Single
Packs

Single Pack SC18MLX.3 220-240V 50Hz CSCR

Single pack code number: **195B4330**

Position	Title	Code	Amount
1	Compressor SC18MLX.3	104L2146	1
2	SC starting device (550mm)	117-7027	1
3	Cord relief	103N1004	1
4	Cover	103N2009	1
5	Bolt joint for one compressor | M6 | ø16mm	118-1917	1

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Model
SC18MLX.3

Sales code:
104L2146

Compressor Data

Refrigerant(s)	**R404A / R452A / R507**
Refr. charge - tech. limit	**1300g / 45.86oz**
Weight	**14.00 kg / 30.86lbs**
Displacement	**17.68 cm3 / 1.08cu.in**
Compressors on pallet	**80**

General – Configurations With SC18MLX.3

–	Conf. 1	Conf. 2	Conf. 3	Conf. 4
Motor configuration	CSCR	CSCR	CSCR	CSCR
Power supply (nominal)	220-240 V/50 Hz	220-240 V/50 Hz	220-240 V/50 Hz	220-240 V/50 Hz
Number of phases	1	1	1	1
Voltage range	198-254 V	198-254 V	198-254 V	198-254 V
Approvals	CCC, EAC, VDE	CCC, EAC, VDE	–	–
Starting torque	HST	HST	HST	HST
Refrigerant	R404A	R452A	R448A	R449A
Application	MBP	MBP	MBP	MBP
Hot gas defrost	OK	OK	OK	OK
Long interval pull down	OK	OK	OK	OK

Application Notes

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

Model
SC18MLX.3

Sales code:
104L2146

Compressor Design

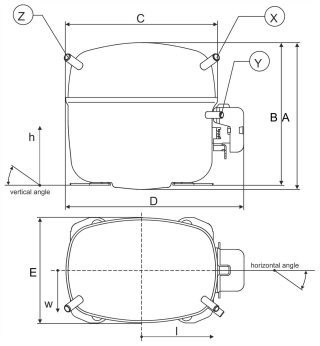
Oil type	**POE**	Winding resistance main	**3.4 Ohm**
Oil viscosity	**32cSt**	Winding resistance aux	**14.4 Ohm**
Oil quantity	**550 / 18.60fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**1,460 cm3 / 49.37fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**internal**		

Compressor Dimensions

Housing

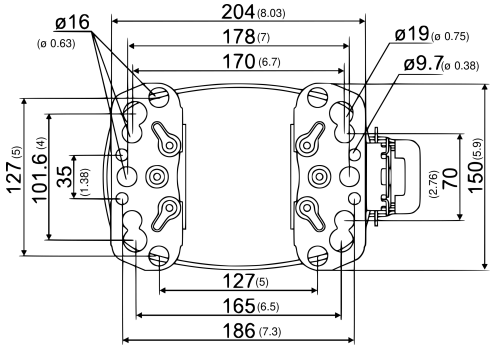
A Height	**219mm / 8.62in**
B Height	**213mm / 8.39in**
C Length shell	**239mm / 9.41in**
D Length w. cover	**255mm / 10.04in**
E Width	**151mm / 5.94in**

Find 3D Model here



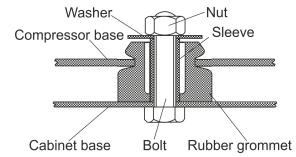
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 10.11–10.29 / 0.40–0.41in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°
Position l/h/w [mm]	107/193/55 / 4.21/7.60/2.17in	115/110/63 / 4.53/4.33/2.48in	-107/193/55 / -4.21/7.60/2.17in
Straight tube l. [mm]	12 / 0.47in	12 / 0.47in	12 / 0.47in

Mounting Accessories

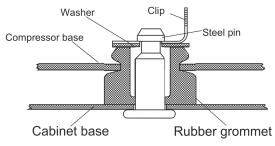


Dimensions in mm [in]

Bolt joint



Snap-on



	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
SC18MLX.3 Configuration 1

Sales code:
104L2146

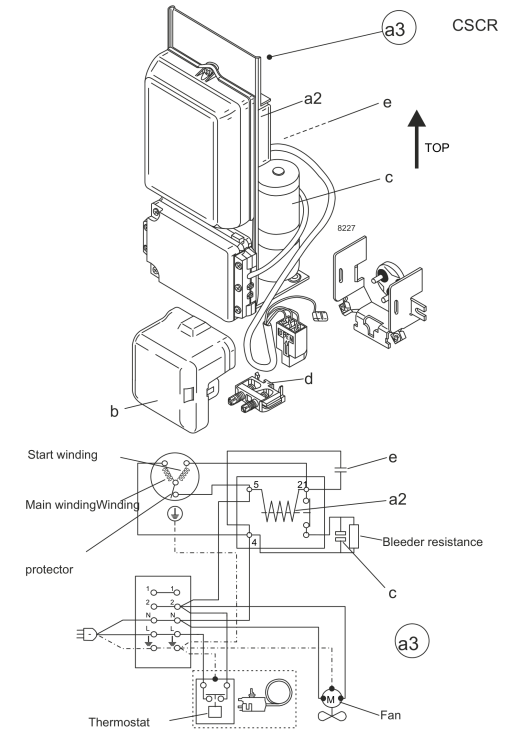
Configuration

Motor configuration	**CSCR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R404A**
Application	**MBP**
Voltage range	**198-254 V**
Starting torque	**HST**
Approvals	**CCC, EAC, VDE**
Starting device type	**relay**
Run capacitor	**10 µF**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**23.4 A**
RLA (rated load amps / 1s/ U(N))	**4.3 A**
Cut in current (U(N))	**23.4 A**

Ambient/ machine room temperatures minimum /maximum
Ambient temperature range: 10 - 38°C / 50 - 100°F
Machine room temp. compressor: 10 - 43°C / 50 - 109°F

System Cooling
fan 3m/s

Electrical Accessories / Wiring Diagram



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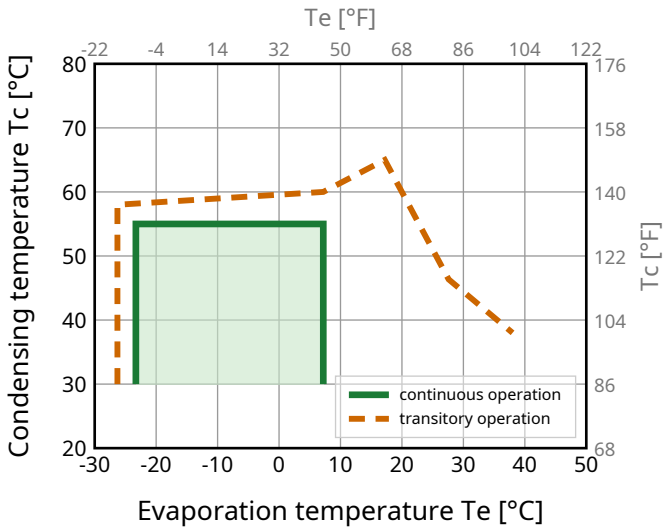
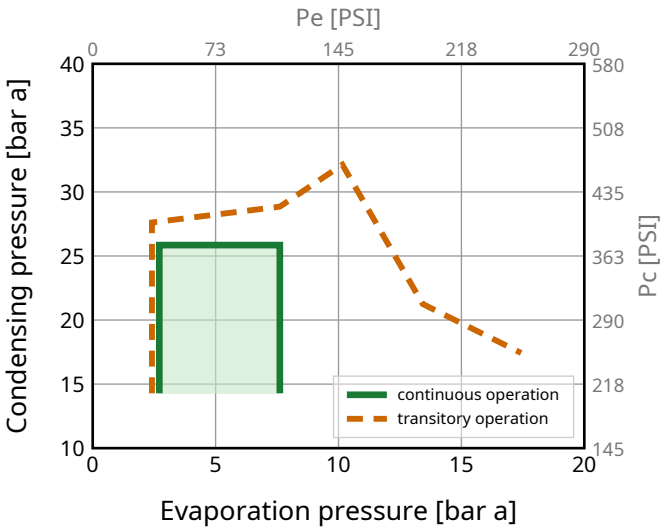
Components
a3 SC starter kit (550mm) 117-7027
b plastic cover 103N2009
d cord relief 103N1004

Alternative components
a3 SC starter kit (1000mm) 117-7040
a3 SC starter kit (650mm) 117-7046
c start capacitor (80µF) 117U5373
e run capacitor (10µF, 6.3mm) 117-7112

Operation Pressure Range





Model
SC18MLX.3 Configuration 1

Sales code:
104L2146

Standard Conditions

R404A, 220 V/50 Hz, CSCR, fan 3m/s

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	ṁ	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-6.7 20	54.4 129.9	35 95	46.1 115	**1682**	5740	1447	**1.67**	5.70	1007	4.61	46.21	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**1260**	4299	1084	**1.32**	4.51	954	4.42	40.28	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**1468**	5009	1263	**1.67**	5.70	878	4.40	44.14	**EN12900 MBP**
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	**1531**	5223	1317	**1.60**	5.46	958	4.60	49.89	**ARI540 MBP**
-10 14	45 113	32 89.6	45 113	**1558**	5314	1339	**1.77**	6.05	878	4.40	42.82	**opt MBP 1**
-25 -13	45 113	32 89.6	45 113	**811**	2766	697	**1.24**	4.24	652	3.78	21.82	**opt MBP 2**

Performance Tables

R404A, 220 V/50 Hz, CSCR, fan 3m/s

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

pe		Cooling capacity			COP	EER	P	I	ṁ
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-23.3	-10	**877**	2993	754	**1.29**	4.42	678	3.85	23.66
-20	-4	**1018**	3475	876	**1.40**	4.78	727	3.98	27.57
-15	5	**1266**	4319	1089	**1.58**	5.38	803	4.18	34.51
-10	14	**1558**	5314	1339	**1.77**	6.05	878	4.40	42.82
-5	23	**1898**	6476	1632	**1.99**	6.80	952	4.63	52.69
0	32	**2292**	7820	1971	**2.23**	7.63	1025	4.87	64.36
5	41	**2743**	9360	2359	**2.50**	8.54	1096	5.12	78.08
7.2	45	**2962**	10105	2547	**2.63**	8.97	1127	5.24	84.86

pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F

-23.3	-10	**711**	2425	611	**0.99**	3.37	720	3.75	22.21
-20	-4	**823**	2808	708	**1.06**	3.62	777	3.91	25.85
-15	5	**1022**	3488	879	**1.18**	4.03	865	4.16	32.36
-10	14	**1260**	4299	1084	**1.32**	4.51	954	4.42	40.28
-5	23	**1541**	5258	1325	**1.48**	5.04	1044	4.70	49.82
0	32	**1870**	6379	1608	**1.65**	5.63	1134	4.99	61.25
5	41	**2250**	7678	1935	**1.84**	6.28	1223	5.28	74.89
7.2	45	**2435**	8310	2094	**1.93**	6.59	1262	5.42	81.69

Model
SC18MLX.3 Configuration 2

Sales code:
104L2146

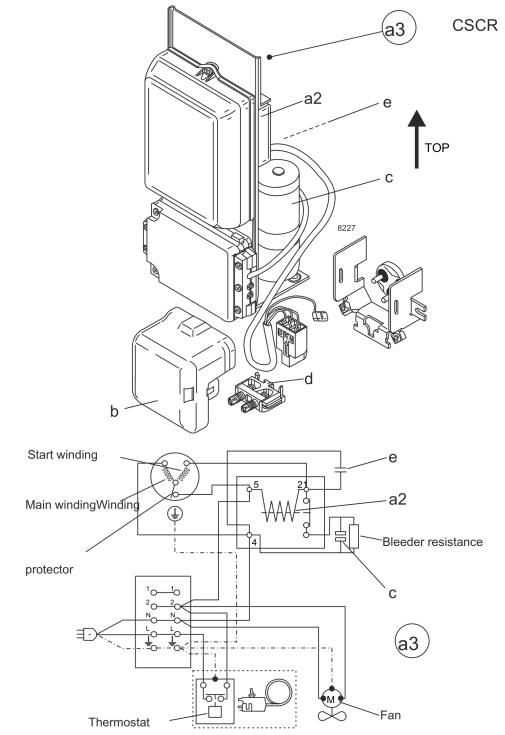
Configuration

Motor configuration	**CSCR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R452A**
Application	**MBP**
Voltage range	**198-254 V**
Starting torque	**HST**
Approvals	**CCC, EAC, VDE**
Starting device type	**relay**
Run capacitor	**10 µF**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**23.4 A**
RLA (rated load amps / 1s/ U(N))	**4.3 A**
Cut in current (U(N))	**23.4 A**

Ambient/ machine room temperatures minimum /maximum
Ambient temperature range: 10 - 38°C / 50 - 100°F
Machine room temp. compressor: 10 - 43°C / 50 - 109°F

System Cooling
fan 3m/s

Electrical Accessories / Wiring Diagram



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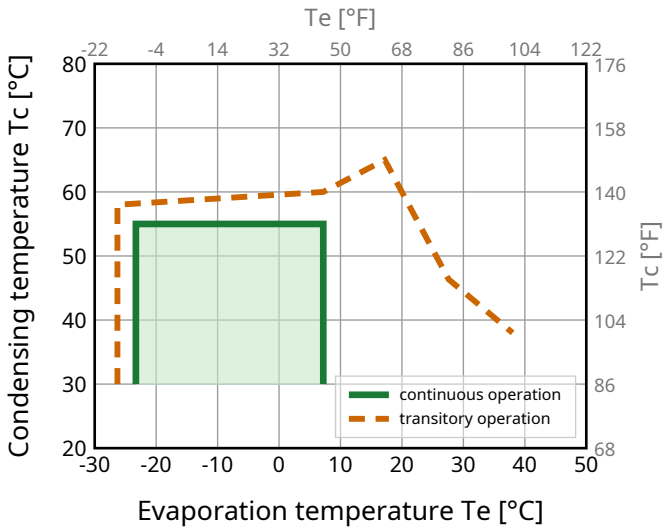
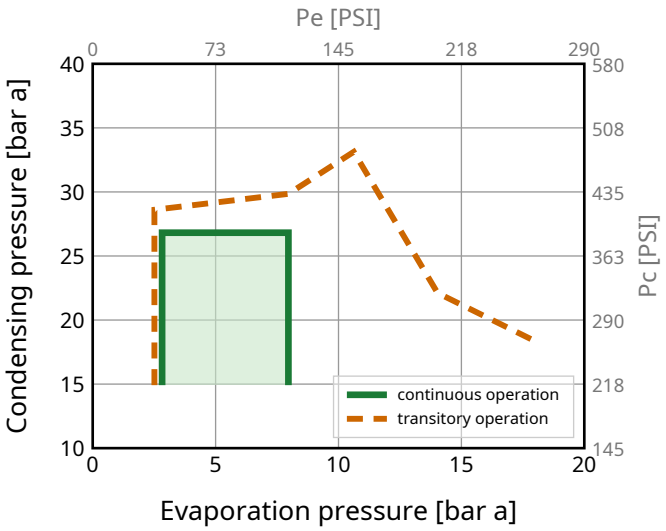
Components
a3 SC starter kit (550mm) 117-7027
b plastic cover 103N2009
d cord relief 103N1004

Alternative components
a3 SC starter kit (1000mm) 117-7040
a3 SC starter kit (650mm) 117-7046
c start capacitor (80µF) 117U5373
e run capacitor (10µF, 6.3mm) 117-7112

Operation Pressure Range





Model
SC18MLX.3 Configuration 2

Sales code:
104L2146

Standard Conditions

R452A, 220 V/50 Hz, CSCR, fan 3m/s

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	ṁ	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-6.7 20	54.4 129.9	35 95	46.1 115	**1594**	5440	1371	**1.66**	5.67	960	4.49	45.48	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**1193**	4072	1026	**1.32**	4.50	905	4.25	39.44	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**1385**	4726	1191	**1.66**	5.66	834	4.01	43.20	**EN12900 MBP**
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	**1453**	4959	1250	**1.59**	5.43	913	4.31	49.05	**ARI540 MBP**
-10 14	45 113	32 89.6	45 113	**1468**	5008	1262	**1.76**	6.00	834	4.01	41.91	**opt MBP 1**
-25 -13	45 113	32 89.6	45 113	**746**	2545	642	**1.23**	4.18	608	3.08	20.86	**opt MBP 2**

Performance Tables

R452A, 220 V/50 Hz, CSCR, fan 3m/s

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

pe		Cooling capacity			COP	EER	P	I	ṁ
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-23.3	-10	**810**	2763	696	**1.28**	4.36	634	3.18	22.68
-20	-4	**946**	3226	813	**1.38**	4.72	683	3.38	26.59
-15	5	**1185**	4042	1019	**1.56**	5.33	758	3.69	33.55
-10	14	**1468**	5008	1262	**1.76**	6.00	834	4.01	41.91
-5	23	**1800**	6140	1548	**1.98**	6.75	910	4.33	51.88
0	32	**2185**	7454	1879	**2.22**	7.57	985	4.66	63.70
5	41	**2628**	8965	2260	**2.48**	8.47	1059	4.99	77.65
7.2	45	**2842**	9697	2444	**2.60**	8.89	1091	5.13	84.55

pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F

-23.3	-10	**656**	2238	564	**0.98**	3.34	669	3.25	21.20
-20	-4	**765**	2611	658	**1.05**	3.60	726	3.48	24.85
-15	5	**960**	3275	826	**1.18**	4.02	814	3.85	31.43
-10	14	**1193**	4072	1026	**1.32**	4.50	905	4.25	39.44
-5	23	**1470**	5016	1264	**1.48**	5.04	996	4.66	49.14
0	32	**1795**	6125	1544	**1.65**	5.63	1089	5.09	60.80
5	41	**2173**	7414	1869	**1.84**	6.27	1182	5.54	74.75
7.2	45	**2357**	8041	2027	**1.93**	6.58	1223	5.73	81.71

Model
SC18MLX.3 Configuration 3

Sales code:
104L2146

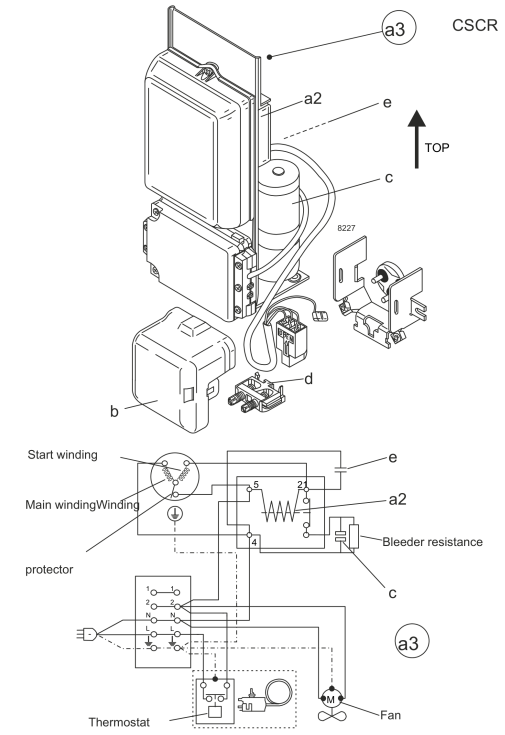
Configuration

Motor configuration	**CSCR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R448A**
Application	**MBP**
Voltage range	**198-254 V**
Starting torque	**HST**
Starting device type	**relay**
Run capacitor	**10 µF**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**23.4 A**
RLA (rated load amps / 1s/ U(N))	**4.3 A**
Cut in current (U(N))	**23.4 A**

Ambient/ machine room temperatures minimum /maximum
Ambient temperature range: 10 - 38°C / 50 - 100°F
Machine room temp. compressor: 10 - 43°C / 50 - 109°F

System Cooling
fan 3m/s

Electrical Accessories / Wiring Diagram



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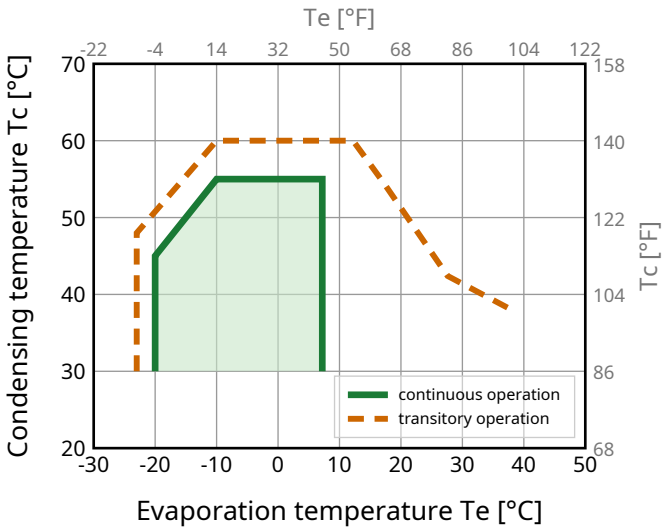
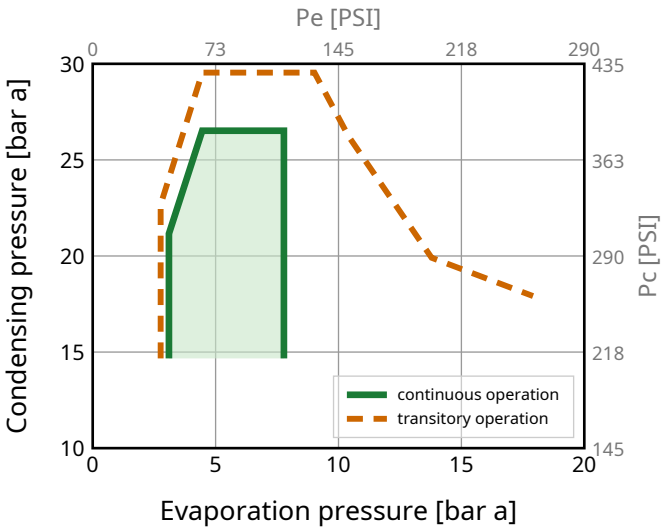
Components
a3 SC starter kit (550mm) 117-7027
b plastic cover 103N2009
d cord relief 103N1004

Alternative components
a3 SC starter kit (1000mm) 117-7040
a3 SC starter kit (650mm) 117-7046
c start capacitor (80µF) 117U5373
e run capacitor (10µF, 6.3mm) 117-7112

Operation Pressure Range





Model

SC18MLX.3 Configuration 3

Sales code:

104L2146

Standard Conditions

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

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	ṁ	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-6.7 20	54.4 129.9	35 95	46.1 115	**1536**	5241	1321	**1.68**	5.73	915	4.43	34.00	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**1182**	4033	1017	**1.37**	4.68	861	4.28	29.36	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**1356**	4628	1166	**1.71**	5.84	793	4.09	32.19	**EN12900 MBP**
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	**1452**	4953	1248	**1.67**	5.69	870	4.31	36.69	**ARI540 MBP**
-10 14	45 113	32 89.6	45 113	**1411**	4814	1213	**1.78**	6.07	793	4.09	31.23	**opt MBP 1**
-25 -13	45 113	32 89.6	45 113	**701**	2391	603	**1.23**	4.19	571	3.47	15.21	**opt MBP 2**

Performance Tables

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

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

pe		Cooling capacity			COP	EER	P	I	ṁ
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-20	-4	**896**	3056	770	**1.39**	4.74	644	3.68	19.55
-15	5	**1131**	3858	972	**1.57**	5.37	718	3.88	24.84
-10	14	**1411**	4814	1213	**1.78**	6.07	793	4.09	31.23
-5	23	**1742**	5944	1498	**2.01**	6.85	867	4.30	38.89
0	32	**2129**	7266	1831	**2.26**	7.72	942	4.51	48.03
5	41	**2578**	8796	2217	**2.54**	8.67	1015	4.71	58.86
7.2	45	**2796**	9540	2405	**2.67**	9.11	1047	4.80	64.23

pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F

-20	-4	**746**	2546	642	**1.09**	3.71	686	3.79	18.25
-15	5	**943**	3219	811	**1.22**	4.17	773	4.04	23.24
-10	14	**1182**	4033	1017	**1.37**	4.68	861	4.28	29.36
-5	23	**1467**	5006	1262	**1.54**	5.26	951	4.54	36.81
0	32	**1805**	6158	1552	**1.73**	5.91	1042	4.79	45.81
5	41	**2200**	7505	1892	**1.94**	6.62	1134	5.05	56.60
7.2	45	**2393**	8164	2058	**2.04**	6.95	1174	5.16	61.99

Model
SC18MLX.3 Configuration 4

Sales code:
104L2146

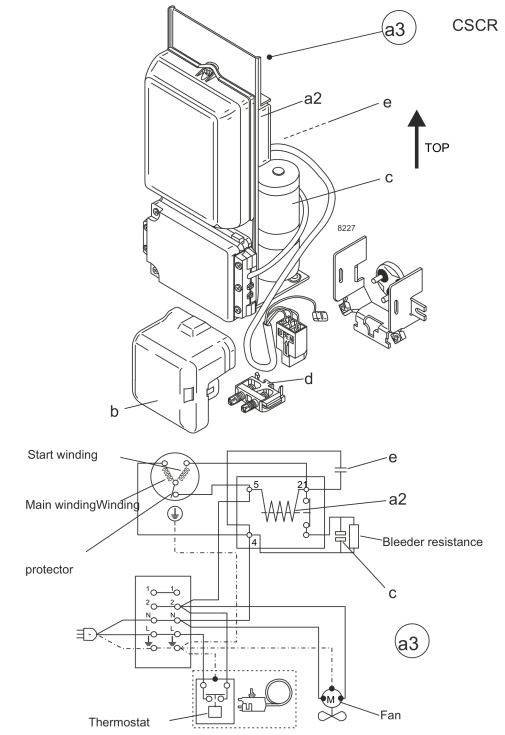
Configuration

Motor configuration	**CSCR**
Power supply (nominal)	**220-240 V/50 Hz 1~**
Refrigerant	**R449A**
Application	**MBP**
Voltage range	**198-254 V**
Starting torque	**HST**
Starting device type	**relay**
Run capacitor	**10 µF**
Start capacitor	**80 µF**
LRA (locked rotor amps / 4s/ U(N))	**23.4 A**
RLA (rated load amps / 1s/ U(N))	**4.3 A**
Cut in current (U(N))	**23.4 A**

Ambient/ machine room temperatures minimum /maximum
Ambient temperature range: 10 - 38°C / 50 - 100°F
Machine room temp. compressor: 10 - 43°C / 50 - 109°F

System Cooling
fan 3m/s

Electrical Accessories / Wiring Diagram

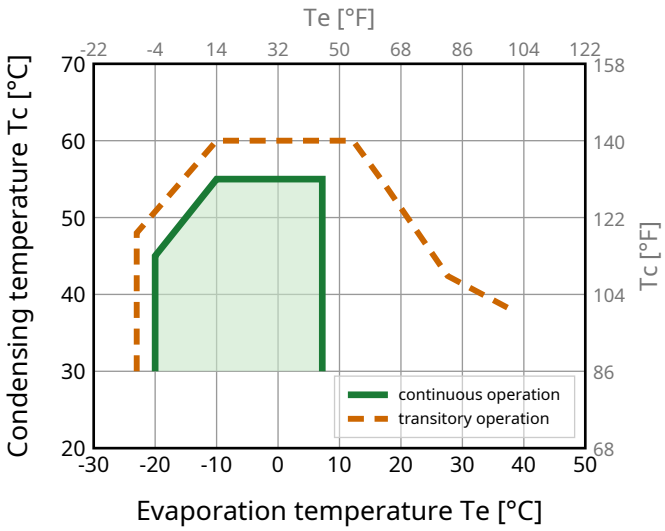


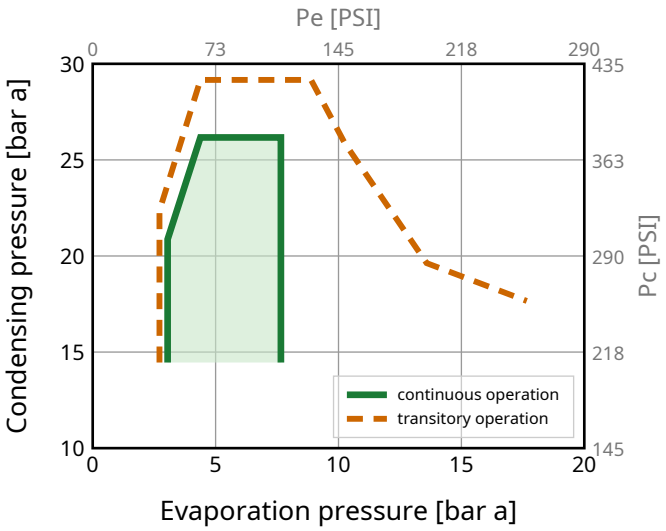
View full size

Components
a3 SC starter kit (550mm) 117-7027
b plastic cover 103N2009
d cord relief 103N1004

Alternative components
a3 SC starter kit (1000mm) 117-7040
a3 SC starter kit (650mm) 117-7046
c start capacitor (80µF) 117U5373
e run capacitor (10µF, 6.3mm) 117-7112

Operation Pressure Range





Model

SC18MLX.3 Configuration 4

Sales code:

104L2146

Standard Conditions

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

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	ṁ	
[°C] [°F]	[°C] [°F]	[°C] [°F]	[°C] [°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]	
-6.7 20	54.4 129.9	35 95	46.1 115	**1527**	5210	1313	**1.68**	5.73	910	4.42	34.15	**ASHRAE MBP**
-10 14	55 131	32 89.6	55 131	**1174**	4006	1010	**1.37**	4.67	857	4.27	29.50	**CECOMAF MBP**
-10 14	45 113	20 68	45 113	**1348**	4599	1159	**1.71**	5.82	789	4.08	32.34	**EN12900 MBP**
-6.7 20	48.8 119.8	18.3 64.9	48.8 119.8	**1441**	4918	1240	**1.67**	5.68	866	4.30	36.85	**ARI540 MBP**
-10 14	45 113	32 89.6	45 113	**1403**	4787	1207	**1.78**	6.06	789	4.08	31.38	**opt MBP 1**
-25 -13	45 113	32 89.6	45 113	**698**	2381	600	**1.23**	4.18	570	3.47	15.31	**opt MBP 2**

Performance Tables

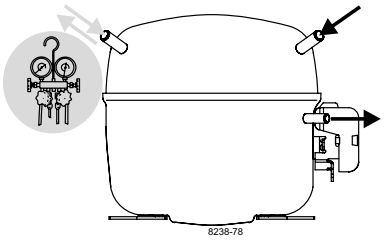
R449A, 220 V/50 Hz, CSCR, fan 3m/s

pc= 45/113 | RGT= 32/89.6 | Tliq= 45/113 | °C/°F

pe		Cooling capacity			COP	EER	P	I	ṁ
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-20	-4	**891**	3041	767	**1.39**	4.74	642	3.67	19.66
-15	5	**1125**	3837	967	**1.57**	5.36	716	3.88	24.96
-10	14	**1403**	4787	1207	**1.78**	6.06	789	4.08	31.38
-5	23	**1732**	5909	1489	**2.01**	6.84	863	4.29	39.07
0	32	**2116**	7221	1820	**2.26**	7.71	937	4.50	48.23
5	41	**2562**	8741	2203	**2.54**	8.66	1009	4.70	59.09
7.2	45	**2778**	9479	2389	**2.67**	9.11	1040	4.79	64.48

pc= 55/131 | RGT= 32/89.6 | Tliq= 55/131 | °C/°F

-20	-4	**742**	2531	638	**1.08**	3.70	684	3.79	18.35
-15	5	**937**	3198	806	**1.22**	4.16	769	4.03	23.36
-10	14	**1174**	4006	1010	**1.37**	4.67	857	4.27	29.50
-5	23	**1457**	4972	1253	**1.54**	5.26	946	4.52	36.97
0	32	**1792**	6113	1541	**1.73**	5.91	1035	4.77	45.99
5	41	**2183**	7449	1878	**1.94**	6.62	1126	5.03	56.81
7.2	45	**2375**	8103	2042	**2.04**	6.95	1165	5.14	62.22



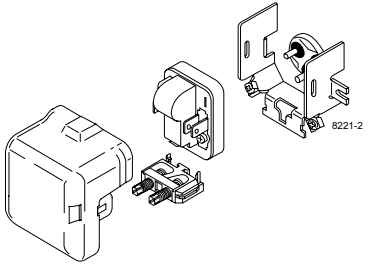
SC Compressors

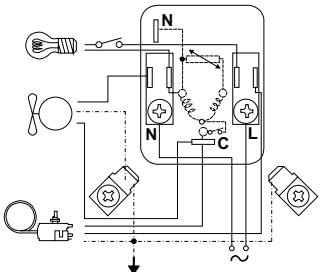
SECOP

Keep electrical equipment clear from oil, chemicals, and water

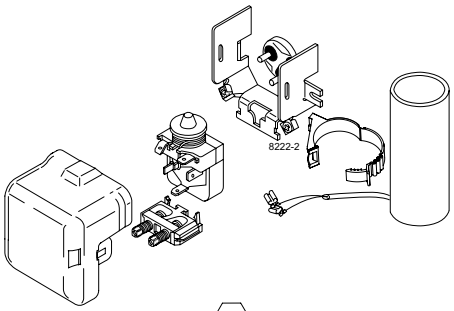
When operated with a flammable refrigerant, only spark-proof starting equipment is allowed.

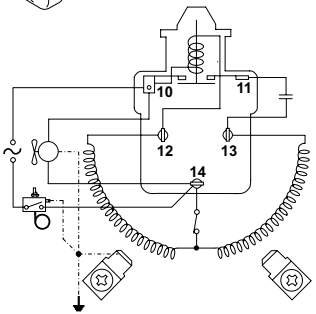
RSIR



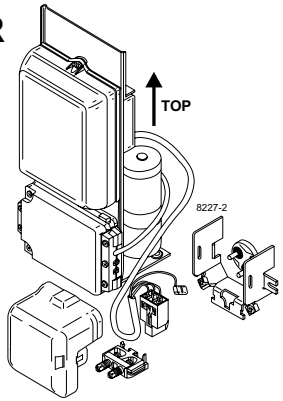


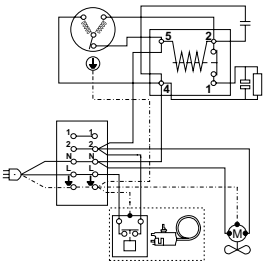
CSIR

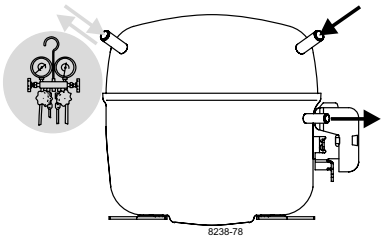




CSCR







SC Compressors

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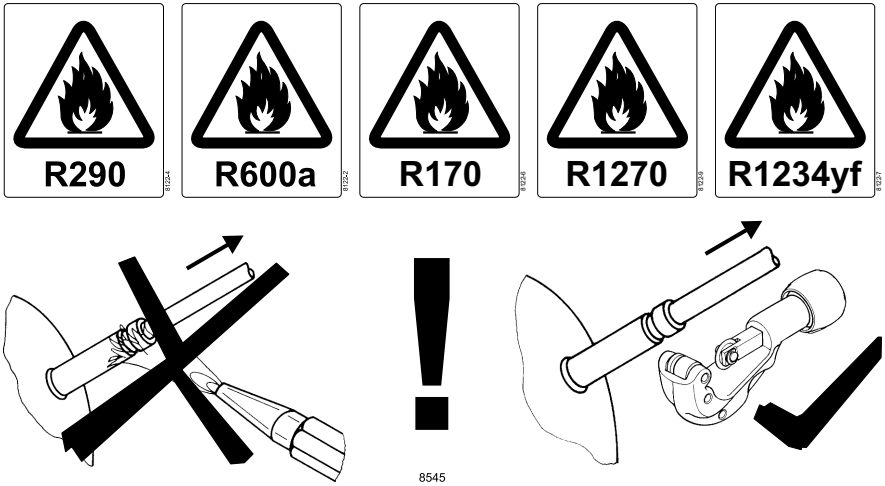
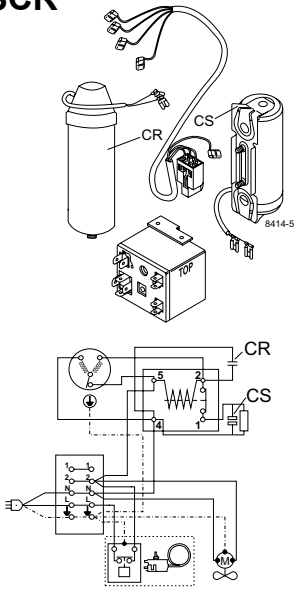
Service/Repair – R290, R600a, R170, R1270, R1234yf

(applies to all flammable refrigerants)



CSCR



Dismantling, recycling, disposal: At the end of a compressor's lifecycle, proceed by separating and storing components according to their environmental impact. Parts that may cause pollution must be clearly identified and handled separately, ensuring appropriate disposal. Refrigerant gas must not be released into the environment and should be recovered by qualified operators. Compressor oil must also be collected separately. The compressor should be disposed of at specialized disposal centers in accordance with the applicable regulations. **Subject to modifications/alterations. www.secop.com**