

SC12G Universal Compressor R134a 115V 60Hz



General

Code number	104G7250
Approvals	UL984
Compressors on pallet	80

Application

Application	Hz	LBP/HBP	
		50	60
Frequency	Hz	50	60
Evaporating temperature	°F	-	-31 to 50
Voltage range	V	-	103 - 127
Max. condensing temperature continuous (short)	°F	-	140 (158)
Max. winding temperature continuous (short)	°F	-	257 (275)

Cooling requirements

Frequency	Hz	50			60		
		LBP	MBP	HBP	LBP	MBP	HBP
90°F		-	-	-	F ₁	F ₁	F ₁
100°F		-	-	-	F ₁	F ₁	F ₁
110°F		-	-	-	F ₁	F ₁	F ₁
Remarks on application:							

Motor

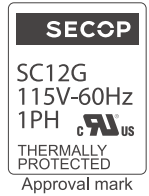
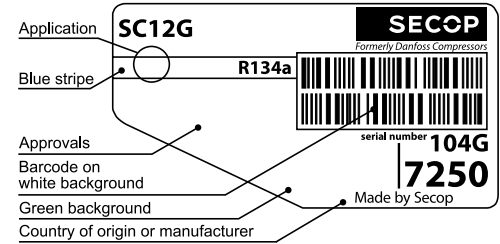
Motor type	CSIR		
LRA (rated after 4 sec. UL984), HST LST	A	42.0	-
Cut in Current, HST LST	A	42.0	-
Resistance, main start winding (77°F)	Ω	1.0	4.3

Design

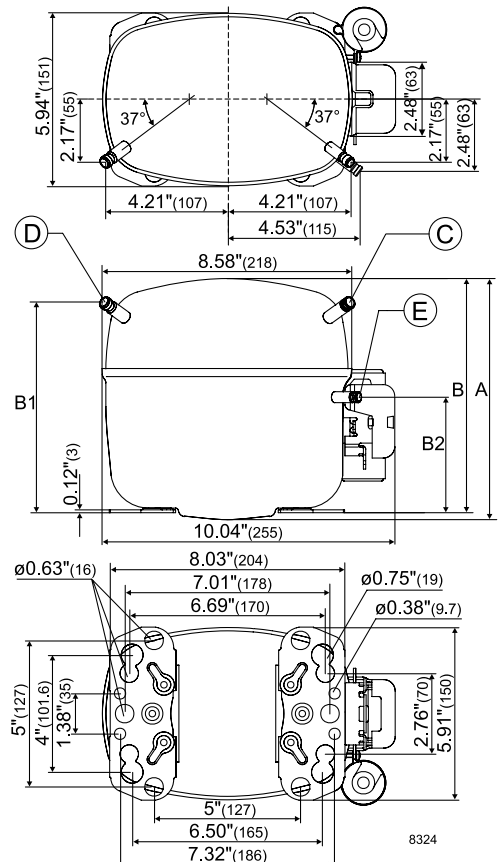
Displacement	cu.in	0.78
Oil quantity (type)	fl.oz.	18.6 (polyolester)
Maximum refrigerant charge	oz.	45.5
Free gas volume in compressor	fl.oz.	49.4
Weight without electrical equipment	lbs.	27.7

Dimensions

Height	inch	A	8.23
		B	8.00
		B1	7.20
		B2	3.93
Suction connector	location, I.D. in. angle	C	0.320-0.327 37°
	material comment		Cu-plated steel Al cap
Process connector	location, I.D. in. angle	D	0.252-0.259 37°
	material comment		Cu-plated steel Al cap
Discharge connector	location, I.D. in. angle	E	0.252-0.259 37°
	material comment		Cu-plated steel Al cap
Oil cooler connector	location, I.D. in. angle	F	-
	material comment		-
Remarks:			



- S = Static cooling normally sufficient
- O = Oil cooling
- F₁ = Fan cooling 1.5 m/s (compressor compartment temperature equal to ambient temperature)
- F₂ = Fan cooling 3.0 m/s necessary
- SG = Suction gas cooling normally sufficient
- = not applicable in this area



ASHRAE LBP

115V, 60Hz, fan cooling F₁

Evap. temp. in °F	-49	-40	-30	-20	-13	-10	0	10	14	20	30	40	41	45	50	59	68
Capacity in BTU/h			243	551	833	972	1507	2157	2399	2924	3807	4808	4896	5354	5930		
Power cons. in W			157	212	252	269	328	389	443	451	516	581	603	615	649		
Current cons. in A			4.42	4.56	4.70	4.76	5.01	5.31	5.82	5.66	6.05	6.49	6.98	6.72	6.97		
EER in BTU/Wh			1.55	2.60	3.31	3.61	4.59	5.55	5.43	6.48	7.38	8.27	8.12	8.71	9.14		

ASHRAE HBP

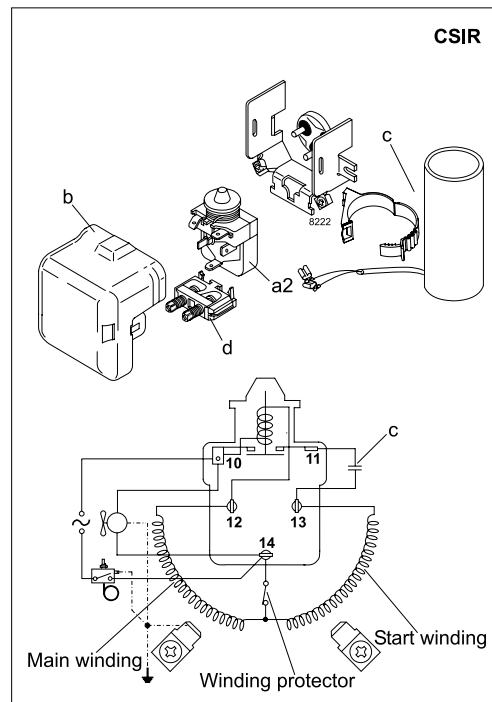
115V, 60Hz, fan cooling F₁

Evap. temp. in °F	-49	-40	-30	-20	-13	-10	0	10	14	20	30	40	41	45	50	59	68
Capacity in BTU/h			216	488	739	861	1335	1911	2136	2588	3367	4250	4350	4730	5236		
Power cons. in W			157	212	252	269	328	389	443	451	516	581	606	615	649		
Current cons. in A			4.42	4.56	4.70	4.76	5.01	5.31	5.82	5.66	6.05	6.49	7.00	6.72	6.97		
EER in BTU/Wh			1.38	2.30	2.93	3.20	4.07	4.91	4.81	5.73	6.53	7.31	7.23	7.69	8.07		

EN 12900 Household (CECOMAF)

115V, 60Hz, fan cooling F₁

Evap. temp. in °F	-49	-40	-30	-20	-13	-10	0	10	14	20	30	40	41	45	50	59	68
Capacity in W			58	132	199	232	360	515	563	698	907	1144	1151	1273	1409		
Power cons. in W			157	212	252	269	328	389	444	451	516	581	606	615	649		
Current cons. in A			4.42	4.56	4.70	4.76	5.01	5.31	5.82	5.66	6.05	6.49	7.00	6.72	6.97		
COP in W/W			0.37	0.62	0.79	0.86	1.10	1.33	1.27	1.55	1.76	1.97	1.90	2.07	2.17		



Accessories for	SC12G	Figure	Code number
PTC starting device	1/4 in. spade connect.	-	-
	3/16 in. spade connect.		-
Starting relay	1/4 in. spade connect.	a2	117U6020
Cover		b	103N2008
Start. capacitor 240 µF	1/4 in. spade connect.	c	117U5023
Cord relief		d	103N1004
Protection screen for PTC		-	-

Test conditions	ASHRAE LBP	ASHRAE HBP	EN 12900/CECOMAF
Condensing temp.	130°F	130°F	131°F
Ambient temperature	90°F	95°F	90°F
Suction gas temp.	90°F	95°F	90°F
Liquid temperature	90°F	115°F	131°F

Mounting accessories	Code number	
Bolt joint for one comp.	Ø: 5/8 in.	118-1917
Bolt joint in quantities	Ø: 5/8 in.	118-1918
Snap-on in quantities	Ø: 5/8 in.	118-1919

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