

## SC18GH Heat Pump Compressor R134a 220-240V 50Hz

### General

Code number	104G8860
Approvals	EN 60335-2-34
Compressors on pallet	80

### Application

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

### Cooling requirements

Frequency	Hz	50			60		
Application		LBP	MBP	HBP	LBP	MBP	HBP
32°C		-	-	F <sub>2</sub>	-	-	-
38°C		-	-	F <sub>2</sub>	-	-	-
43°C		-	-	F <sub>2</sub>	-	-	-
Remarks on application:							

### Motor

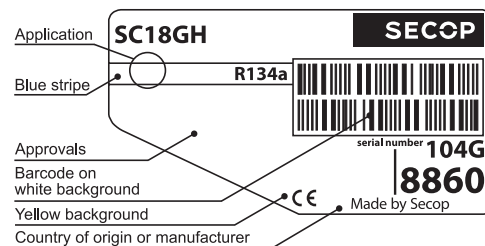
Motor type	CSIR		
LRA (rated after 4 sec. UL984), HST   LST	A	18.6	-
Cut in Current, HST   LST	A	18.6	-
Resistance, main   start winding (25°C)	Ω	3.7	14.1

### Design

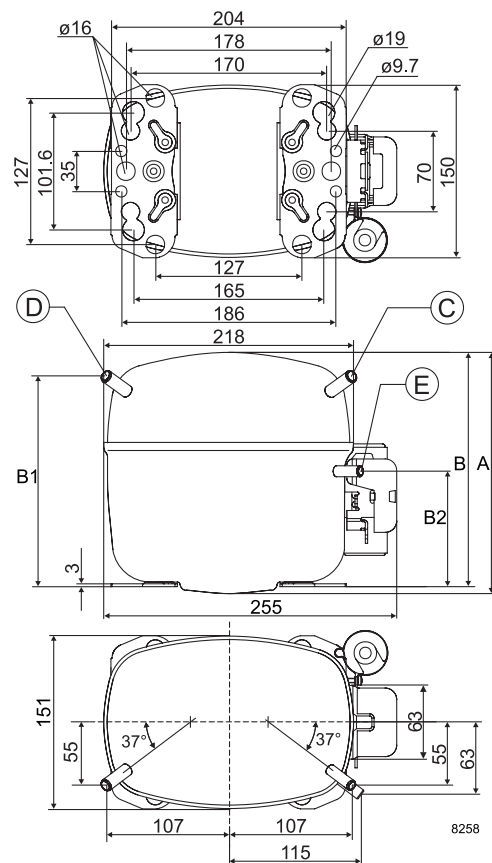
Displacement	cm <sup>3</sup>	17.69
Oil quantity (type)	cm <sup>3</sup>	500 (polyolester)
Maximum refrigerant charge	g	1300
Free gas volume in compressor	cm <sup>3</sup>	1460
Weight without electrical equipment	kg	13.7

### 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		CCopper   Rubber plug
Discharge connector	location/I.D. mm   angle	E	8.2   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

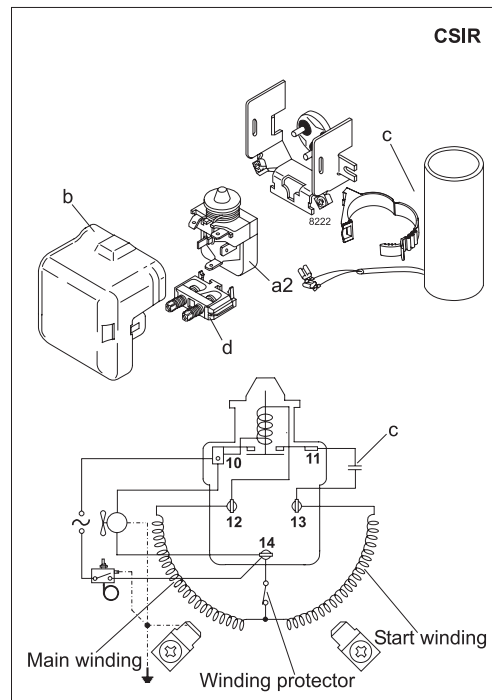


**EN 12900 Household (CECOMAF)** 220V, 50Hz, fan cooling F<sub>2</sub>

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								539	676	789	855	1077	1340	1469	1645	1990	
Power cons. in W								425	498	544	567	633	697	724	758	817	
Current cons. in A								2.90	3.13	3.28	3.36	3.60	3.85	3.96	4.11	4.38	
COP in W/W								1.27	1.36	1.45	1.51	1.70	1.92	2.03	2.17	2.44	

**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								664	833	976	1056	1331	1659	1824	2039	2472	
Power cons. in W								425	498	544	567	633	697	724	758	817	
Current cons. in A								2.90	3.13	3.28	3.36	3.60	3.85	3.96	4.11	4.38	
COP in W/W								1.56	1.67	1.79	1.86	2.10	2.38	2.52	2.69	3.03	



Accessories for	SC18GH	Figure	Code number	Test conditions	EN 12900/CECOMAF	ASHRAE LBP
PTC starting device	6.3 mm spade connectors	a1	–	Condensing temperature	55°C	55°C
	4.8 mm spade connectors		–	Ambient temperature	32°C	32°C
Starting relay	6.3 mm spade connectors	a2	117U6019	Suction gas temperature	32°C	32°C
Cover		b	103N2009	Liquid temperature	55°C	32°C
Start. capacitor 80 µF	6.3 mm spade connectors	c	117U5017			
Cord relief		d	103N1004			
Protection screen for PTC		g	–			
				<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

Nidec GA Compressors accepts no responsibility for possible errors in catalogs, brochures, and other printed material. Nidec GA Compressors reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without consequential changes being necessary to specifications already agreed. All trademarks in this material are the property of the respective companies. Secop and the Secop logotype are trademarks of Nidec Global Appliance Germany GmbH. All rights reserved. [www.secop.com](http://www.secop.com)