

Datasheets

SC10GH Heat pump Compressor

R134a, 220-240V 50/60Hz

General

Code number	104G8041
Approvals	EN 60335-2-34, UL984, CCC
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 ₂	—	—	F ₂
38°C		—	—	F ₂	—	—	F ₂
43°C		—	—	F ₂	—	—	F ₂
Remarks on application:							

Motor

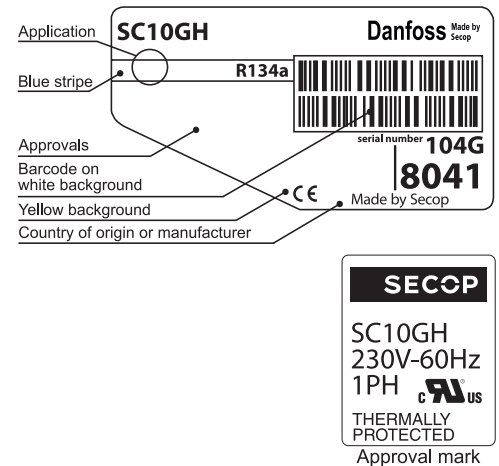
Motor type	CSIR			
LRA (rated after 4 sec. UL984), HST LST	A	14.8	–	
Cut in Current, HST LST	A	14.8	–	
Resistance, main start winding (25°C)	Ω	5.0	13.7	

Design

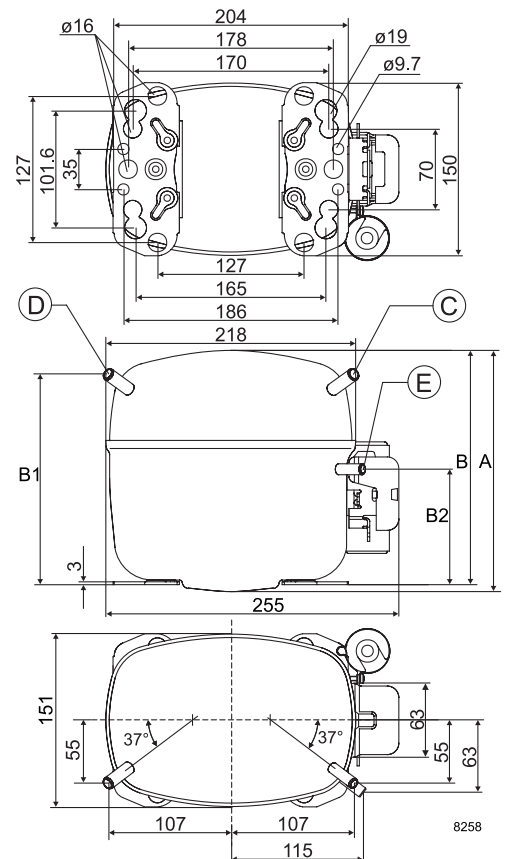
Displacement	cm ³	10.29
Oil quantity (type)	cm ³	500 (polyolester)
Maximum refrigerant charge	g	1300
Free gas volume in compressor	cm ³	1410
Weight without electrical equipment	kg	12.2

Dimensions

Height	mm	A	209
		B	193
		B1	173
		B2	90
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	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
 F₁ = Fan cooling 1.5 m/s
 (compressor compartment temperature equal to ambient temperature)
 F₂ = 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 F₂

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								233	352	434	478	613	762	832	927	1113	1323
Power cons. in W								235	281	309	323	361	395	409	426	453	476
Current cons. in A								2.34	2.57	2.73	2.80	3.03	3.26	3.36	3.48	3.70	3.92
COP in W/W								0.99	1.25	1.41	1.48	1.70	1.93	2.03	2.18	2.46	2.78

EN 12900 Household (CECOMAF) 220V, 60Hz, fan cooling F₂

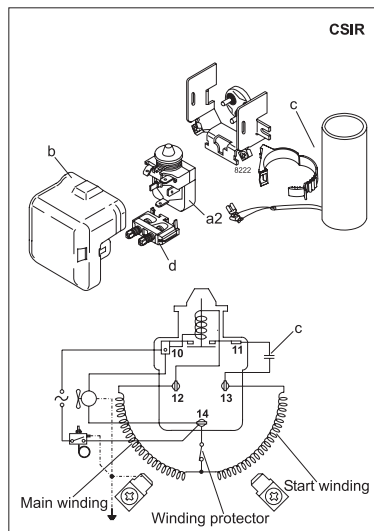
Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10	15	20
Capacity in W								318	421	498	541	683	849	930	1042	1265	
Power cons. in W								287	340	374	392	444	496	518	545	593	
Current cons. in A								2.13	2.37	2.54	2.63	2.90	3.18	3.30	3.46	3.76	
COP in W/W								1.11	1.24	1.33	1.38	1.54	1.71	1.80	1.91	2.13	

ASHRAE HBP 220V, 50Hz, fan cooling F₂

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								257	387	477	525	675	840	918	1023	1230	1465
Power cons. in W								235	280	308	321	359	393	406	423	449	472
Current cons. in A								2.34	2.57	2.72	2.80	3.02	3.24	3.34	3.46	3.68	3.89
COP in W/W								1.09	1.38	1.55	1.64	1.88	2.14	2.26	2.42	2.74	3.10

ASHRAE HBP 220V, 60Hz, fan cooling F₂

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								354	467	552	599	756	939	1029	1153	1400	
Power cons. in W								289	340	374	391	442	492	514	541	587	
Current cons. in A								2.11	2.36	2.52	2.61	2.87	3.14	3.26	3.42	3.72	
COP in W/W								1.23	1.37	1.48	1.53	1.71	1.91	2.00	2.13	2.38	



Accessories for	SC10GH	Figure	Code number	Test conditions	EN 12900/CECOMAF	ASHRAE HBP
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	117U6005	Suction gas temperature	32°C	32°C
Cover		b	103N2008	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	—			

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