

# SC18G Universal Compressor R134a 115V 60Hz

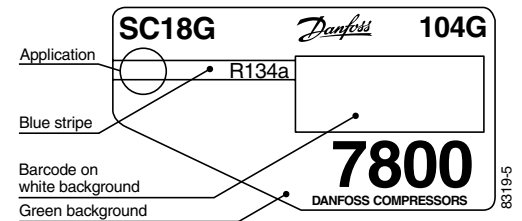
Data Sheet (Replaces CG.42.H3.22)

## General

Compressor (CU-plated steel connectors)	<b>SC18G</b>
Codenumber	104G7800

## Application

Application		LBP/HBP
Evaporating temperature range	°F (°C)	-13 to 59 (-25 to 15)
Voltage range	V/Hz	LBP: 95 - 135 /60 MBP: 95 - 135 /60 HBP: 103 - 127 /60
Motor type		CSIR
Max. ambient temperature	°F (°C)	110 (43)
Comp. cooling at max. ambient temperature	110°F (43°C)	F <sub>2</sub>



- S = Static cooling normally sufficient
- O = Oil cooling
- F<sub>1</sub> = Fan cooling 1.5 m/s (compressor compartment temp. equal to ambient temperature)
- F<sub>2</sub> = Fan cooling 3.0 m/s necessary

## Design

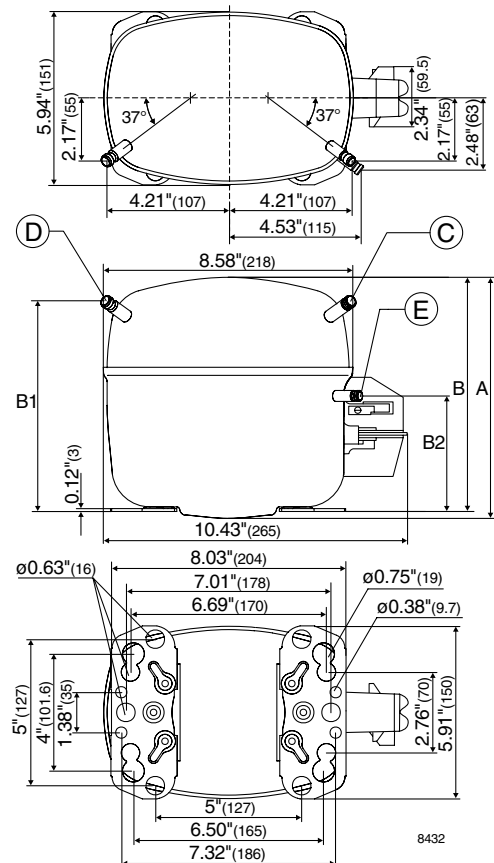
Displacement	cu.in. (cm <sup>3</sup> )	1.08 (17.69)
Oil quantity	fl.oz. (cm <sup>3</sup> )	20.3 (600)
Maximum refrigerant charge	oz. (g)	45.5 (1300)
Free gas vol. in compressor housing	fl.oz. (cm <sup>3</sup> )	49.4 (1460)
Weight without electrical equipment	lbs. (kg)	30.2 (13.7)

## Motor

Motor size	watt	755
LRA (rated after 4 sec.UL984) HST	A	53.0
Cut-in current HST	A	53.0
Resistance, main and start winding (77°F) Ω		0.7/2.9
Approvals		UL984/CSA-C22.2

## Dimensions

Height	in. (mm)	A	8.62 (219)
		B	8.39 (213)
		B1	7.60 (193)
		B2	4.33 (110)
Suction connector	location/I.D. in. (mm)	C	0.387-0.385 (9.7±0.09)
Process connector	location/I.D. in. (mm)	D	0.252-0.259 (6.5±0.09)
Discharge connector	location/I.D. in. (mm)	E	0.252-0.259 (6.5±0.09)
Compressors on a pallet	pcs.		60



**Capacity at LBP conditions (ASHRAE)**
**Btu/h**

Comp.\°F	-13	-10	0	10	20	30	40	45	50	59
Comp.\°C	-25	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	7.2	10	15
SC18G	1142	1357	2112	2952	3908	5008	6285	6999	7768	9308

**Capacity at HBP conditions (ASHRAE)**
**Btu/h**

Comp.\°F	-13	-10	0	10	20	30	40	45	50	59
Comp.\°C	-25	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	7.2	10	15
SC18G	1015	1206	1877	2622	3469	4443	5570	6200	6878	8233

**Capacity (EN 12900/CECOMAF)**
**watt**

Comp.\°C	-25	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	7.2	10	15
Comp.\°F	-13	-10	0	10	20	30	40	45	50	59
SC18G	264	315	495	695	921	1181	1481	1648	1829	2187

**Power consumption**
**watt**

Comp.\°F	-13	-10	0	10	20	30	40	45	50	59
Comp.\°C	-25	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	7.2	10	15
SC18G	374	404	504	599	691	780	868	912	956	1035

**Current consumption**
**A**

Comp.\°F	-13	-10	0	10	20	30	40	45	50	59
Comp.\°C	-25	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	7.2	10	15
SC18G	6.56	6.71	7.24	7.80	8.41	9.05	9.72	10.07	10.43	11.11

**EER at LBP conditions (ASHRAE)**
**Btu/Wh**

Comp.\°F	-13	-10	0	10	20	30	40	45	50	59
Comp.\°C	-25	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	7.2	10	15
SC18G	3.06	3.35	4.19	4.93	5.66	6.42	7.24	7.67	8.13	8.99

**EER at HBP conditions (ASHRAE)**
**Btu/Wh**

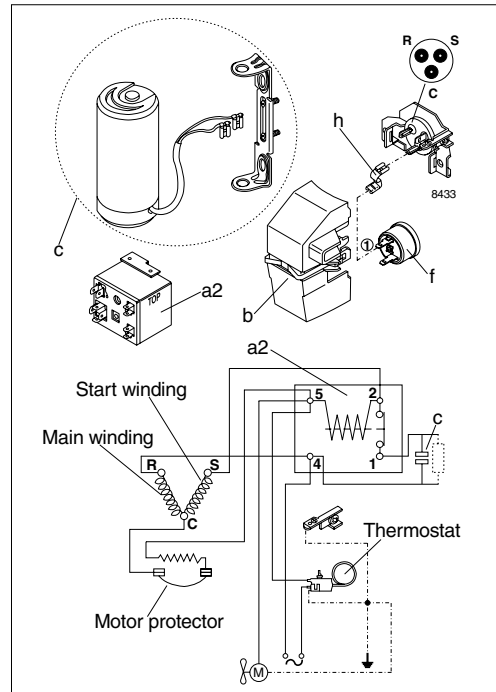
Comp.\°F	-13	-10	0	10	20	30	40	45	50	59
Comp.\°C	-25	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	7.2	10	15
SC18G	2.72	2.98	3.73	4.38	5.02	5.70	6.42	6.80	7.20	7.95

**COP (EN 12900/CECOMAF)**
**W/W**

Comp.\°C	-25	-23.3	-17.8	-12.2	-6.7	-1.1	4.4	7.2	10	15
Comp.\°F	-13	-10	0	10	20	30	40	45	50	59
SC18G	0.71	0.79	0.99	1.16	1.34	1.51	1.70	1.80	1.91	2.11

**Accessories**

Devices	Fig.	SC18G
Starting relay	a2	117-7441
Starting capacitor 410 µF	c	117U5042
Cover	b	(117U1021)
Protector	f	(117U3212)
Protector holder	h	(117U0438)
Mounting accessories	∅ in. (mm)	
Bolt joint for one compressor	5/8 (16)	118-1917
Bolt joint in quantities	5/8 (16)	118-1918
Snap-on in quantities	5/8 (16)	118-1919


**Test conditions**

1. Condensing temperature
  2. Ambient and suction gas temp.
  3. Liquid temperature
- Fan cooling  $F_2$ , 115V 60Hz

**ASHRAE**

1. LBP 130°F (54,4°C)
2. 90°F (32°C)
3. 90°F (32°C)

1. HBP 130°F (54,4 °C)
2. 95°F (35°C)
3. 115°F (46°C)

**EN 12900/CECOMAF**

1. 55°C (131°F)
2. 32°C (90°F)
3. 55°C (131°F)