Single
Packs

Single Pack SC15CLX.2 115V 60Hz CSIR

Single pack code number: **195B4146**

Position	Title	Code	Amount
1	Compressor SC15CLX.2	104L1853	1
2	SC starting device (600mm)	117-7053	1
3	Bolt joint for one compressor | M6 | ø16mm	118-1917	1
Below electrical equipment is pre-assembled on the compressor:			
4	Overload protector T0761/46	117U3212	1
5	Protector holder	117U0439	1
6	Cover	117U1021	1

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Model
SC15CLX.2

Sales code:
104L1853

Compressor Data

Refrigerant(s)	**R404A / R452A / R507**
Refr. charge - tech. limit	**1300g / 45.86oz**
Weight	**13.70 kg / 30.20lbs**
Displacement	**15.28 cm3 / 0.93cu.in**
Compressors on pallet	**80**

General – Configurations With SC15CLX.2

–	Conf. 1	Conf. 2	Conf. 3	Conf. 4
Motor configuration	CSIR	CSCR	CSIR	CSCR
Power supply (nominal)	115 V/60 Hz	115 V/60 Hz	115 V/60 Hz	115 V/60 Hz
Number of phases	1	1	1	1
Voltage range	103-127 V	103-127 V	103-127 V	103-127 V
Approvals	UL	UL	UL	UL
Starting torque	HST	HST	HST	HST
Refrigerant	R404A	R404A	R452A	R452A
Application	LBP	LBP	LBP	LBP
Hot gas defrost	OK	OK	OK	OK

Application Notes

- Protector and cover are included and pre-assembled to compressor.
- Provision for PE Grounding is located at the PE Stamp on the compressor

Model

SC15CLX.2

Sales code:

104L1853

Compressor Design

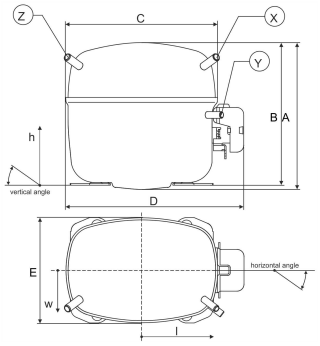
Oil type	**POE**	Winding resistance main	**0.66 Ohm**
Oil viscosity	**32cSt**	Winding resistance aux	**2.7 Ohm**
Oil quantity	**506 / 17.11fl.oz**	Max. winding temp.	**125 °C**
Free gas volume comp.	**1,460 cm3 / 49.37fl.oz**	Max. discharge temp.	**130°C / 266°F**
Motor protection	**external**		

Compressor Dimensions

Housing

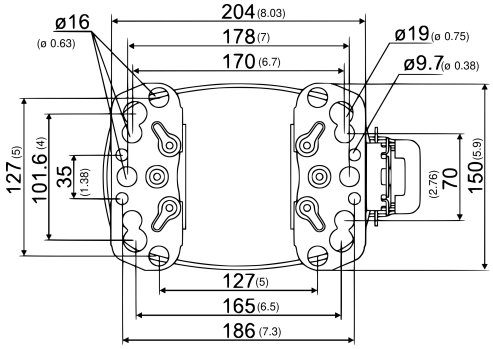
A Height	**219mm / 8.62in**
B Height	**213mm / 8.39in**
C Length shell	**218mm / 8.58in**
D Length w. cover	**255mm / 10.04in**
E Width	**151mm / 5.94in**

Find 3D Model here



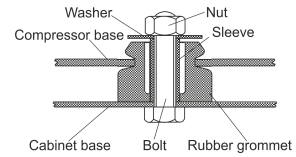
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 9.54–9.72 / 0.38–0.38in	øi 6.41–6.59 / 0.25–0.26in	øi 6.41–6.59 / 0.25–0.26in
Material	CU	CU	CU
Horizontal angle ±2°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°
Position l/h/w [mm]	107/193/55 / 4.21/7.60/2.17in	115/110/63 / 4.53/4.33/2.48in	-107/193/55 / -4.21/7.60/2.17in
Straight tube l. [mm]	12 / 0.47in	12 / 0.47in	12 / 0.47in

Mounting Accessories

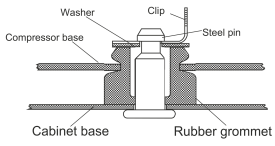


Dimensions in mm [in]

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
SC15CLX.2 Configuration 1

Sales code:
104L1853

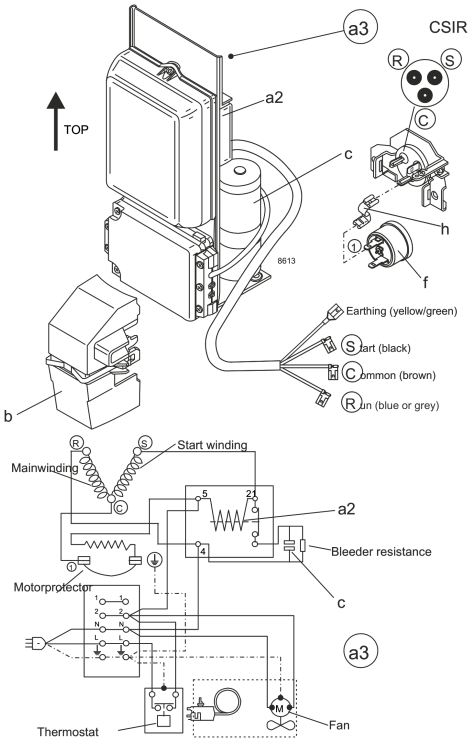
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**115 V/60 Hz 1~**
Refrigerant	**R404A**
Application	**LBP**
Voltage range	**103-127 V**
Starting torque	**HST**
Approvals	**UL**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**410 µF**
LRA (locked rotor amps / 4s/ U(N))	**56.8 A**
RLA (rated load amps / 1s/ U(N))	**9.8 A**
Cut in current (U(N))	**56.8 A**

Ambient/ machine room temperatures minimum /maximum
Ambient temperature range: 10 - 43°C / 50 - 109°F
Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling
fan 3m/s

Electrical Accessories / Wiring Diagram



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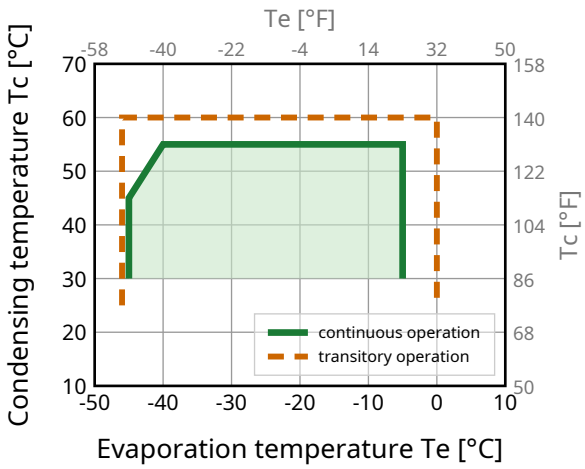
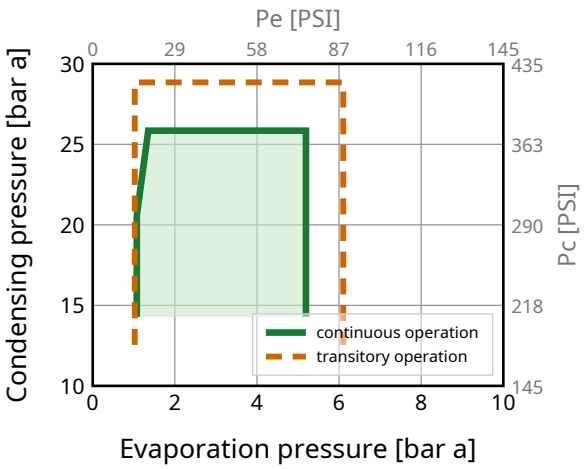
Components (protector + ~holder + cover: pre assembled)
a3 SC starter kit 117-7053
f ext. protector (T0761/46) 117U3212
h protector holder 117U0439
b plastic cover + clamp 117U1021

Alternative components
a2 potential relay (RVA 7AA3R) 117-7441
c start capacitor (410µF, 6.3mm) 117U5042
f ext. protector (T0761/46) 117U3212
h protector holder 117U0439
b plastic cover + clamp 117U1021

Operation Pressure Range





Model

SC15CLX.2 Configuration 1

Sales code:

104L1853

Standard Conditions

R404A, 115 V/60 Hz, CSIR, 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]	
-23.3 -10	54.4 129.9	32.2 90	32.2 90	**882**	3010	759	**1.21**	4.13	729	9.24	20.51	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**592**	2021	509	**0.85**	2.89	700	9.05	18.47	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**478**	1632	411	**0.93**	3.18	513	7.99	12.96	**EN12900 LBP**
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	**668**	2279	574	**0.94**	3.20	711	9.18	23.57	**ARI540 LBP**
-23.3 -10	40.6 105.1	32.2 90	32.2 90	**1019**	3477	876	**1.48**	5.06	687	9.05	23.69	**AHAM LBP**
-35 -31	45 113	32 89.6	45 113	**437**	1490	375	**0.85**	2.89	515	7.99	11.64	**opt LBP**

Performance Tables

R404A, 115 V/60 Hz, CSIR, 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]
-45	-49	**194**	661	166	**0.54**	1.85	358	7.09	5.13
-40	-40	**305**	1040	262	**0.70**	2.37	438	7.53	8.10
-30	-22	**593**	2023	510	**1.00**	3.41	593	8.46	15.87
-20	-4	**991**	3380	852	**1.31**	4.48	754	9.46	26.82
-10	14	**1525**	5204	1312	**1.64**	5.58	932	10.52	41.93
-5	23	**1852**	6318	1593	**1.79**	6.12	1032	11.07	51.41

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

-45	-49	**93**	317	80	**0.28**	0.97	326	6.90	2.84
-40	-40	**190**	648	163	**0.45**	1.54	422	7.41	5.84
-30	-22	**436**	1489	375	**0.72**	2.45	608	8.49	13.53
-20	-4	**775**	2643	666	**0.98**	3.33	793	9.63	24.32
-10	14	**1231**	4200	1059	**1.24**	4.24	990	10.83	39.35
-5	23	**1512**	5158	1300	**1.38**	4.71	1096	11.46	48.87

Model
SC15CLX.2 Configuration 2

Sales code:
104L1853

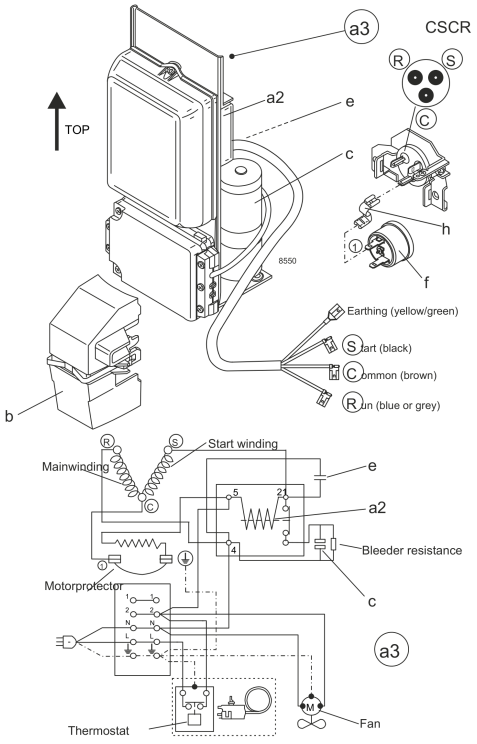
Configuration

Motor configuration	**CSCR**
Power supply (nominal)	**115 V/60 Hz 1~**
Refrigerant	**R404A**
Application	**LBP**
Voltage range	**103-127 V**
Starting torque	**HST**
Approvals	**UL**
Starting device type	**relay**
Run capacitor	**23.5 µF**
Start capacitor	**410 µF**
LRA (locked rotor amps / 4s/ U(N))	**56.8 A**
RLA (rated load amps / 1s/ U(N))	**9.8 A**
Cut in current (U(N))	**56.8 A**

Ambient/ machine room temperatures minimum /maximum
Ambient temperature range: 10 - 43°C / 50 - 109°F
Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling
fan 3m/s

Electrical Accessories / Wiring Diagram



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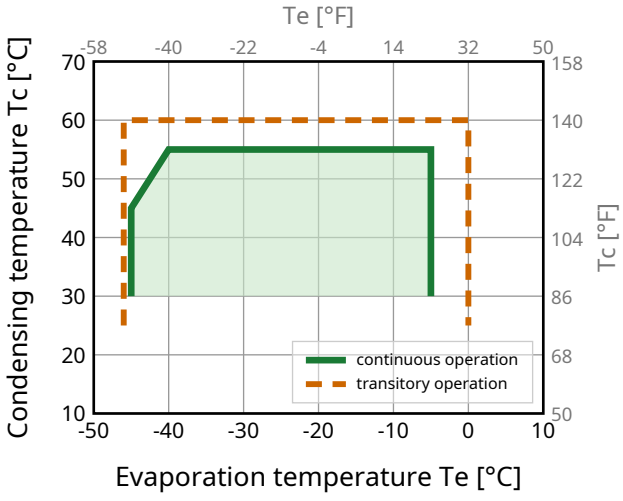
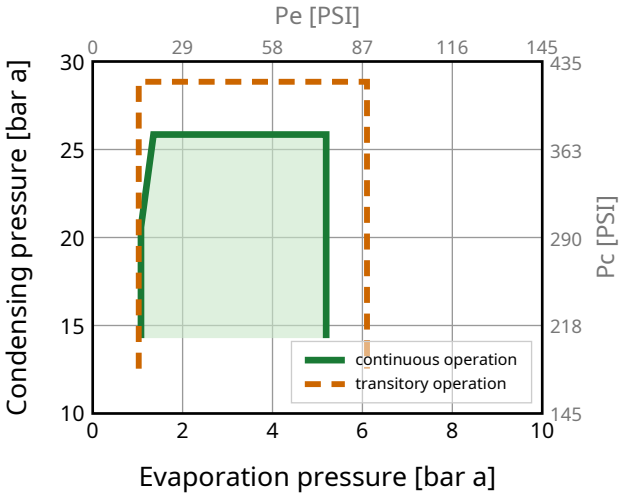
Components (protector + ~holder + cover: pre assembled)
a3 SC starter kit 117-7045
f ext. protector (T0761/46) 117U3212
b plastic cover + clamp 117U1021

Alternative components
a2 potential relay (RVA 7AA3R) 117-7441
e run capacitor (23,5µF, 6.3mm) 117-7114
c start capacitor (410µF, 6.3mm) 117U5043
f ext. protector (T0761/46) 117U3212
b plastic cover + clamp 117U1021

Operation Pressure Range





Model

SC15CLX.2 Configuration 2

Sales code:

104L1853

Standard Conditions

R404A, 115 V/60 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]	
-23.3 -10	54.4 129.9	32.2 90	32.2 90	**876**	2989	753	**1.27**	4.33	691	7.23	20.36	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**588**	2007	506	**0.89**	3.03	662	7.03	18.34	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**475**	1622	409	**0.98**	3.36	483	5.66	12.88	**EN12900 LBP**
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	**663**	2262	570	**0.98**	3.35	676	7.10	23.40	**ARI540 LBP**
-23.3 -10	40.6 105.1	32.2 90	32.2 90	**1012**	3453	870	**1.55**	5.28	654	6.83	23.52	**AHAM LBP**
-35 -31	45 113	32 89.6	45 113	**434**	1480	373	**0.89**	3.04	487	5.73	11.57	**opt LBP**

Performance Tables

R404A, 115 V/60 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]
-45	-49	**192**	653	165	**0.60**	2.03	321	4.88	5.07
-40	-40	**303**	1033	260	**0.74**	2.54	407	5.28	8.04
-30	-22	**589**	2009	506	**1.04**	3.56	564	6.22	15.77
-20	-4	**984**	3356	846	**1.37**	4.68	717	7.37	26.63
-10	14	**1516**	5172	1304	**1.72**	5.88	879	8.76	41.68
-5	23	**1842**	6287	1585	**1.90**	6.49	969	9.54	51.15

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

-45	-49	**91**	311	78	**0.32**	1.08	288	4.88	2.79
-40	-40	**189**	644	162	**0.48**	1.65	389	5.35	5.79
-30	-22	**434**	1479	373	**0.76**	2.58	574	6.42	13.44
-20	-4	**769**	2625	662	**1.03**	3.50	750	7.68	24.15
-10	14	**1224**	4177	1053	**1.31**	4.49	931	9.14	39.13
-5	23	**1506**	5137	1295	**1.46**	4.99	1029	9.96	48.67

Model
SC15CLX.2 Configuration 3

Sales code:
104L1853

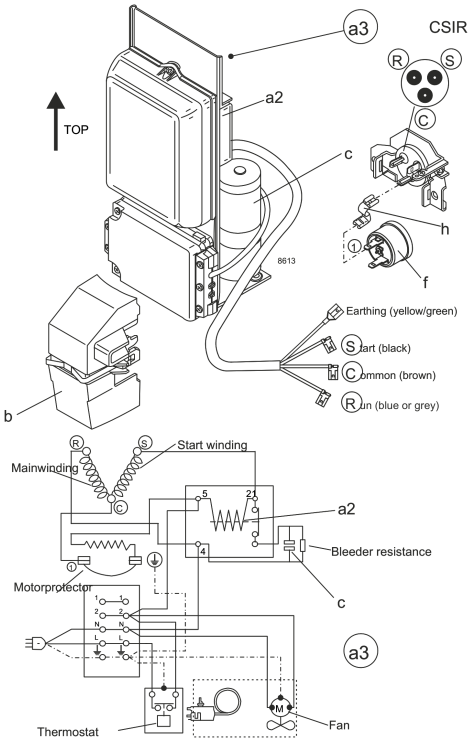
Configuration

Motor configuration	**CSIR**
Power supply (nominal)	**115 V/60 Hz 1~**
Refrigerant	**R452A**
Application	**LBP**
Voltage range	**103-127 V**
Starting torque	**HST**
Approvals	**UL**
Starting device type	**relay**
Run capacitor	**-/-**
Start capacitor	**410 µF**
LRA (locked rotor amps / 4s/ U(N))	**56.8 A**
RLA (rated load amps / 1s/ U(N))	**9.8 A**
Cut in current (U(N))	**56.8 A**

Ambient/ machine room temperatures minimum /maximum
Ambient temperature range: 10 - 43°C / 50 - 109°F
Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling
fan 3m/s

Electrical Accessories / Wiring Diagram



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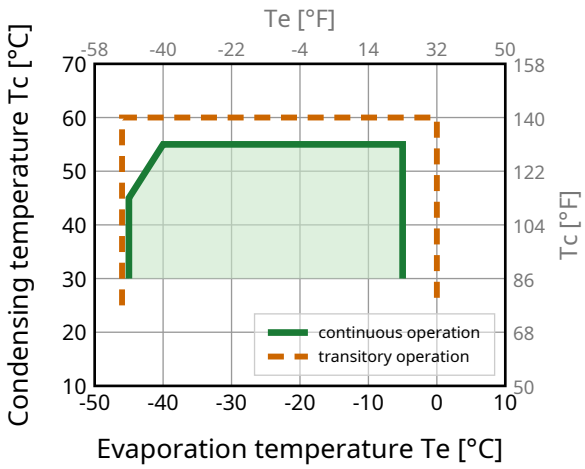
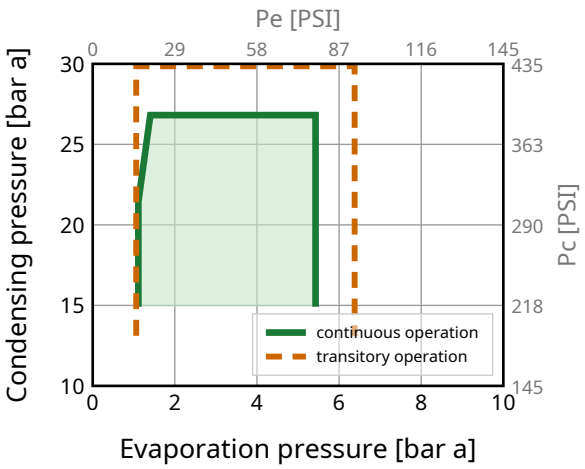
Components (protector + ~holder + cover: pre assembled)
a3 SC starter kit 117-7053
f ext. protector (T0761/46) 117U3212
h protector holder 117U0439
b plastic cover + clamp 117U1021

Alternative components
a2 potential relay (RVA 7AA3R) 117-7441
c start capacitor (410µF, 6.3mm) 117U5042
f ext. protector (T0761/46) 117U3212
h protector holder 117U0439
b plastic cover + clamp 117U1021

Operation Pressure Range





Model

SC15CLX.2 Configuration 3

Sales code:

104L1853

Standard Conditions

R452A, 115 V/60 Hz, CSIR, 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]	
-23.3 -10	54.4 129.9	32.2 90	32.2 90	**810**	2765	697	**1.19**	4.07	679	8.94	19.61	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**545**	1861	469	**0.84**	2.86	650	8.77	17.59	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**431**	1469	370	**0.90**	3.07	479	7.80	12.13	**EN12900 LBP**
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	**619**	2111	532	**0.93**	3.18	664	8.85	22.58	**ARI540 LBP**
-23.3 -10	40.6 105.1	32.2 90	32.2 90	**939**	3204	808	**1.46**	4.99	642	8.73	22.72	**AHAM LBP**
-35 -31	45 113	32 89.6	45 113	**392**	1338	337	**0.81**	2.78	481	7.81	10.86	**opt LBP**

Performance Tables

R452A, 115 V/60 Hz, CSIR, 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]
-45	-49	**164**	561	141	**0.47**	1.61	348	7.05	4.52
-40	-40	**268**	915	231	**0.65**	2.21	414	7.42	7.40
-30	-22	**540**	1841	464	**0.98**	3.33	552	8.21	15.01
-20	-4	**920**	3138	791	**1.30**	4.44	707	9.10	25.86
-10	14	**1436**	4901	1235	**1.62**	5.53	886	10.12	41.01
-5	23	**1755**	5987	1509	**1.78**	6.07	986	10.69	50.59

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

-45	-49	**73**	250	63	**0.23**	0.79	315	6.86	2.32
-40	-40	**164**	559	141	**0.41**	1.41	396	7.32	5.21
-30	-22	**396**	1353	341	**0.70**	2.41	562	8.27	12.72
-20	-4	**721**	2459	620	**0.97**	3.32	741	9.29	23.41
-10	14	**1165**	3975	1002	**1.24**	4.23	939	10.42	38.51
-5	23	**1441**	4917	1239	**1.38**	4.69	1048	11.04	48.16

Model
SC15CLX.2 Configuration 4

Sales code:
104L1853

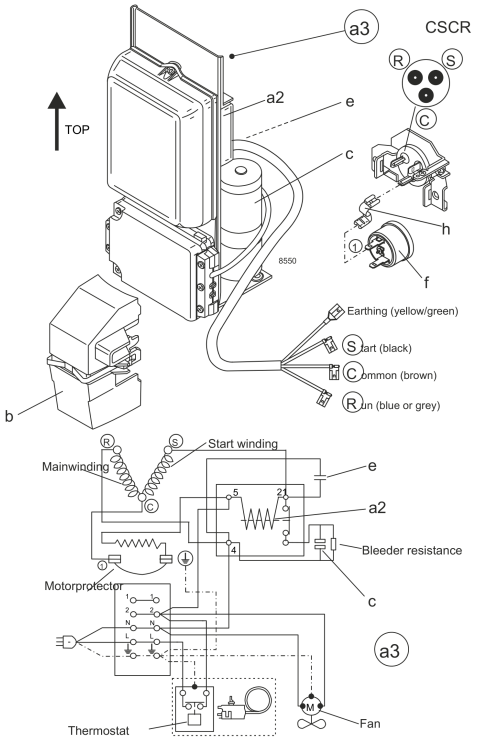
Configuration

Motor configuration	**CSCR**
Power supply (nominal)	**115 V/60 Hz 1~**
Refrigerant	**R452A**
Application	**LBP**
Voltage range	**103-127 V**
Starting torque	**HST**
Approvals	**UL**
Starting device type	**relay**
Run capacitor	**23.5 µF**
Start capacitor	**410 µF**
LRA (locked rotor amps / 4s/ U(N))	**56.8 A**
RLA (rated load amps / 1s/ U(N))	**9.8 A**
Cut in current (U(N))	**56.8 A**

Ambient/ machine room temperatures minimum /maximum
Ambient temperature range: 10 - 43°C / 50 - 109°F
Machine room temp. compressor: 10 - 48°C / 50 - 118°F

System Cooling
fan 3m/s

Electrical Accessories / Wiring Diagram



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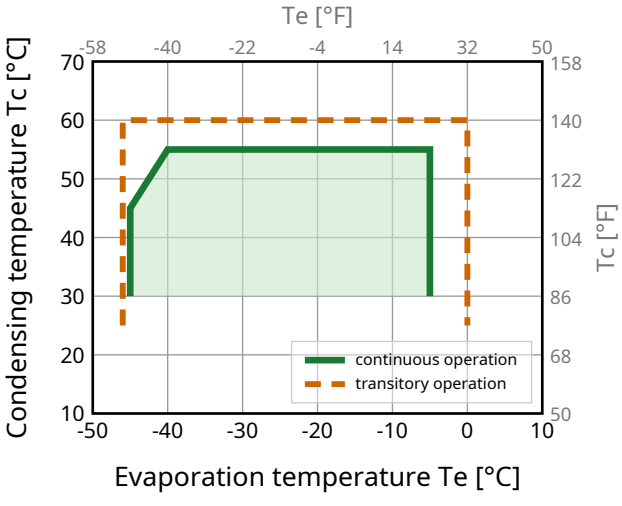
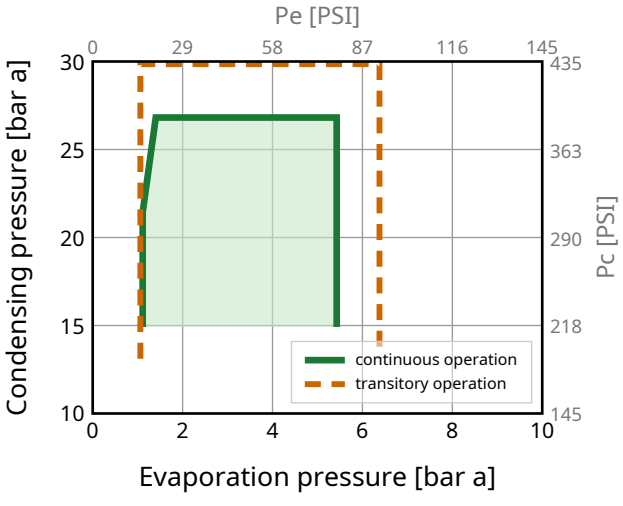
Components (protector + ~holder + cover: pre assembled)
a3 SC starter kit 117-7045
f ext. protector (T0761/46) 117U3212
b plastic cover + clamp 117U1021

Alternative components
a2 potential relay (RVA 7AA3R) 117-7441
e run capacitor (23,5µF, 6.3mm) 117-7114
c start capacitor (410µF, 6.3mm) 117U5043
f ext. protector (T0761/46) 117U3212
b plastic cover + clamp 117U1021

Operation Pressure Range





Model

SC15CLX.2 Configuration 4

Sales code:

104L1853

Standard Conditions

R452A, 115 V/60 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]	
-23.3 -10	54.4 129.9	32.2 90	32.2 90	**805**	2746	692	**1.25**	4.26	644	6.90	19.47	**ASHRAE LBP**
-25 -13	55 131	32 89.6	55 131	**542**	1848	466	**0.88**	3.00	615	6.70	17.47	**CECOMAF LBP**
-35 -31	40 104	20 68	40 104	**428**	1461	368	**0.96**	3.29	444	5.42	12.06	**EN12900 LBP**
-23.3 -10	48.8 119.8	4.4 39.9	48.8 119.8	**614**	2096	528	**0.97**	3.32	631	6.77	22.42	**ARI540 LBP**
-23.3 -10	40.6 105.1	32.2 90	32.2 90	**932**	3181	802	**1.52**	5.20	612	6.52	22.56	**AHAM LBP**
-35 -31	45 113	32 89.6	45 113	**390**	1329	335	**0.87**	2.97	447	5.48	10.80	**opt LBP**

Performance Tables

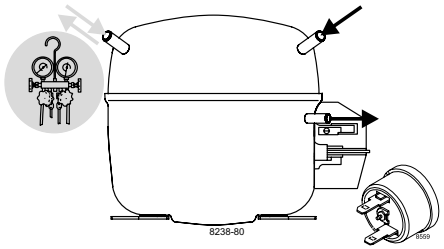
R452A, 115 V/60 Hz, CSCR, fan 3m/s

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]
-45	-49	**163**	556	140	**0.57**	1.93	288	4.73	4.48
-40	-40	**266**	909	229	**0.72**	2.46	369	5.08	7.36
-30	-22	**536**	1828	461	**1.03**	3.50	522	5.94	14.91
-20	-4	**913**	3115	785	**1.36**	4.63	673	7.04	25.67
-10	14	**1427**	4870	1227	**1.71**	5.82	836	8.38	40.75
-5	23	**1745**	5955	1501	**1.88**	6.43	926	9.14	50.31

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

-45	-49	**72**	247	62	**0.29**	0.99	250	4.73	2.29
-40	-40	**163**	556	140	**0.47**	1.60	347	5.15	5.18
-30	-22	**394**	1344	339	**0.74**	2.54	528	6.13	12.63
-20	-4	**716**	2442	615	**1.02**	3.48	703	7.33	23.24
-10	14	**1158**	3952	996	**1.31**	4.47	885	8.75	38.29
-5	23	**1434**	4894	1234	**1.46**	4.97	984	9.55	47.94



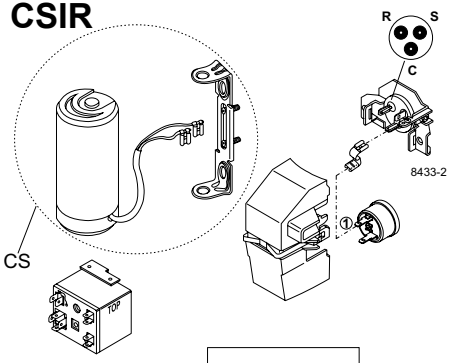
SC Compressors
(External Protector)

SECOP

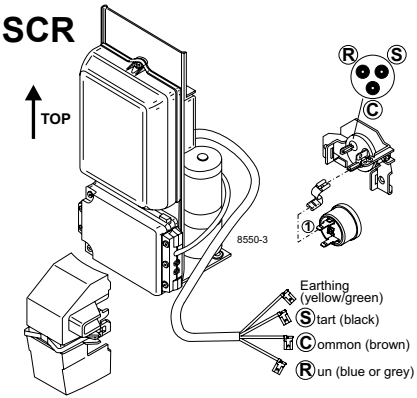
Keep electrical equipment clear from oil, chemicals, and water

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

CSIR

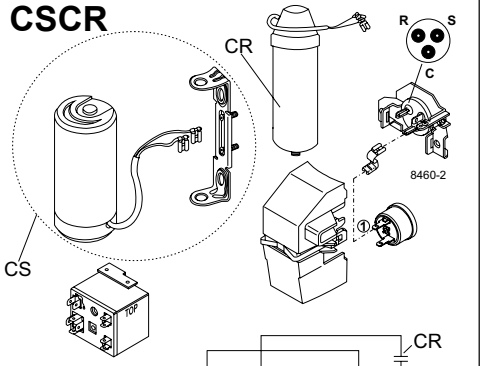


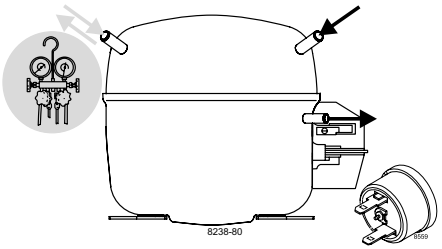
CSCR



	S	C	R
ENGLISH	Black	Brown	Blue or grey
DEUTSCH	Schwarz	Braun	Blau od. grau
FRANÇAIS	Noir	Marron	Bleu ou gris
ESPAÑOL	Negro	Marrón	Azul o gris
ITALIANO	Nero	Marrone	Blu o grigio
NEDERLANDS	Zwart	Bruin	Blauw of grijs
РУССКИЙ	Чёрный	Корич-невый	Синий или серый
中文	黑色	棕色	蓝色或灰色

CSCR





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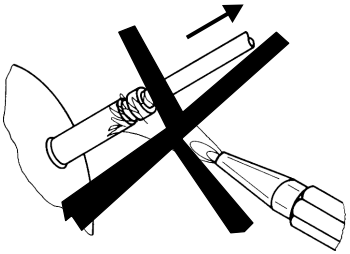
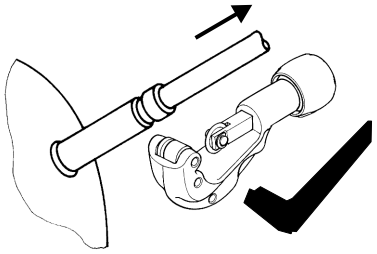
Service/Repair – R290, R600a, R170, R1270, R1234yf

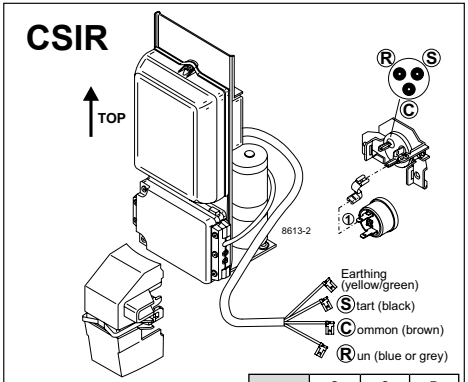
(applies to all flammable refrigerants)

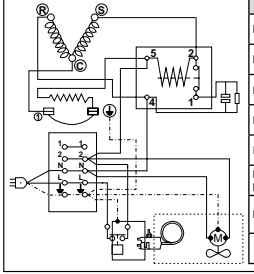


8545



CSIR





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РУССКИЙ	Чёрный	Корич-невый	Синий или серый
中文	黑色	棕色	蓝色或灰色

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**