

## SC18G Universal Compressor R134a 220-240V 50/60Hz

### General

Code number	104G8820
Approvals	EN 60335-2-34, UL984, CCC, EAC
Compressors on pallet	80

### Application

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

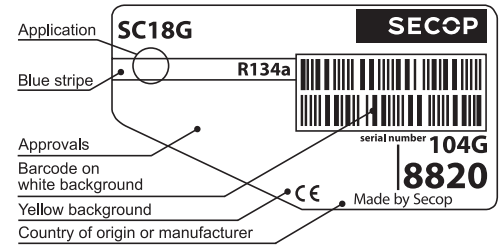
Motor type	CSIR		
LRA (rated after 4 sec. UL984), HST   LST	A	18.6	-
Cut in Current, HST   LST	A	18.6	-
Resistance, main   start winding (25°C)	Ω	3.7	14.1

### Design

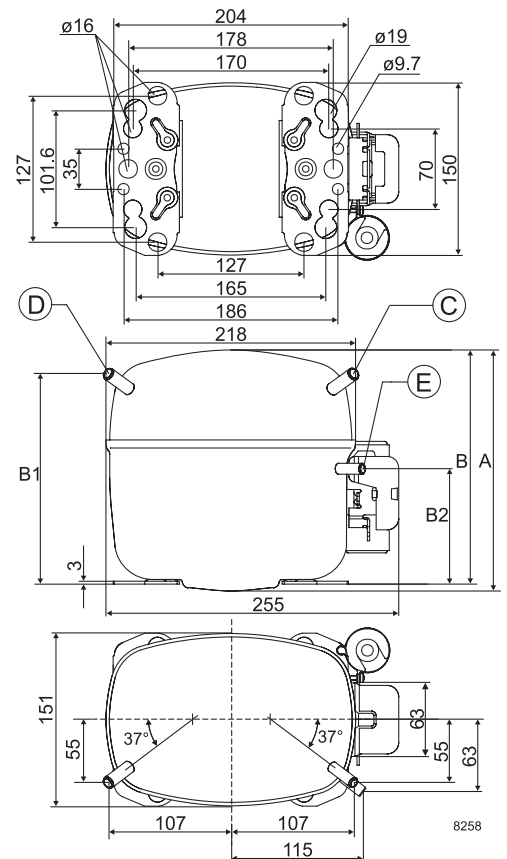
Displacement	cm <sup>3</sup>	17.69
Oil quantity (type)	cm <sup>3</sup>	550 (polyolester)
Maximum refrigerant charge	g	1300
Free gas volume in compressor	cm <sup>3</sup>	1460
Weight without electrical equipment	kg	13.7

### Dimensions

Height	mm	A	219
		B	213
		B1	193
		B2	110
Suction connector	location/I.D. mm   angle	C	10.2   37°
	material   comment		Copper   Rubber plug
Process connector	location/I.D. mm   angle	D	6.2   37°
	material   comment		Copper   Rubber plug
Discharge connector	location/I.D. mm   angle	E	6.2   37°
	material   comment		Copper   Rubber plug
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					283	318	394	526	684	804	870	1087	1337	1459	1624	1950	
Power cons. in W					331	351	389	448	507	547	568	630	695	725	763	835	
Current cons. in A					2.56	2.62	2.72	2.88	3.05	3.18	3.24	3.46	3.71	3.84	4.00	4.34	
COP in W/W					0.86	0.91	1.01	1.18	1.35	1.47	1.53	1.72	1.92	2.01	2.13	2.34	

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

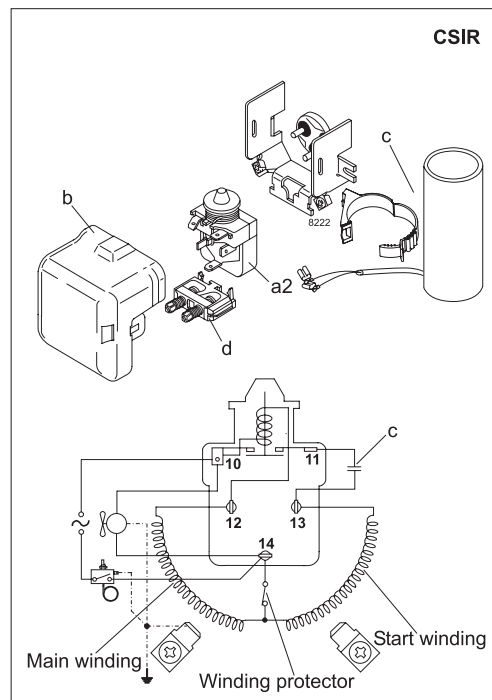
Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10	15	20
Capacity in W					348	392	485	650	846	994	1076	1346	1658	1809	2016	2425	
Power cons. in W					329	349	387	445	504	543	564	626	691	720	758	829	
Current cons. in A					2.56	2.61	2.71	2.87	3.04	3.16	3.23	3.45	3.70	3.82	3.98	4.32	
COP in W/W					1.06	1.12	1.25	1.46	1.68	1.83	1.91	2.15	2.40	2.51	2.66	2.92	

**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					338	379	468	623	807	944	1021						
Power cons. in W					386	414	466	543	616	663	687						
Current cons. in A					3.05	3.10	3.19	3.36	3.56	3.70	3.79						
COP in W/W					0.88	0.92	1.00	1.15	1.31	1.42	1.49						

**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					417	469	579	772	999	1170	1265						
Power cons. in W					386	414	466	541	613	660	683						
Current cons. in A					3.05	3.09	3.19	3.35	3.55	3.69	3.77						
COP in W/W					1.08	1.13	1.24	1.43	1.63	1.77	1.85						



Accessories for	SC18G	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	117U6019
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	54.5°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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