

# SC18GH Heat Pump Compressor R134a 220-240V 50/60Hz

## General

Code number	104G8861
Approvals	EN 60335-2-34, UL984
Compressors on pallet	80

## Application

Application	HBP			
Frequency	Hz	50	60	
Evaporating temperature	°C	-15 to 20	-15 to 15	
Voltage range	V	198 - 254	198 - 254	
Max. condensing temperature continuous (short)	°C	70 (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>
38°C		-	-	F <sub>2</sub>	-	-	F <sub>2</sub>
43°C		-	-	F <sub>2</sub>	-	-	F <sub>2</sub>
Remarks on application:							

## Motor

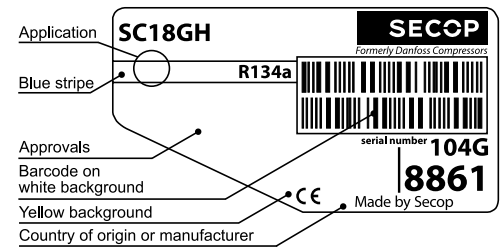
Motor type	CSR		
LRA (rated after 4 sec. UL984), HST   LST	A	21.8	-
Cut in Current, HST   LST	A	21.8	-
Resistance, main   start winding (25°C)	Ω	3.5	12.1

## Design

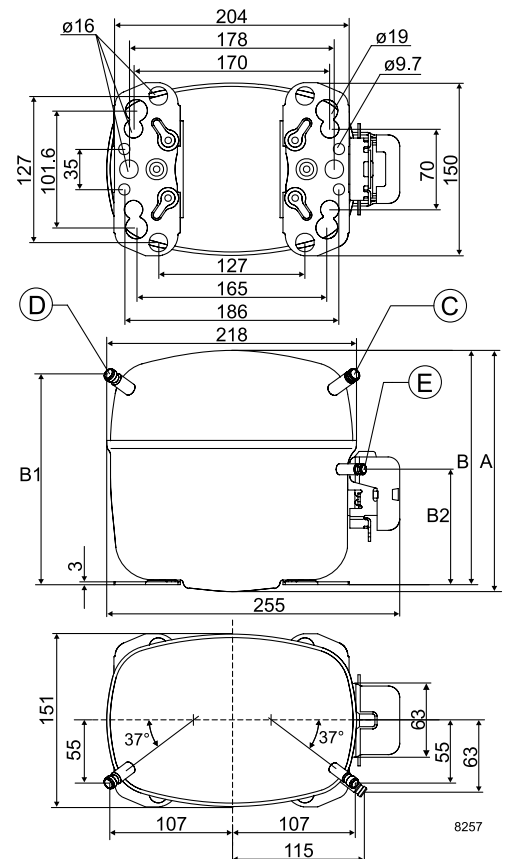
Displacement	cm <sup>3</sup>	17.69
Oil quantity (type)	cm <sup>3</sup>	500 (polyolester)
Maximum refrigerant charge	g	1300
Free gas volume in compressor	cm <sup>3</sup>	1460
Weight without electrical equipment	kg	13.7

## Dimensions

Height	mm	A	219
		B	213
		B1	193
		B2	110
Suction connector	location/I.D. mm   angle	C	10.2   37°
	material   comment	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	8.2   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								485	639	758	825	1047	1310	1440	1618	1976	2389
Power cons. in W								404	452	485	503	554	605	626	651	692	724
Current cons. in A								2.44	2.66	2.79	2.86	3.06	3.26	3.34	3.45	3.63	3.80
COP in W/W								1.20	1.42	1.56	1.64	1.89	2.17	2.30	2.49	2.86	3.30

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

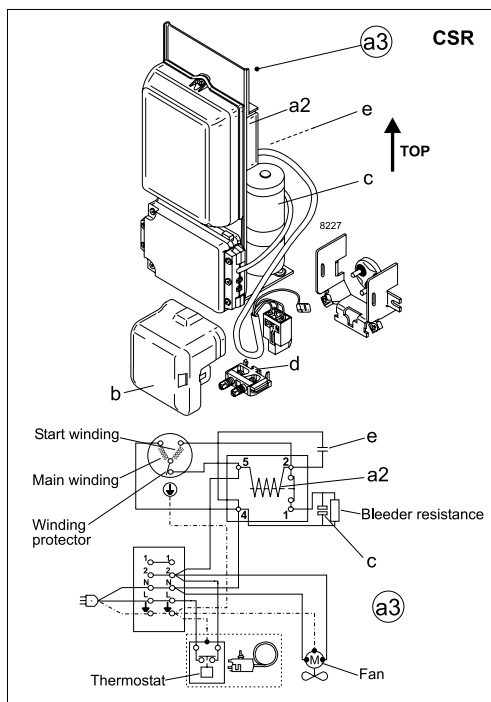
Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10	15	20
Capacity in W								573	745	879	955	1207	1506	1654	1858	2268	
Power cons. in W								449	511	554	577	643	708	736	770	826	
Current cons. in A								2.14	2.45	2.65	2.75	3.05	3.35	3.48	3.65	3.94	
COP in W/W								1.27	1.46	1.59	1.66	1.88	2.13	2.25	2.41	2.75	

**ASHRAE HBP 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								600	790	938	1021	1298	1626	1788	2011	2461	2982
Power cons. in W								404	452	485	503	554	605	626	651	692	724
Current cons. in A								2.44	2.66	2.79	2.86	3.06	3.26	3.34	3.45	3.63	3.80
COP in W/W								1.48	1.75	1.93	2.03	2.34	2.69	2.86	3.09	3.56	4.12

**ASHRAE HBP 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								707	921	1087	1181	1495	1869	2054	2310	2825	
Power cons. in W								449	511	554	577	643	708	736	770	826	
Current cons. in A								2.14	2.45	2.65	2.75	3.05	3.35	3.48	3.65	3.94	
COP in W/W								1.57	1.80	1.96	2.05	2.33	2.64	2.79	3.00	3.42	



Accessories for	SC18GH	Figure	Code number
Starting device	470 mm cable length	a3	117-7038
	550 mm cable length		117-7039
Cover		b	103N2008
Starting relay		a2	Components of starting device
Start. capacitor 80 µF		c	
Run capacitor		e	
Cord relief		d	103N1004

Test conditions	EN 12900/CECOMAF	ASHRAE HBP
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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