

Datasheet

SC21G Universal Compressor

R134a 220-240V 50/60Hz

General

Code number	104G8140
Approvals	EN 60335-2-34
Compressors on pallet	80

Application

Application	LBP/HBP	LBP
Frequency	Hz 50	60
Evaporating temperature	°C -25 to 15	-25 to -5
Voltage range	V 187 - 254	198 - 254
Max. condensing temperature continuous (short)	°C 60 (70)	60 (70)
Max. winding temperature continuous (short)	°C 125 (135)	125 (135)

Cooling requirements

Frequency	Hz	50			60		
Application		LBP	MBP	HBP	LBP	MBP	HBP
32°C		F ₂	F ₂	F ₂	F ₂	-	-
38°C		F ₂	F ₂	F ₂	F ₂	-	-
43°C		F ₂	F ₂	F ₂	F ₂	-	-

Remarks on application:
Not applicable below -25°C evaporating temp. in 43°C ambient temperature above 240V.
HBP at 198 - 254V 50Hz only.

Motor

Motor type	CSR		
LRA (rated after 4 sec. UL984), HST LST	A	21.8	-
Cut in Current, HST LST	A	21.8	-
Resistance, main start winding (25°C)	Ω	3.5	12.1

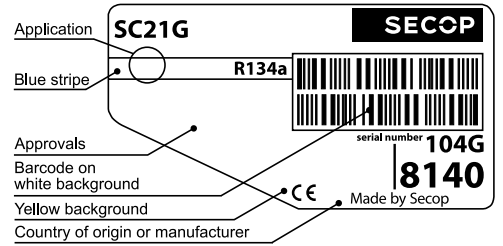
Design

Displacement	cm ³	20.95
Oil quantity (type)	cm ³	550 (polyolester)
Maximum refrigerant charge	g	1300
Free gas volume in compressor	cm ³	1460
Weight without electrical equipment	kg	13.5

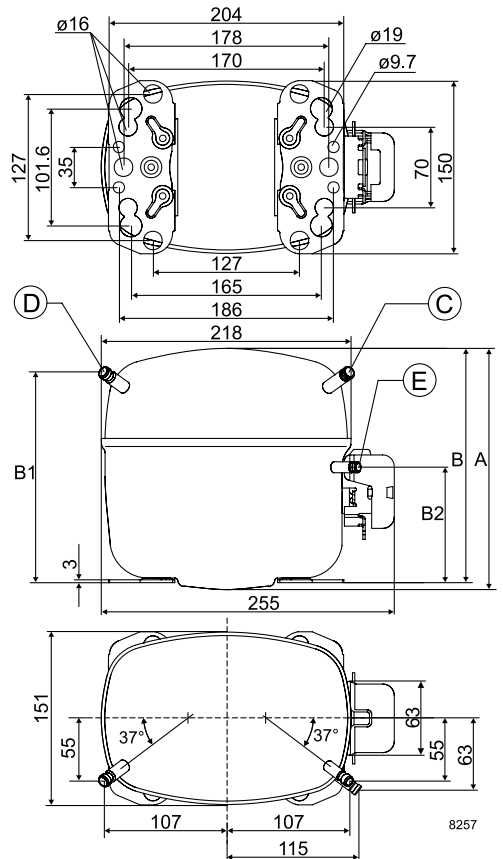
Dimensions

Height	mm	A	219
		B	213
		B1	193
		B2	110
Suction connector	location/I.D. mm angle	C	10.2 37°
	material comment	Cu-plated steel Al cap	
Process connector	location/I.D. mm angle	D	6.2 37°
	material comment	Cu-plated steel Al cap	
Discharge connector	location/I.D. mm angle	E	6.2 37°
	material comment	Cu-plated steel Al cap	
Oil cooler connector	location/I.D. mm angle	F	-
	material comment	-	
Connector tolerance	I.D. mm	±0.09	

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



EN 12900 Household

220V, 50Hz, fan cooling F₂

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10	15	20
Capacity in W					333	370	453	606	792	934	1012	1268	1560	1700	1889	2256	
Power cons. in W					382	404	445	509	575	620	643	714	789	823	868	953	
Current cons. in A					2.28	2.34	2.48	2.71	2.96	3.14	3.24	3.54	3.87	4.02	4.22	4.60	
COP in W/W					0.87	0.92	1.02	1.19	1.38	1.51	1.58	1.78	1.98	2.07	2.18	2.37	

ASHRAE LBP

220V, 50Hz, fan cooling F₂

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10	15	20
Capacity in W					410	456	558	746	977	1156	1250	1568	1931	2106	2343	2803	
Power cons. in W					382	404	445	509	575	620	643	714	789	823	868	953	
Current cons. in A					2.28	2.34	2.48	2.71	2.96	3.14	3.24	3.54	3.87	4.02	4.22	4.60	
COP in W/W					1.07	1.13	1.25	1.47	1.70	1.86	1.95	2.20	2.45	2.56	2.70	2.94	

EN 12900 Household

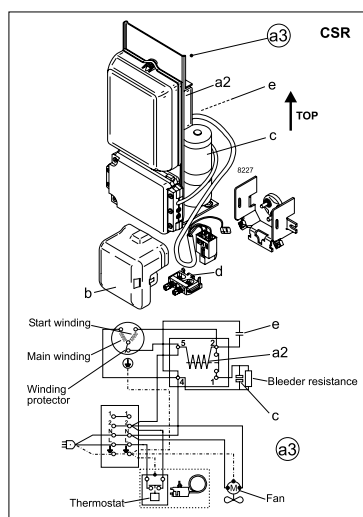
230V, 60Hz, fan cooling F₂

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10	15	20
Capacity in W					311	364	476	671	903	1078	1175						
Power cons. in W					374	406	466	553	638	693	721						
Current cons. in A					1.82	1.95	2.21	2.58	2.95	3.19	3.31						
COP in W/W					0.83	0.90	1.02	1.21	1.42	1.56	1.63						

ASHRAE LBP

230V, 60Hz, fan cooling F₂

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10	15	20
Capacity in W					392	457	595	835	1121	1336	1456						
Power cons. in W					378	409	468	554	637	692	720						
Current cons. in A					1.83	1.96	2.21	2.58	2.94	3.18	3.29						
COP in W/W					1.04	1.12	1.27	1.51	1.76	1.93	2.02						



Accessories for SC21G	Figure	Code number
Starting device 550 mm cable length 650 mm cable length	a3	117-7029 117-7032
	b	103N2009
Starting relay	a2	Components of starting device
Starting capacitor	c	
Run capacitor	e	
Cord relief	d	103N1004

Test conditions	EN 12900/CECOMAF	ASHRAE LBP
Condensing temperature	55°C	55°C
Ambient temperature	32°C	32°C
Suction gas temperature	32°C	32°C
Liquid temperature	no subcooling	32°C

Mounting accessories	Code number	
Bolt joint for one comp.	Ø: 16 mm	118-1917
Bolt joint in quantities	Ø: 16 mm	118-1918
Snap-on in quantities	Ø: 16 mm	118-1919

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