

## Single Pack SC15MLX 220-240V 50Hz CSIR

Single pack code number: **195B4052**

Position	Title	Code	Amount
1	Compressor SC15MLX	104L2869	1
2	Starting relay	117U6013	1
3	Starting capacitor (125 $\mu$ F 220V, 6.3mm)	117U5012	1
4	Cord relief	103N1004	1
5	Cover	103N2009	1
6	Bolt joint for one compressor   M6   $\varnothing$ 16mm	118-1917	1

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## Model

Designation	<b>SC15MLX</b>	220-240V/50Hz 1~	Sales code:	<b>104L2869</b>
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## Compressor design

Oil type	Polyolester	Refrigerant(s)	<b>R404A, R452A, R507</b>
Oil viscosity	32cST	Displacement	15,28cm <sup>3</sup> / 0,93cu.in
Oil quantity	550cm <sup>3</sup> / 18,6fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	1300g / 45,9oz		
Free gas volume comp.	1460cm <sup>3</sup> / 49,4fl.oz		
Weight	13,8kg / 30,4lbs		
Motor protection	1# internal		
Winding resistance main	3,3Ω (at 25°C)		
Winding resistance aux	16,5Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



## General - Configurations with SC15MLX

	<b>Conf. 1</b>	<b>Conf. 2</b>	<b>Conf. 3</b>	<b>Conf. 4</b>
Motorconfiguration	CSIR	CSIR	CSIR	CSIR
Power supply (nominal)	220-240V/50Hz	220-240V/50Hz	220-240V/50Hz	220-240V/50Hz
Number of phases	1	1	1	1
Voltage range	198-254V	198-254V	198-254V	198-254V
Approvals	VDE, CCC, EAC	VDE, CCC, EAC	VDE, CCC, EAC	VDE, CCC, EAC
Starting torque	HST	HST	HST	HST
Note	- / -	- / -	- / -	- / -

## Applications with SC15MLX

	<b>Conf. 1</b>	<b>Conf. 2</b>	<b>Conf. 3</b>	<b>Conf. 4</b>
Refrigerant	R404A	R452A	R448A	R449A
Application	MBP	MBP	MBP	MBP
System cooling	fan 3m/s	fan 3m/s	fan 3m/s	fan 3m/s
Hot gas defrost	OK	OK	OK	OK
Long interval pull down	OK	OK	OK	OK

## Electrical data - Configurations with SC15MLX

	<b>Conf. 1</b>	<b>Conf. 2</b>	<b>Conf. 3</b>	<b>Conf. 4</b>
Starting device type	relay	relay	relay	relay
Run capacitor	- / -	- / -	- / -	- / -
Start capacitor	125μF	125μF	125μF	125μF
LRA (locked rotor amps / 4s)	23,5A	23,5A	23,5A	23,5A
RLA (rated load amps / 1s)	4,5A	4,5A	4,5A	4,5A
Cut in current	23,5A	23,5A	23,5A	23,5A

## Model

Designation

**SC15MLX**

220-240V/50Hz 1~

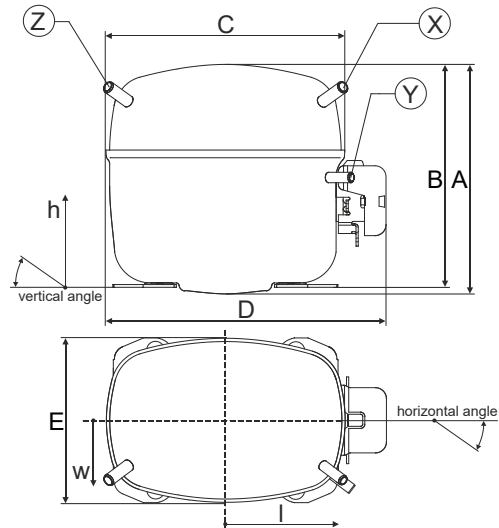
Sales code:

**104L2869**

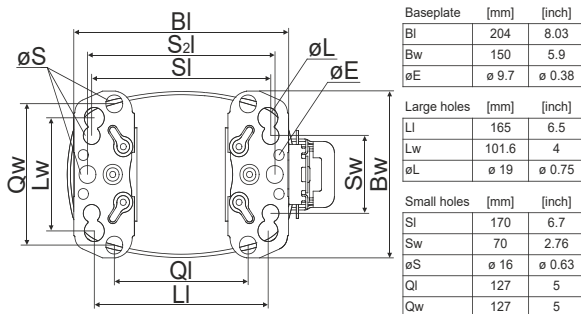
## Compressor dimensions

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

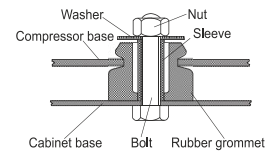
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 10,11-10,29	øi 6,11-6,29	øi 6,11-6,29
(i:inside, o:outside) [in]	øi 0,4-0,41	øi 0,24-0,25	øi 0,24-0,25
Material	copper	copper	copper
Horizontal angle ±2°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°
Position l/h/w [mm]	107/193/55	115/110/63	-107/193/55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



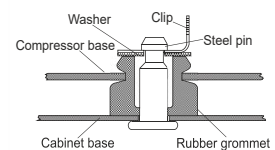
## Compressor fixation



## Bolt joint



## Snap-on



## Mounting accessories

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

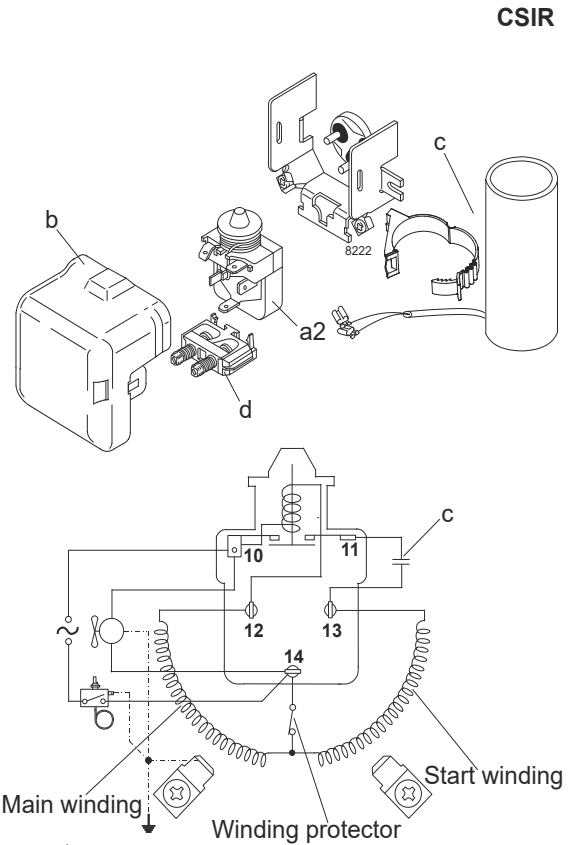
## Model

Designation	<b>SC15MLX</b>	<b>220-240V/50Hz</b>	<b>Conf. 1</b>	Sales code:	<b>104L2869</b>
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## Configuration

Motorconfiguration	CSIR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R404A
Application	MBP
Voltage range	198-254V
Starting torque	HST
Approvals	VDE CCC EAC

## Electrical accessories / wiring diagram

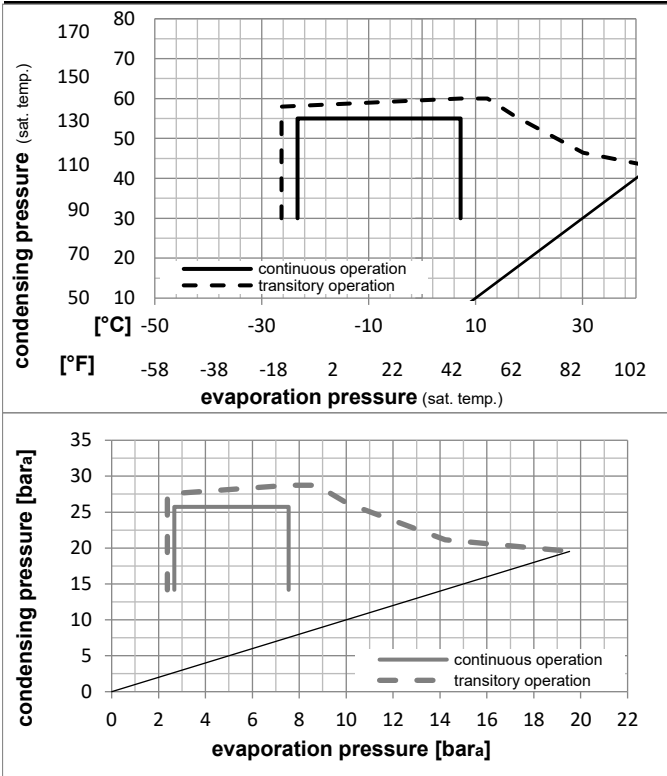


## Ambient/ machine room temperatures minimum /maximum

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 Limits

## Operation pressure range



## Components

a2	relay	117U6013
c	start capacitor (125µF)	117U5012
d	cord relief	103N1004
b	plastic cover	103N2009

## Model

Designation **SC15MLX** **220-240V/50Hz** Conf. 1 Sales code: **104L2869**

## Optimization + standard conditions

R404A, 220V/50Hz, CSIR, fan 3m/s, VDE, CCC, EAC

		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	m	[W]	[A]	[kg/h]						
[°C]	[°F]																						
-7	20	54	130	35	95	46	115	1376,9	4702	1184,9	1,56	5,31	1,34	885,2	5,17	37,88					ASHRAE MBP		
-10	14	55	131	32	90	55	131	1024,6	3499	881,7	1,22	4,17	1,05	839,4	4,96	32,80					cecomaf MBP		
-10	14	45	113	20	68	45	113	1210,5	4134	1041,8	1,55	5,30	1,34	780,1	4,73	36,46					EN12900 MBP		
-7	20	49	120	18	65	49	120	1259,4	4301	1083,8	1,49	5,09	1,28	844,4	5,01	41,15					ARI540 MBP		
-10	14	45	113	32	90	45	113	1284,7	4388	1105,7	1,65	5,62	1,42	780,1	4,73	35,38					opt		
-25	-13	45	113	32	90	45	113	654,5	2235	563,3	1,11	3,77	0,95	592,3	3,93	17,66					opt		

## Performance tables

R404A, 220V/50Hz, CSIR, fan 3m/s, VDE, CCC, 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]	-23	-10	710,1	2425	611,1	1,16	3,95	1,00	613,4	4,01	19,19
cond. pressure	-20	-4	828,7	2830	713,2	1,27	4,32	1,09	654,4	4,18	22,48
pc= 45/113	-15	5	1037,5	3543	892,9	1,45	4,94	1,25	716,9	4,44	28,34
return gas temp.	-10	14	1284,7	4388	1105,7	1,65	5,62	1,42	780,1	4,73	35,38
RGT= 32/90	-5	23	1573,9	5375	1354,5	1,86	6,36	1,60	844,6	5,03	43,76
liquid temp	0	32	1908,7	6519	1642,7	2,10	7,16	1,80	910,8	5,34	53,66
Tliq= 45/113	7,2	45	2478,3	8464	2132,8	2,45	8,38	2,11	1010,3	5,83	71,07
[°C / °F]	-23	-10	564,3	1927	485,7	0,88	3,01	0,76	639,5	4,14	17,68
cond. pressure	-20	-4	657,9	2247	566,2	0,95	3,26	0,82	689,2	4,33	20,70
pc= 55/131	-15	5	824,6	2816	709,7	1,08	3,69	0,93	764,2	4,63	26,15
return gas temp	-10	14	1024,6	3499	881,7	1,22	4,17	1,05	839,4	4,96	32,80
RGT= 32/90	-5	23	1261,3	4308	1085,5	1,38	4,71	1,19	915,4	5,30	40,83
liquid temp	0	32	1538,5	5254	1324,1	1,55	5,29	1,33	992,5	5,66	50,45
Tliq= 55/131	7,2	45	2016,1	6885	1735,1	1,82	6,22	1,57	1106,7	6,20	67,66

## Model

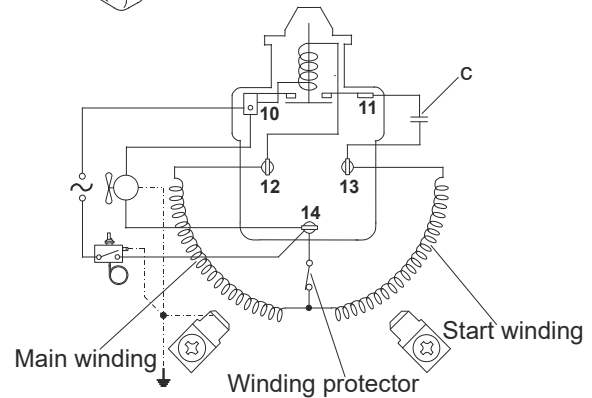
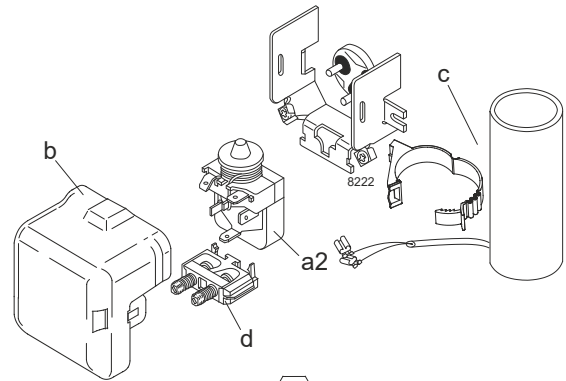
Designation	<b>SC15MLX</b>	<b>220-240V/50Hz</b>	<b>Conf. 2</b>	Sales code:	<b>104L2869</b>
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## Configuration

Motorconfiguration	CSIR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R452A
Application	MBP
Voltage range	198-254V
Starting torque	HST
Approvals	VDE CCC EAC

## Electrical accessories / wiring diagram

CSIR

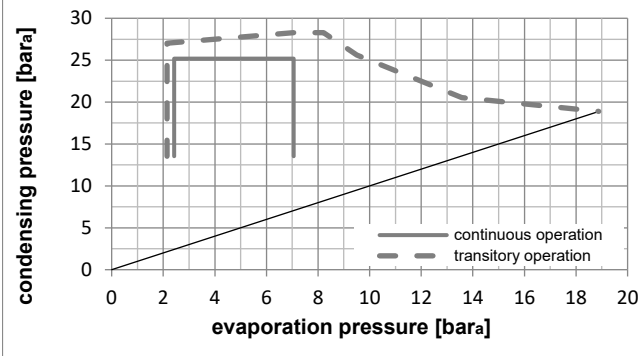
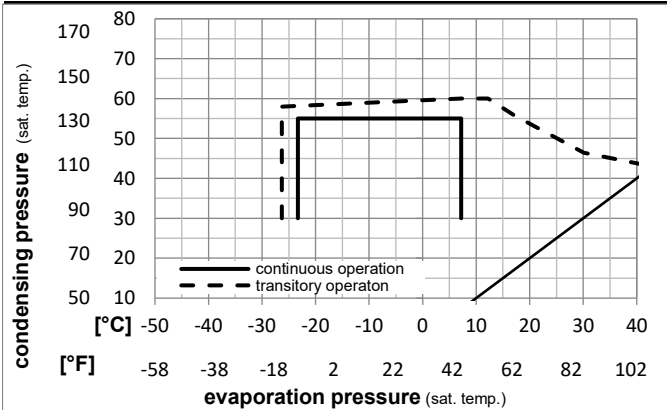


## Ambient/ machine room temperatures minimum /maximum

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 Limits

## Operation pressure range



## Components

a2	relay	117U6013
c	start capacitor (125µF)	117U5012
d	cord relief	103N1004
b	plastic cover	103N2009

## Model

Designation **SC15MLX** **220-240V/50Hz** Conf. 2 Sales code: **104L2869**

## Optimization + standard conditions

R452A, 220V/50Hz, CSIR, fan 3m/s, VDE, CCC, EAC

		Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)						Power consumption			
		Return gas temp.				Liquid temp.						Current consumption			Ref. mass flow
		Cooling capacity				COP	EER	P1			I	m			
		pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
[°C]	-7	54	35	46	1301,3	4444	1119,9	1,54	5,26	1,33	844,6	5,00	36,61	ASHRAE MBP	
[°F]	20	130	95	115											
[°C]	-10	55	32	55	970,1	3313	834,8	1,22	4,15	1,05	797,4	4,79	31,53	cecomaf MBP	
[°F]	14	131	90	131											
[°C]	-10	45	20	45	1142,2	3901	983,0	1,54	5,26	1,33	741,5	4,55	35,10	EN12900 MBP	
[°F]	14	113	68	113											
[°C]	-7	49	18	49	1196,3	4086	1029,5	1,48	5,07	1,28	805,9	4,83	39,69	ARI540 MBP	
[°F]	20	120	65	120											
[°C]	-10	45	32	45	1210,4	4134	1041,7	1,63	5,57	1,40	741,5	4,55	34,10	opt	
[°F]	14	113	90	113											
[°C]	-25	45	32	45	602,5	2058	518,5	1,09	3,72	0,94	552,5	3,74	16,67	opt	
[°F]	-13	113	90	113											

## Performance tables

R452A, 220V/50Hz, CSIR, fan 3m/s, VDE, CCC, 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]	-23	-10	655,8	2240	564,4	1,14	3,90	0,98	573,6	3,83	18,17	
cond. pressure	-20	-4	769,7	2629	662,4	1,25	4,28	1,08	614,7	4,01	21,40	
pc= 45/113	-15	5	971,1	3316	835,7	1,43	4,90	1,23	677,5	4,28	27,16	
return gas temp.	-10	14	1210,4	4134	1041,7	1,63	5,57	1,40	741,5	4,55	34,10	
RGT= 32/90	-5	23	1491,6	5094	1283,6	1,85	6,31	1,59	807,3	4,84	42,38	
liquid temp	0	32	1818,5	6210	1565,0	2,08	7,10	1,79	875,2	5,13	52,19	
Tliq= 45/113	7,2	45	2377,4	8119	2046,0	2,43	8,30	2,09	978,1	5,57	69,45	
[°C / °F]	-23	-10	521,6	1781	448,9	0,88	2,99	0,75	595,5	3,92	16,63	
cond. pressure	-20	-4	612,4	2092	527,1	0,95	3,24	0,82	645,3	4,14	19,60	
pc= 55/131	-15	5	774,7	2646	666,7	1,07	3,67	0,92	721,0	4,46	24,97	
return gas temp.	-10	14	970,1	3313	834,8	1,22	4,15	1,05	797,4	4,79	31,53	
RGT= 32/90	-5	23	1202,5	4107	1034,8	1,37	4,69	1,18	875,0	5,13	39,47	
liquid temp	0	32	1475,8	5040	1270,1	1,55	5,28	1,33	954,3	5,47	49,00	
Tliq= 55/131	7,2	45	1949,0	6656	1677,3	1,82	6,21	1,56	1072,6	5,98	66,05	

## Model

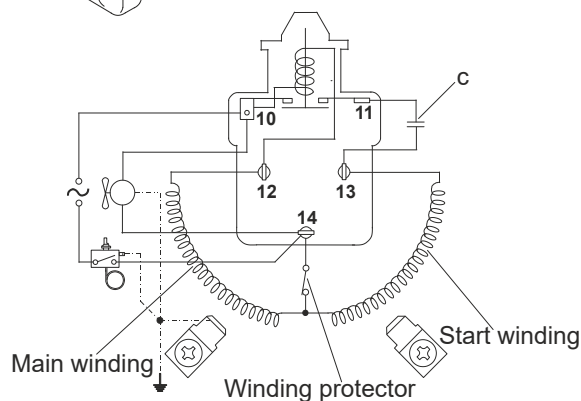
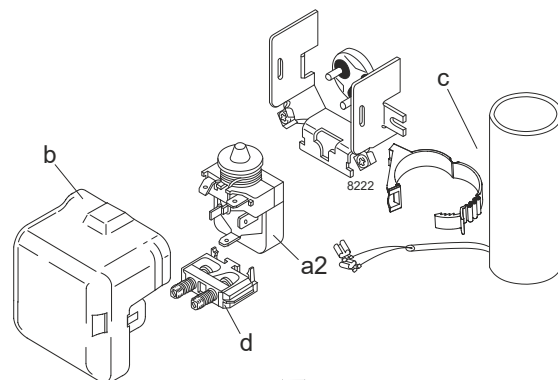
Designation	<b>SC15MLX</b>	<b>220-240V/50Hz</b>	<b>Conf. 3</b>	Sales code:	<b>104L2869</b>
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## Configuration

Motorconfiguration	CSIR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R448A
Application	MBP
Voltage range	198-254V
Starting torque	HST
Approvals	

## Electrical accessories / wiring diagram

CSIR



## Ambient/ machine room temperatures minimum /maximum

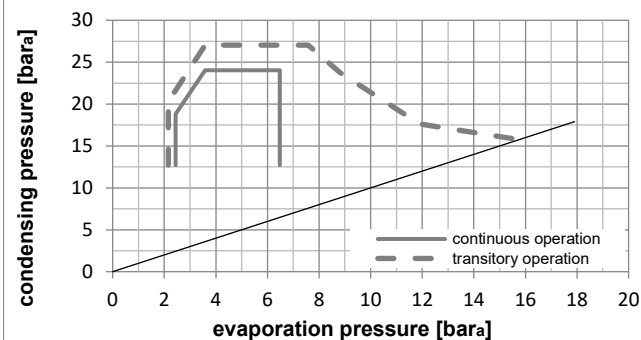
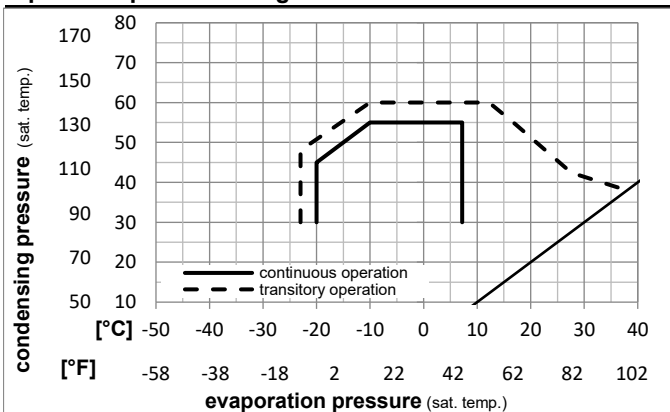
Ambient temperature range: 10 - 38°C / 50 - 101°F

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

Compressor cooling: fan 3m/s

## Operation Limits

## Operation pressure range



## Components

a2	relay	117U6013
c	start capacitor (125µF)	117U5012
d	cord relief	103N1004
b	plastic cover	103N2009



### Model

Designation **SC15MLX** **220-240V/50Hz** Conf. 3 Sales code: **104L2869**

### Optimization + standard conditions

R448A, 220V/50Hz, CSIR, fan 3m/s,

		Evaporating pressure (saturation temperature)				Cooling capacity			COP			EER			Power consumption			
		Condensing pressure (saturation temperature)				Return gas temp.			Liquid temp.			Current consumption			Ref. mass flow			
		pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	m				
[°C]	[°F]	[°C]	[°F]	[°C]	[°F]							[W]	[A]	[kg/h]				
[°C]	-7	54	35	46	1255,1	4286	1080,1	1,57	5,38	1,36	797,1	4,79	27,41				ASHRAE MBP	
[°F]	20	130	95	115														
[°C]	-10	55	32	55	958,9	3275	825,2	1,28	4,36	1,10	750,4	4,59	23,48				cecomaf MBP	
[°F]	14	131	90	131														
[°C]	-10	45	20	45	1116,9	3814	961,2	1,60	5,46	1,37	699,1	4,37	26,13				EN12900 MBP	
[°F]	14	113	68	113														
[°C]	-7	49	18	49	1193,6	4076	1027,2	1,57	5,35	1,35	761,5	4,64	29,69				ARI540 MBP	
[°F]	20	120	65	120														
[°C]	-10	45	32	45	1162,2	3969	1000,2	1,66	5,68	1,43	699,1	4,37	25,40				opt	
[°F]	14	113	90	113														
[°C]	-25	45	32	45	562,0	1919	483,7	1,10	3,75	0,95	511,4	3,56	12,09				opt	
[°F]	-13	113	90	113														

### Performance tables

R448A, 220V/50Hz, CSIR, fan 3m/s,

	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]	-20	-4	725,6	2478	624,5	1,27	4,32	1,09	573,5	3,83	15,67			
cond. pressure	-15	5	924,2	3156	795,4	1,45	4,96	1,25	635,9	4,10	20,07			
pc= 45/113	-10	14	1162,2	3969	1000,2	1,66	5,68	1,43	699,1	4,37	25,40			
return gas temp.	-7	20	1343,1	4587	1155,9	1,81	6,19	1,56	741,6	4,55	29,49			
RGT= 32/90	-5	23	1444,2	4932	1242,9	1,89	6,46	1,63	763,8	4,65	31,79			
liquid temp	0	32	1774,6	6061	1527,3	2,14	7,30	1,84	830,7	4,94	39,41			
Tliq= 45/113	7,2	45	2344,5	8007	2017,7	2,52	8,59	2,17	931,9	5,37	52,88			
[°C / °F]	-20	-4	592,4	2023	509,9	0,99	3,37	0,85	601,0	3,95	14,32			
cond. pressure	-15	5	757,9	2588	652,2	1,12	3,83	0,97	675,4	4,27	18,43			
pc= 55/131	-10	14	958,9	3275	825,2	1,28	4,36	1,10	750,4	4,59	23,48			
return gas temp	-7	20	1113,2	3802	958,0	1,39	4,75	1,20	800,6	4,81	27,41			
RGT= 32/90	-5	23	1199,9	4098	1032,6	1,45	4,96	1,25	826,7	4,92	29,63			
liquid temp	0	32	1485,4	5073	1278,3	1,64	5,61	1,41	904,9	5,26	37,05			
Tliq= 55/131	7,2	45	1983,8	6775	1707,3	1,94	6,63	1,67	1022,1	5,76	50,35			

## Model

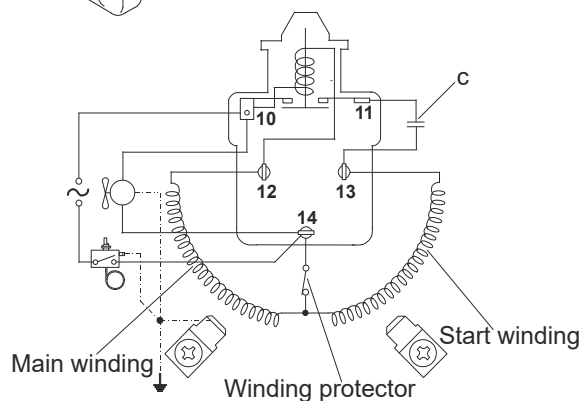
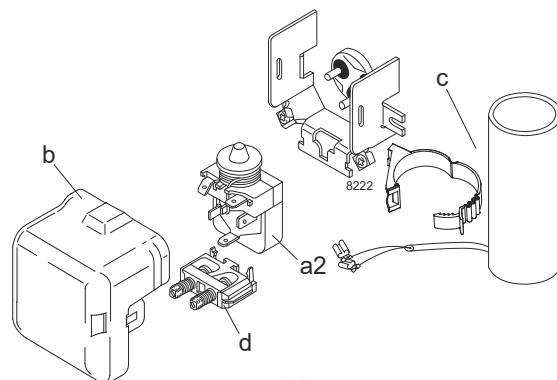
Designation	<b>SC15MLX</b>	<b>220-240V/50Hz</b>	<b>Conf. 4</b>	Sales code:	<b>104L2869</b>
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## Configuration

Motorconfiguration	CSIR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R449A
Application	MBP
Voltage range	198-254V
Starting torque	HST
Approvals	

## Electrical accessories / wiring diagram

CSIR



## Ambient/ machine room temperatures minimum /maximum

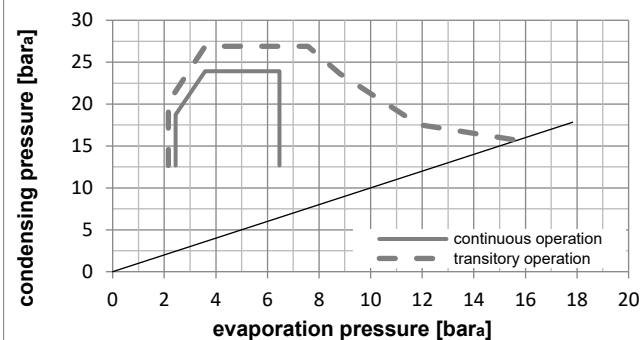
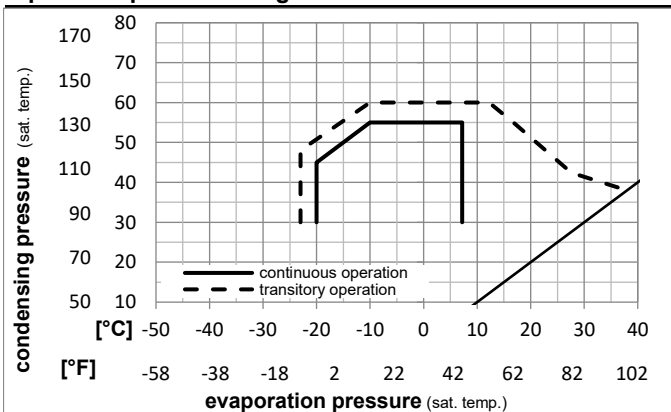
Ambient temperature range: 10 - 38°C / 50 - 101°F

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

Compressor cooling: fan 3m/s

## Operation Limits

## Operation pressure range



## Components

a2	relay	117U6013
c	start capacitor (125µF)	117U5012
d	cord relief	103N1004
b	plastic cover	103N2009

### Model

Designation **SC15MLX** **220-240V/50Hz** Conf. 4 Sales code: **104L2869**

### Optimization + standard conditions

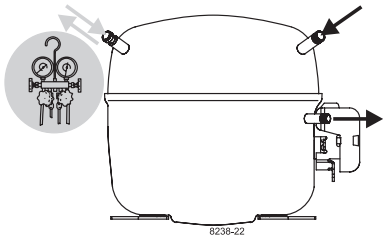
R449A, 220V/50Hz, CSIR, fan 3m/s,

		Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)						Power consumption			
		Return gas temp.				Liquid temp.						Current consumption			Ref. mass flow
		Cooling capacity				COP	EER	P1			I	m			
		pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
[°C]	-7	54	35	46	1248,5	4264	1074,5	1,57	5,38	1,36	792,8	4,77	27,81	ASHRAE MBP	
[°F]	20	130	95	115											
[°C]	-10	55	32	55	952,6	3253	819,8	1,28	4,36	1,10	746,7	4,58	23,83	cecomaf MBP	
[°F]	14	131	90	131											
[°C]	-10	45	20	45	1109,7	3790	955,0	1,59	5,44	1,37	696,1	4,36	26,50	EN12900 MBP	
[°F]	14	113	68	113											
[°C]	-7	49	18	49	1184,8	4046	1019,6	1,56	5,34	1,35	757,7	4,62	30,11	ARI540 MBP	
[°F]	20	120	65	120											
[°C]	-10	45	32	45	1155,9	3948	994,8	1,66	5,67	1,43	696,1	4,36	25,76	opt	
[°F]	14	113	90	113											
[°C]	-25	45	32	45	559,8	1912	481,8	1,10	3,75	0,94	510,0	3,56	12,27	opt	
[°F]	-13	113	90	113											

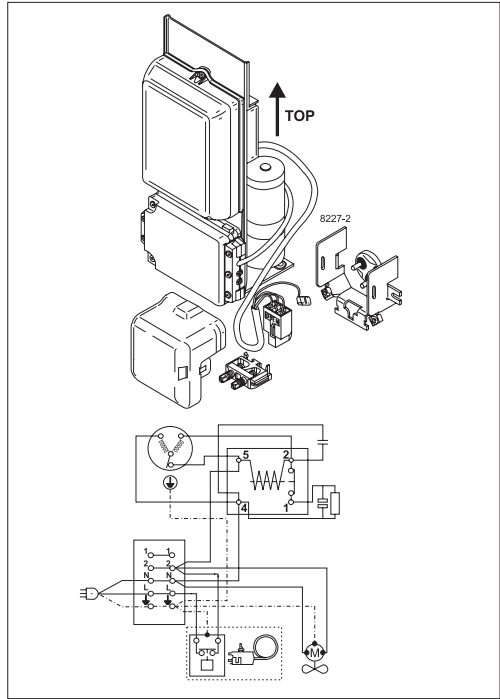
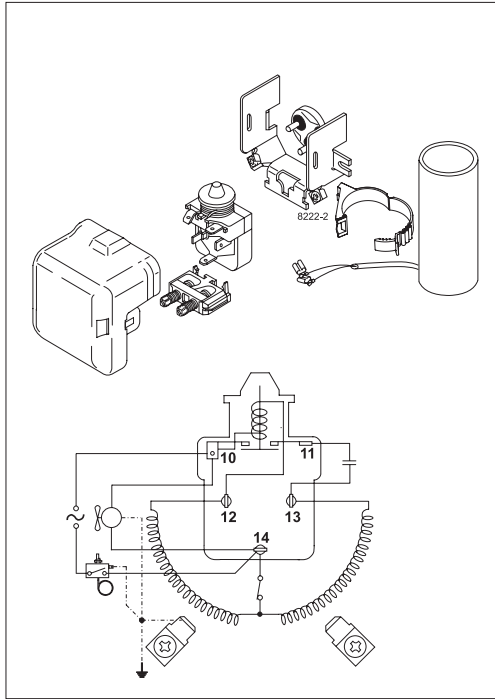
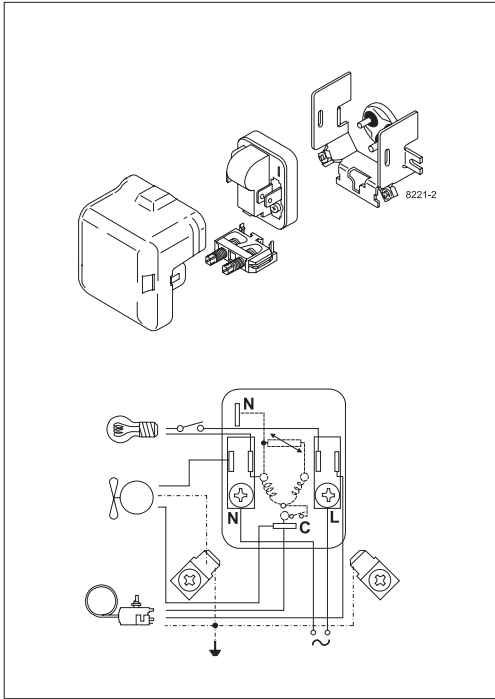
### Performance tables

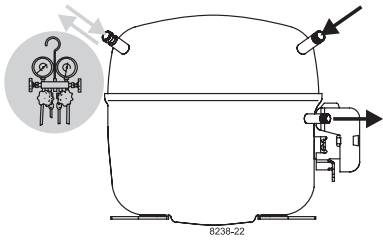
R449A, 220V/50Hz, CSIR, fan 3m/s,

	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]	-20	-4	722,4	2467	621,7	1,26	4,32	1,09	571,6	3,82	15,91	
cond. pressure	-15	5	919,6	3140	791,4	1,45	4,96	1,25	633,5	4,09	20,36	
pc= 45/113	-10	14	1155,9	3948	994,8	1,66	5,67	1,43	696,1	4,36	25,76	
return gas temp.	-7	20	1335,6	4561	1149,4	1,81	6,18	1,56	738,2	4,54	29,91	
RGT= 32/90	-5	23	1436,0	4904	1235,8	1,89	6,45	1,63	760,1	4,63	32,24	
liquid temp	0	32	1764,1	6025	1518,2	2,14	7,29	1,84	826,1	4,92	39,96	
Tliq= 45/113	7,2	45	2330,1	7958	2005,4	2,52	8,60	2,17	925,9	5,35	53,62	
[°C / °F]	-20	-4	589,2	2012	507,1	0,98	3,36	0,85	599,0	3,94	14,54	
cond. pressure	-15	5	753,3	2573	648,3	1,12	3,82	0,96	672,6	4,26	18,71	
pc= 55/131	-10	14	952,6	3253	819,8	1,28	4,36	1,10	746,7	4,58	23,83	
return gas temp	-7	20	1105,7	3776	951,6	1,39	4,74	1,20	796,2	4,79	27,80	
RGT= 32/90	-5	23	1191,7	4070	1025,6	1,45	4,95	1,25	822,0	4,90	30,06	
liquid temp	0	32	1475,0	5037	1269,4	1,64	5,60	1,41	899,0	5,23	37,58	
Tliq= 55/131	7,2	45	1969,6	6727	1695,1	1,94	6,63	1,67	1014,1	5,72	51,07	



# SC Compressors





# SC Compressors

## Service/Repair – R290



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