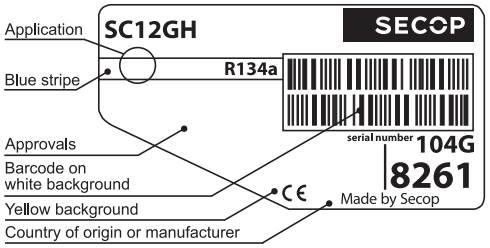
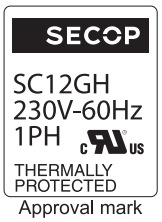
SC12GH
Heat Pump Compressor
R134a
220-240V 50/60Hz





Approval mark

General

Code number	104G8261
Approvals	EN 60335-2-34, UL984
Compressors on pallet	80

Application

Application		HBP	
Frequency	Hz	50	60
Evaporating temperature	°C	-10 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_2	–	–	F_2
38°C		–	–	F_2	–	–	F_2
43°C		–	–	F_2	–	–	F_2
Remarks on application:							

S = Static cooling normally sufficient
O = Oil cooling
F_1 = Fan cooling 1.5 m/s (compressor compartment temperature equal to ambient temperature)
F_2 = Fan cooling 3.0 m/s necessary
SG = Suction gas cooling normally sufficent
– = not applicable in this area

Motor

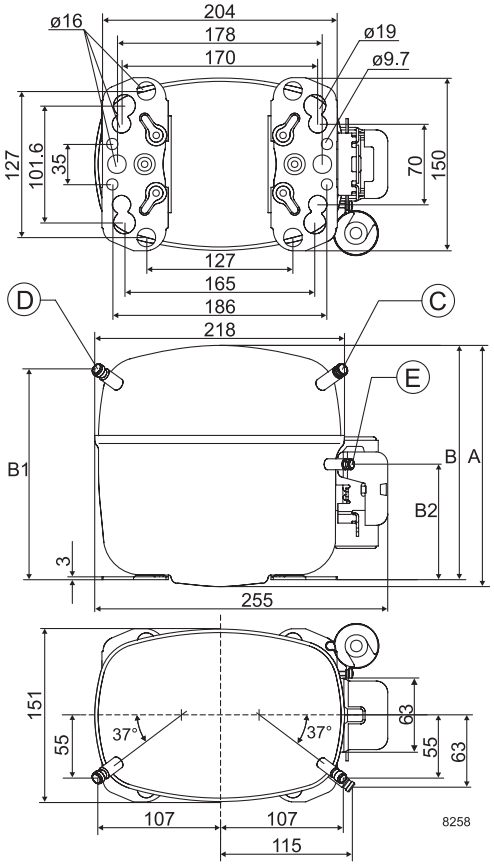
Motor type		CSIR	
LRA (rated after 4 sec. UL984), HST | LST	A	19.7	–
Cut in Current, HST | LST	A	19.7	–
Resistance, main | start winding (25°C)	Ω	4.3	15.3

Design

Displacement	cm^3	12.87
Oil quantity (type)	cm^3	500 (polyolester)
Maximum refrigerant charge	g	1300
Free gas volume in compressor	cm^3	1510
Weight without electrical equipment	kg	12.95

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	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:			



EN 12900 Household (CECOMAF) 220V, 50Hz, fan cooling F_2

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									429	524	577	752	957	1058	1196	1471	1787
Power cons. in W									356	386	401	445	487	505	526	561	590
Current cons. in A									3.08	3.16	3.21	3.34	3.47	3.53	3.60	3.73	3.86
COP in W/W									1.20	1.36	1.44	1.69	1.97	2.10	2.27	2.62	3.03

EN 12900 Household (CECOMAF) 220V, 60Hz, fan cooling F_2

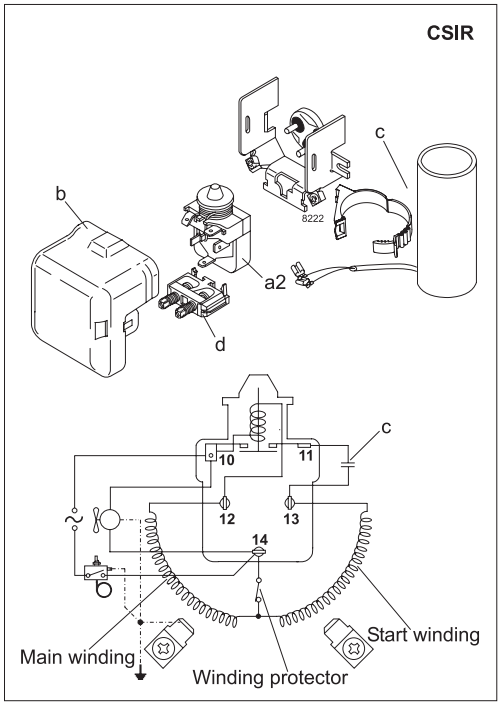
Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10	15	20
Capacity in W								371	511	619	680	880	1116	1233	1393	1714	
Power cons. in W								332	389	426	445	501	556	579	608	658	
Current cons. in A								2.37	2.61	2.76	2.84	3.06	3.28	3.37	3.49	3.68	
COP in W/W								1.12	1.31	1.45	1.53	1.76	2.01	2.13	2.29	2.60	

ASHRAE HBP 220V, 50Hz, fan cooling F_2

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									474	579	637	830	1055	1166	1318	1622	1972
Power cons. in W									356	385	400	443	484	502	522	556	584
Current cons. in A									3.08	3.16	3.20	3.33	3.46	3.52	3.59	3.72	3.84
COP in W/W									1.33	1.50	1.59	1.87	2.18	2.33	2.52	2.92	3.38

ASHRAE HBP 220V, 60Hz, fan cooling F_2

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								409	564	682	749	970	1230	1359	1536	1890	
Power cons. in W								332	388	425	444	499	552	575	604	653	
Current cons. in A								2.37	2.61	2.76	2.83	3.05	3.26	3.35	3.47	3.66	
COP in W/W								1.23	1.45	1.61	1.69	1.94	2.23	2.36	2.54	2.90	



Accessories for	SC12GH	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	117U6011
Cover		b	103N2008
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 HBP
Condensing temperature	55°C	55°C
Ambient temperature	32°C	35°C
Suction gas temperature	32°C	35°C
Liquid temperature	55°C	46.1°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

Secop can accept no responsibility for possible errors in catalogues, brochures and other printed material. Secop 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 subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Secop and the Secop logotype are trademarks of Secop GmbH. All rights reserved. **www.secop.com**