

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
Application							
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

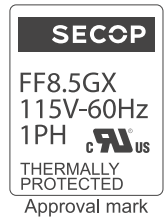
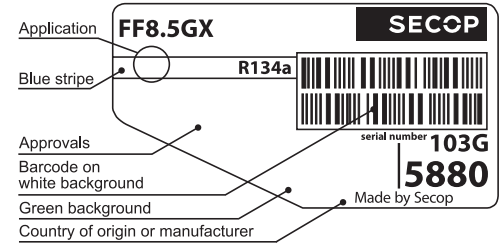
Motor type	CSIR		
LRA (rated after 4 sec. UL984), HST LST	A	28.0	-
Cut in Current, HST LST	A	28.0	-
Resistance, main start winding (77°F)	Ω	1.9	6.6

Design

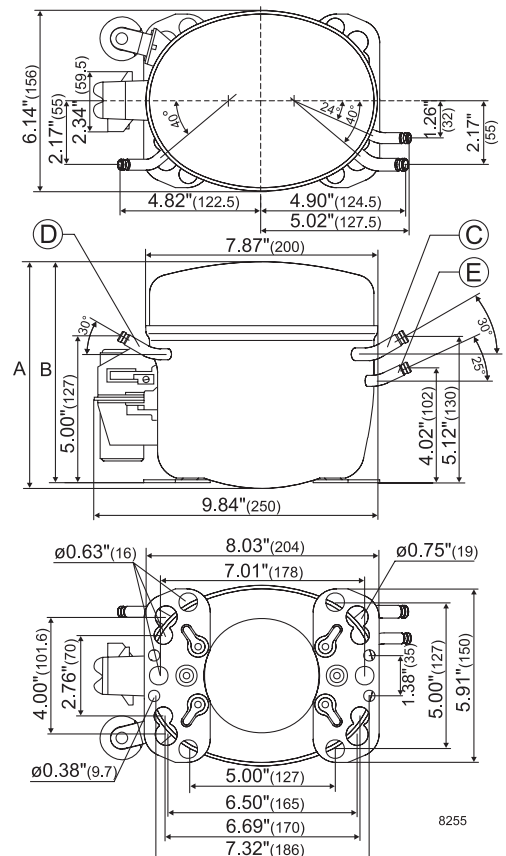
Displacement	cu.in	0.48
Oil quantity (type)	fl.oz.	13.5 (polyolester)
Maximum refrigerant charge	oz.	32.0
Free gas volume in compressor	fl.oz.	47.3
Weight without electrical equipment	lbs.	23.3

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
- 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	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

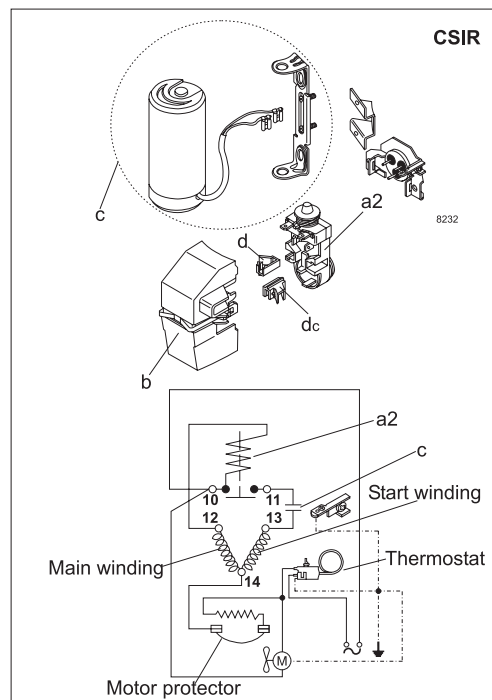
115V, 60Hz, fan cooling F₁

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 F₁

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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