

# SC21G Universal Compressor R134a 220-240V 50/60Hz

## General

Code number	104G8124
Approvals	EN 60335-2-34
Compressors on pallet	80

## Application

Application	LBP/HBP		
Frequency	Hz	50	60
Evaporating temperature	°C	-25 to 15	-25 to 15
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 <sub>2</sub>	F <sub>2</sub>	F <sub>2</sub>	F <sub>2</sub>	-	-
38°C		F <sub>2</sub>	F <sub>2</sub>	F <sub>2</sub>	F <sub>2</sub>	-	-
43°C		F <sub>2</sub>	F <sub>2</sub>	F <sub>2</sub>	F <sub>2</sub>	-	-

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

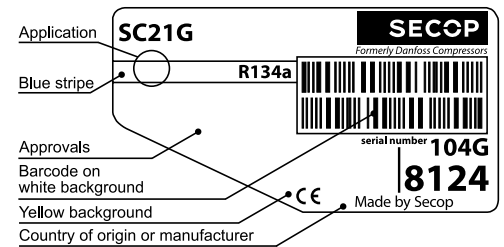
## Design

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

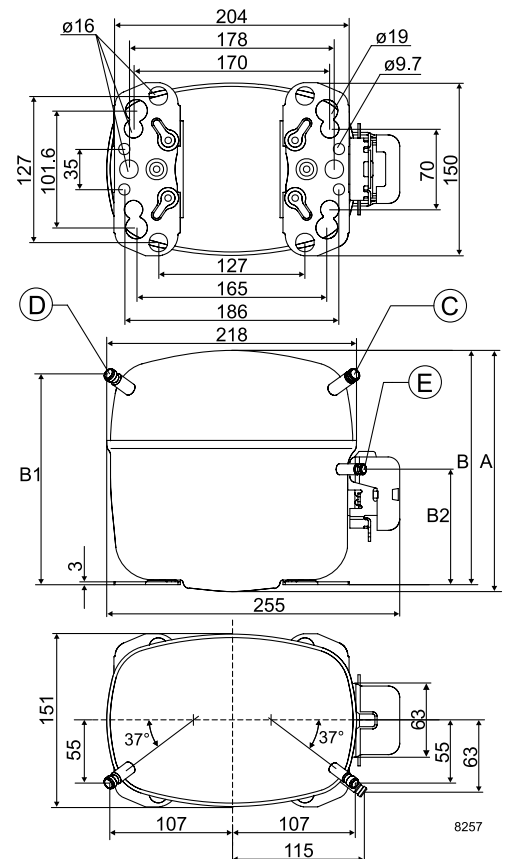
## Dimensions

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	6.5   37°
	material   comment		Cu-plated steel   Al cap
Discharge connector	location/I.D. mm   angle	E	6.5   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: Drawing shows standard SC housing cover. On housing cover of type 104G8124 suction and process connectors are interchanged.



- 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

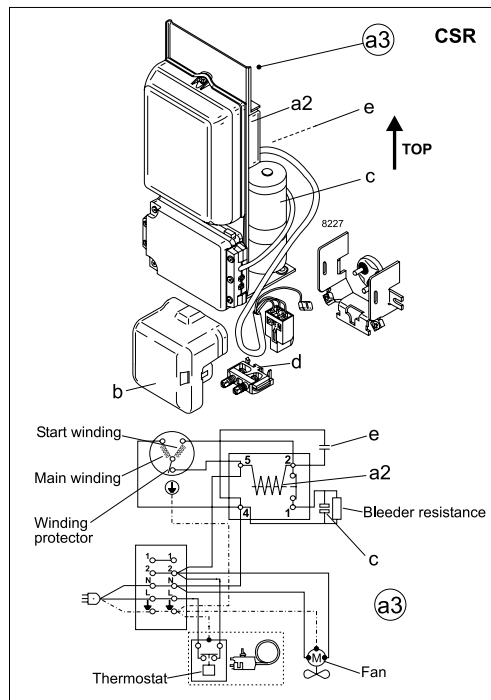


**EN 12900 Household (CECOMAF)** 220V, 50Hz, fan cooling F<sub>2</sub>

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 F<sub>2</sub>

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	



Accessories for SC21G	Figure	Code number	Test conditions	EN 12900/CECOMAF	ASHRAE LBP
Starting device	a3	470 mm cable length	Condensing temperature	55°C	55°C
		550 mm cable length			
		650 mm cable length			
Cover	b	103N2009	Ambient temperature	32°C	32°C
Starting relay	a2	Components of starting device	Suction gas temperature	32°C	32°C
Starting capacitor	c		Liquid temperature	no subcooling	32°C
Run capacitor	e				
Cord relief	d	103N1004			
			<b>Mounting accessories</b>	<b>Code number</b>	
			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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