

## SC18MFX Standard Compressor R134a 220-240V 50Hz & 208-230V 60Hz

### General

Code number	104G8804
Approvals	EN 60335-2-34, CCC
Compressors on pallet	80

### Application

Application	MBP			
	Hz	50	60	
Frequency	Hz	50	60	
Evaporating temperature	°C	-20 to 10	-20 to 7.2	
Voltage range	V	187 - 254	187 - 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		
		LBP	MBP	HBP	LBP	MBP	HBP
32°C		-	F <sub>2</sub>	-	-	F <sub>2</sub>	-
38°C		-	F <sub>2</sub>	-	-	F <sub>2</sub>	-
43°C		-	F <sub>2</sub>	-	-	F <sub>2</sub>	-
Remarks on application: 60Hz CSR only							

### Motor

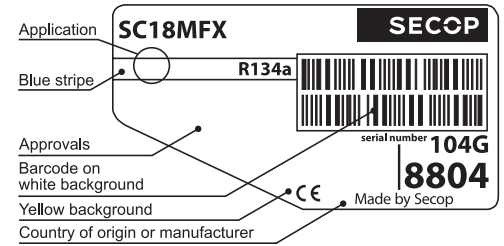
Motor type	CSIR/CSR		
LRA (rated after 4 sec. UL984), HST   LST	A	18.6	-
Cut in Current, HST   LST	A	18.6	-
Resistance, main   start winding (25°C)	Ω	3.8	13.7

### Design

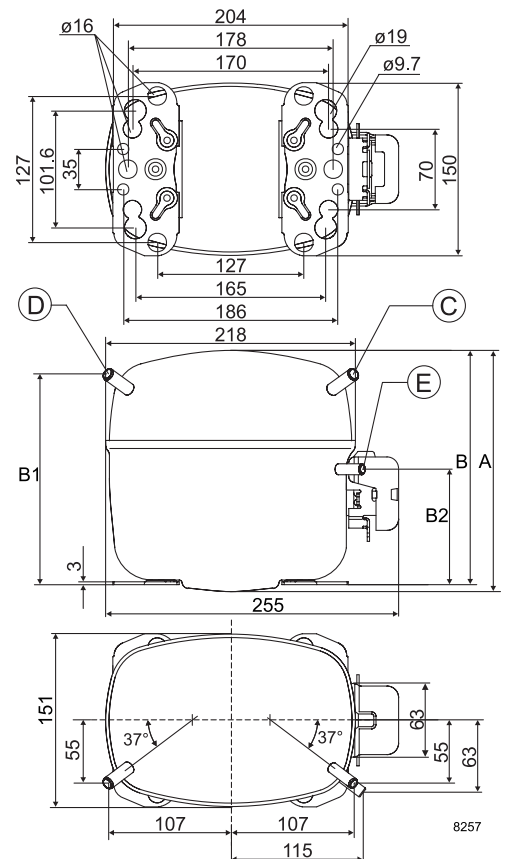
Displacement	cm <sup>3</sup>	17.69
Oil quantity (type)	cm <sup>3</sup>	600 (polyolester)
Maximum refrigerant charge	g	1300
Free gas volume in compressor	cm <sup>3</sup>	1460
Weight without electrical equipment	kg	13.8

### Dimensions

Height	mm	A	219
		B	213
		B1	193
		B2	110
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	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 (CSIR), 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							424	553	709	828	894	1113	1370	1496	1670		
Power cons. in W							414	470	527	565	585	644	705	733	768		
Current cons. in A							3.04	3.23	3.43	3.57	3.64	3.86	4.09	4.19	4.32		
COP in W/W							1.02	1.18	1.34	1.46	1.53	1.73	1.94	2.04	2.17		

**EN 12900 Household (CECOMAF)** 220V, 50Hz (CSR), RC 10µF, fan cooling F<sub>2</sub>

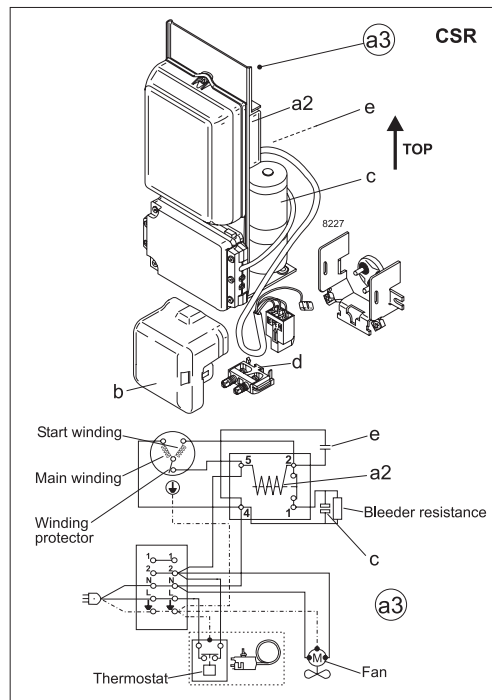
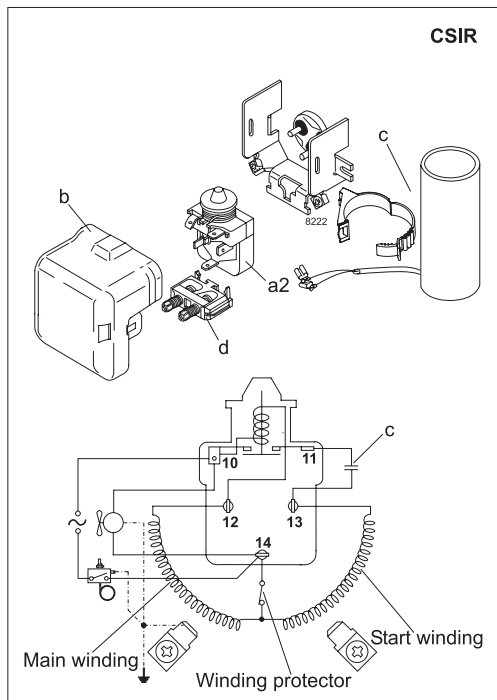
Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10	15	20
Capacity in W							430	563	722	845	912	1137	1400	1529	1706		
Power cons. in W							400	455	507	541	558	607	657	679	707		
Current cons. in A							2.26	2.46	2.67	2.81	2.89	3.11	3.34	3.45	3.58		
COP in W/W							1.08	1.24	1.42	1.56	1.64	1.87	2.13	2.25	2.41		

**ASHRAE MBP** 220V, 50Hz (CSIR), 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							502	657	843	988	1067	1335	1647	1784	1965		
Power cons. in W							413	469	525	563	582	641	701	729	764		
Current cons. in A							3.03	3.23	3.43	3.56	3.63	3.85	4.07	4.18	4.31		
COP in W/W							1.22	1.40	1.61	1.75	1.83	2.08	2.35	2.45	2.57		

**ASHRAE MBP** 220V, 50Hz (CSR), RC 10µF, 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							510	669	860	1008	1090	1363	1683	1823	2008		
Power cons. in W							400	454	506	539	556	605	654	676	704		
Current cons. in A							2.25	2.45	2.66	2.81	2.88	3.10	3.33	3.43	3.57		
COP in W/W							1.28	1.47	1.70	1.87	1.96	2.25	2.57	2.70	2.85		



Accessories for	SC18MFX (50Hz)	Figure	Code number
Starting device	550 mm cable length	a3	117-7027
	1000 mm cable length		117-7040
Starting relay		a2	Components of starting device
Start. capacitor 80 µF		c	
Run capacitor 10 µF		e	
Starting relay	6.3 mm spade connectors	a2	117U6019
Start. capacitor 80 µF	6.3 mm spade connectors	c	117U5017
Cover		b	103N2008
Cord relief		d	103N1004

Test conditions	EN 12900/CECOMAF	ASHRAE MBP
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

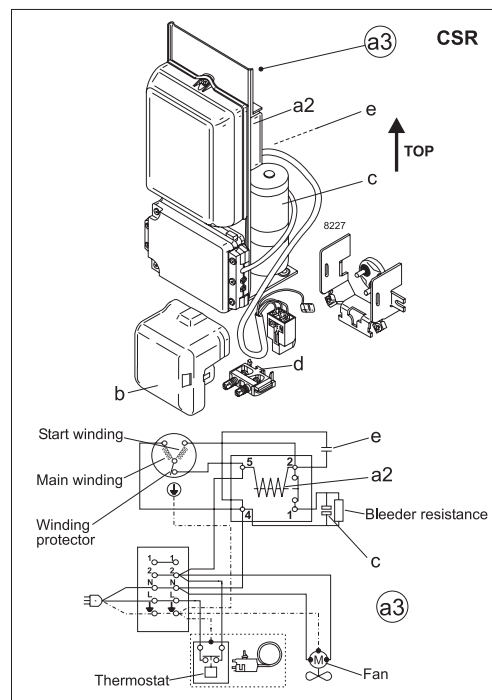
Mounting accessories	Code number	
Bolt joint for one comp.	Ø: 16 mm	118-1917
Bolt joint in quantities	Ø: 16 mm	118-1918
Snap-on in quantities	Ø: 16 mm	118-1919

**EN 12900 Household (CECOMAF)** 220V, 60Hz (CSR), RC 10µF, 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							514	668	851	991	1067	1322	1621	1767			
Power cons. in W							460	520	585	630	653	724	798	831			
Current cons. in A							2.06	2.34	2.63	2.83	2.93	3.25	3.58	3.73			
COP in W/W							1.12	1.28	1.45	1.57	1.63	1.83	2.03	2.13			

**ASHRAE MBP** 220V, 60Hz (CSR), RC 10µF, 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							609	793	1012	1182	1274	1586	1948	2106			
Power cons. in W							459	519	583	628	651	721	795	828			
Current cons. in A							2.05	2.33	2.62	2.82	2.92	3.24	3.57	3.72			
COP in W/W							1.33	1.53	1.73	1.88	1.96	2.20	2.45	2.54			



Accessories for	SC18MFX (60Hz)	Figure	Code number
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	1000 mm cable length		117-7040
Starting relay		a2	Components of starting device
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Run capacitor 10 µF		e	
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