

## FF8.5GX Universal Compressor R134a 115V 60Hz

### General

Code number	103G5880
Approvals	UL984
Compressors on pallet	80

### Application

Application	LBP/HBP			
	Hz	50	60	
Frequency	Hz	50	60	
Evaporating temperature	°F	-	-22 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 <sub>1</sub>	F <sub>1</sub>	F <sub>1</sub>
100°F		-	-	-	F <sub>1</sub>	F <sub>1</sub>	F <sub>1</sub>
110°F		-	-	-	F <sub>1</sub>	F <sub>1</sub>	F <sub>1</sub>
Remarks on application:							

### Motor

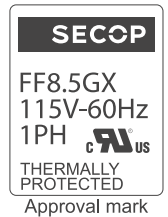
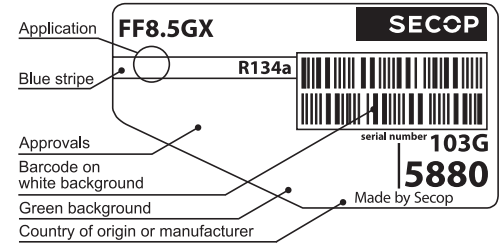
Motor type	CSIR		
LRA (rated after 4 sec. UL984), HST   LST	A	28.0	-
Cut in Current, HST   LST	A	28.0	-
Resistance, main   start winding (77°F)	Ω	1.9	6.6

### Design

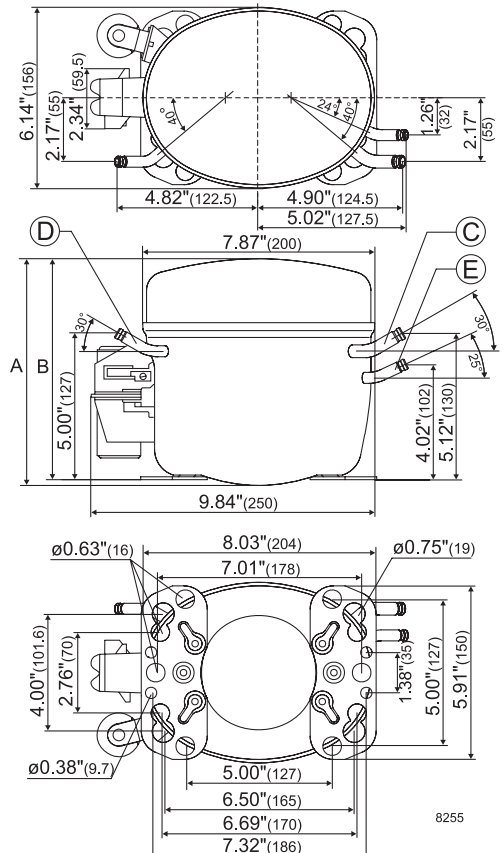
Displacement	cu.in	0.48
Oil quantity (type)	fl.oz.	13.5 (polyolester)
Maximum refrigerant charge	oz.	32.0
Free gas volume in compressor	fl.oz.	47.3
Weight without electrical equipment	lbs.	23.3

### Dimensions

Height	inch	A	7.72
		B	7.52
		B1	-
		B2	-
Suction connector	location, I.D. in.   angle	C	0.320-0.327   30°
	material   comment		Cu-plated steel   Al cap
Process connector	location, I.D. in.   angle	D	0.252-0.259   30°
	material   comment		Cu-plated steel   Al cap
Discharge connector	location, I.D. in.   angle	E	0.252-0.259   25°
	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
- 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
- SG = Suction gas cooling normally sufficient
- = not applicable in this area



**ASHRAE LBP**

115V, 60Hz, fan cooling F<sub>1</sub>

Evap. temp. in °F	-49	-40	-30	-20	-13	-10	0	10	14	20	30	32	40	45	50	59	68
Capacity in BTU/h				443	588	662	957	1328	1490	1773	2294	2404	2890	3217	3563		
Power cons. in W				172	198	209	245	283	299	321	359	369	398	418	437		
Current cons. in A				3.13	3.22	3.27	3.45	3.67	3.77	3.92	4.19	4.25	4.46	4.59	4.72		
EER in BTU/Wh				2.57	2.98	3.18	3.90	4.69	4.98	5.53	6.38	6.51	7.26	7.70	8.14		

**ASHRAE HBP**

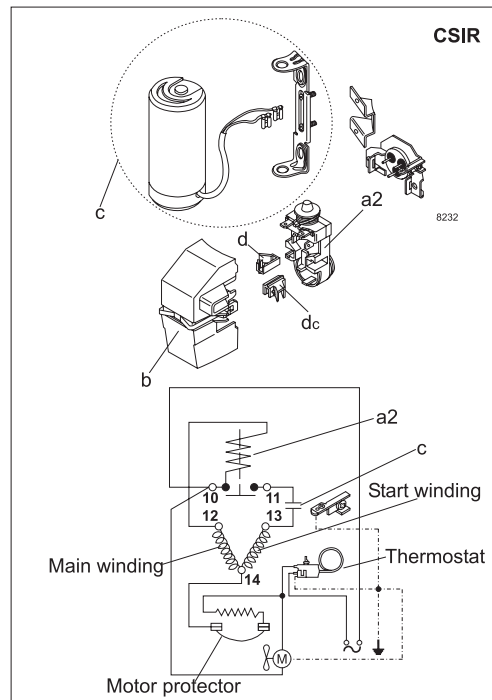
115V, 60Hz, fan cooling F<sub>1</sub>

Evap. temp. in °F	-49	-40	-30	-20	-13	-10	0	10	14	20	30	32	40	45	50	59	68
Capacity in BTU/h				392	522	587	848	1176	1336	1570	2029	2141	2555	2842	3146		
Power cons. in W				172	198	209	245	283	297	321	359	366	398	418	437		
Current cons. in A				3.13	3.22	3.27	3.45	3.67	3.77	3.92	4.19	4.24	4.46	4.59	4.72		
EER in BTU/Wh				2.28	2.64	2.81	3.46	4.16	4.50	4.89	5.65	5.83	6.41	6.80	7.19		

**EN 12900 Household (CECOMAF)**

115V, 60Hz, fan cooling F<sub>1</sub>

Evap. temp. in °F	-49	-40	-30	-20	-13	-10	0	10	14	20	30	32	40	45	50	59	68
Capacity in W				106	141	158	229	317	354	423	547	569	688	765	846		
Power cons. in W				172	198	209	245	283	299	321	359	369	398	418	437		
Current cons. in A				3.13	3.22	3.27	3.45	3.67	3.77	3.92	4.19	4.25	4.46	4.59	4.72		
COP in W/W				0.61	0.71	0.76	0.93	1.12	1.18	1.32	1.52	1.54	1.73	1.83	1.93		



Accessories for	FF8.5GX	Figure	Code number
Starting relay	1/4 in. spade connect.	a2	117U4060
Protector 3/4 in.	Texas Instruments		MRP36AEN-6
Cover		b	117U1021
Start. capacitor 280 µF	1/4 in. spade connect.	c	117U5041
Cord relief		d	117U0349
Cord relief for capacitor		dc	117U0349

Test conditions	ASHRAE LBP	ASHRAE HBP	EN 12900/CECOMAF
Condensing temp.	130°F	130°F	131°F
Ambient temp.	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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