

# SC12CL

## LBP Compressor

### R404A/R507

### 115V 60Hz

Data Sheet (Replaces CF.54.U1.22)

#### General

Compressor	<b>SC12CL</b>
Codenumber (CU-plated steel connectors)	104L1603

#### Application

Application	LBP	
Evaporating temperature range	°F (°C)	-40 to 10 (-40 to -12.2)
Voltage range	V/Hz	103 - 127 /60
Motor type	CSIR	
Max. ambient temperature	°F (°C)	110 (43)
Comp. cooling at max. ambient temperature	110°F (43°C)	F <sub>2</sub>

#### Design

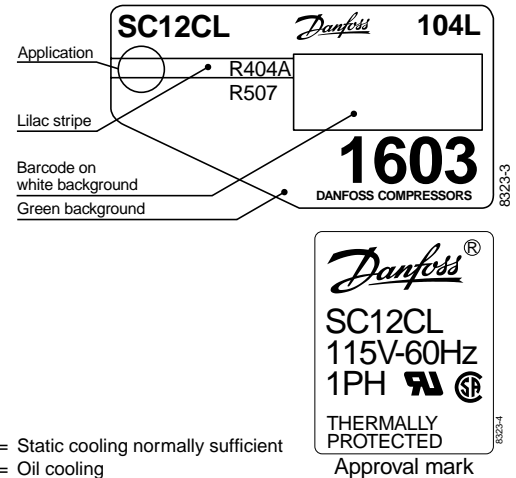
Displacement	cu.in. (cm <sup>3</sup> )	0.78 (12.87)
Oil quantity	fl.oz. (cm <sup>3</sup> )	18.6 (550)
Maximum refrigerant charge	oz. (g)	45.8 (1300)
Free gas vol. in compressor housing	fl.oz. (cm <sup>3</sup> )	51.1 (1510)
Weight without electrical equipment	lbs. (kg)	27.7 (12.6)

#### Motor

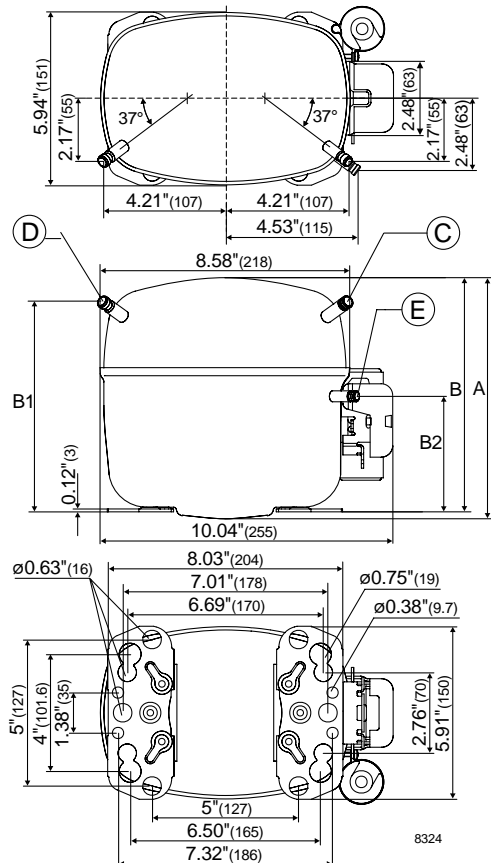
Motor size	watt	540
LRA (rated after 4 sec. UL984) HST	A	41.9
Cut-in current HST	A	41.9
Resistance, main and start winding (77°F) Ω		1.0/4.3
Approvals	UL984/CSA-C22.2	

#### Dimensions

Height	in. (mm)	A	8.23 (209)
		B	8.00 (203)
		B1	7.20 (183)
		B2	3.93 (100)
Suction connector	location/l.D. in. (mm)	C	0.320-0.327 (8.2±0.09)
Process connector	location/l.D. in. (mm)	D	0.252-0.259 (6.5±0.09)
Discharge connector	location/l.D. in. (mm)	E	0.252-0.259 (6.5±0.09)
Compressors on a pallet	pcs.	80	



- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s (compressor compartment temperature equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary



**Capacity ASHRAE in Btu/h - EN 12900/CECOMAF in watt**

Evap. temp in°F	-40	-30	-20	-13	-10	0	10
Evap. temp in°C	-40	-34.4	-28.9	-25	-23.3	-17.8	-12.2
ASHRAE LBP	143	842	1577	2127	2374	3255	4246
ASHRAE LBP*	648	1229	1871	2366	2592	3414	4356
EN 12900	146	297	463	590	648	857	1095

**Power consumption (ASHRAE, EN 12900/CECOMAF) watt**

Evap. temp in°F	-40	-30	-20	-13	-10	0	10
Evap. temp in°C	-40	-34.4	-28.9	-25	-23.3	-17.8	-12.2
ASHRAE LBP	212	374	510	595	629	739	848
ASHRAE LBP*	322	436	535	599	627	720	822
EN 12900	308	429	533	600	628	723	826

**Current consumption (ASHRAE, EN 12900/CECOMAF) A**

Evap. temp in°F	-40	-30	-20	-13	-10	0	10
Evap. temp in°C	-40	-34.4	-28.9	-25	-23.3	-17.8	-12.2
ASHRAE LBP	4.92	5.44	6.08	6.60	6.84	7.73	8.74
ASHRAE LBP*	5.32	5.69	6.17	6.59	6.78	7.52	8.38
EN 12900	5.26	5.64	6.15	6.58	6.79	7.55	8.43

**EER / COP ASHRAE in Btu/Wh - EN 12900/CECOMAF in W/W**

Evap. temp in°F	-40	-30	-20	-13	-10	0	10
Evap. temp in°C	-40	-34.4	-28.9	-25	-23.3	-17.8	-12.2
ASHRAE LBP	0.68	2.25	3.09	3.58	3.77	4.40	5.01
ASHRAE LBP*	2.01	2.82	3.50	3.95	4.14	4.74	5.30
EN 12900	0.48	0.69	0.87	0.98	1.03	1.18	1.33

Test conditions	ASHRAE LBP	ASHRAE LBP*	EN 12900
Condensing temp.	130°F (54.4°C)	110°F (43.3°C)	45°C (113°F)
Suction gas temp.	90°F (32°C)	90°F (32°C)	32°C (90°F)
Ambient temp.	90°F (32°C)	90°F (32°C)	32°C (90°F)
Liquid temp.	90°F (32°C)	90°F (32°C)	45°C (113°F)
Cooling	Fan F <sub>2</sub>	Fan F <sub>2</sub>	Fan F <sub>2</sub>
V/Hz	115/60	115/60	115/60

**Design limits:**

Max. cond. temp. °F (°C) stable 120 (49)  
 Max. cond. temp. °F (°C) peak 135 (58)

**Accessories**

Devices	Fig.	SC12CL
Starting relay	a2	117U6020
Cover	b	103N2008
Starting capacitor 240 μF	c	117U5023
Cord relief	d	103N1004
Mounting accessories		
Bolt joint for one compressor		118-1917
Bolt joint in quantities		118-1918
Snap-on in quantities		118-1919

