plastic cover + clamp 117U1021

Alternative components

a2 potential relay (RVA 7AA3R) 117-7441

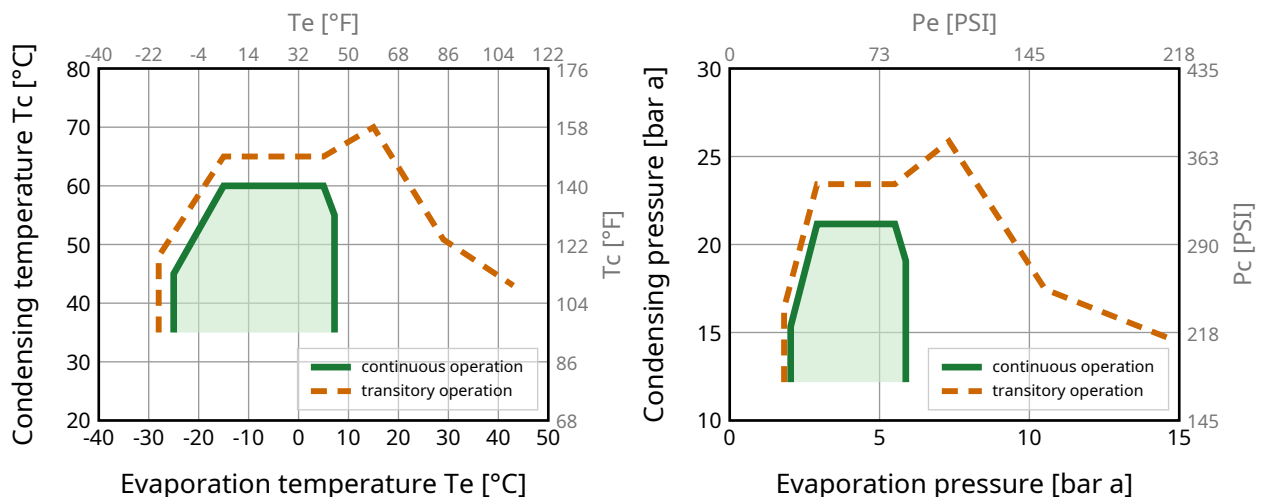
e run capacitor (23,5 μ F, 6.3mm) 117-7114

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

f ext. protector (T0761/46) 117U3212

b plastic cover + clamp 117U1021

Operation Pressure Range



Model
SC15MNX

Configuration 2

Sales code:
104H7570

Standard Conditions

R290, 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	1422	4853	1223	1.88	6.42	756	8.87	16.28	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	1143	3899	983	1.57	5.37	726	8.67	14.53	CECOMAF MBP
-10 14	45 113	20 68	45 113	1250	4264	1075	1.87	6.38	668	8.32	15.38	EN12900 MBP
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	1328	4531	1142	1.85	6.30	719	8.65	17.27	ARI540 MBP
-10 14	45 113	32 89.6	45 113	1299	4433	1117	1.94	6.63	668	8.32	14.92	opt MBP
-23.3 -10	45 113	32.2 90	32.2 90	822	2805	707	1.52	5.19	540	7.60	8.35	opt LBP

Performance Tables

R290, 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]
-25	-13	660	2252	568	1.27	4.34	519	7.50	7.48
-20	-4	876	2989	753	1.51	5.17	579	7.79	9.97
-15	5	1081	3689	930	1.72	5.88	628	8.07	12.35
-10	14	1299	4433	1117	1.94	6.63	668	8.32	14.92
-5	23	1554	5301	1336	2.21	7.54	703	8.57	17.94
0	32	1868	6374	1607	2.54	8.67	735	8.80	21.72
5	41	2267	7734	1949	2.95	10.08	768	9.02	26.56
7.2	45	2475	8444	2128	3.16	10.79	782	9.12	29.11

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

-25	-13	496	1694	427	0.95	3.24	523	7.54	6.22
-20	-4	736	2512	633	1.22	4.16	604	7.95	9.27
-15	5	944	3220	812	1.41	4.80	671	8.32	11.94
-10	14	1143	3899	983	1.57	5.37	726	8.67	14.53
-5	23	1357	4630	1167	1.75	5.98	774	9.00	17.37
0	32	1610	5494	1385	1.97	6.72	817	9.32	20.77
5	41	1926	6573	1657	2.25	7.66	858	9.61	25.06
7.2	45	2092	7137	1799	2.39	8.15	876	9.74	27.32