

# SC10CL

## LBP/MBP Compressor

### R404A/R507

### 115V 60Hz

Data Sheet (Replaces CF.54.Q2.22)

#### General

Compressor	<b>SC10CL</b>
Codenumber (CU-plated steel connectors)	104L1503

#### Application

Application	LBP/MBP	
Evaporating temperature range	°F (°C)	-40 to 45 (-40 to 7.2)
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

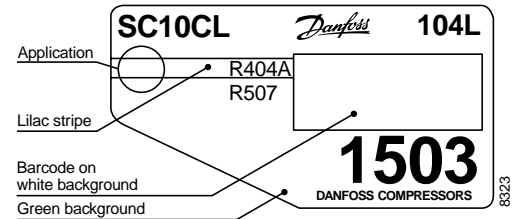
Displacement	cu.in. (cm <sup>3</sup> )	0.63 (10.29)
Oil quantity	fl.oz. (cm <sup>3</sup> )	18.6 (550)
Maximum refrigerant charge	oz. (g)	45.8 (1300)
Free gas vol. in compressor housing	fl.oz. (cm <sup>3</sup> )	51.1 (1510)
Weight without electrical equipment	lbs. (kg)	27.7 (12.6)

#### Motor

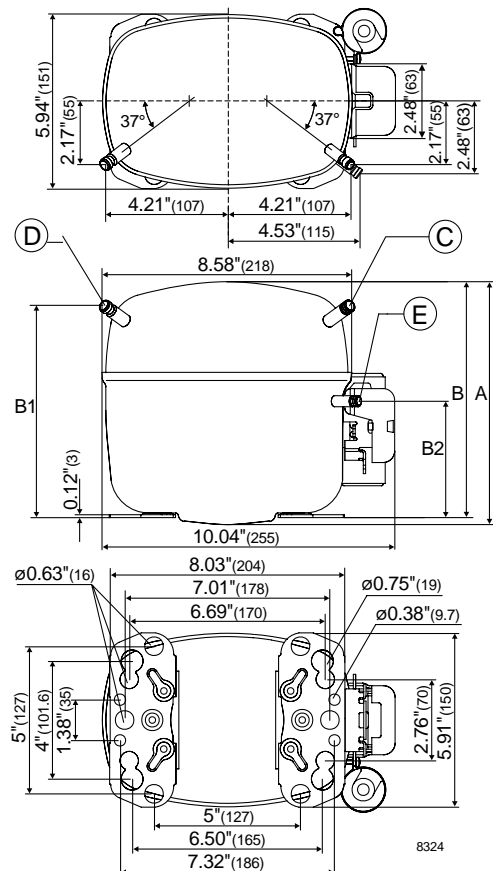
Motor size	watt	540
LRA (rated after 4 sec. UL984) HST	A	41.9
Cut-in current HST	A	41.9
Resistance, main and start winding (77°F) Ω	1.0/4.3	
Approvals	UL984/CSA-C22.2	

#### 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	20	30	40	41	45
Evap. temp in°C	-40	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	5	7.2
ASHRAE LBP	147	624	1154	1568	1758	2453	3261	4200	5293	6563	6701	7272
ASHRAE LBP*	499	926	1422	1818	2001	2681	3477	4405	5483	6727	6861	7417
ASHRAE MBP	126	533	986	1338	1500	2091	2775	3570	4491	5556	5671	6148
EN 12900	113	223	349	450	497	668	869	1102	1372	1682	1716	1854

### Power consumption (ASHRAE, EN 12900/CECOMAF)

watt

Evap. temp in°F	-40	-30	-20	-13	-10	0	10	20	30	40	41	45
Evap. temp in°C	-40	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	5	7.2
ASHRAE LBP	162	285	393	461	488	573	649	719	785	850	856	882
ASHRAE LBP*	240	332	413	464	484	548	608	664	720	778	784	808
ASHRAE MBP	162	285	393	461	488	573	649	719	785	850	856	882
EN 12900	230	327	412	465	487	554	616	674	732	790	796	821

### Current consumption (ASHRAE, EN 12900/CECOMAF)

A

Evap. temp in°F	-40	-30	-20	-13	-10	0	10	20	30	40	41	45
Evap. temp in°C	-40	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	5	7.2
ASHRAE LBP	4.52	5.11	5.69	6.09	6.26	6.82	7.37	7.91	8.44	8.95	9.00	9.21
ASHRAE LBP*	4.83	5.30	5.77	6.08	6.22	6.66	7.08	7.50	7.91	8.31	8.34	8.50
ASHRAE MBP	4.52	5.11	5.69	6.09	6.26	6.82	7.37	7.91	8.44	8.95	9.00	9.21
EN 12900	4.79	5.28	5.76	6.09	6.23	6.69	7.13	7.57	8.00	8.41	8.45	8.61

### EER / COP

ASHRAE in Btu/Wh - EN 12900/CECOMAF in W/W

Evap. temp in°F	-40	-30	-20	-13	-10	0	10	20	30	40	41	45
Evap. temp in°C	-40	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	5	7.2
ASHRAE LBP	0.91	2.19	2.94	3.40	3.60	4.28	5.02	5.84	6.74	7.73	7.83	8.25
ASHRAE LBP*	2.08	2.79	3.44	3.92	4.13	4.89	5.72	6.63	7.61	8.65	8.75	9.18
ASHRAE MBP	0.77	1.87	2.51	2.90	3.07	3.65	4.27	4.96	5.72	6.54	6.63	6.97
EN 12900	0.49	0.68	0.85	0.97	1.02	1.21	1.41	1.63	1.87	2.13	2.15	2.26

Test conditions	ASHRAE LBP	ASHRAE LBP*	ASHRAE MBP	EN 12900
Condensing temp.	130°F (54.4°C)	110°F (43.3°C)	130°F (54.4°C)	45°C (113°F)
Suction gas temp.	90°F (32°C)	90°F (32°C)	95°F (35°C)	32°C (90°F)
Ambient temp.	90°F (32°C)	90°F (32°C)	95°F (35°C)	32°C (90°F)
Liquid temp.	90°F (32°C)	90°F (32°C)	115°F (46°C)	45°C (113°F)
Cooling	Fan F <sub>2</sub>	Fan F <sub>2</sub>	Fan F <sub>2</sub>	Fan F <sub>2</sub>
V/Hz	115/60	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.	SC10CL
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

