

SC15GH Heat Pump Compressor R134a 220-240V 50/60Hz

General

Code number	104G8561
Approvals	EN 60335-2-34, UL984/CSA-C22.2, CCC
Compressors on pallet	80

Application

Application	HBP			
	Hz	50	60	
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		
		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

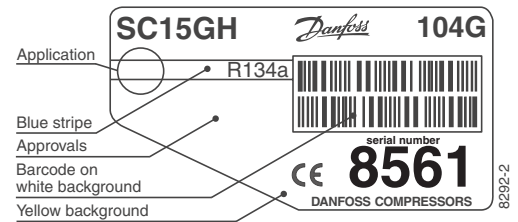
Motor type	CSIR		
LRA (rated after 4 sec. UL984), HST LST	A	19.7	-
Cut in Current, HST LST	A	19.7	-
Resistance, main start winding (25°C)	Ω	4.3	15.3

Design

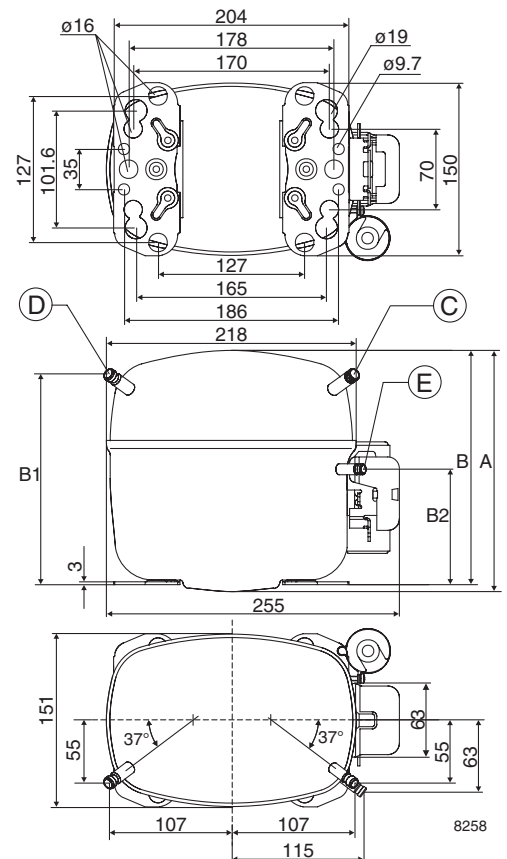
Displacement	cm ³	15.28
Oil quantity (type)	cm ³	500 (polyolester)
Maximum refrigerant charge	g	1300
Free gas volume in compressor	cm ³	1410
Weight without electrical equipment	kg	13.5

Dimensions

Height	A	209
	B	203
	B1	183
	B2	90
Suction connector	location/I.D. mm angle	C 10.2 37°
	material comment	Cu-plated steel Al caps
Process connector	location/I.D. mm angle	D 6.2 37°
	material comment	Cu-plated steel Al caps
Discharge connector	location/I.D. mm angle	E 8.2 37°
	material comment	Cu-plated steel Al caps
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 F₁

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									559	664	723	915	1139	1249	1398	1698	2041
Power cons. in W									424	461	479	526	565	580	596	618	632
Current cons. in A									3.33	3.41	3.46	3.59	3.73	3.79	3.87	4.01	4.16
COP in W/W									1.32	1.44	1.51	1.74	2.02	2.15	2.35	2.75	3.23

EN 12900 Household (CECOMAF) 220V, 60Hz, fan cooling F₁

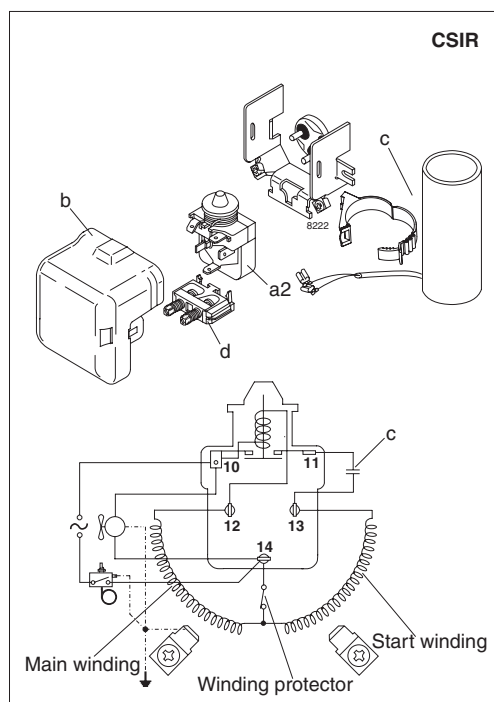
Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10	15	20
Capacity in W								425	582	705	776	1012	1295	1436	1629	2019	
Power cons. in W								355	424	470	494	566	639	671	711	782	
Current cons. in A								2.37	2.67	2.87	2.97	3.24	3.50	3.61	3.74	3.97	
COP in W/W								1.20	1.37	1.50	1.57	1.79	2.03	2.14	2.29	2.58	

ASHRAE HBP 220V, 50Hz, fan cooling F₁

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									615	732	796	1008	1255	1376	1541	1872	2252
Power cons. in W									423	460	477	523	562	576	592	614	627
Current cons. in A									3.33	3.41	3.45	3.59	3.72	3.78	3.86	4.00	4.15
COP in W/W									1.45	1.59	1.67	1.93	2.23	2.39	2.60	3.05	3.59

ASHRAE HBP 220V, 60Hz, fan cooling F₁

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								466	639	776	854	1115	1427	1582	1796	2227	
Power cons. in W								355	423	469	493	564	635	667	706	775	
Current cons. in A								2.37	2.67	2.87	2.96	3.23	3.49	3.60	3.73	3.95	
COP in W/W								1.31	1.51	1.66	1.66	1.98	2.25	2.37	2.54	2.87	



Accessories for	SC15GH	Figure	Code number
PTC starting device	6.3 mm spade connectors	-	-
	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		-	-

Test conditions	EN 12900/CECOMAF	ASHRAE HBP
Condensing temperature	55°C	54.4°C
Ambient temperature	32°C	35°C
Suction gas temperature	32°C	35°C
Liquid temperature	no subcooling	46.1°C

Mounting accessories	Code number	
Bolt joint for one compressor	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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