Technical Data Compressor

SECOP

Model

Designation	**SCE23MNIX**	**220-240V/60Hz 1~**	Sales code:	**104H8340**

Compressor design

Oil type	Polyolester	Refrigerant(s)	**R290, 0, 0**
Oil viscosity	32cSt	Displacement	23cm³ / 1,4cu.in
Oil quantity	500cm³ / 16,9fl.oz	Compressors on pallet	48
Refr. charge - tech. limit	500g / 17,6oz		
Free gas volume comp.	3150cm³ / 106,5fl.oz		
Weight	14,9kg / 32,8lbs		
Motor protection	1# internal		
Winding resistance main	2,2Ω (at 25°C)		
Winding resistance aux	5,3Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	140°C / 284°F		

General - Configurations with SCE23MNIX

	Conf. 1
Motor configuration	CSCR
Power supply (nominal)	220-240V/60Hz
Number of phases	1
Voltage range	195-254V
Approvals	UL
Starting torque	HST
Note	Starter kit(relay), cover and cord relief are included and pre-assembled.

Applications with SCE23MNIX

	Conf. 1
Refrigerant	R290
Application	MBP
System cooling	fan 3m/s
Hot gas defrost	OK
Long interval pull down	OK

Electrical data - Configurations with SCE23MNIX

	Conf. 1
Starting device type	relay
Run capacitor	15µF
Start capacitor	80µF
LRA (locked rotor amps / 4s/ $U_{(N)}$)	31,3A
RLA (rated load amps / 1s/ $U_{(N)}$)	3,9A
Cut in current ($U_{(N)}$)	

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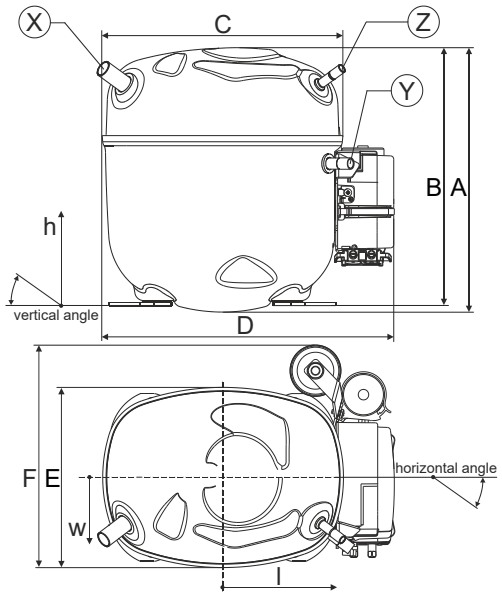
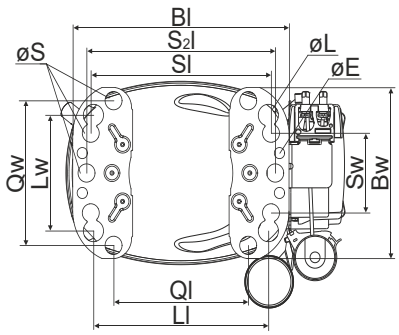
Compressor dimensions

Housing	A Height	236,4mm / 9,31in
	B Height	230,6mm / 9,08in
	C Length shell	217mm / 8,54in
	D Length w. cover	263,4mm / 10,37in
	E Width	161,1mm / 6,34in
	F Width with equipment	199mm / 7,83in



Connectors		**Suction**	**Discharge**	**Process**
		X	**Y**	**Z**
Diameter	[mm]	øi 12,81-12,99	øi 8,11-8,29	øi 6,41-6,59
(i:inside, o:outside)	[in]	øi 0,5-0,51	øi 0,32-0,33	øi 0,25-0,26
Material		steel/CU	copper	copper
Horizontal angle	±2°	37°	37°	37°
Vertical angle	±2°	36°	0°	36°
Position l/h/w	[mm]	-111/212/57	116/127/81	110/94/72
	[in]	-4,4/8,3/2,2	4,5/5/3,2	4,3/3,7/2,8
Straight tube l.	[mm]	12	12	12
	[in]	0,5	0,5	0,5

Compressor fixation

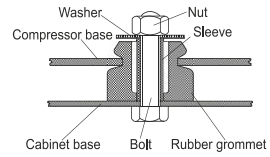


Baseplate	[mm]	[inch]
Bl	204	8.03
Bw	150	5.9
øE	ø 9.7	ø 0.38

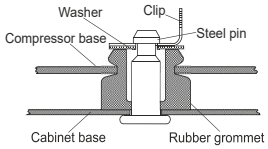
Large holes	[mm]	[inch]
Ll	165	6.5
Lw	101.6	4
øL	ø 19	ø 0.75

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

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

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

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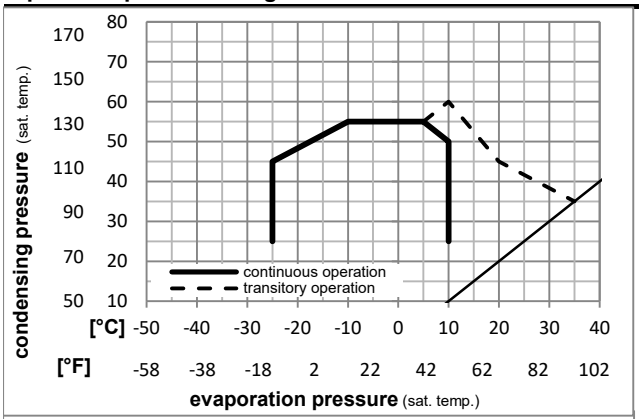
Configuration

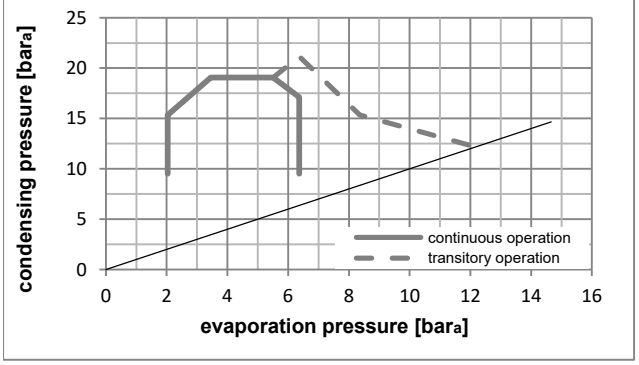
Motor configuration	CSCR
Power supply (nominal)	220-240V/60Hz 1~
Refrigerant	R290
Application	MBP
Voltage range	195-254V
Starting torque	HST
Approvals	UL

Ambient/ machine room temperatures minimum /maximum

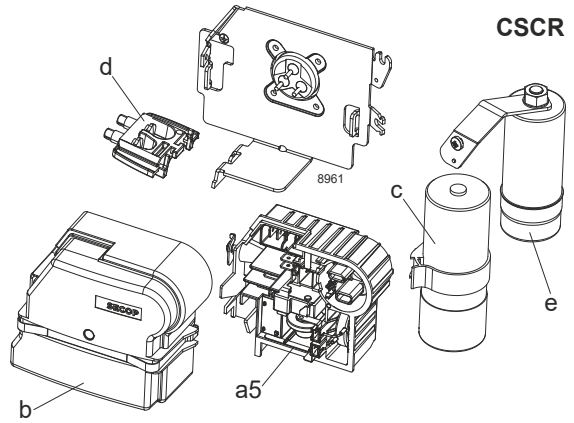
Ambient temperature range:	10 - 43°C / 50 - 110°F
Machine room temperature range:	10 - 48°C / 50 - 119°F
Compressor cooling:	fan 3m/s

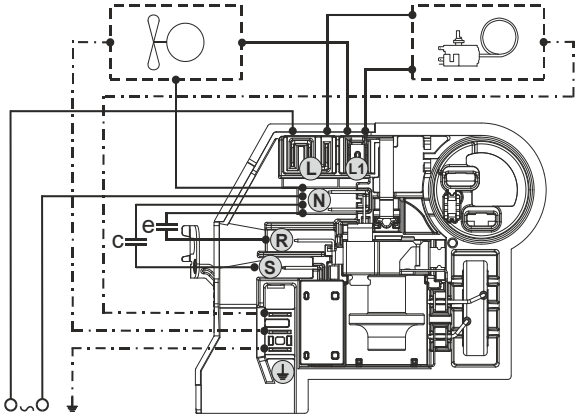
Operation pressure range





Electrical accessories / wiring diagram





Components (Starter kit (a5)+cover (b) +cord relief (d): pre assembled)

a5	SC starter kit	117U8102
b	cover terminal board + clamp	117U1036
c	start capacitor (80µF)	117U5352
e	run capacitor (15µF, 6.3mm)	117-7167
e1	retaining clamp	117-0313
	screw M4x8mm	117-0301
d	cord relief	103N1007

Model

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Optimization + standard conditions R290, 230V/60Hz, CSCR, fan 3m/s, UL

	Evaporating pressure (saturation temperature) pe	Condensing pressure (saturation temperature) pc	Return gas temp. RGT	Liquid temp. Tliq	Cooling capacity [W]	[Btu/h]	[kcal/h]	COP [W/W]	EER [Btu/Wh]	[kcal/Wh]	Power consumption P1 [W]	Current consumption I [A]	Ref. mass flow ṁ [kg/h]	
[°C]	-7	54	35	46	2235,0	7633	1923,5	2,08	7,11	1,79	1073,4	5,07	25,50	**ASHRAE MBP**
[°F]	20	130	95	115										
[°C]	-10	55	32	55	1792,6	6122	1542,8	1,75	5,99	1,51	1022,0	4,84	22,68	**cecomaf MBP**
[°F]	14	131	90	131										
[°C]	-10	45	20	45	1997,8	6823	1719,3	2,15	7,34	1,85	929,8	4,43	24,53	**EN12900 MBP**
[°F]	14	113	68	113										
[°C]	-7	49	18	49	2106,2	7193	1812,6	2,08	7,11	1,79	1011,1	4,79	27,35	**ARI540 MBP**
[°F]	20	120	65	120										
[°C]	-10	45	32	45	2079,8	7103	1789,9	2,24	7,64	1,93	929,8	4,43	23,79	**opt**
[°F]	14	113	90	113										
[°C]	-25	45	32	45	1089,2	3720	937,3	1,55	5,31	1,34	701,1	3,42	12,28	**opt**
[°F]	-13	113	90	113										

Performance tables R290, 230V/60Hz, CSCR, fan 3m/s, UL

	pe [°C]	[°F]	Cooling capacity [W]	[Btu/h]	[kcal/h]	COP [W/W]	EER [Btu/Wh]	[kcal/Wh]	P1 [W]	I [A]	m [kg/h]
[°C / °F]	-25	-13	1089,2	3720	937,3	1,55	5,31	1,34	701,1	3,42	12,28
cond. pressure	-20	-4	1400,4	4783	1205,2	1,79	6,12	1,54	781,3	3,77	15,86
pc= 45/113	-15	5	1726,5	5896	1485,9	2,01	6,87	1,73	858,1	4,11	19,64
return gas temp.	-10	14	2079,8	7103	1789,9	2,24	7,64	1,93	929,8	4,43	23,79
RGT= 32/90	0	32	2917,4	9963	2510,7	2,77	9,47	2,39	1051,7	4,98	33,84
liquid temp	5	41	3426,3	11702	2948,7	3,12	10,65	2,68	1098,8	5,19	40,09
Tliq= 45/113	10	50	4011,9	13701	3452,7	3,54	12,08	3,04	1134,6	5,35	47,41
[°C / °F]	-25	-13	882,8	3015	759,8	1,23	4,20	1,06	718,4	3,50	10,99
cond. pressure	-20	-4	1181,2	4034	1016,5	1,43	4,89	1,23	825,7	3,97	14,77
pc= 55/131	-15	5	1480,3	5056	1274,0	1,60	5,45	1,37	927,4	4,42	18,61
return gas temp	-10	14	1792,6	6122	1542,8	1,75	5,99	1,51	1022,0	4,84	22,68
RGT= 32/90	0	32	2506,1	8559	2156,8	2,12	7,23	1,82	1183,2	5,58	32,19
liquid temp	5	41	2932,0	10013	2523,3	2,35	8,03	2,02	1246,8	5,87	38,02
Tliq= 55/131	10	50	3420,4	11681	2943,7	2,64	9,01	2,27	1296,9	6,10	44,85