

Model
SC15DL

Sales code:
104L2856

Compressor Data

Refrigerant(s)	R404A / R507 / R407C
Refr. charge - tech. limit	1300g / 45.86oz
Weight	13.50 kg / 29.76lbs
Displacement	15.28 cm3 / 0.93cu.in
Compressors on pallet	80



General – Configurations With SC15DL

-	Conf. 1	Conf. 2
Motor configuration	CSCR	CSCR
Power supply (nominal)	220-240 V/50 Hz	220-240 V/50 Hz
Number of phases	1	1
Voltage range	198-254 V	198-254 V
Approvals	CCC, VDE, EAC	CCC, VDE, EAC
Starting torque	HST	HST
Refrigerant	R404A	R407C
Application	HBP	HBP
Hot gas defrost	OK	OK
Long interval pull down	OK	OK

Application Notes

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

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Compressor Design

Oil type	POE	Winding resistance main	3.500 Ohm
Oil viscosity	32cSt	Winding resistance aux	12.90 Ohm
Oil quantity	550 / 18.60fl.oz	Max. winding temp.	125 °C
Free gas volume comp.	1,460 cm ³ / 49.37fl.oz	Max. discharge temp.	135°C / 275°F
Motor protection	internal		

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

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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

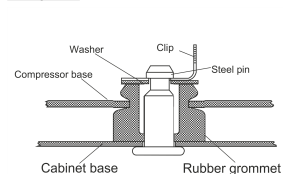
Mounting Accessories



Bolt joint



Snap-on



Dimensions in mm [in]

	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

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Configuration 1

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Motor configuration	CSCR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R404A
Application	HBP
Voltage range	198-254 V
Starting torque	HST
Approvals	CCC, VDE, EAC
Starting device type	relay
Run capacitor	10 μF
Start capacitor	80 μF
LRA (locked rotor amps / 4s/ U(N))	22 A
RLA (rated load amps / 1s/ U(N))	3.9 A
Cut in current (U(N))	22 A

Ambient/ machine room temperatures minimum /maximum

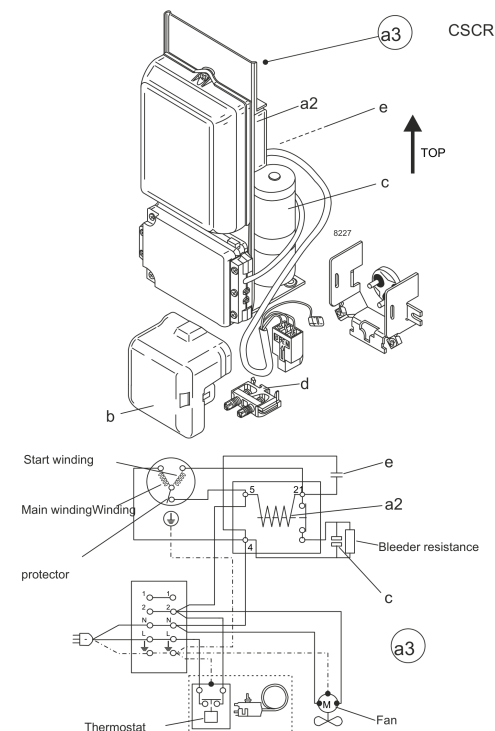
Ambient temperature range: 10 - 38°C / 50 - 100°F

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) 117-7029

b plastic cover 103N2009

d cord relief 103N1004

Alternative components

a3 SC starter kit (650mm) 117-7032

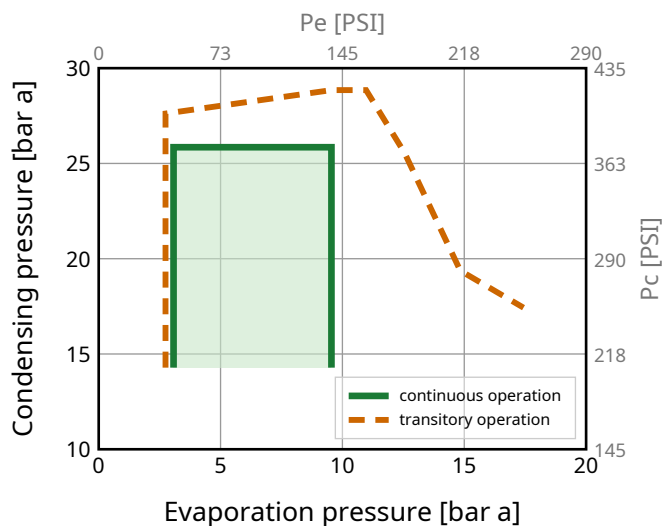
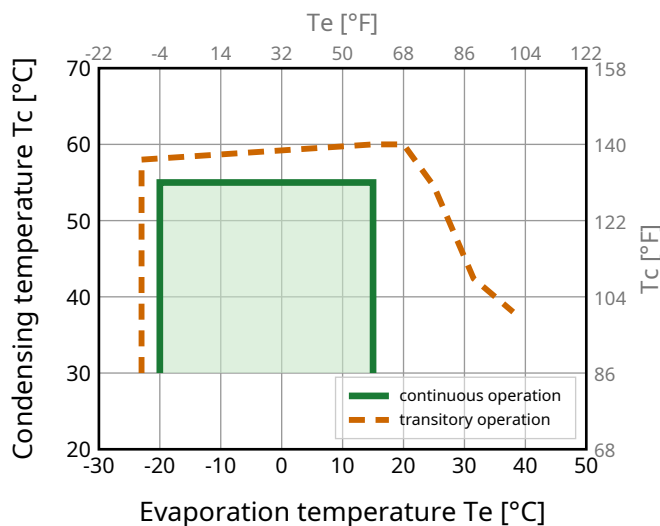
b plastic cover 103N2009

d cord relief 103N1004

c start capacitor (80 μ F) 117U5373

e run capacitor (10 μ F, 6.3mm) 117-7112

Operation Pressure Range



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Configuration 1

Sales code:
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Standard Conditions

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

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	m	
[°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	1311	4473	1127	1.56	5.33	840	4.34	36.01	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	970	3309	834	1.22	4.16	795	4.12	31.00	CECOMAF MBP
-10 14	45 113	20 68	45 113	1138	3883	979	1.58	5.38	722	3.79	34.22	EN12900 MBP
7.2 45	54.4 129.9	35 95	46.1 115	2264	7726	1947	2.25	7.67	1007	5.16	64.33	ASHRAE HBP
5 41	55 131	32 89.6	55 131	1777	6064	1528	1.79	6.10	994	5.09	59.15	CECOMAF HBP
5 41	50 122	20 68	50 122	1849	6308	1590	2.00	6.82	925	4.77	63.00	EN12900 HBP

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	m
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-20	-4	759	2589	653	1.29	4.40	589	3.09	20.54
-15	5	964	3290	829	1.46	4.99	659	3.46	26.29
-10	14	1207	4119	1038	1.67	5.70	722	3.79	33.19
-5	23	1493	5093	1284	1.92	6.55	778	4.07	41.44
0	32	1825	6228	1570	2.21	7.55	825	4.30	51.26
5	41	2210	7541	1901	2.56	8.72	865	4.50	62.91
10	50	2652	9049	2281	2.96	10.10	896	4.64	76.70
15	59	3156	10767	2714	3.44	11.72	918	4.75	93.04

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

-20	-4	576	1967	496	0.93	3.18	619	3.25	18.10
-15	5	762	2600	655	1.07	3.66	711	3.71	24.12
-10	14	970	3309	834	1.22	4.16	795	4.12	31.00
-5	23	1205	4112	1036	1.39	4.73	870	4.49	38.96
0	32	1473	5025	1266	1.57	5.36	937	4.81	48.24
5	41	1777	6064	1528	1.79	6.10	994	5.09	59.15
10	50	2124	7246	1826	2.04	6.95	1042	5.33	72.02
15	59	2517	8587	2164	2.33	7.95	1081	5.52	87.30

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Configuration 2

Sales code:
104L2856

Configuration

Motor configuration	CSCR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R407C
Application	HBP
Voltage range	198-254 V
Starting torque	HST
Approvals	CCC, VDE, EAC
Starting device type	relay
Run capacitor	10 μF
Start capacitor	80 μF
LRA (locked rotor amps / 4s/ U(N))	22 A
RLA (rated load amps / 1s/ U(N))	3.9 A
Cut in current (U(N))	22 A

Ambient/ machine room temperatures minimum /maximum

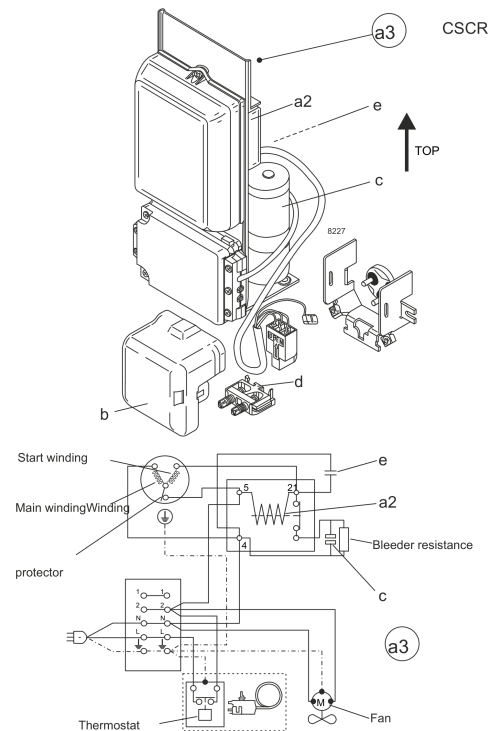
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Alternative components

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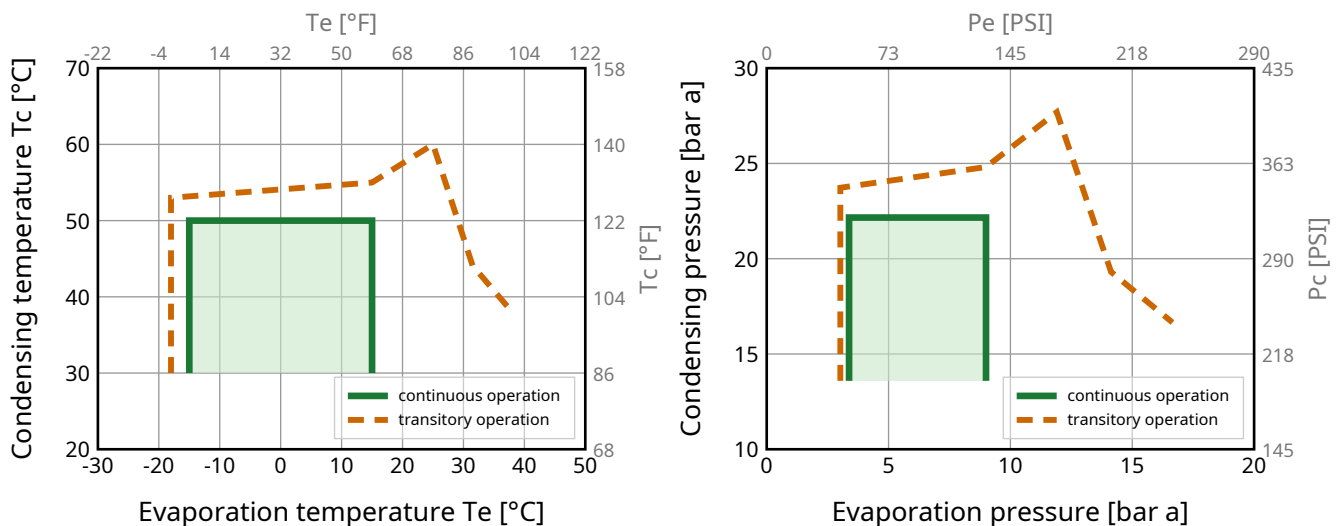
b plastic cover 103N2009

d cord relief 103N1004

c start capacitor (80 μ F) 117U5373

e run capacitor (10 μ F, 6.3mm) 117-7112

Operation Pressure Range



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Configuration 2

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Standard Conditions

R407C, 220 V/50 Hz, CSCR, fan 3m/s

pe	pc	RGT	Tliq	Cooling capacity			COP	EER	P	I	m	
[°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	1104	3767	949	1.70	5.79	650	3.33	23.19	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	833	2841	716	1.36	4.66	610	3.15	19.46	CECOMAF MBP
-10 14	45 113	20 68	45 113	977	3333	840	1.66	5.65	590	3.08	21.90	EN12900 MBP
7.2 45	54.4 129.9	35 95	46.1 115	2068	7057	1779	2.59	8.84	798	3.98	44.66	ASHRAE HBP
5 41	55 131	32 89.6	55 131	1687	5755	1451	2.16	7.37	780	3.90	40.68	CECOMAF HBP
5 41	50 122	20 68	50 122	1766	6026	1519	2.34	7.98	755	3.79	43.42	EN12900 HBP

Performance Tables

R407C, 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	m
[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[W]	[A]	[kg/h]
-15	5	777	2650	668	1.45	4.96	534	2.84	16.21
-10	14	1011	3450	870	1.71	5.85	590	3.08	21.24
-5	23	1293	4412	1112	2.02	6.89	640	3.30	27.38
0	32	1629	5557	1401	2.38	8.10	686	3.50	34.81
5	41	2023	6903	1740	2.79	9.51	726	3.67	43.73
10	50	2483	8472	2135	3.26	11.14	761	3.82	54.37
15	59	3014	10282	2592	3.82	13.02	790	3.94	67.03

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

-15	5	622	2123	535	1.15	3.92	542	2.85	14.43
-10	14	833	2841	716	1.36	4.66	610	3.15	19.46
-5	23	1076	3672	926	1.60	5.46	672	3.42	25.37
0	32	1359	4637	1169	1.86	6.36	729	3.67	32.38
5	41	1687	5755	1451	2.16	7.37	780	3.90	40.68
10	50	2065	7046	1776	2.50	8.53	826	4.11	50.54
15	59	2500	8530	2150	2.89	9.86	865	4.29	62.27