

## SC12FT Tropical Compressor R134a 220-240V 50/60Hz

### General

Code number	104G8205
Approvals	EN 60335-2-34
Compressors on pallet	80

### Application

Application	LBP			
Frequency	Hz	50		60
Evaporating temperature	°C	-35 to -5		-35 to -5
Voltage range	V	187 - 254		198 - 254
Max. condensing temperature continuous (short)	°C	60 (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>1</sub>	-	-	F <sub>1</sub>	-	-
38°C		F <sub>1</sub>	-	-	F <sub>1</sub>	-	-
43°C		F <sub>2</sub>	-	-	F <sub>2</sub>	-	-

Remarks on application:  
F<sub>1</sub> at 43°C ambient temperature possible at 220V nominal (187-242V)

### Motor

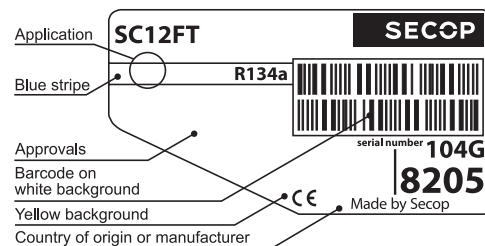
Motor type	RSIR/CSIR		
LRA (rated after 4 sec. UL984), HST   LST	A	12.6	12.4
Cut in Current, HST   LST	A	12.6	17.2
Resistance, main   start winding (25°C)	Ω	6.7	11.8

### Design

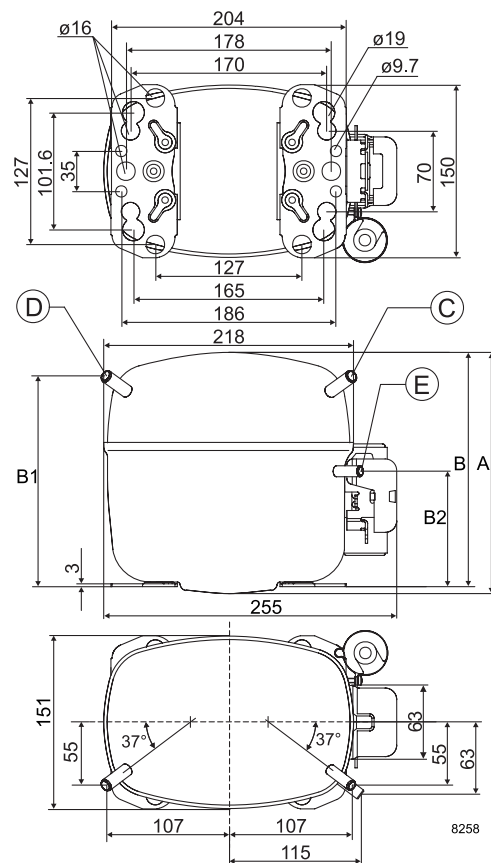
Displacement	cm <sup>3</sup>	12.87
Oil quantity (type)	cm <sup>3</sup>	550 (polyolester)
Maximum refrigerant charge	g	1300
Free gas volume in compressor	cm <sup>3</sup>	1510
Weight without electrical equipment	kg	12.6

### Dimensions

Height	mm	A	209
		B	203
		B1	183
		B2	100
Suction connector	location/I.D. mm   angle	C	8.2   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	6.2   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			103	163	233	259	314	408	517	599	645						
Power cons. in W			184	226	265	278	303	341	380	407	422						
Current cons. in A			193	245	298	316	351	405	458	2.55	511						
COP in W/W			0.56	0.72	0.88	0.93	1.03	1.20	1.36	1.47	1.53						

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

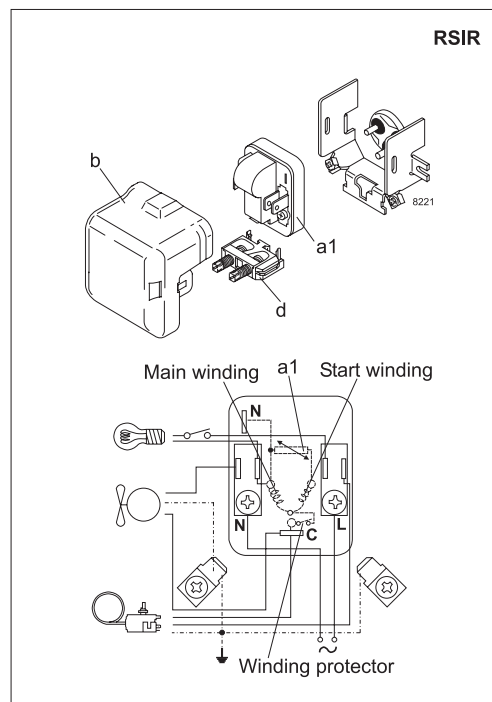
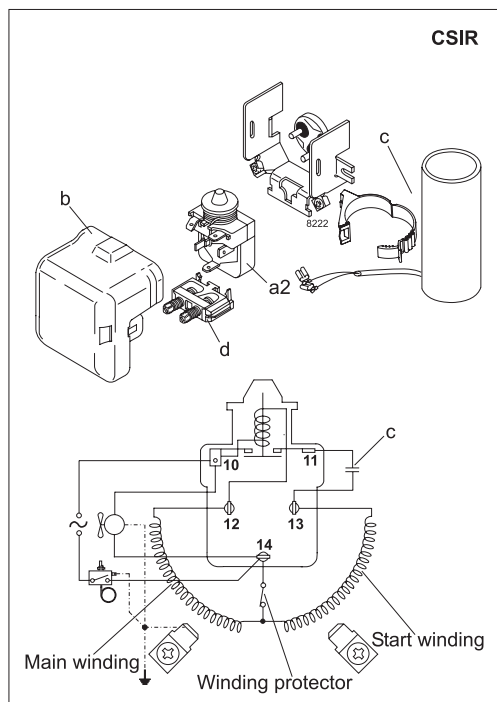
Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10	15	20
Capacity in W			125	192	272	302	366	477	608	706	761						
Power cons. in W			193	245	298	316	351	405	458	496	511						
Current cons. in A			1.58	1.75	1.92	1.98	2.10	2.30	2.50	2.63	2.71						
COP in W/W			0.64	0.78	0.91	0.96	1.04	1.18	1.33	1.43	1.49						

**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			126	201	287	320	387	503	639	741	798						
Power cons. in W			184	226	265	278	303	341	380	407	422						
Current cons. in A			193	245	298	316	351	405	458	2.55	511						
COP in W/W			0.69	0.89	1.08	1.15	1.28	1.48	1.68	1.82	1.89						

**ASHRAE LBP** 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			153	237	336	373	452	589	751	874	942						
Power cons. in W			193	245	298	316	351	405	458	493	511						
Current cons. in A			1.58	1.75	1.92	1.98	2.10	2.30	2.50	2.63	2.71						
COP in W/W			0.79	0.97	1.13	1.18	1.29	1.46	1.64	1.77	1.84						



Accessories for	SC12FT	Figure	Code number
PTC starting device	6.3 mm spade connectors	a1	103N0011
	4.8 mm spade connectors		-
Starting relay	6.3 mm spade connectors	a2	117U6003
Cover		b	103N2009
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 LBP
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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