

Model

SC12DL

Sales code:

104L2627

Compressor Data

Refrigerant(s)	R404A / R507 / R407C
Refr. charge - tech. limit	1300g / 45.86oz
Weight	13.60 kg / 29.98lbs
Displacement	12.87 cm3 / 0.79cu.in
Compressors on pallet	80



General – Configurations With SC12DL

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

Application Notes

- Compressor with noise optimization kit.
- Provision for PE Grounding is located at the PE Stamp on the compressor

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Compressor Design

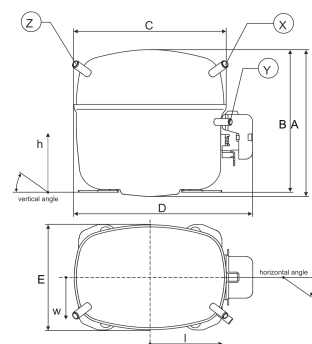
Oil type	POE	Winding resistance main	3.700 Ohm
Oil viscosity	32cSt	Winding resistance aux	13.70 Ohm
Oil quantity	550 / 18.60fl.oz	Max. winding temp.	125 °C
Free gas volume comp.	1,460 cm3 / 49.37fl.oz	Max. discharge temp.	130°C / 266°F
Motor protection	internal		

Compressor Dimensions

Housing

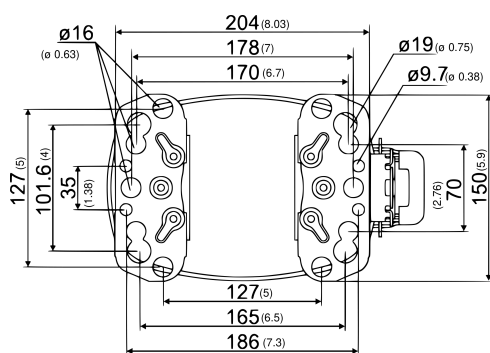
A Height	219mm / 8.62in
B Height	213mm / 8.39in
C Length shell	218mm / 8.58in
D Length w. cover	255mm / 10.04in
E Width	151mm / 5.94in

[Find 3D Model here](#)



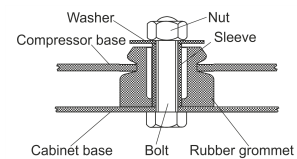
Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 10.11–10.29 / 0.40–0.41in	øi 6.11–6.29 / 0.24–0.25in	øi 6.11–6.29 / 0.24–0.25in
Material	CU	CU	CU
Horizontal angle ±2°	37°	37°	143°
Vertical angle ±2°	30°	0°	150°
Position l/h/w [mm]	107/193/55 / 4.21/7.60/2.17in	115/110/63 / 4.53/4.33/2.48in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

Mounting Accessories

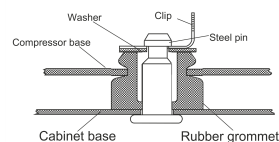


Dimensions in mm [in]

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

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Configuration 1

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Motor configuration	CSIR
Power supply (nominal)	220-240 V/50 Hz 1~
Refrigerant	R404A
Application	HBP
Voltage range	198-254 V
Starting torque	HST
Approvals	CCC, VDE
Starting device type	relay
Run capacitor	-/-
Start capacitor	80 µF
LRA (locked rotor amps / 4s/ U(N))	20.43 A
RLA (rated load amps / 1s/ U(N))	3.9 A
Cut in current (U(N))	20.43 A

Ambient/ machine room temperatures minimum /maximum

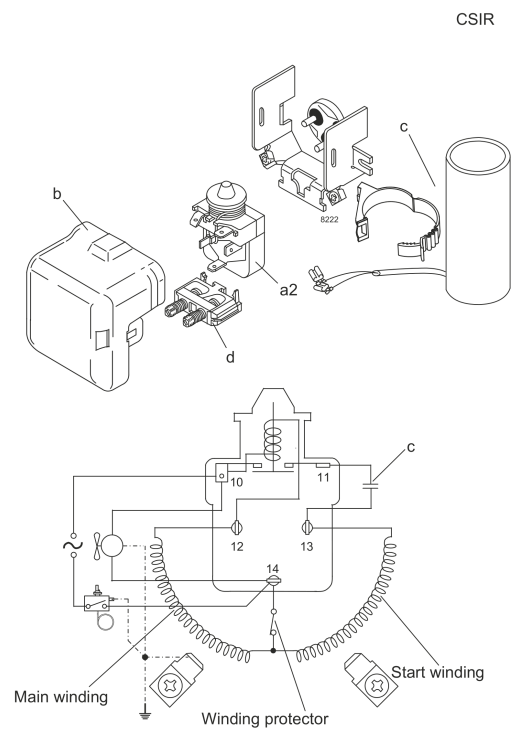
Ambient temperature range: 10 - 38°C / 50 - 100°F

Machine room temp. compressor: 10 - 43°C / 50 - 109°F

System Cooling

fan 3m/s

Electrical Accessories / Wiring Diagram



[View full size](#)

Components

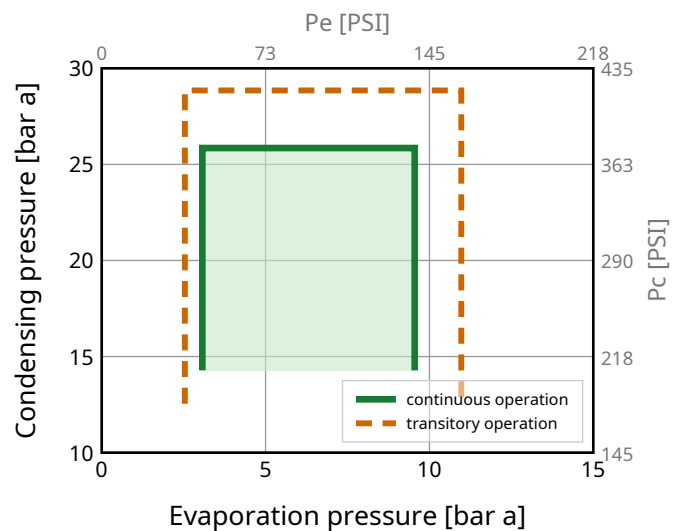
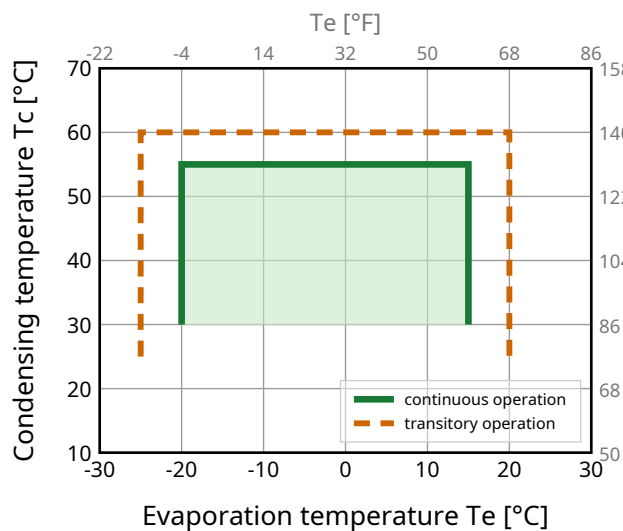
a2 relay 117U6019

c start capacitor (80µF) 117U5017

d cord relief 103N1004

b plastic cover 103N2009

Operation Pressure Range



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Standard Conditions

R404A, 220 V/50 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]	
7.2 45	54.4 129.9	35 95	46.1 115	1942	6626	1670	2.26	7.71	860	4.92	55.17	ASHRAE HBP
5 41	55 131	32 89.6	55 131	1526	5206	1312	1.80	6.14	848	4.85	50.78	CECOMAF HBP
5 41	50 122	20 68	50 122	1584	5406	1363	1.99	6.78	798	4.64	53.99	EN12900 HBP
-6.7 20	54.4 129.9	35 95	46.1 115	1122	3828	965	1.57	5.36	714	4.26	30.82	ASHRAE MBP
-10 14	55 131	32 89.6	55 131	827	2820	711	1.23	4.21	670	4.08	26.42	CECOMAF MBP
-10 14	45 113	20 68	45 113	969	3306	833	1.55	5.30	624	3.89	29.13	EN12900 MBP

Performance Tables

R404A, 220 V/50 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]
-20	-4	609	2077	523	1.24	4.24	489	3.37	16.48
-15	5	806	2749	693	1.43	4.89	562	3.65	21.97
-10	14	1028	3507	884	1.65	5.62	624	3.89	28.25
-5	23	1279	4365	1100	1.90	6.47	675	4.11	35.52
0	32	1565	5340	1346	2.18	7.45	716	4.29	43.95
5	41	1890	6448	1625	2.52	8.59	750	4.44	53.79
10	50	2258	7704	1942	2.90	9.91	778	4.57	65.31
15	59	2674	9124	2300	3.34	11.40	800	4.66	78.84

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

-20	-4	466	1589	401	0.95	3.23	493	3.41	14.63
-15	5	639	2179	549	1.08	3.70	588	3.76	20.22
-10	14	827	2820	711	1.23	4.21	670	4.08	26.42
-5	23	1034	3528	889	1.40	4.77	740	4.37	33.42
0	32	1266	4318	1088	1.58	5.40	799	4.62	41.46
5	41	1526	5206	1312	1.80	6.14	848	4.85	50.78
10	50	1820	6208	1565	2.05	6.99	888	5.05	61.71
15	59	2151	7340	1850	2.33	7.96	922	5.22	74.62