

Model

Designation	SCE18MNX	220-240V/50Hz 1~	Sales code:	104H8849
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R290
Oil viscosity	32cSt	Displacement	17,69cm ³ / 1,08cu.in
Oil quantity	550cm ³ / 18,6fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	550g / 19,4oz		
Free gas volume comp.	1460cm ³ / 49,4fl.oz		
Weight	14,2kg / 31,3lbs		
Motor protection	external		
Winding resistance main	3,44Ω (at 25°C)		
Winding resistance aux	9,4Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	135°C / 275°F		



General - Configurations with SCE18MNX

	Conf. 1	Conf. 2
Motorconfiguration	CSIR	CSIR
Power supply (nominal)	220-240V/50Hz	220-240V/50Hz
Number of phases	1	1
Voltage range	198-254V	198-254V
Approvals	VDE, CCC, EAC, CB	VDE, CCC, EAC, CB
Starting torque	HST	HST
Note	Protector, relay and cover are included and pre-assembled to compressor.	

Applications with SCE18MNX

	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 SCE18MNX

	Conf. 1	Conf. 2
Starting device type	relay	relay
Run capacitor	-/-	-/-
Start capacitor	80μF	80μF
LRA (locked rotor amps / 4s/ U(N))	21,07A	21,07A
RLA (rated load amps / 1s/ U(N))	3,75A	3,75A
Cut in current (U(N))	21,07A	21,07A

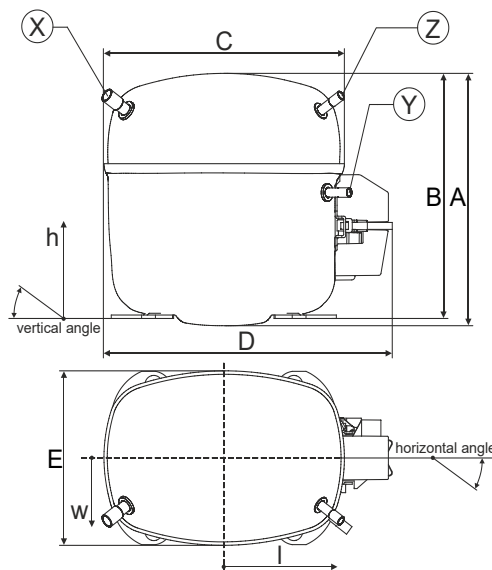
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Compressor dimensions

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	X	Y	Z
Diameter [mm]	øi 10,11-10,29	øi 6,11-6,29	øi 6,11-6,29	øi 10,11-10,29	øi 6,11-6,29	øi 6,11-6,29
(i:inside, o:outside) [in]	øi 0,4-0,41	øi 0,24-0,25	øi 0,24-0,25	øi 0,4-0,41	øi 0,24-0,25	øi 0,24-0,25
Material	copper	copper	copper	copper	copper	copper
Horizontal angle ±2°	37°	37°	143°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°	30°	0°	150°
Position l/h/w [mm]	107/193/55	115/110/63	-107/193/55	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	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	12	12	12
[in]	0,5	0,5	0,5	0,5	0,5	0,5



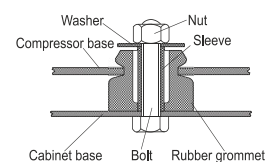
Compressor fixation

Baseplate	[mm]	[inch]
BI	204	8.03
Bw	150	5.9
øE	ø 9.7	ø 0.38

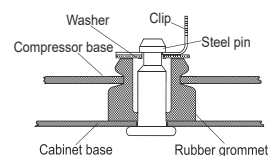
Large holes	[mm]	[inch]
LI	165	6.5
Lw	101.6	4
øL	ø 19	ø 0.75

Small holes	[mm]	[inch]
SI	170	6.7
Sw	70	2.76
øS	ø 16	ø 0.63
QI	127	5
Qw	127	5

Bolt joint



Snap-on



Mounting accessories

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

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

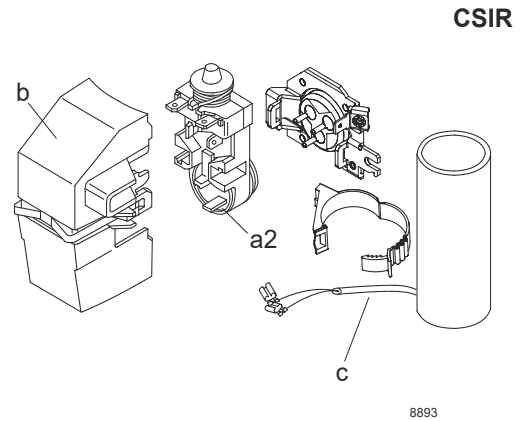
Model

Designation **SCE18MNX** **220-240V/50Hz** Conf. 1 Sales code: **104H8849**

Configuration

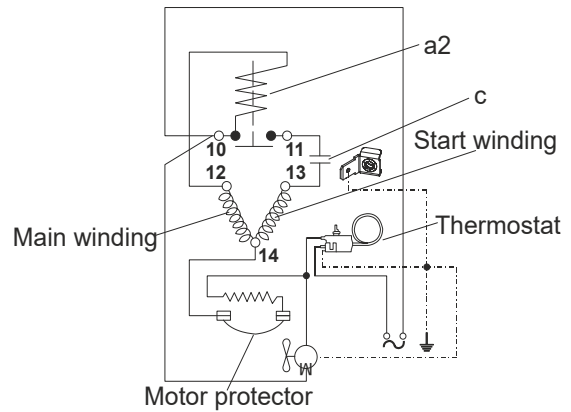
Motor configuration CSIR
 Power supply (nominal) 220-240V/50Hz 1~
 Refrigerant R290
 Application MBP
 Voltage range 198-254V
 Starting torque HST
 Approvals VDE
 CCC
 EAC
 CB

Electrical accessories / wiring diagram

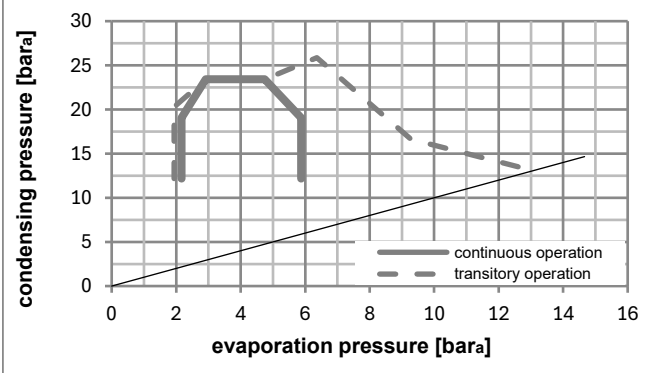
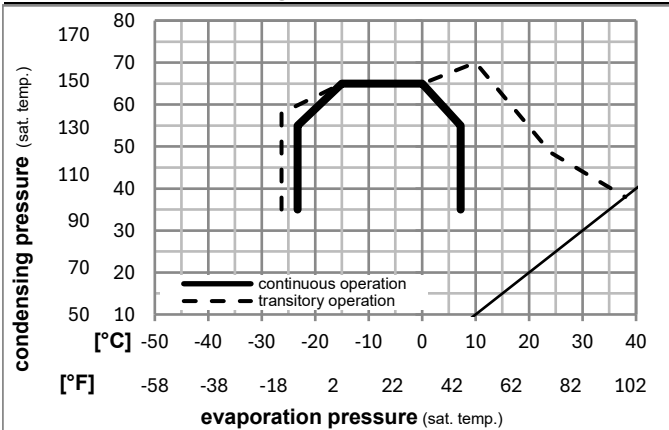


Ambient/ machine room temperatures minimum /maximum

Ambient temperature range: 10 - 38°C / 50 - 101°F
 Machine room temperature range: 10 - 43°C / 50 - 110°F
 Compressor cooling: fan 3m/s



Operation pressure range



Components (relay (a2)+ cover (b): pre-assembled)

a2	assy. relay + ext. protector (T0214)	117U7406
c	start capacitor (80μF)	117U5017
d	cord relief	103N1004
b	plastic cover + clamp	117U1033

Noise emission

Operation pressures:	pe: -10°C / 14°F
	pc: 45°C / 113°F
Motor speed appr.:	2900rpm
Lw(A):	58dB(A)

Model

Designation **SCE18MNX** **220-240V/50Hz** Conf. 1 Sales code: **104H8849**

Optimization + standard conditions

R290, 230V/50Hz, CSIR, fan 3m/s, VDE, CCC, EAC, CB

		Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)			Return gas temp.		Liquid temp.		Cooling capacity			COP	EER	Power consumption		
		pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	Current consumption		Ref. mass flow				
[°C]	[°F]											[W]	[A]			[kg/h]				
[°C]	-7	54	35	46	1503,3	5134	1293,8	1,98	6,75	1,70	761,1	4,43			17,15	ASHRAE MBP				
[°F]	20	130	95	115																
[°C]	-10	55	32	55	1189,8	4063	1023,9	1,64	5,61	1,41	723,7	4,30			15,05	cecomaf MBP				
[°F]	14	131	90	131																
[°C]	-10	45	20	45	1320,5	4510	1136,5	1,98	6,78	1,71	665,4	4,11			16,21	EN12900 MBP				
[°F]	14	113	68	113																
[°C]	-7	49	18	49	1410,0	4816	1213,5	1,95	6,65	1,68	724,1	4,31			18,31	ARI540 MBP				
[°F]	20	120	65	120																
[°C]	-10	45	32	45	1374,7	4695	1183,1	2,07	7,06	1,78	665,4	4,11			15,73	opt				
[°F]	14	113	90	113																
[°C]	-25	45	32	45	719,1	2456	618,9	1,39	4,76	1,20	515,9	3,68			8,11	opt				
[°F]	-13	113	90	113																

Performance tables

R290, 230V/50Hz, CSIR, fan 3m/s, VDE, CCC, EAC, CB

	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]	-23	-10	777,3	2655	668,9	1,46	4,99	1,26	531,8	3,71	8,78
cond. pressure	-20	-4	901,8	3080	776,1	1,60	5,46	1,38	564,4	3,80	10,21
pc= 45/113	-15	5	1120,1	3825	964,0	1,82	6,21	1,57	615,5	3,95	12,74
return gas temp.	-10	14	1374,7	4695	1183,1	2,07	7,06	1,78	665,4	4,11	15,73
RGT= 32/90	-5	23	1666,3	5691	1434,0	2,35	8,01	2,02	710,1	4,27	19,19
liquid temp	0	32	1995,5	6815	1717,4	2,68	9,14	2,30	745,6	4,39	23,15
Tliq= 45/113	7,2	45	2537,0	8664	2183,3	3,28	11,21	2,83	772,7	4,48	29,81
[°C / °F]	-23	-10	653,8	2233	562,7	1,17	4,01	1,01	557,0	3,78	8,15
cond. pressure	-20	-4	768,2	2623	661,1	1,29	4,40	1,11	596,5	3,89	9,61
pc= 55/131	-15	5	964,7	3295	830,2	1,46	4,99	1,26	659,8	4,09	12,13
return gas temp	-10	14	1189,8	4063	1023,9	1,64	5,61	1,41	723,7	4,30	15,05
RGT= 32/90	-5	23	1444,1	4932	1242,8	1,84	6,29	1,59	784,0	4,51	18,40
liquid temp	0	32	1728,3	5902	1487,4	2,06	7,05	1,78	837,0	4,70	22,20
Tliq= 55/131	7,2	45	2191,4	7484	1885,9	2,46	8,39	2,11	892,4	4,90	28,55

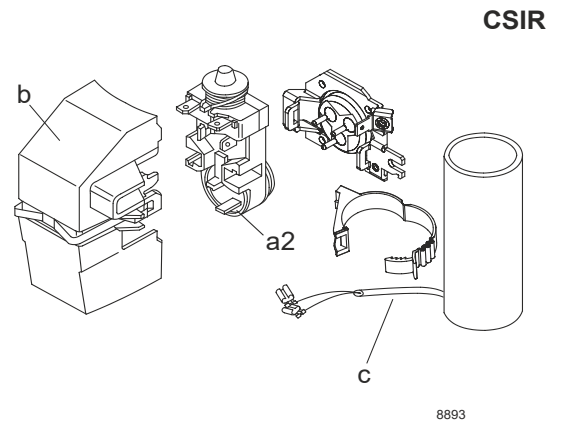
Model

Designation	SCE18MNX	220-240V/50Hz	Conf. 2	Sales code:	104H8849
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Configuration

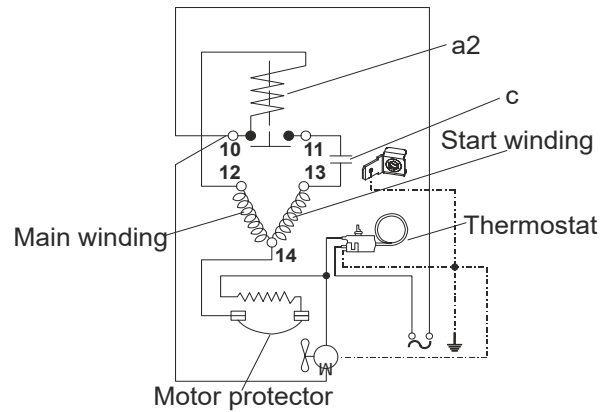
Motor configuration	CSIR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R290
Application	MBP
Voltage range	198-254V
Starting torque	HST
Approvals	VDE
	CCC
	EAC
	CB

Electrical accessories / wiring diagram

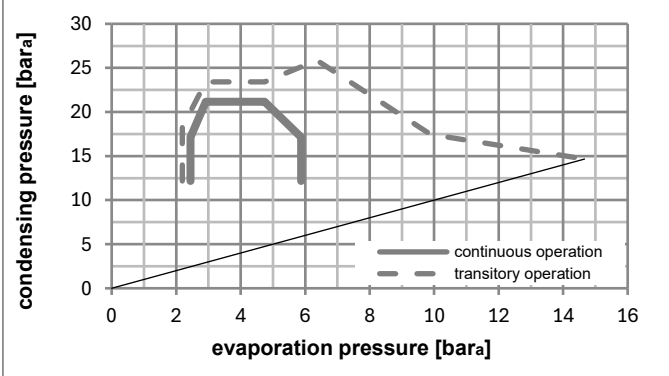
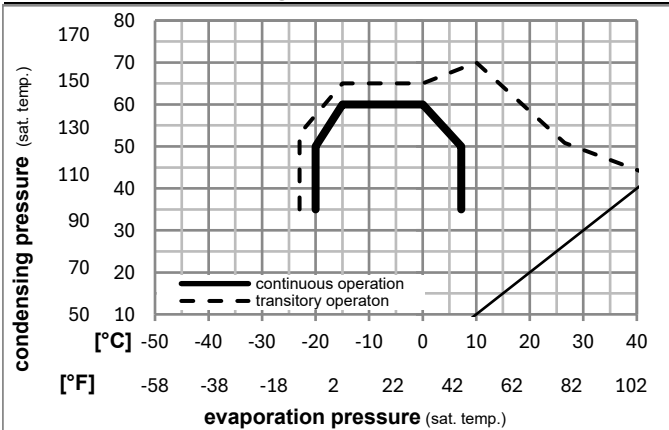


Ambient/ machine room temperatures minimum /maximum

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 (relay (a2)+ cover (b): pre-assembled)

a2	assy. relay + ext. protector (T0214)	117U7406
c	start capacitor (80µF)	117U5017
d	cord relief	103N1004
b	plastic cover + clamp	117U1033

Noise emission

Operation pressures:	pe: -10°C / 14°F
	pc: 45°C / 113°F
Motor speed appr.:	2900rpm
Lw(A):	58dB(A)

Model

Designation **SCE18MNX** **220-240V/50Hz** Conf. 2 Sales code: **104H8849**

Optimization + standard conditions

R290, 230V/50Hz, CSIR, fan 3m/s, VDE, CCC, EAC, CB

	Evaporating pressure (saturation temperature)				Cooling capacity			COP	EER	P1	Power consumption		Ref. mass flow	
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]				I	m		
[°C]	-7	54	35	46				[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
[°F]	20	130	95	115										
					1503,3	5134	1293,8	1,98	6,75	1,70	761,1	4,43	17,15	ASHRAE MBP
					1189,8	4063	1023,9	1,64	5,61	1,41	723,7	4,30	15,05	cecomaf MBP
					1320,5	4510	1136,5	1,98	6,78	1,71	665,4	4,11	16,21	EN12900 MBP
					1410,0	4816	1213,5	1,95	6,65	1,68	724,1	4,31	18,31	ARI540 MBP
					1374,7	4695	1183,1	2,07	7,06	1,78	665,4	4,11	15,73	opt
					719,1	2456	618,9	1,39	4,76	1,20	515,9	3,68	8,11	opt

Performance tables

R290, 230V/50Hz, CSIR, fan 3m/s, VDE, CCC, EAC, CB

	pe		Cooling capacity			COP	EER	P1	I	m	
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]						
[°C / °F]	-20	-4	901,8	3080	776,1	1,60	5,46	1,38	564,4	3,80	10,21
cond. pressure	-15	5	1120,1	3825	964,0	1,82	6,21	1,57	615,5	3,95	12,74
pc= 45/113	-10	14	1374,7	4695	1183,1	2,07	7,06	1,78	665,4	4,11	15,73
return gas temp.	-7	20	1563,0	5338	1345,1	2,25	7,67	1,93	695,7	4,22	17,95
RGT= 32/90	-5	23	1666,3	5691	1434,0	2,35	8,01	2,02	710,1	4,27	19,19
liquid temp	0	32	1995,5	6815	1717,4	2,68	9,14	2,30	745,6	4,39	23,15
Tliq= 45/113	7,2	45	2537,0	8664	2183,3	3,28	11,21	2,83	772,7	4,48	29,81
[°C / °F]	-20	-4	768,2	2623	661,1	1,29	4,40	1,11	596,5	3,89	9,61
cond. pressure	-15	5	964,7	3295	830,2	1,46	4,99	1,26	659,8	4,09	12,13
pc= 55/131	-10	14	1189,8	4063	1023,9	1,64	5,61	1,41	723,7	4,30	15,05
return gas temp	-7	20	1354,3	4625	1165,5	1,77	6,05	1,53	764,1	4,44	17,21
RGT= 32/90	-5	23	1444,1	4932	1242,8	1,84	6,29	1,59	784,0	4,51	18,40
liquid temp	0	32	1728,3	5902	1487,4	2,06	7,05	1,78	837,0	4,70	22,20
Tliq= 55/131	7,2	45	2191,4	7484	1885,9	2,46	8,39	2,11	892,4	4,90	28,55