

## Model

Designation	<b>SCE18MNX</b>	115V/60Hz 1~	Sales code:	<b>104H7879</b>
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## Compressor design

Oil type	Polyolester	Refrigerant(s)	<b>R290</b>
Oil viscosity	32cST	Displacement	17,68cm <sup>3</sup> / 1,08cu.in
Oil quantity	550cm <sup>3</sup> / 18,6fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	450g / 15,9oz		
Free gas volume comp.	1460cm <sup>3</sup> / 49,4fl.oz		
Weight	14,2kg / 31,3lbs		
Motor protection	external		
Winding resistance main	0,7Ω (at 25°C)		
Winding resistance aux	2,81Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	135°C / 275°F		



## General - Configurations with SCE18MNX

	<b>Conf. 1</b>	<b>Conf. 2</b>
Motorconfiguration	CSCR	CSIR
Power supply (nominal)	115V/60Hz	115V/60Hz
Number of phases	1	1
Voltage range	103-127V	103-127V
Approvals	UL, EAC	UL, EAC
Starting torque	HST	HST
Note	Protector and cover are included and pre-assembled to compressor.	

## Applications with SCE18MNX

	<b>Conf. 1</b>	<b>Conf. 2</b>
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 SCE18MNX

	<b>Conf. 1</b>	<b>Conf. 2</b>
Starting device type	relay	relay
Run capacitor	23,5μF	-/-
Start capacitor	410μF	410μF
LRA (locked rotor amps / 4s)	56,6A	55,9A
RLA (rated load amps / 1s)	8,98A	9,87A
Cut in current	56,6A	55,9A

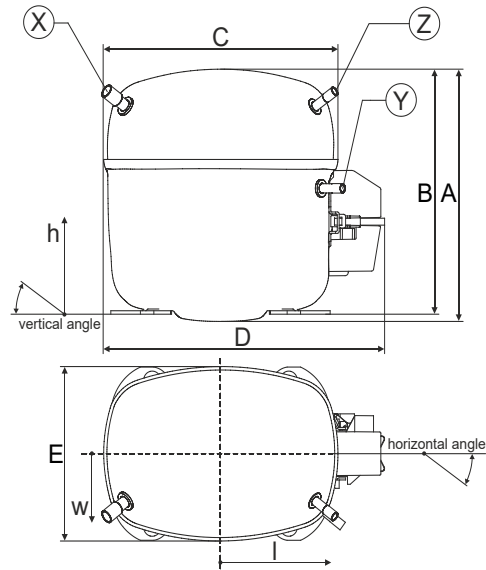
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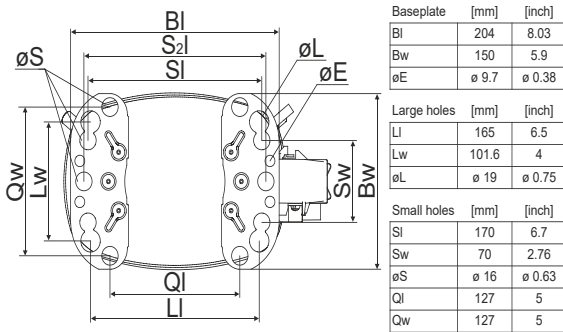
## Compressor dimensions

<b>Housing</b>	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

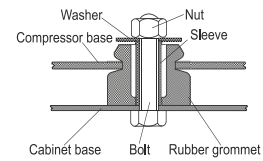
Connectors		Suction	Discharge	Process
		X	Y	Z
Diameter	[mm]	øi 9,54-9,72	øi 6,41-6,59	øi 6,41-6,59
	(i:inside, o:outside) [in]	øi 0,38-0,38	øi 0,25-0,26	øi 0,25-0,26
Material		copper	copper	copper
Horizontal angle	±2°	37°	37°	143°
Vertical angle	±2°	30°	0°	150°
Position l/h/w	[mm]	107/193/55	115/110/63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



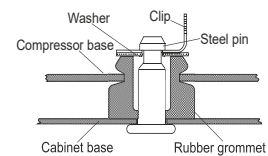
## Compressor fixation



### 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.

Provision for PE Grounding is located at the PE Stamp on the compressor

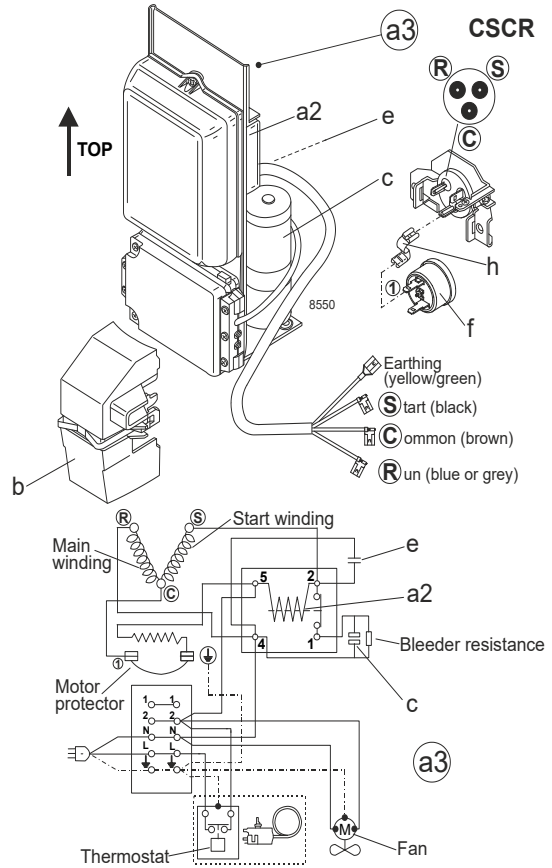
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## Configuration

Motorconfiguration	CSCR
Power supply (nominal)	115V/60Hz 1~
Refrigerant	R290
Application	MBP
Voltage range	103-127V
Starting torque	HST
Approvals	UL EAC

## Electrical accessories / wiring diagram



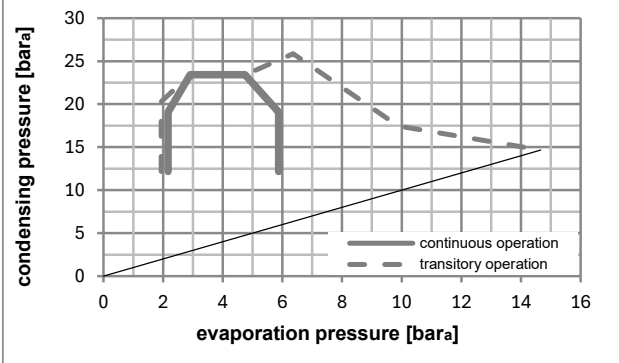
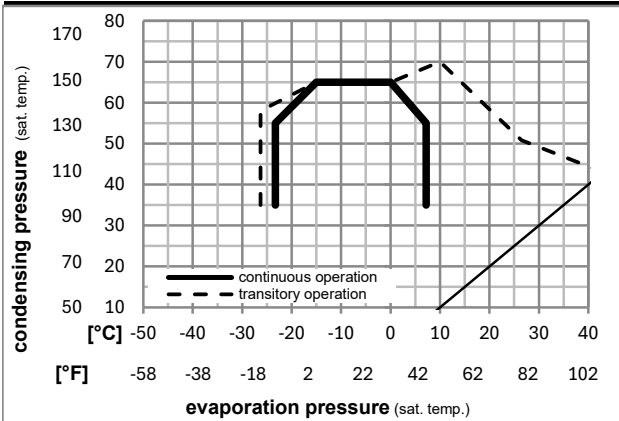
## Ambient/ machine room temperatures minimum /maximum

Ambient temperature range: 10 - 43°C / 50 - 110°F

Machine room temperature range: 10 - 48°C / 50 - 119°F

Compressor cooling: fan 3m/s

## Operation pressure range



## Components (protector + ~holder + cover: pre assembled)

a3	SC starter kit (600mm)	117-7805
h	protector holder	117U0439
f	ext. protector (T0803)	117U3220
b	plastic cover	117U1021

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

a2	potential relay (RVA 7AB3R A39)	117-7443
e	run capacitor (23,5µF, 6.3mm)	117-7133
c	start capacitor (410µF, 6.3mm)	117U5379
h	protector holder	117U0439
f	ext. protector (T0803)	117U3220
b	plastic cover	117U1021

### Model

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### Optimization + standard conditions

R290, 115V/60Hz, CSCR, fan 3m/s, UL, EAC

Evaporating pressure (saturation temperature)					Condensing pressure (saturation temperature)			Return gas temp.			Liquid temp.			Cooling capacity			COP	EER	Power consumption			ASHRAE MBP
pe	pc	RGT	Tliq		[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	m				[W]	[A]	[kg/h]			
[°C]	[°C]	[°C]	[°C]																			
-7	54	35	46		1796,7	6136	1546,3	2,13	7,26	1,83	845,0	8,43	20,50									
[°F]	20	130	95	115																		
-10	55	32	55		1421,4	4854	1223,2	1,76	6,03	1,52	805,5	8,13	17,98								cecomaf MBP	
[°F]	14	131	90	131																		
-10	45	20	45		1595,5	5449	1373,1	2,16	7,38	1,86	738,2	7,73	19,59								EN12900 MBP	
[°F]	14	113	68	113																		
-7	49	18	49		1697,2	5796	1460,6	2,12	7,25	1,83	799,6	8,18	22,04								ARI540 MBP	
[°F]	20	120	65	120																		
-10	45	32	45		1661,0	5673	1429,5	2,25	7,68	1,94	738,2	7,73	19,00								opt	
[°F]	14	113	90	113																		
-25	45	32	45		847,9	2896	729,7	1,48	5,04	1,27	574,5	6,28	9,56								opt	
[°F]	-13	113	90	113																		

### Performance tables

R290, 115V/60Hz, CSCR, fan 3m/s, UL, EAC

	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	847,9	2896	729,7	1,48	5,04	1,27	574,5	6,28	9,56	
cond. pressure	-23	-10	926,0	3162	796,9	1,55	5,31	1,34	595,8	6,48	10,46	
pc= 45/113	-15	5	1358,9	4641	1169,5	1,97	6,72	1,69	690,2	7,33	15,46	
return gas temp.	-9	15	1696,9	5795	1460,4	2,28	7,80	1,96	743,2	7,77	19,43	
RGT= 32/90	-4	25	2084,3	7118	1793,8	2,64	9,02	2,27	789,3	8,14	24,04	
liquid temp	0	32	2389,6	8161	2056,5	2,92	9,98	2,51	818,0	8,37	27,72	
Tliq= 45/113	7,2	45	3041,9	10389	2617,9	3,52	12,01	3,03	864,7	8,71	35,74	
[°C / °F]	-25	-13	658,0	2247	566,3	1,19	4,05	1,02	554,5	6,33	8,19	
cond. pressure	-23	-10	735,7	2512	633,1	1,25	4,28	1,08	587,2	6,56	9,17	
pc= 55/131	-15	5	1147,4	3919	987,5	1,57	5,35	1,35	732,2	7,60	14,43	
return gas temp.	-9	15	1453,4	4964	1250,8	1,79	6,10	1,54	813,0	8,19	18,40	
RGT= 32/90	-4	25	1794,6	6129	1544,4	2,03	6,95	1,75	882,4	8,71	22,90	
liquid temp	0	32	2059,0	7032	1772,0	2,23	7,61	1,92	924,6	9,04	26,45	
Tliq= 55/131	7,2	45	2616,8	8937	2252,0	2,64	9,02	2,27	990,4	9,61	34,09	

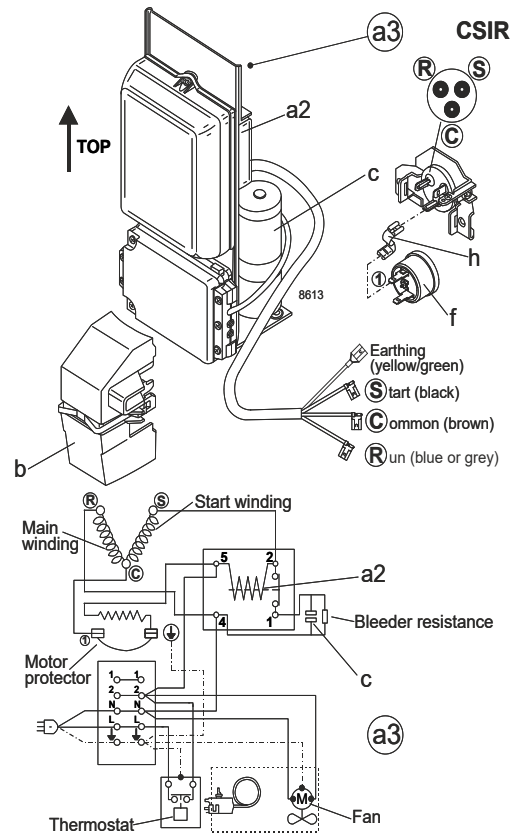
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## Configuration

Motorconfiguration	CSIR
Power supply (nominal)	115V/60Hz 1~
Refrigerant	R290
Application	MBP
Voltage range	103-127V
Starting torque	HST
Approvals	UL
	EAC

## Electrical accessories / wiring diagram



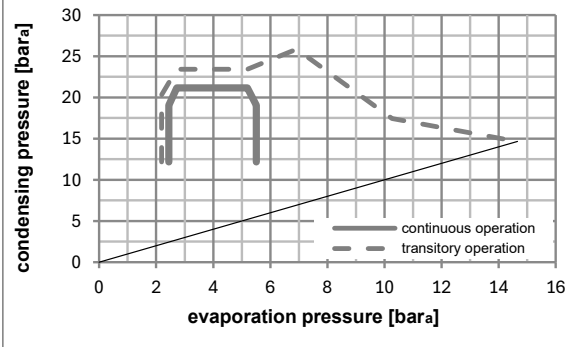
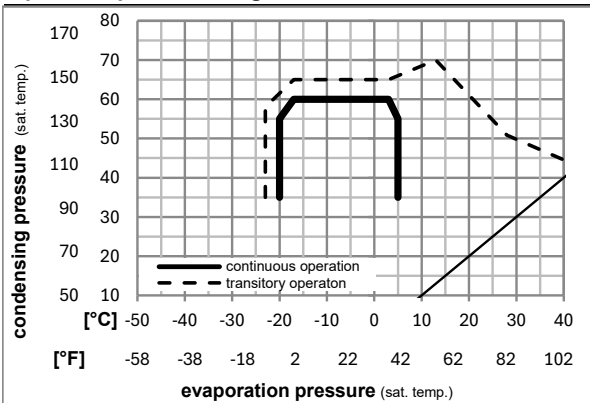
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## Components (protector + ~holder + cover: pre assembled)

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## Optimization + standard conditions

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Evaporating pressure (saturation temperature)					Condensing pressure (saturation temperature)						Power consumption			ASHRAE MBP
Return gas temp.				Liquid temp.		Cooling capacity	COP	EER	P1	Current consumption		Ref. mass flow		
pe	pc	RGT	Tliq	[W]	[Btu/h]					[kcal/h]	[W/W]		[Btu/Wh]	
[°C]	[°F]	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]		
-7	54	35	46	1783,7	6092	1535,1	1,98	6,78	1,71	898,8	10,38	20,35	ASHRAE MBP	
20	130	95	115											
-10	55	32	55	1411,1	4819	1214,4	1,65	5,62	1,42	856,8	10,01	17,85	cecomaf MBP	
14	131	90	131											
-10	45	20	45	1584,0	5410	1363,2	2,02	6,89	1,74	785,2	9,52	19,45	EN12900 MBP	
14	113	68	113											
-7	49	18	49	1684,9	5754	1450,1	1,98	6,77	1,70	850,5	10,07	21,88	ARI540 MBP	
20	120	65	120											
-10	45	32	45	1649,0	5632	1419,1	2,10	7,17	1,81	785,2	9,52	18,86	opt	
14	113	90	113											
-25	45	32	45	841,8	2875	724,5	1,38	4,70	1,19	611,1	7,74	9,49	opt	
-13	113	90	113											

## Performance tables

R290, 115V/60Hz, CSIR, fan 3m/s, UL, EAC

	pe		Cooling capacity			COP	EER	P1	I	m	
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]				[kcal/Wh]
[°C / °F]	-20	-4	1082,1	3696	931,3	1,60	5,46	1,38	676,4	8,43	12,25
cond. pressure	-15	5	1349,1	4607	1161,0	1,84	6,28	1,58	734,2	9,02	15,35
pc= 45/113	-9	15	1684,6	5753	1449,8	2,13	7,28	1,83	790,5	9,57	19,29
return gas temp.	-7	20	1870,3	6387	1609,6	2,29	7,83	1,97	815,9	9,81	21,49
RGT= 32/90	-4	25	2069,3	7067	1780,8	2,46	8,42	2,12	839,5	10,03	23,86
liquid temp	0	32	2372,3	8102	2041,6	2,73	9,31	2,35	870,1	10,30	27,52
Tliq= 45/113	5	41	2808,1	9590	2416,7	3,10	10,59	2,67	905,3	10,61	32,85
[°C / °F]	-20	-4	888,6	3035	764,7	1,29	4,40	1,11	690,1	8,62	11,11
cond. pressure	-15	5	1139,1	3890	980,3	1,46	5,00	1,26	778,8	9,36	14,32
pc= 55/131	-9	15	1442,9	4928	1241,8	1,67	5,70	1,44	864,8	10,08	18,27
return gas temp	-7	20	1607,4	5489	1383,3	1,78	6,08	1,53	903,2	10,41	20,43
RGT= 32/90	-4	25	1781,6	6085	1533,3	1,90	6,48	1,63	938,6	10,72	22,74
liquid temp	0	32	2044,1	6981	1759,2	2,08	7,10	1,79	983,5	11,14	26,25
Tliq= 55/131	5	41	2417,5	8256	2080,5	2,34	7,99	2,01	1033,7	11,63	31,35