

Datasheet

# SC15G Universal Compressor

## R134a 220-240V 50/60Hz

**General**

Code number	104G8520
Approvals	EN 60335-2-34
Compressors on pallet	80

**Application**

Frequency	Hz	50	60
Application		LBP/HBP	LBP
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 <sub>1</sub>	F <sub>2</sub>	F <sub>2</sub>	F <sub>1</sub>	-	-
38°C		F <sub>1</sub>	F <sub>2</sub>	F <sub>2</sub>	F <sub>1</sub>	-	-
43°C		F <sub>1</sub>	F <sub>2</sub>	F <sub>2</sub>	F <sub>1</sub>	-	-
Remarks on application: HBP at 198 - 254V 50Hz only.							

**Motor**

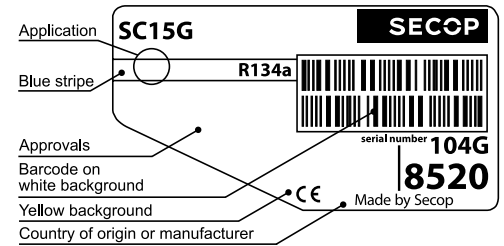
Motor type		CSIR	
LRA (rated after 4 sec. UL984), HST   LST	A	14.8	-
Cut in Current, HST   LST	A	14.8	-
Resistance, main   start winding (25°C)	Ω	5.0	13.7

**Design**

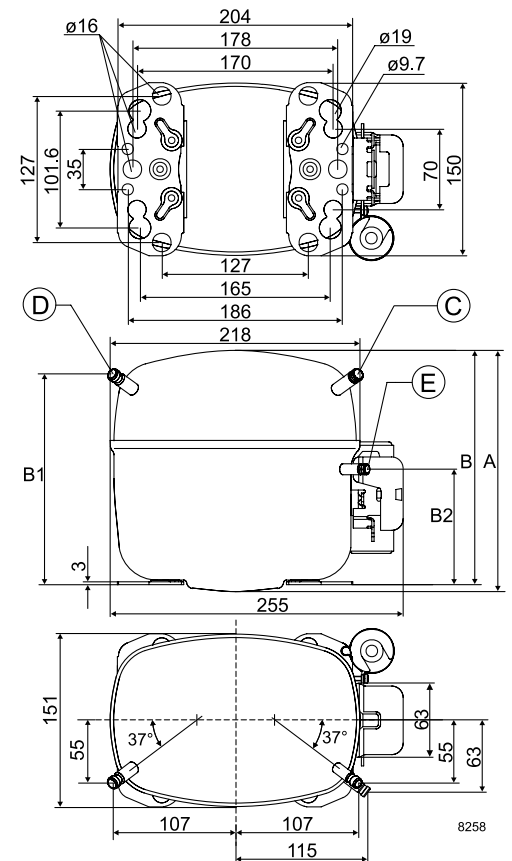
Displacement	cm <sup>3</sup>	15.28
Oil quantity (type)	cm <sup>3</sup>	550 (polyolester)
Maximum refrigerant charge	g	1300
Free gas volume in compressor	cm <sup>3</sup>	1410
Weight without electrical equipment	kg	13.1

**Dimensions**

Height	mm	A	209
		B	203
		B1	183
		B2	100
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
- 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					164	206	290	424	568	672	728	908	1110	1207	1340	1600	
Power cons. in W					233	259	307	376	440	478	497	549	595	613	634	667	
Current cons. in A					2.21	2.28	2.40	2.59	2.78	2.92	2.99	3.20	3.42	3.52	3.64	3.88	
COP in W/W					0.71	0.80	0.95	1.13	1.29	1.40	1.46	1.65	1.87	1.97	2.11	2.40	

**ASHRAE LBP 220V, 50Hz, fan cooling F<sub>2</sub>**

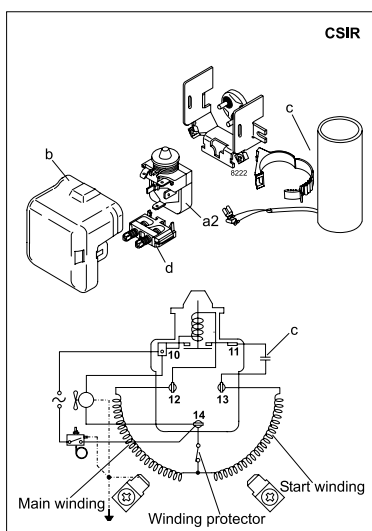
Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10	15	20
Capacity in W					203	255	358	523	703	831	901	1124	1377	1499	1665	1993	
Power cons. in W					233	259	307	376	440	478	497	549	595	613	634	667	
Current cons. in A					2.21	2.28	2.40	2.59	2.78	2.92	2.99	3.20	3.42	3.52	3.64	3.88	
COP in W/W					0.87	0.99	1.17	1.39	1.60	1.74	1.81	2.05	2.31	2.44	2.62	2.99	

**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					262	298	376	515	677	797	863						
Power cons. in W					330	350	388	447	506	544	563						
Current cons. in A					1.99	2.05	2.17	2.37	2.59	2.74	2.82						
COP in W/W					0.79	0.85	0.97	1.15	1.34	1.47	1.53						

**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					326	371	468	639	840	988	1070						
Power cons. in W					328	347	386	444	502	540	560						
Current cons. in A					1.97	2.03	2.16	2.36	2.57	2.73	2.81						
COP in W/W					0.99	1.07	1.21	1.44	1.67	1.83	1.91						



Accessories for	SC15G	Figure	Code number
PTC starting device	6.3 mm spade connectors	a1	—
	4.8 mm spade connectors		—
Starting relay	6.3 mm spade connectors	a2	117U6005
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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