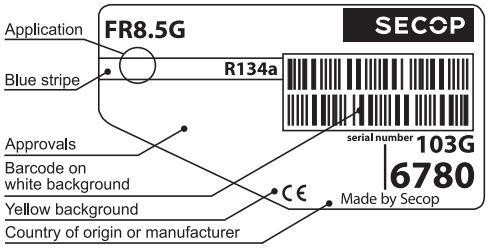
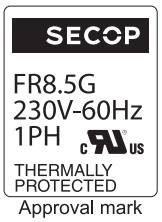
FR8.5G
Universal Compressor
R134a
220-240V 50/60Hz





Approval mark

General

Code number	103G6780
Approvals	EN 60335-2-34, UL984, CCC
Compressors on pallet	80

Application

Application		LBP/HBP	LBP
Frequency	Hz	50	60
Evaporating temperature	°C	-30 to 10	-30 to -10
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		S	F_2	F_2	S	–	–
38°C		S	F_2	F_2	S	–	–
43°C		F_1	F_2	F_2	F_1	–	–
Remarks on application: HBP at 198 - 254V 50Hz only.							

S = Static cooling normally sufficient
O = Oil cooling
F_1 = Fan cooling 1.5 m/s (compressor compartment temperature equal to ambient temperature)
F_2 = Fan cooling 3.0 m/s necessary
SG = Suction gas cooling normally sufficent
– = not applicable in this area

Motor

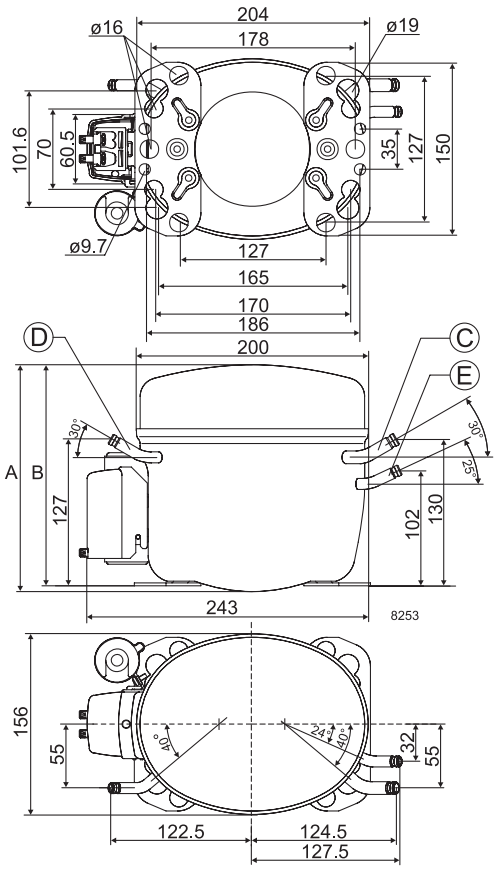
Motor type		RSIR/CSIR	
LRA (rated after 4 sec. UL984), HST | LST	A	8.2	8.1
Cut in Current, HST | LST	A	8.2	12.8
Resistance, main | start winding (25°C)	Ω	8.9	12.0

Design

Displacement	cm^3	7.95
Oil quantity (type)	cm^3	450 (polyolester)
Maximum refrigerant charge	g	900
Free gas volume in compressor	cm^3	1350
Weight without electrical equipment	kg	10.6

Dimensions

Height	mm	A	196
		B	191
		B1	–
		B2	–
Suction connector	location/I.D. mm | angle	C	8.2 | 30°
	material | comment		Cu-plated steel | Al cap
Process connector	location/I.D. mm | angle	D	6.2 | 30°
	material | comment		Cu-plated steel | Al cap
Discharge connector	location/I.D. mm | angle	E	6.2 | 25°
	material | comment		Cu-plated steel | Al cap
Oil cooler connector	location/I.D. mm | angle	F	–
	material | comment		–
Connector tolerance	I.D. mm		±0.09
Remarks:			



EN 12900 Household (CECOMAF) 220V, 50Hz, fan cooling F_2

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				84.9	123	138	171	228	298	351	381	478	592	647	722		
Power cons. in W				127	151	159	176	203	231	251	261	291	321	335	352		
Current cons. in A				1.16	1.22	1.25	1.30	1.38	1.47	1.53	1.56	1.67	1.78	1.83	1.90		
COP in W/W				0.67	0.82	0.87	0.97	1.12	1.29	1.40	1.46	1.65	1.84	1.93	2.05		

EN 12900 Household (CECOMAF) 220V, 60Hz, fan cooling F_2

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				92.3	138	156	195	263	345								
Power cons. in W				134	164	174	197	233	273								
Current cons. in A				1.02	1.12	1.16	1.24	1.37	1.53								
COP in W/W				0.69	0.85	0.90	0.99	1.13	1.26								

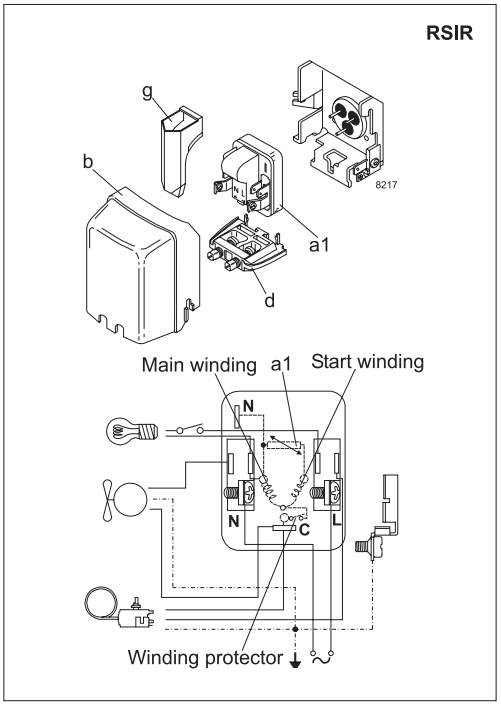
ASHRAE LBP 220V, 50Hz, fan cooling F_2

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				105	152	171	211	282	368	434	471	592	734	803	898		
Power cons. in W				127	151	159	176	203	231	251	261	291	321	335	352		
Current cons. in A				1.16	1.22	1.25	1.30	1.38	1.47	1.53	1.56	1.67	1.78	1.83	1.90		
COP in W/W				0.83	1.01	1.07	1.19	1.39	1.59	1.73	1.81	2.04	2.29	2.40	2.55		

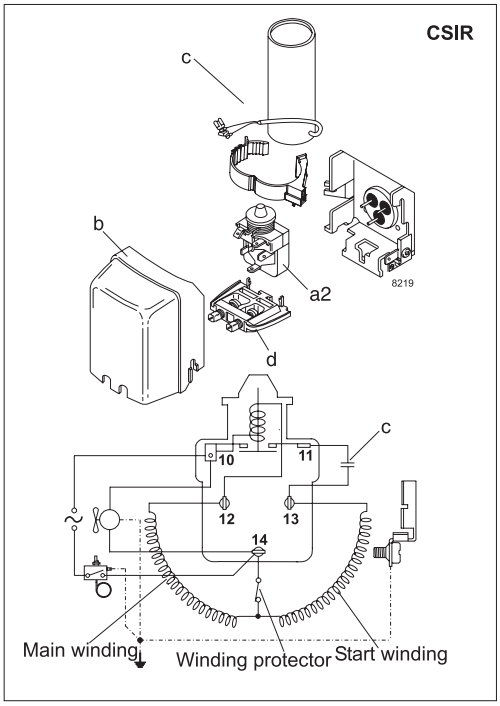
ASHRAE LBP 220V, 60Hz, fan cooling F_2

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				114	171	193	241	325	426								
Power cons. in W				134	164	174	197	233	273								
Current cons. in A				1.02	1.12	1.16	1.24	1.37	1.53								
COP in W/W				0.85	1.04	1.11	1.22	1.39	1.56								

RSIR



CSIR



Accessories for	FR8.5G	Figure	Code number
PTC starting device	6.3 mm spade connectors	a1	103N0011
	4.8 mm spade connectors		103N0018
Starting relay	6.3 mm spade connectors	a2	117U6015
Start. capacitor 80 µF	6.3 mm spade connectors	c	117U5015
Cover		b	103N2010
Cord relief		d	103N1010
Protection screen for PTC		g	103N0476

Test conditions	EN 12900/ CECOMAF	ASHRAE
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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