

Model

Designation	SC18MLX	208-230V/60Hz 1~	Sales code:	104L2138
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R404A, R507
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	1300g / 45,9oz		
Free gas volume comp.	1460cm ³ / 49,4fl.oz		
Weight	14kg / 30,9lbs		
Motor protection	1# internal		
Winding resistance main	2,2Ω (at 25°C)		
Winding resistance aux	6,4Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



General - Configurations with SC18MLX

	Conf. 1
Motorconfiguration	CSCR
Power supply (nominal)	208-230V/60Hz
Number of phases	1
Voltage range	187-254V
Approvals	UL, KC
Starting torque	HST
Note	LRA value on compressor label and datasheet may differ due to different test conditions for UL approval.

Applications with SC18MLX

	Conf. 1
Refrigerant	R404A
Application	MBP
System cooling	fan 3m/s
Hot gas defrost	OK
Long interval pull down	OK

Electrical data - Configurations with SC18MLX

	Conf. 1
Starting device type	relay
Run capacitor	10μF
Start capacitor	80μF
LRA (locked rotor amps / 4s)	32A
RLA (rated load amps / 1s)	6,2A
Cut in current	32A

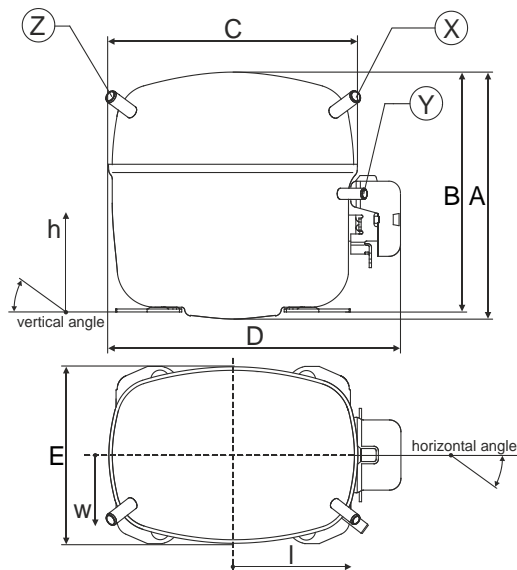
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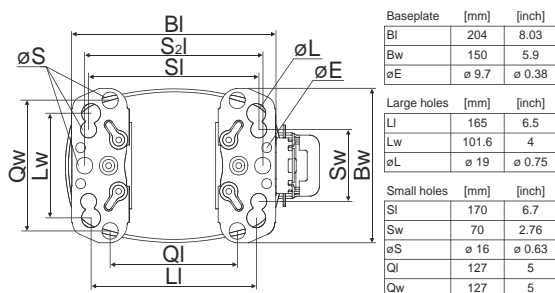
Compressor dimensions

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

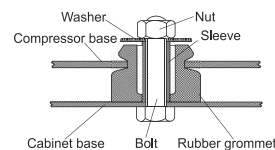
Connectors		Suction	Discharge	Process
		X	Y	Z
Diameter	[mm]	øi 9,54-9,72	øi 6,41-6,59	øi 6,41-6,59
	(i:inside, o:outside) [in]	øi 0,38-0,38	øi 0,25-0,26	øi 0,25-0,26
Material		copper	copper	copper
Horizontal angle	±2°	37°	37°	143°
Vertical angle	±2°	30°	0°	150°
Position l/h/w	[mm]	107/193/55	115/110/63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



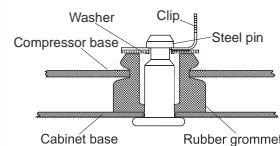
Compressor fixation



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

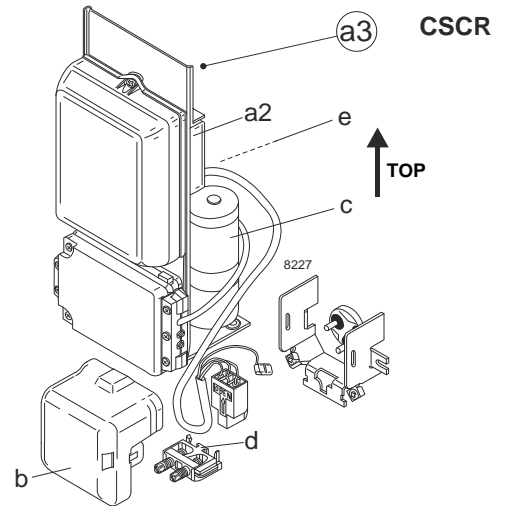
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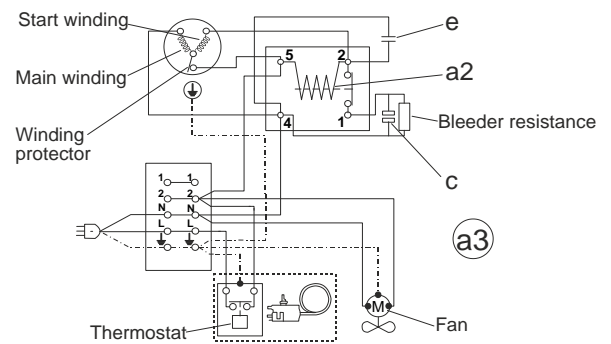
Electrical accessories / wiring diagram



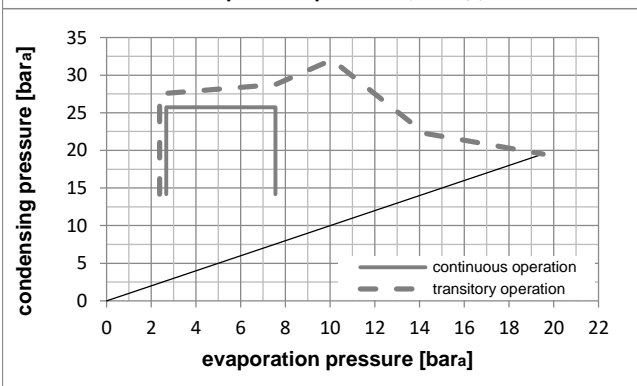
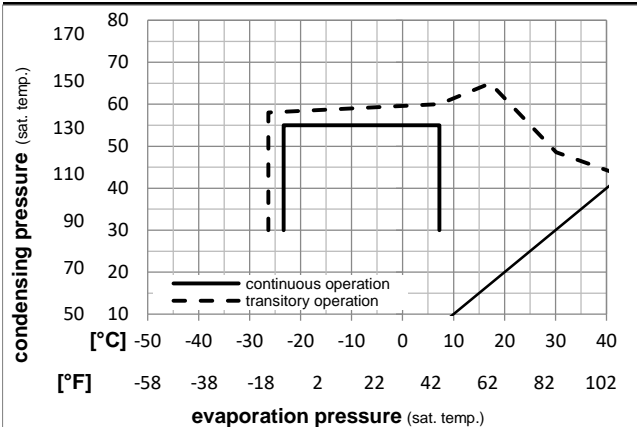
Ambient temperatures / system cooling

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

a3	SC starter kit	117-7066
b	plastic cover	103N2009
d	cord relief	103N1004

Alternative components

a2	potential relay (RVA 2GR134)	117-7445
e	run capacitor (10μF, 6.3mm)	117-7121
c	start capacitor (80μF)	117U5373
b	plastic cover	103N2009
d	cord relief	103N1004

Model

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Optimization + standard conditions

R404A, 230V/60Hz, CSCR, fan 3m/s, UL, KC

Evaporating pressure (saturation temperature)					Condensing pressure (saturation temperature)					Power consumption				
					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]											[W]	[A]	[kg/h]	ASHRAE MBP
[°F]														cecomaf MBP
	-6,66	54,4	35	46,1	1868,1	6380	1607,7	1,47	5,03	1,27	1268,3	6,71	51,40	ASHRAE MBP
	20	130	95	115										
	-10	55	32	55	1392,8	4757	1198,7	1,17	3,98	1,00	1193,7	6,43	44,59	cecomaf MBP
	14	131	89,6	131										
	-10	45	20	45	1631,9	5573	1404,4	1,44	4,93	1,24	1131,2	6,21	49,15	EN12900 MBP
	14	113	68	113										
	-6,66	48,9	18,3	48,9	1697,4	5797	1460,8	1,39	4,73	1,19	1224,2	6,55	55,46	ARI540 MBP
	20	120	65	120										
	-10	45	32	45	1731,9	5915	1490,5	1,53	5,23	1,32	1131,2	6,21	47,69	opt
	14	113	89,6	113										
	-25	45	32	45	913,7	3120	786,3	1,06	3,63	0,91	859,8	5,34	24,65	opt
	-13	113	89,6	113										

Performance tables

R404A, 230V/60Hz, CSCR, fan 3m/s, UL, KC

	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	913,7	3120	786,3	1,06	3,63	0,91	859,8	5,34	24,65	
cond. pressure	-23,3	-10	984,6	3363	847,4	1,11	3,78	0,95	889,6	5,42	26,61	
pc= 45/113	-15	5	1411,6	4821	1214,8	1,36	4,64	1,17	1039,3	5,88	38,56	
return gas temp.	-9,4	15	1770,7	6047	1523,9	1,55	5,30	1,33	1141,6	6,24	48,81	
RGT= 32/90	-3,9	25	2196,9	7503	1890,6	1,76	6,01	1,52	1247,6	6,65	61,22	
liquid temp	0	32	2538,5	8669	2184,6	1,92	6,54	1,65	1324,9	6,96	71,36	
Tliq= 45/113	7,2	45	3275,7	11187	2819,1	2,22	7,57	1,91	1477,2	7,58	93,94	
[°C / °F]	-25	-13	701,6	2396	603,8	0,84	2,87	0,72	835,8	5,30	21,93	
cond. pressure	-23,3	-10	761,4	2600	655,3	0,87	2,97	0,75	876,4	5,41	23,85	
pc= 55/131	-15	5	1121,6	3831	965,3	1,04	3,56	0,90	1075,5	6,02	35,57	
return gas temp	-9,4	15	1425,7	4869	1227,0	1,18	4,03	1,02	1206,8	6,48	45,69	
RGT= 32/90	-3,9	25	1788,4	6108	1539,1	1,34	4,56	1,15	1338,7	6,98	58,04	
liquid temp	0	32	2080,5	7105	1790,5	1,45	4,96	1,25	1432,2	7,35	68,23	
Tliq= 55/131	7,2	45	2715,0	9272	2336,6	1,69	5,76	1,45	1610,4	8,10	91,12	