

# SC12G Universal Compressor R134a 220-240V 50/60Hz

## General

Code number	104G8240
Approvals	EN 60335-2-34
Compressors on pallet	80

## Application

Application	LBP/HBP			
Frequency	Hz	50		60
Evaporating temperature	°C	-35 to 15		-35 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 <sub>1</sub>	F <sub>2</sub>	F <sub>2</sub>	F <sub>1</sub>	F <sub>2</sub>	F <sub>2</sub>
38°C		F <sub>1</sub>	F <sub>2</sub>	F <sub>2</sub>	F <sub>1</sub>	F <sub>2</sub>	F <sub>2</sub>
43°C		F <sub>1</sub>	F <sub>2</sub>	F <sub>2</sub>	F <sub>1</sub>	F <sub>2</sub>	F <sub>2</sub>
Remarks on application:							

## Motor

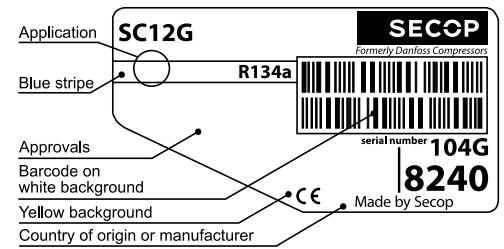
Motor type	RSIR/CSIR		
LRA (rated after 4 sec. UL984), HST   LST	A	12.6	12.4
Cut in Current, HST   LST	A	12.6	17.2
Resistance, main   start winding (25°C)	Ω	6.7	11.8

## Design

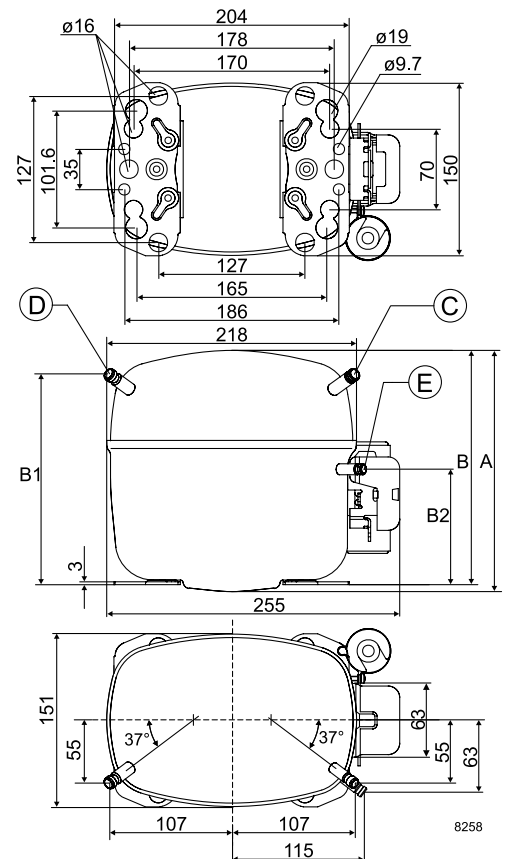
Displacement	cm <sup>3</sup>	12.87
Oil quantity (type)	cm <sup>3</sup>	550 (polyolester)
Maximum refrigerant charge	g	1300
Free gas volume in compressor	cm <sup>3</sup>	1510
Weight without electrical equipment	kg	12.6

## Dimensions

Height	mm	A	209
		B	203
		B1	183
		B2	100
Suction connector	location/I.D. mm   angle	C	8.2   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
- 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			64.6	113	175	199	252	348	464	553	603	768	960	1054	1182	1437	
Power cons. in W			148	187	227	241	268	311	355	385	400	446	493	514	541	589	
Current cons. in A			1.63	1.72	1.83	1.87	1.95	2.09	2.24	2.34	2.40	2.57	2.76	2.85	2.96	3.17	
COP in W/W			0.44	0.61	0.77	0.83	0.94	1.12	1.31	1.44	1.51	1.72	1.95	2.05	2.19	2.44	

**EN 12900 Household (CECOMAF) 220V, 60Hz, fan cooling F<sub>2</sub>**

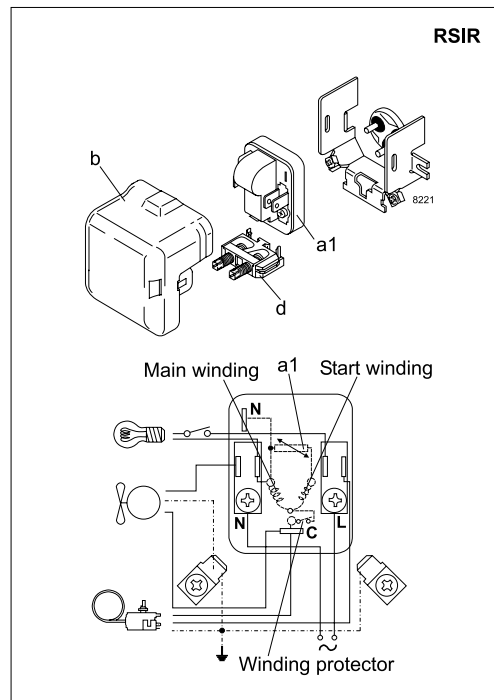
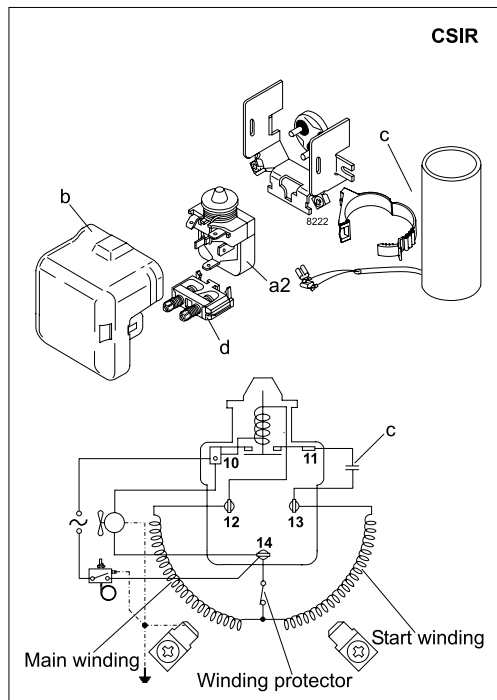
Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10	15	20
Capacity in W			74.2	131	203	232	294	406	542	646	704						
Power cons. in W			172	218	265	281	313	363	415	449	468						
Current cons. in A			1.79	1.89	2.01	2.06	2.15	2.30	2.46	2.57	2.64						
COP in W/W			0.43	0.60	0.77	0.83	0.94	1.12	1.31	1.44	1.51						

**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			79.6	140	216	246	312	430	574	684	746	951	1191	1308	1469	1790	
Power cons. in W			148	187	227	241	268	311	355	385	400	446	493	514	541	589	
Current cons. in A			1.63	1.72	1.83	1.87	1.95	2.09	2.24	2.34	2.40	2.57	2.76	2.85	2.96	3.17	
COP in W/W			0.54	0.75	0.95	1.02	1.16	1.38	1.62	1.78	1.87	2.13	2.42	2.55	2.72	3.04	

**ASHRAE LBP 220V, 60Hz, 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			91.5	162	251	286	363	501	670	799	872						
Power cons. in W			172	218	265	281	313	363	415	449	468						
Current cons. in A			1.79	1.89	2.01	2.06	2.15	2.30	2.46	2.57	2.64						
COP in W/W			0.53	0.74	0.95	1.02	1.16	1.38	1.61	1.78	1.86						



Accessories for	SC12G	Figure	Code number
PTC starting device	6.3 mm spade connectors	a1	103N0002
	4.8 mm spade connectors		-
Starting relay	6.3 mm spade connectors	a2	117U6003
Cover		b	103N2009
Start. capacitor 80 µF	6.3 mm spade connectors	c	117U5017
Cord relief		d	103N1004
Protection screen for PTC		g	-

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	55°C	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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