

Model

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

Oil type	Polyolester	Refrigerant(s)	R404A, R452A, R507
Oil viscosity	32cST	Displacement	15,28cm ³ / 0,93cu.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	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

	Conf. 1	Conf. 2	Conf. 3	Conf. 4
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		
Starting torque	HST	HST	HST	HST
Note	- / -			

Applications with SC15MLX

	Conf. 1	Conf. 2	Conf. 3	Conf. 4
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

	Conf. 1	Conf. 2	Conf. 3	Conf. 4
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

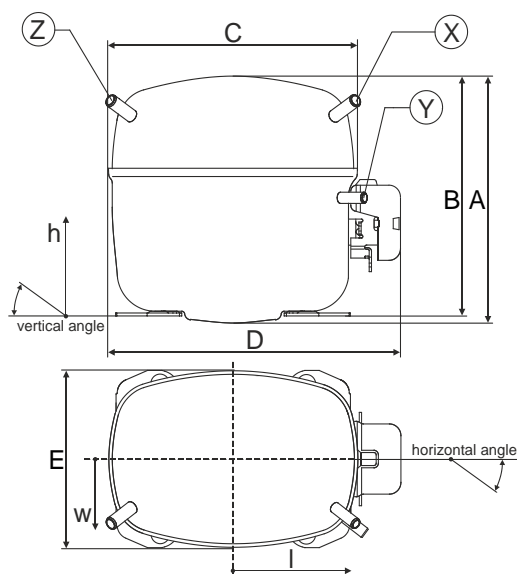
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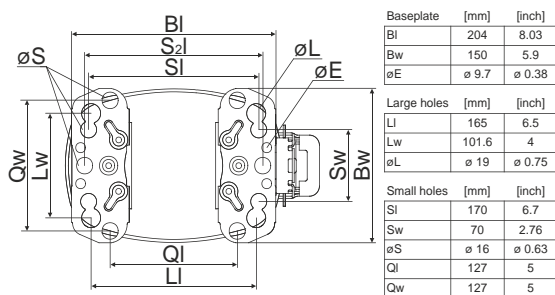
Compressor dimensions

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

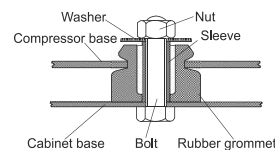
Connectors	Suction			Discharge			Process		
		X		Y		Z			
Diameter	[mm]	øi 10,11-10,29		øi 6,11-6,29		øi 6,11-6,29			
(i:inside, o:outside)	[in]	øi 0,4-0,41		øi 0,24-0,25		øi 0,24-0,25			
Material		copper		copper		copper			
Horizontal angle	±2°	37°		37°		143°			
Vertical angle	±2°	30°		0°		150°			
Position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



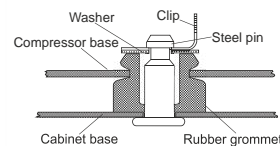
Compressor fixation



Bolt joint



Snap-on



Mounting accessories	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

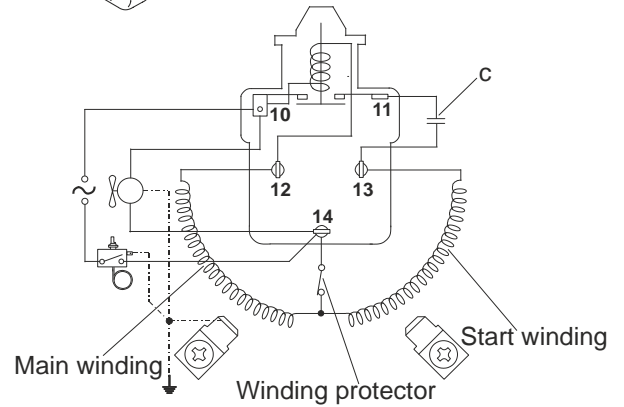
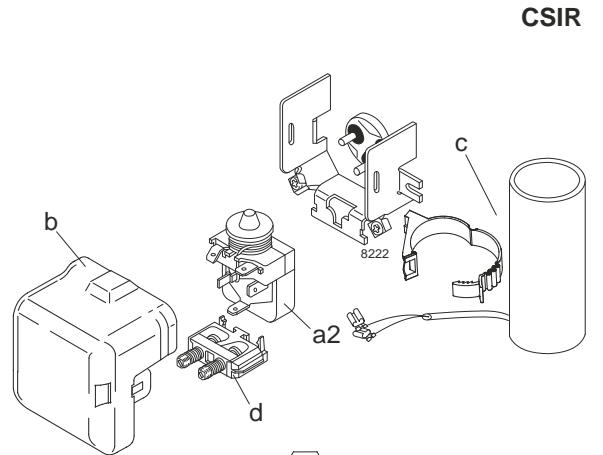
Model

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

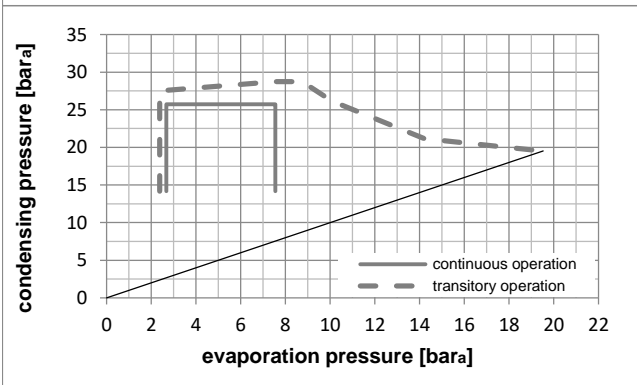
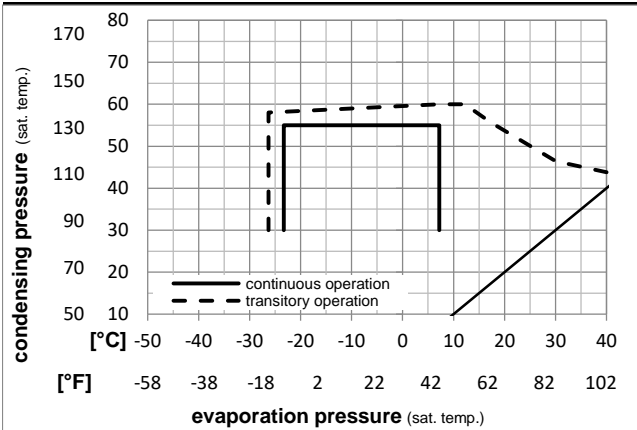


Ambient temperatures / system cooling

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	n/a	n/a

Operation pressure range



Components

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

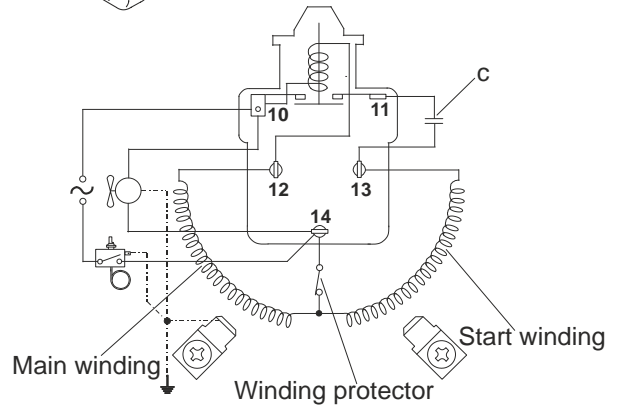
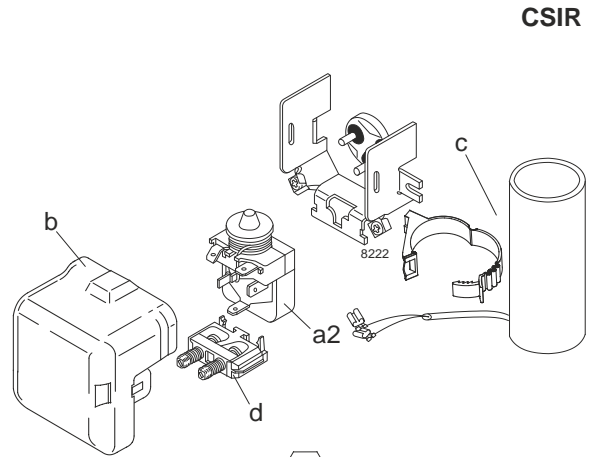
Model

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

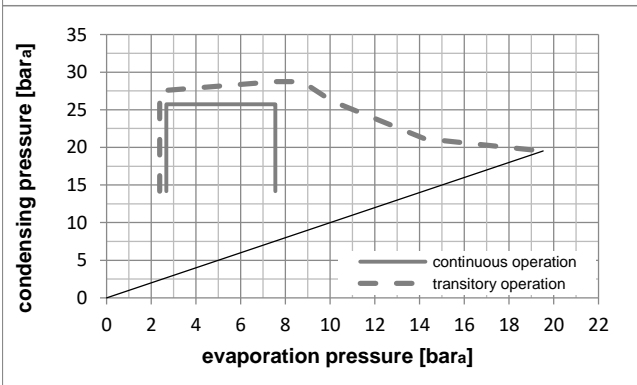
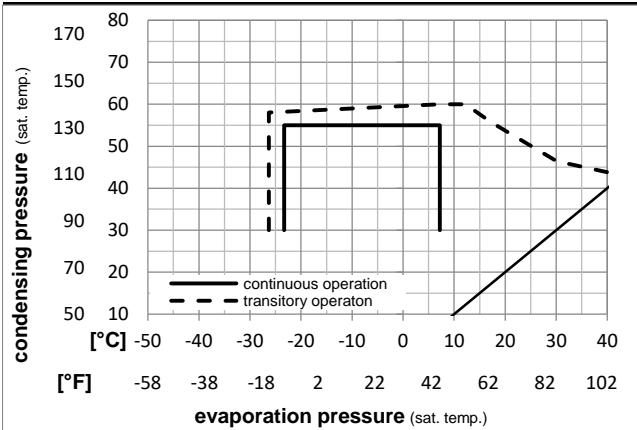


Ambient temperatures / system cooling

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	n/a	n/a

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			ASHRAE MBP	
					Return gas temp.			Liquid temp.			Current consumption				Ref. mass flow ṁ
					Cooling capacity			COP	EER	P1	I				
pe	pc	RGT	Tliq		[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]		
[°C]	-6,7	54,4	35	46,1	1301,3	4444	1119,9	1,54	5,26	1,33	844,6	5,00	36,61		
[°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	89,6	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]	-6,7	48,9	18,3	48,9	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	89,6	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	89,6	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

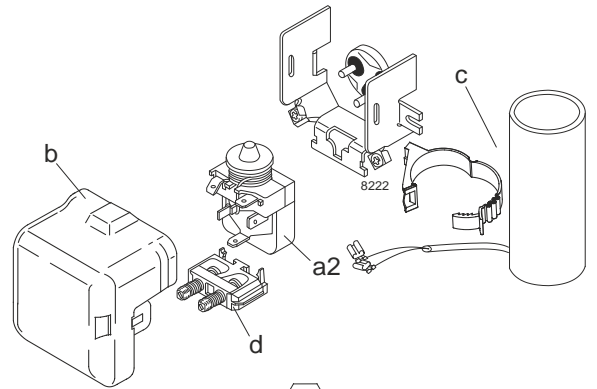
Designation	SC15MLX	220-240V/50Hz	Conf. 3	Sales code:	104L2869
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Configuration

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

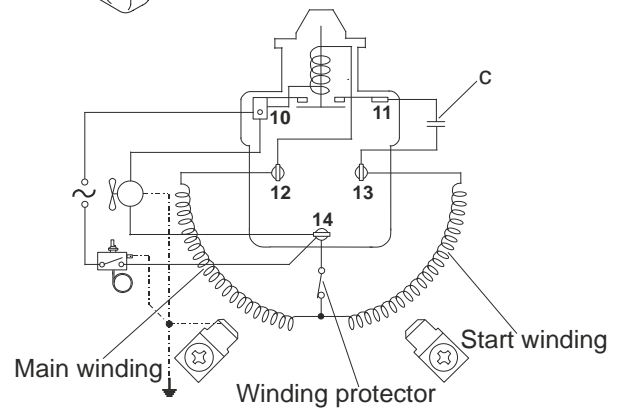
CSIR



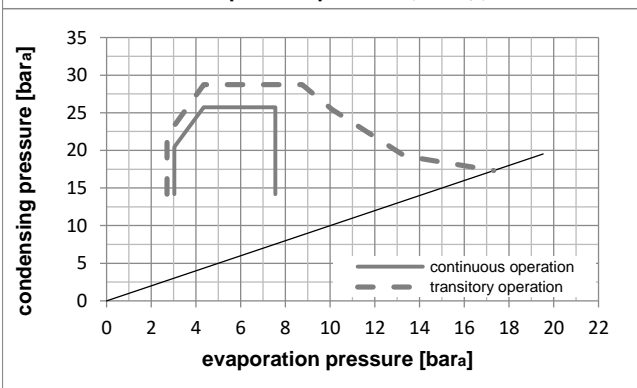
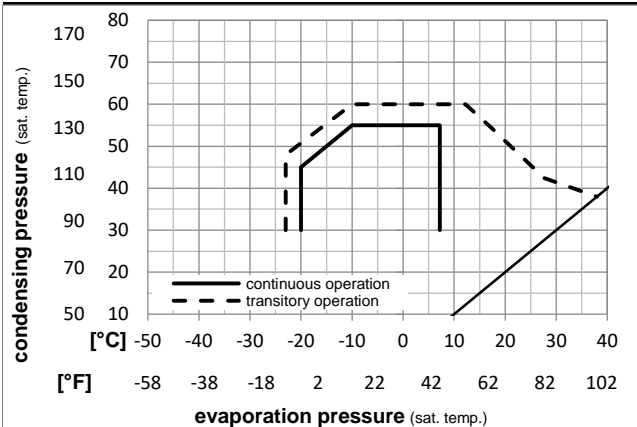
Ambient temperatures / system cooling

Ambient temperature min.:	10°C / 50°F
Ambient temperature max.:	38°C / 101°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	n/a	n/a



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)				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]	-6,66	54,4	35	46,1	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	89,6	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]	-6,66	48,9	18,3	48,9	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	89,6	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	89,6	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.	-6,7	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	-6,7	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

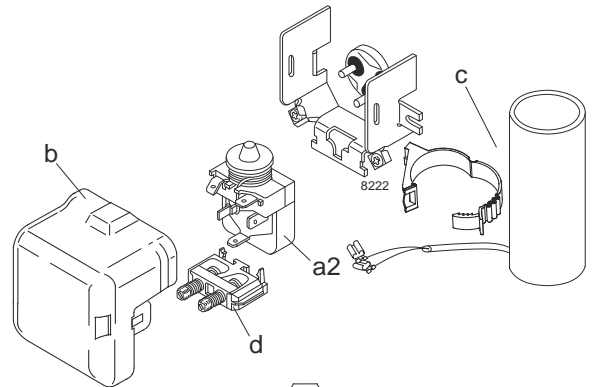
Designation	SC15MLX	220-240V/50Hz	Conf. 4	Sales code:	104L2869
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Configuration

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

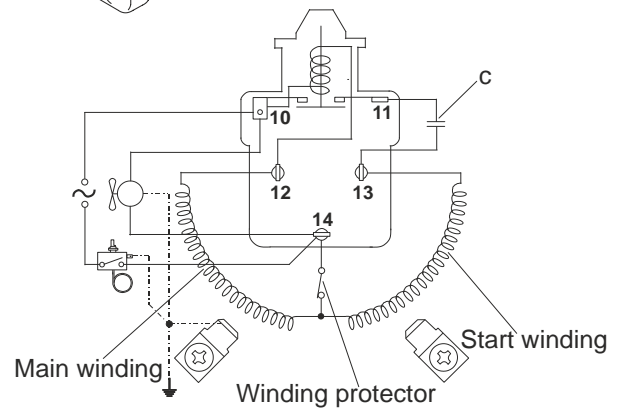
CSIR



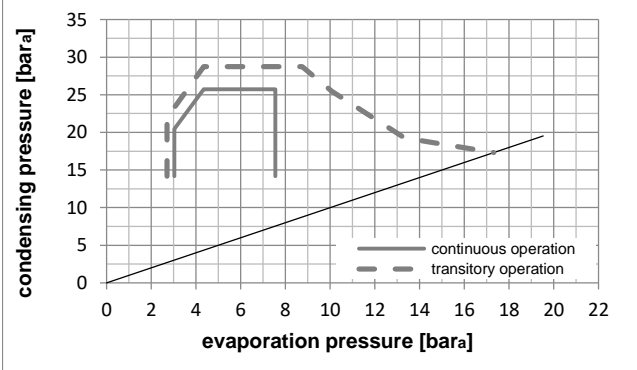
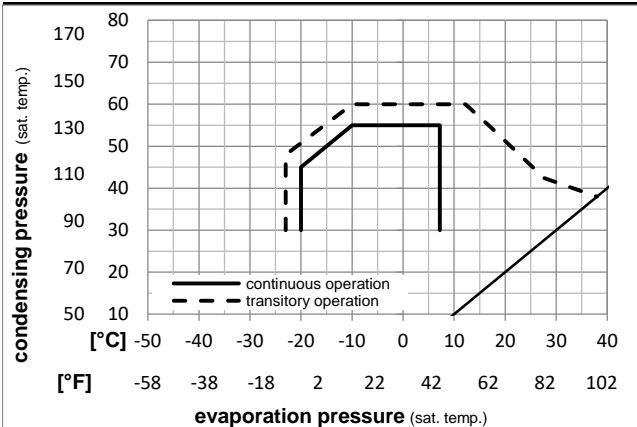
Ambient temperatures / system cooling

Ambient temperature min.:	10°C / 50°F
Ambient temperature max.:	38°C / 101°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	n/a	n/a



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)			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	Ref. mass flow	[W]	[A]	[kg/h]						
[°C]	-6,66	54,4	35	46,1	1248,5	4264	1074,5	1,57	5,38	1,36	792,8	4,77	27,81									
[°F]	20	130	95	115																		
	-10	55	32	55	952,6	3253	819,8	1,28	4,36	1,10	746,7	4,58	23,83									
	14	131	89,6	131																		
	-10	45	20	45	1109,7	3790	955,0	1,59	5,44	1,37	696,1	4,36	26,50									
	14	113	68	113																		
	-6,66	48,9	18,3	48,9	1184,8	4046	1019,6	1,56	5,34	1,35	757,7	4,62	30,11									
	20	120	65	120																		
	-10	45	32	45	1155,9	3948	994,8	1,66	5,67	1,43	696,1	4,36	25,76									
	14	113	89,6	113																		
	-25	45	32	45	559,8	1912	481,8	1,10	3,75	0,94	510,0	3,56	12,27									
	-13	113	89,6	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.	-6,7	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	-6,7	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