

SC12G Universal Compressor R134a 115V 60Hz

Data Sheet (Replaces CD.44.A5.22)

General

Compressor (CU-plated steel connectors)	SC12G
Codenumber	104G7250
Codenumber compressor with oil cooler	104G7260

Application

Application		LBP/HBP
Evaporating temperature range	°F (°C)	-31 to 50 (-35 to 10)
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)	O/F ₁

Design

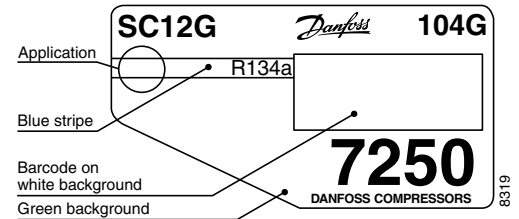
Displacement	cu.in. (cm ³)	0.78 (12.90)
Oil quantity	fl.oz. (cm ³)	18.6 (550)
Maximum refrigerant charge	oz. (g)	45.5 (1300)
Free gas vol. in compressor housing	fl.oz. (cm ³)	49.4 (1460)
Weight without electrical equipment	lbs. (kg)	27.7 (12.6)

Motor

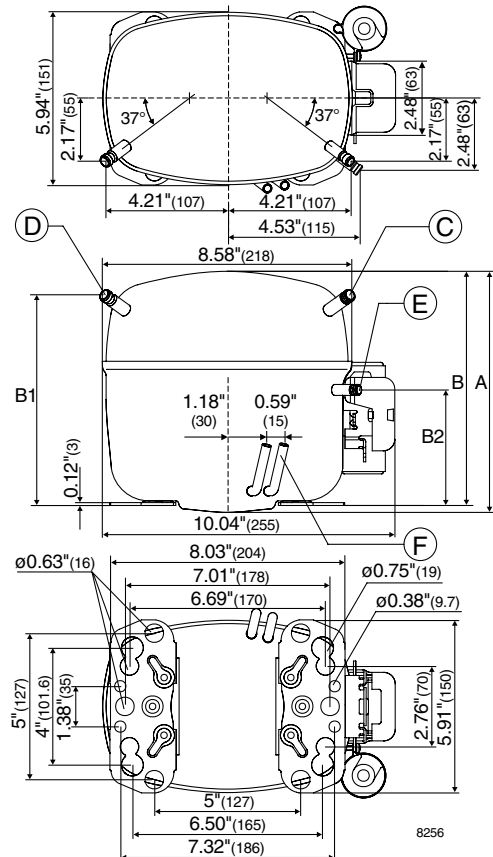
Motor size	watt	540
LRA (rated after 4 sec.UL984) HST	A	42.0
Cut-in current HST	A	42.0
Resistance, main and start winding (77°F)	Ω	1.0/4.3
Approvals		UL984/CSA-C22.2

Dimensions

Height	in. (mm)	A	8.23 (209)
		B	8.00 (203)
		B1	7.20 (183)
		B2	3.94 (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)
Oil cooler	location/l.D. in. (mm)	F	0.252-0.259 (6.5±0.09)
Compressors on a pallet	pcs.		80



- S = Static cooling normally sufficient
- O = Oil cooling
- F₁ = Fan cooling 1.5 m/s
(compressor compartment temp.
equal to ambient temperature)
- F₂ = Fan cooling 3.0 m/s necessary



Capacity at LBP conditions (ASHRAE)
Btu/h

Comp. °F	-30	-20	-13	-10	0	10	20	30	40	45	50
Comp. °C	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	7.2	10
SC12G	243	551	833	972	1507	2157	2924	3807	4808	5354	5930

Capacity at HBP conditions (ASHRAE)
Btu/h

Comp. °F	-30	-20	-13	-10	0	10	20	30	40	45	50
Comp. °C	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	7.2	10
SC12G	216	488	739	861	1335	1911	2588	3367	4250	4730	5236

Capacity (EN 12900/CECOMAF)
watt

Comp. °C	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	7.2	10
Comp. °F	-30	-20	-13	-10	0	10	20	30	40	45	50
SC12G	58	132	199	232	360	515	698	907	1144	1273	1409

Power consumption
watt

Comp. °F	-30	-20	-13	-10	0	10	20	30	40	45	50
Comp. °C	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	7.2	10
SC12G	157	212	252	269	328	389	451	516	581	615	649

Current consumption
A

Comp. °F	-30	-20	-13	-10	0	10	20	30	40	45	50
Comp. °C	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	7.2	10
SC12G	4.42	4.56	4.70	4.76	5.01	5.31	5.66	6.05	6.49	6.72	6.97

EER at LBP conditions (ASHRAE)
Btu/Wh

Comp. °F	-30	-20	-13	-10	0	10	20	30	40	45	50
Comp. °C	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	7.2	10
SC12G	1.55	2.60	3.31	3.61	4.59	5.55	6.48	7.38	8.27	8.71	9.14

EER at HBP conditions (ASHRAE)
Btu/Wh

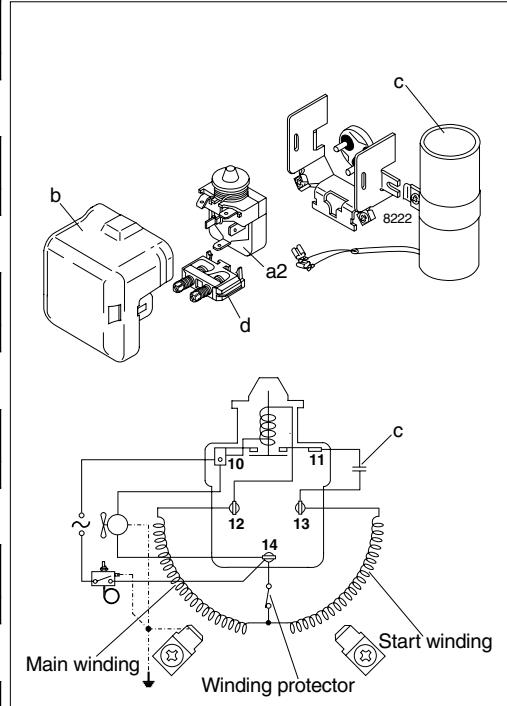
Comp. °F	-30	-20	-13	-10	0	10	20	30	40	45	50
Comp. °C	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	7.2	10
SC12G	1.38	2.30	2.93	3.20	4.07	4.91	5.73	6.53	7.31	7.69	8.07

COP (EN 12900/CECOMAF)
W/W

Comp. °C	-34.4	-28.9	-25	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	7.2	10
Comp. °F	-30	-20	-13	-10	0	10	20	30	40	45	50
SC12G	0.37	0.62	0.79	0.86	1.10	1.33	1.55	1.76	1.97	2.07	2.17

Accessories

Devices	Fig.	SC12G
Starting relay	a2	117U6020
Cover	b	103N2008
Starting capacitor 240 µF	c	117U5023
Cord relief	d	103N1004
Mounting accessories	Ø in. (mm)	
Bolt joint for one compressor	5/8 (16)	118-1917
Bolt joint in quantities	5/8 (16)	118-1918
Snap-on in quantities	5/8 (16)	118-1919


Test conditions

1. Condensing temperature
 2. Ambient and suction gas temp.
 3. Liquid temperature
- Fan cooling F_{11} , 115V 60Hz

ASHRAE

1. LBP 130°F (54.4°C)
2. 90°F (32°C)
3. 90°F (32°C)

EN 12900/CECOMAF

1. HBP 130°F (54.4 °C)
2. 95°F (35°C)
3. 115°F (46°C)