

Model

Designation	SC15MNX	115V/60Hz 1~	Sales code:	104H7570
-------------	----------------	---------------------	-------------	-----------------

Compressor design

Oil type	Polyolester	Refrigerant(s)	R290
Oil viscosity	32cST	Displacement	15,28cm ³ / 0,93cu.in
Oil quantity	500cm ³ / 16,9fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	150g / 5,3oz		
Free gas volume comp.	1460cm ³ / 49,4fl.oz		
Weight	14,2kg / 31,3lbs		
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.	135°C / 275°F		



General - Configurations with SC15MNX

	Conf. 1	Conf. 2
Motorconfiguration	CSIR	CSCR
Power supply (nominal)	115V/60Hz	115V/60Hz
Number of phases	1	1
Voltage range	100-127V	100-127V
Approvals	UL	UL
Starting torque	HST	HST
Note	Protector and cover are included and pre-assembled to compressor.	

Applications with SC15MNX

	Conf. 1	Conf. 2
Refrigerant	R290	R290
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 SC15MNX

	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

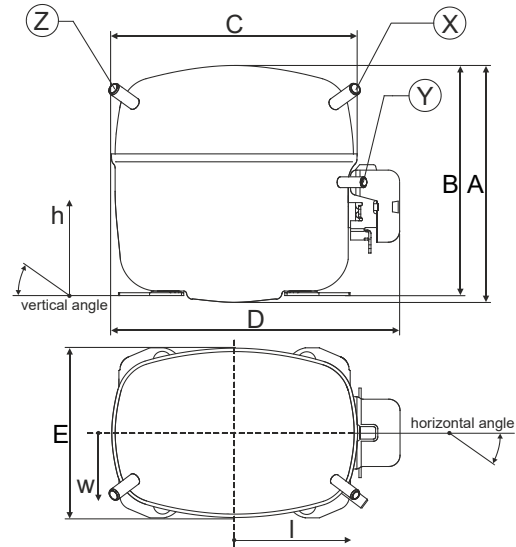
Model

Designation	SC15MNX	115V/60Hz 1~	Sales code:	104H7570
-------------	----------------	--------------	-------------	-----------------

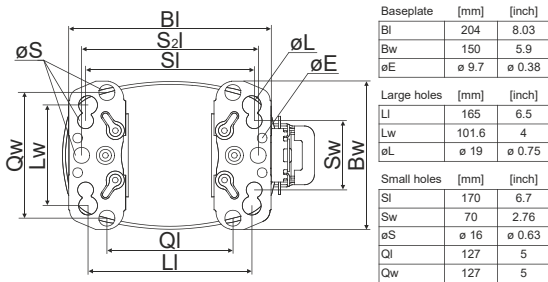
Compressor dimensions

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

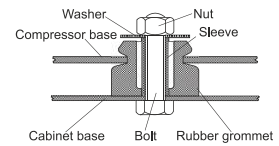
Connectors		Suction	Discharge	Process
		X	Y	Z
Diameter	[mm]	øi 9,54-9,72	øi 6,41-6,59	øi 6,41-6,59
(i:inside, o:outside)	[in]	øi 0,38-0,38	øi 0,25-0,26	øi 0,25-0,26
Material		copper	copper	copper
Horizontal angle	±2°	37°	37°	143°
Vertical angle	±2°	30°	0°	150°
Position l/h/w	[mm]	107/193/55	115/110/63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



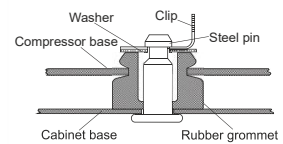
Compressor fixation



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.

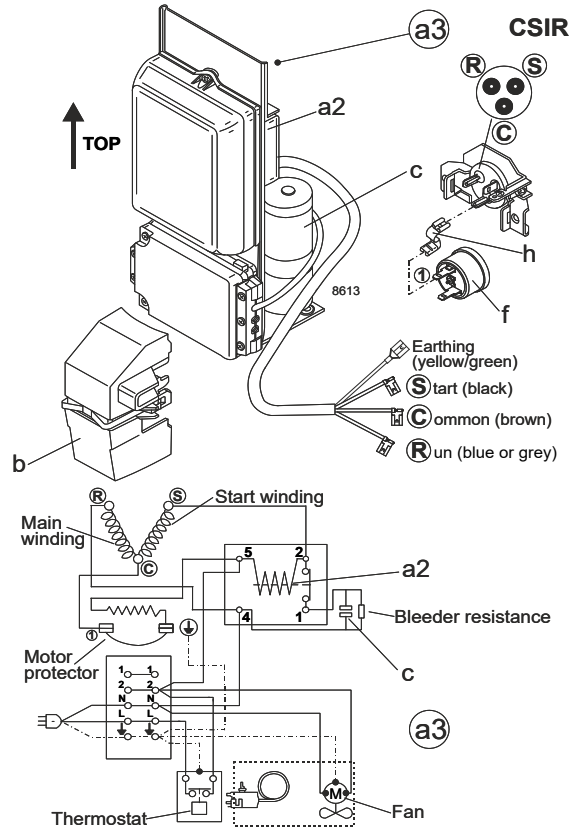
Model

Designation	SC15MNX	115V/60Hz	Conf. 1	Sales code:	104H7570
-------------	----------------	------------------	----------------	-------------	-----------------

Configuration

Motorconfiguration	CSIR
Power supply (nominal)	115V/60Hz 1~
Refrigerant	R290
Application	MBP
Voltage range	100-127V
Starting torque	HST
Approvals	UL SA3693

Electrical accessories / wiring diagram

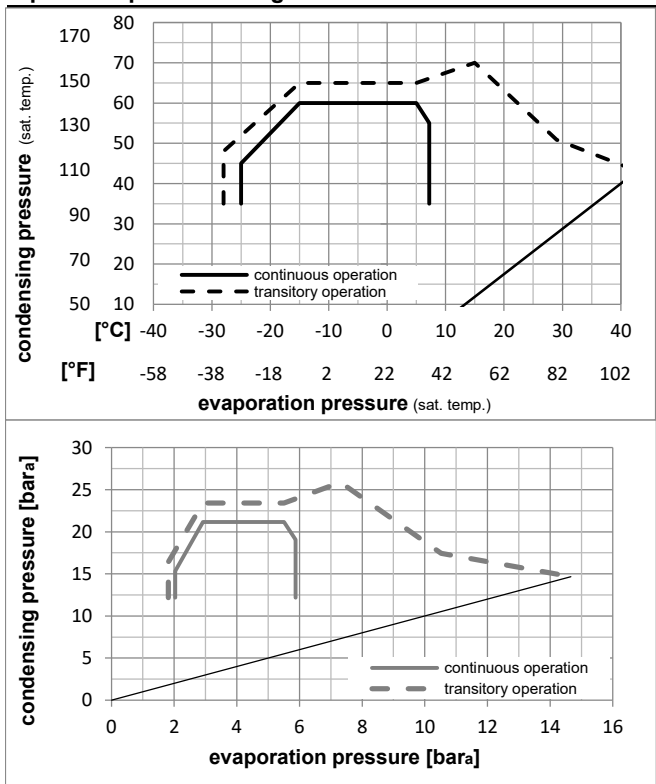


Ambient temperatures / system cooling

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
b	plastic cover	117U1021

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

a2	potential relay (RVA 7AA3R)	117-7441
c	start capacitor (410µF, 6.3mm)	117U5043
f	ext. protector (T0761/46)	117U3212
b	plastic cover	117U1021

Model

Designation **SC15MNX 115V/60Hz** Conf. 1 Sales code: **104H7570**

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				
					Cooling capacity						COP EER				
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	m		
[°C]	[°C]	[°C]	[°C]	[°C]							[W]	[A]	[kg/h]		
-6,66	54,4	35	46,1	1404,4	4796	1208,6	1,77	6,05	1,52	793,3	9,31	16,02	ASHRAE MBP		
[°F]	20	130	95	115											
-10	55	32	55	1129,2	3856	971,8	1,48	5,06	1,28	761,6	9,09	14,28	cecomaf MBP		
[°F]	14	131	89,6	131											
-10	45	20	45	1229,7	4200	1058,3	1,76	5,99	1,51	700,6	8,73	15,10	EN12900 MBP		
[°F]	14	113	68	113											
-6,66	48,9	18,3	48,9	1307,7	4466	1125,4	1,73	5,91	1,49	755,4	9,08	16,98	ARI540 MBP		
[°F]	20	120	65	120											
-10	45	32	45	1280,2	4372	1101,7	1,83	6,24	1,57	700,6	8,73	14,65	opt		
[°F]	14	113	89,6	113											
-25	45	32	45	642,1	2193	552,6	1,20	4,10	1,03	534,9	7,74	7,24	opt		
[°F]	-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	642,1	2193	552,6	1,20	4,10	1,03	534,9	7,74	7,24
cond. pressure	-23,3	-10	718,3	2453	618,1	1,28	4,38	1,10	559,4	7,87	8,11
pc= 45/113	-15	5	1065,1	3638	916,6	1,62	5,54	1,40	656,9	8,44	12,12
return gas temp.	-9,4	15	1305,9	4460	1123,8	1,85	6,33	1,59	704,9	8,76	14,95
RGT= 32/90	-3,9	25	1595,0	5447	1372,7	2,14	7,31	1,84	745,6	9,05	18,39
liquid temp	0	32	1844,9	6301	1587,7	2,39	8,16	2,06	772,5	9,25	21,40
Tliq= 45/113	7,2	45	2458,3	8395	2115,6	2,98	10,17	2,56	825,8	9,62	28,88
[°C / °F]	-25	-13	482,8	1649	415,5	0,89	3,06	0,77	539,7	7,78	6,01
cond. pressure	-23,3	-10	569,5	1945	490,1	1,00	3,40	0,86	571,5	7,95	7,10
pc= 55/131	-15	5	933,0	3186	802,9	1,33	4,54	1,14	701,6	8,70	11,73
return gas temp	-9,4	15	1151,4	3932	990,9	1,50	5,12	1,29	767,6	9,13	14,58
RGT= 32/90	-3,9	25	1391,4	4752	1197,5	1,69	5,77	1,45	823,3	9,53	17,76
liquid temp	0	32	1591,1	5434	1369,3	1,85	6,33	1,59	859,0	9,79	20,44
Tliq= 55/131	7,2	45	2076,3	7091	1786,9	2,25	7,67	1,93	924,7	10,28	27,05

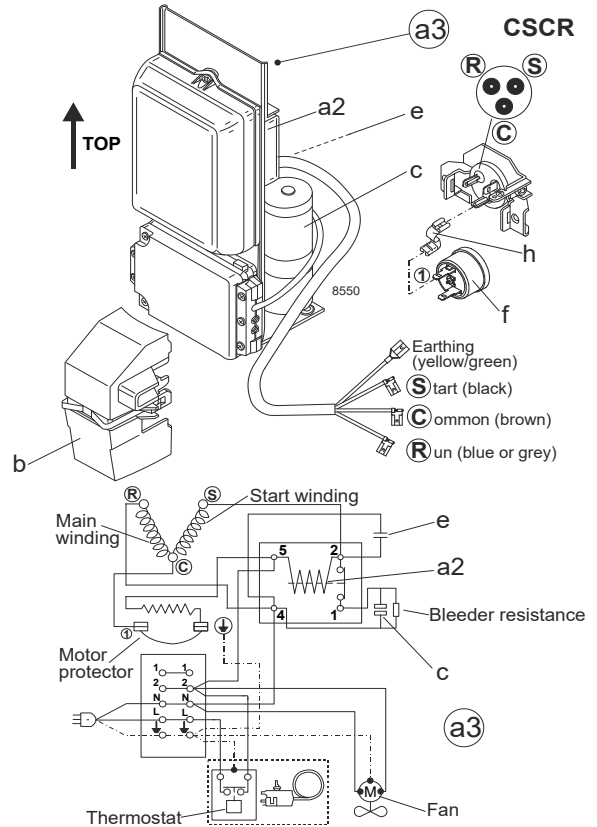
Model

Designation	SC15MNX	115V/60Hz	Conf. 2	Sales code:	104H7570
-------------	----------------	------------------	----------------	-------------	-----------------

Configuration

Motorconfiguration	CSCR
Power supply (nominal)	115V/60Hz 1~
Refrigerant	R290
Application	MBP
Voltage range	100-127V
Starting torque	HST
Approvals	UL SA3693

Electrical accessories / wiring diagram

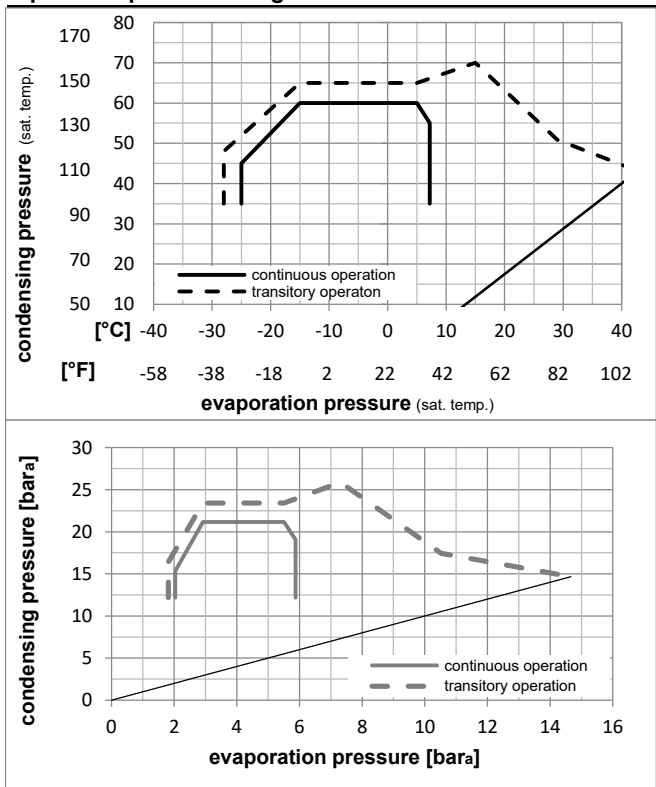


Ambient temperatures / system cooling

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
b	plastic cover	117U1021

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

a2	potential relay (RVA 7AA3R)	117-7441
e	run capacitor (23,5µF, 6.3mm)	117-7114
c	start capacitor (410µF, 6.3mm)	117U5043
f	ext. protector (T0761/46)	117U3212
b	plastic cover	117U1021

Model

Designation **SC15MNX 115V/60Hz** Conf. **2** Sales code: **104H7570**

Optimization + standard conditions

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

	Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)						Power consumption			ASHRAE MBP				
	pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P1	I	Ref. mass flow m						
	[°C]	[°F]	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]					
	-6,66	20	54,4	130	35	95	46,1	115	1422,3	4857	1224,0	1,88	6,42	1,62	756,2	8,88	16,22	ASHRAE MBP
	-10	14	55	131	32	89,6	55	131	1142,8	3903	983,5	1,57	5,37	1,35	726,5	8,67	14,46	cecomaf MBP
	-10	14	45	113	20	68	45	113	1247,9	4262	1074,0	1,87	6,38	1,61	668,1	8,32	15,32	EN12900 MBP
	-6,66	20	48,9	120	18,3	65	48,9	120	1326,0	4529	1141,2	1,84	6,29	1,59	719,9	8,65	17,22	ARI540 MBP
	-10	14	45	113	32	89,6	45	113	1299,1	4437	1118,0	1,94	6,64	1,67	668,1	8,32	14,86	opt
	-25	-13	45	113	32	89,6	45	113	659,9	2254	567,9	1,27	4,35	1,10	518,6	7,50	7,44	opt

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	659,9	2254	567,9	1,27	4,35	1,10	518,6	7,50	7,44
cond. pressure	-23,3	-10	734,7	2509	632,3	1,36	4,65	1,17	540,1	7,60	8,30
pc= 45/113	-15	5	1081,3	3693	930,6	1,72	5,88	1,48	627,7	8,07	12,30
return gas temp.	-9,4	15	1325,2	4526	1140,4	1,97	6,73	1,70	672,2	8,35	15,17
RGT= 32/90	-3,9	25	1617,3	5524	1391,9	2,28	7,78	1,96	710,3	8,62	18,65
liquid temp	0	32	1868,1	6380	1607,7	2,54	8,68	2,19	735,1	8,80	21,67
Tliq= 45/113	7,2	45	2477,1	8460	2131,8	3,16	10,81	2,72	782,7	9,12	29,10
[°C / °F]	-25	-13	496,5	1695	427,3	0,95	3,24	0,82	523,2	7,54	6,18
cond. pressure	-23,3	-10	581,4	1986	500,4	1,05	3,60	0,91	551,8	7,68	7,25
pc= 55/131	-15	5	943,8	3223	812,2	1,41	4,81	1,21	670,6	8,32	11,87
return gas temp	-9,4	15	1165,4	3980	1002,9	1,59	5,44	1,37	732,2	8,71	14,75
RGT= 32/90	-3,9	25	1409,1	4812	1212,7	1,80	6,14	1,55	784,4	9,07	17,98
liquid temp	0	32	1610,3	5500	1385,9	1,97	6,73	1,70	817,4	9,32	20,68
Tliq= 55/131	7,2	45	2093,3	7149	1801,5	2,39	8,16	2,06	876,2	9,74	27,27