

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	16Ω (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
Motor configuration	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

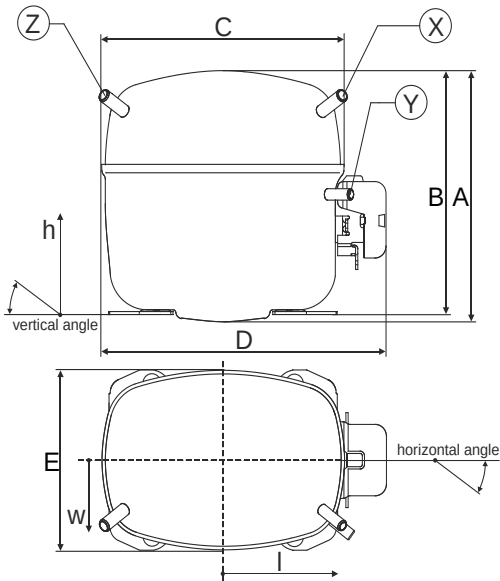
	Conf. 1	Conf. 2	Conf. 3	Conf. 4
Starting device type	relay	relay	relay	relay
Run capacitor	-/-	-/-	-/-	-/-
Start capacitor	125μF	125μF	125μF	125μF
LRA (locked rotor amps / 4s/ U(N))	25A	25A	25A	25A
RLA (rated load amps / 1s/ U(N))	4,5A	4,5A	4,5A	4,5A
Cut in current (U(N))	25A	25A	25A	25A

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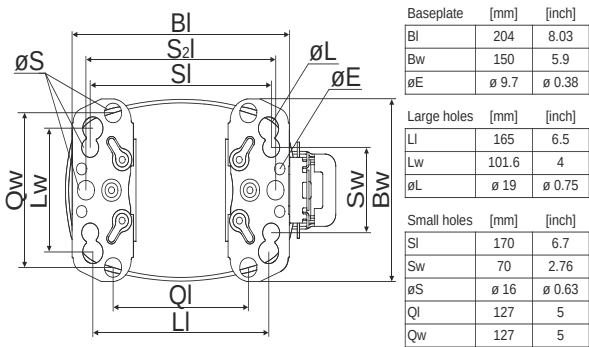
Compressor dimensions

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

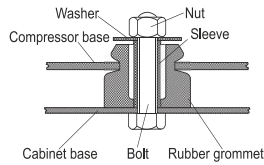
Connectors	Suction	Discharge	Process
	X	Y	Z
Diameter [mm]	øi 10,11-10,29	øi 6,11-6,29	øi 6,11-6,29
(i:inside, o:outside) [in]	øi 0,4-0,41	øi 0,24-0,25	øi 0,24-0,25
Material	copper	copper	copper
Horizontal angle ±2°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°
Position l/h/w [mm]	107/193/55	115/110/63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



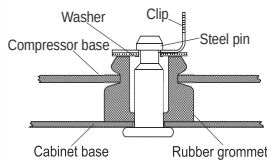
Compressor fixation



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

Application notes

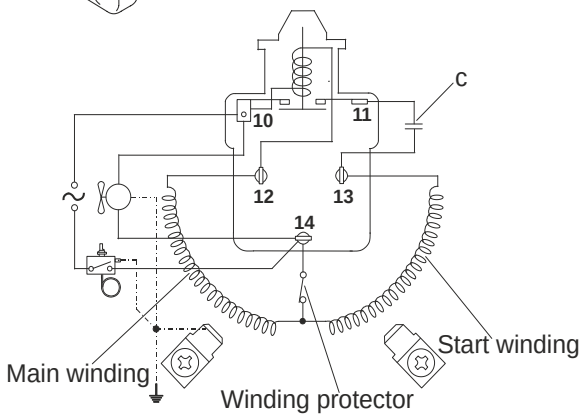
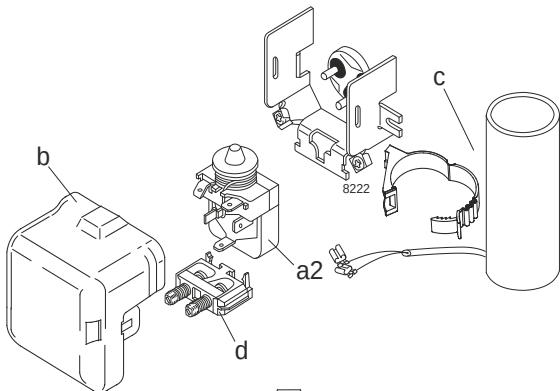
Provision for PE Grounding is located at the PE Stamp on the compressor

Model					
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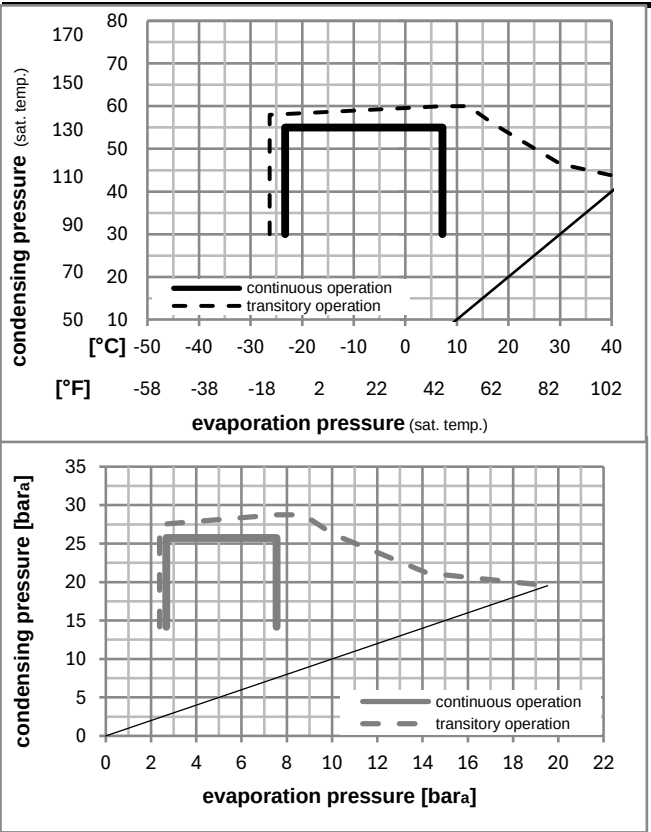
Configuration		Electrical accessories / wiring diagram			
Motor configuration	CSIR	CSIR			
Power supply (nominal)	220-240V/50Hz 1~				
Refrigerant	R404A				
Application	MBP				
Voltage range	198-254V				
Starting torque	HST				
Approvals	VDE				
	CCC				
	EAC				

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		
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			Current consumption			Ref. mass flow		
pe					pc			RGT			Tliq			[W]			[Btu/h]			[kcal/h]			P1			I			m		
[°C]					[°F]			[°C]			[°F]			[W]			[Btu/h]			[kcal/h]			[W]			[A]			[kg/h]		
-7					54			35			46			1376,9			4702			1184,9			1,56			5,31			1,34		
20					130			95			115			885,2			5,17			37,88			ASHRAE MBP								
-10					55			32			55			1024,6			3499			881,7			1,22			4,17			1,05		
14					131			90			131			839,4			4,96			32,80			cecomaf MBP								
-10					45			20			45			1210,5			4134			1041,8			1,55			5,30			1,34		
14					113			68			113			780,1			4,73			36,46			EN12900 MBP								
-7					49			18			49			1259,4			4301			1083,8			1,49			5,09			1,28		
20					120			65			120			844,4			5,01			41,15			ARI540 MBP								
-10					45			32			45			1284,7			4388			1105,7			1,65			5,62			1,42		
14					113			90			113			780,1			4,73			35,38			opt								
-25					45			32			45			654,5			2235			563,3			1,11			3,77			0,95		
-13					113			90			113			592,3			3,93			17,66			opt								

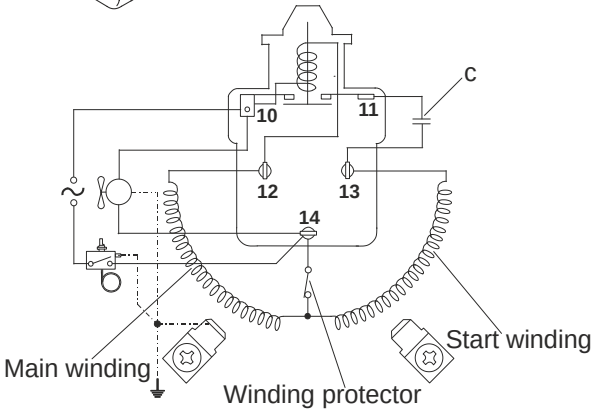
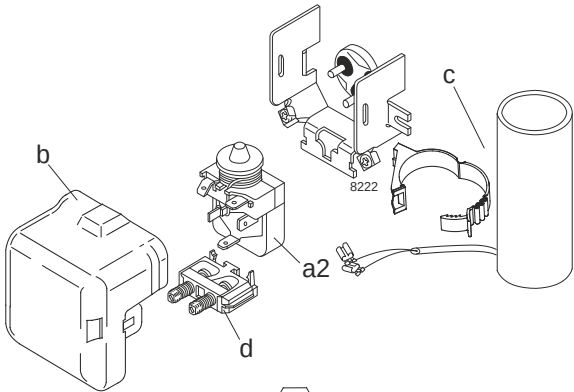
Performance tables						R404A, 220V/50Hz, CSIR, fan 3m/s, VDE, CCC, EAC					
	pe		Cooling capacity			COP	EER		P1	I	m
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]
[°C / °F]	-23	-10	710,1	2425	611,1	1,16	3,95	1,00	613,4	4,01	19,19
cond. pressure	-20	-4	828,7	2830	713,2	1,27	4,32	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	SC15MLX	220-240V/50Hz	Conf. 2	Sales code: 104L2869

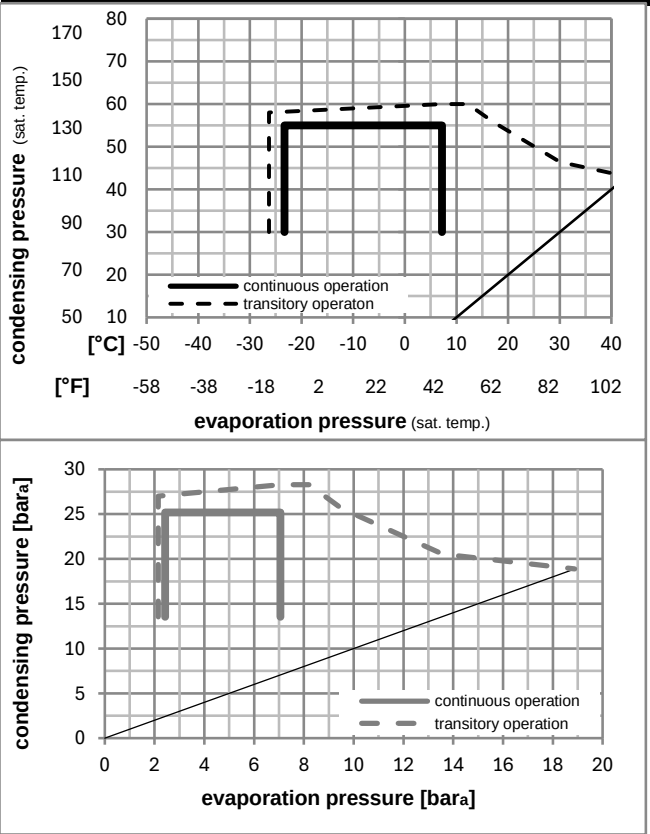
Configuration		Electrical accessories / wiring diagram		
Motor configuration	CSIR	CSIR		
Power supply (nominal)	220-240V/50Hz 1~			
Refrigerant	R452A			
Application	MBP			
Voltage range	198-254V			
Starting torque	HST			
Approvals	VDE			
	CCC			
	EAC			

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		
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)															
Return gas temp.															
Liquid temp.															
Cooling capacity															
COP															
EER															
Power consumption															
Current consumption															
Ref. mass flow															
P1															
I															
ṁ															
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											

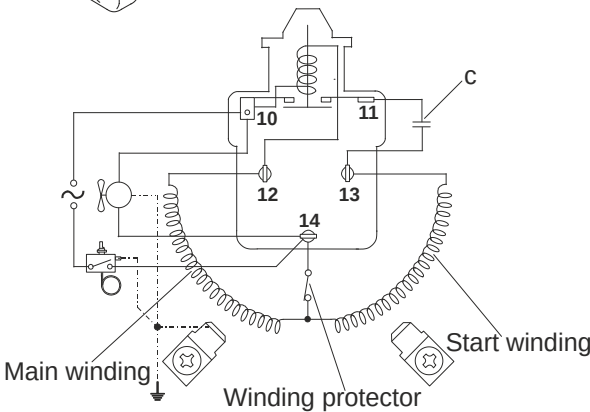
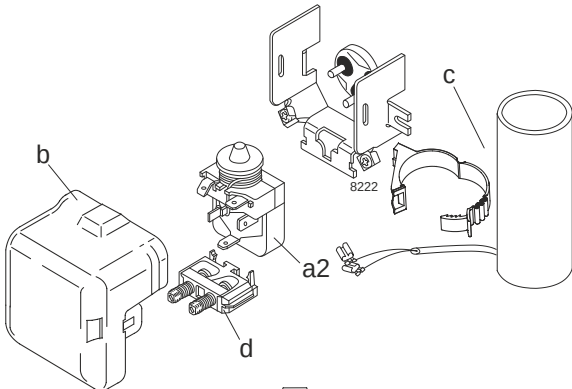
Performance tables						R452A, 220V/50Hz, CSIR, fan 3m/s, VDE, CCC, EAC					
	pe		Cooling capacity			COP	EER		P1	I	m
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]
[°C / °F]	-23	-10	655,8	2240	564,4	1,14	3,90	0,98	573,6	3,83	18,17
cond. pressure	-20	-4	769,7	2629	662,4	1,25	4,28	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

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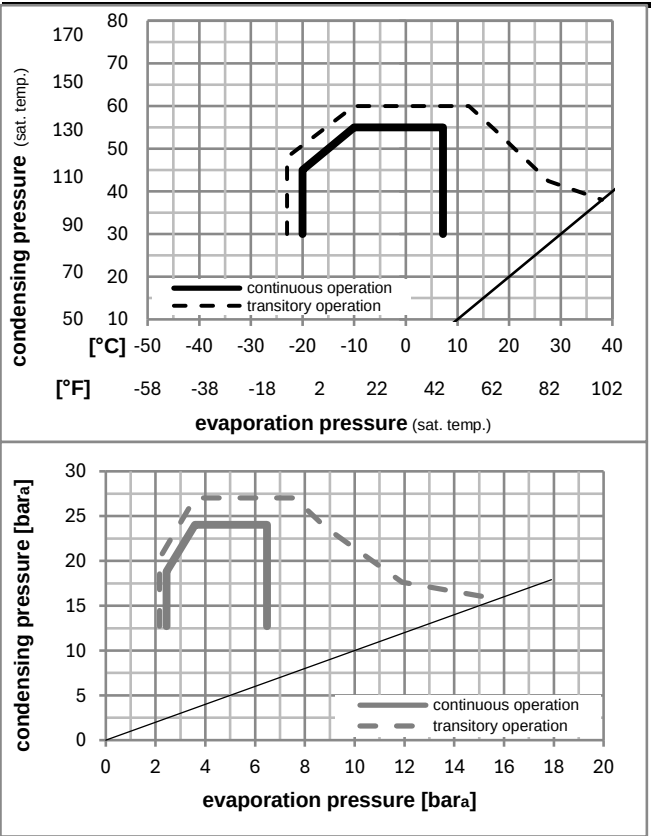
Configuration		Electrical accessories / wiring diagram			
Motor configuration	CSIR	CSIR			
Power supply (nominal)	220-240V/50Hz 1~				
Refrigerant	R448A				
Application	MBP				
Voltage range	198-254V				
Starting torque	HST				
Approvals					

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		
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
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Optimization + standard conditions

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

Evaporating pressure (saturation temperature)					Condensing pressure (saturation temperature)						Power consumption			
											Current consumption			
											Ref. mass flow			

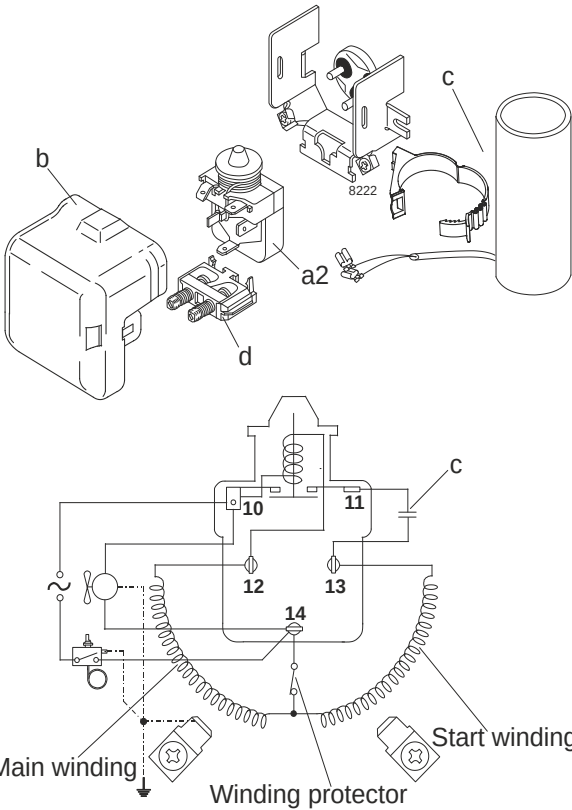
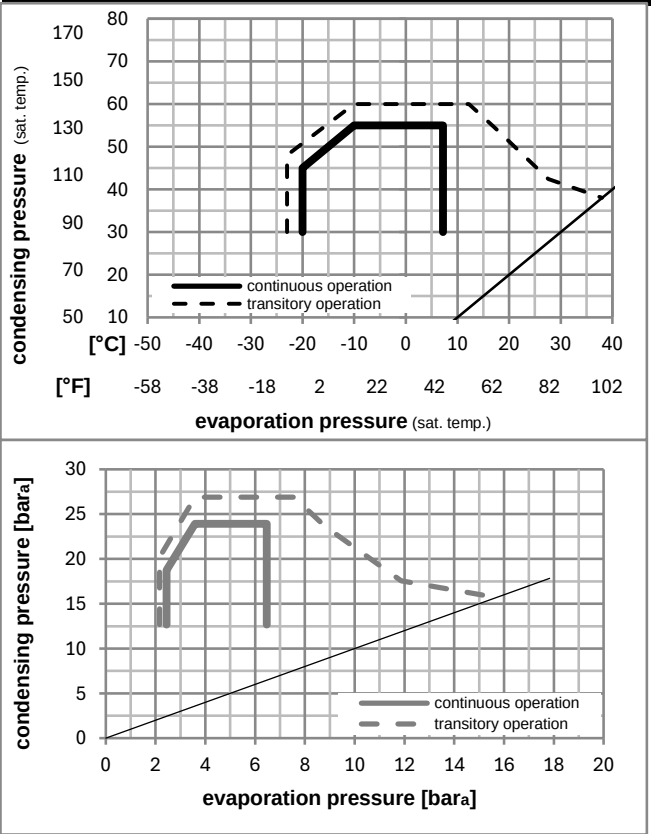
Model					
Designation	SC15MLX	220-240V/50Hz	Conf. 4	Sales code:	104L2869

Configuration		Electrical accessories / wiring diagram			
Motor configuration	CSIR	CSIR			
Power supply (nominal)	220-240V/50Hz 1~				
Refrigerant	R449A				
Application	MBP				
Voltage range	198-254V				
Starting torque	HST				
Approvals					

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

Model

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Optimization + standard conditions

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

Evaporating pressure (saturation temperature)					Condensing pressure (saturation temperature)						Power consumption			
Return gas temp.					Current consumption						Ref. mass flow			
Liquid temp.														
Cooling capacity					COP		EER		P1		I		ṁ	
pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/W/h]	[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		