

FR7.5G

Universal Compressor

R134a

220-240V 50Hz

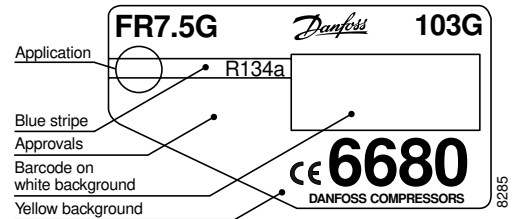
Data Sheet (Replaces CG.43.F1.02)

General

Compressor	FR7.5G
Code number	103G6680
Code number compressor with oil cooler	103G6690

Application

Application		LBP/HBP
Evaporating temperature range	°C	-30 to 10
Voltage range	V/Hz	LBP: 187 - 254 /50
		LBP: 198 - 254 /60
		HBP: 198 - 254 /50
Motor type		RSIR/CSIR
Max. ambient temperature	°C	43
Comp. cooling at ambient temp.	32°C	LBP: S
		HBP: F ₂
	38°C	LBP: S
		HBP: F ₂
43°C	LBP: O/F ₁	
	HBP: F ₂	



- 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

Design

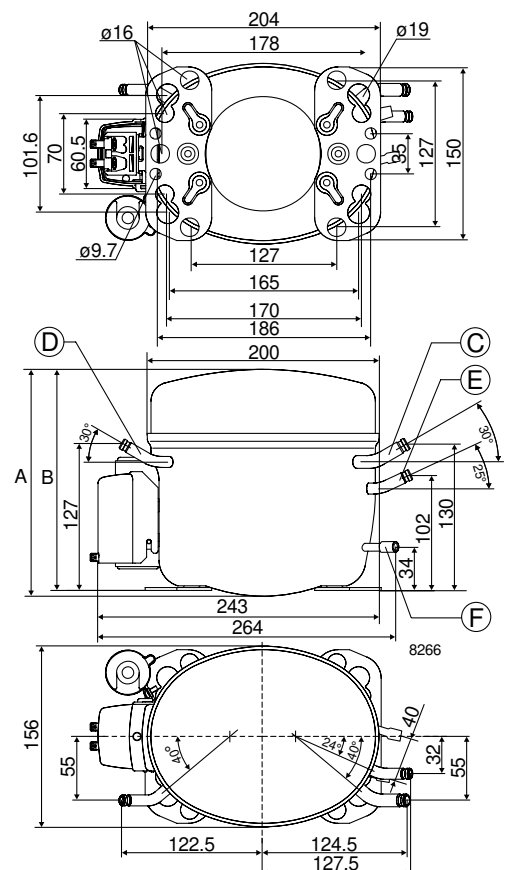
Displacement	cm ³	6.93
Oil quantity	cm ³	450
Maximum refrigerant charge	g	900
Free gas vol. in compressor	cm ³	1350
Weight without electrical equipment	kg	10.6

Motor

Motor size	watt	175
LRA (rated after 4 sec. UL984) LST/HST	A	6.8/8.1
Cut-in current LST/HST	A	11.4/8.1
Resistance, main and start winding (25°C)	Ω	10.7/13.0
Approvals		EN 60335-2-34, CCIB

Dimensions

Height	mm	A	196
		B	191
Suction connector	location/I.D. mm	C	8.2 ± 0.09
Process connector	location/I.D. mm	D	6.2 ± 0.09
Discharge connector	location/I.D. mm	E	6.2 ± 0.09
Oil cooler	location/I.D. mm	F	6.2 ± 0.09
Compressors on a pallet	pcs.		80



Capacity (EN 12900/CECOMAF)

watt

Evap. temp in °C	-30	-25	-23.3	-20	-15	-10	-5	0	5	7.2	10
FR7.5G, 50Hz	61.7	99.0	113	142	193	254	325	408	505	553	618
FR7.5G, 60Hz	66.5	112	130	166	228	300					

Capacity (ASHRAE)

watt

Evap. temp in °C	-30	-25	-23.3	-20	-15	-10	-5	0	5	7.2	10
FR7.5G, 50Hz	76.1	122	139	176	239	314	402	506	627	687	768
FR7.5G, 60Hz	82.0	139	160	204	281	371					

Power consumption

watt

Evap. temp in °C	-30	-25	-23.3	-20	-15	-10	-5	0	5	7.2	10
FR7.5G, 50Hz	108	126	133	147	170	194	220	246	272	284	298
FR7.5G, 60Hz	110	138	148	167	198	229					

Current consumption

A

Evap. temp in °C	-30	-25	-23.3	-20	-15	-10	-5	0	5	7.2	10
FR7.5G, 50Hz	0.81	0.90	0.93	0.99	1.09	1.19	1.30	1.41	1.52	1.58	1.64
FR7.5G, 60Hz	0.67	0.81	0.85	0.94	1.07	1.19					

COP (EN 12900/CECOMAF)

W/W

Evap. temp in °C	-30	-25	-23.3	-20	-15	-10	-5	0	5	7.2	10
FR7.5G, 50Hz	0.57	0.79	0.85	0.97	1.14	1.30	1.48	1.66	1.86	1.95	2.07
FR7.5G, 60Hz	0.60	0.81	0.88	0.99	1.15	1.31					

COP (ASHRAE)

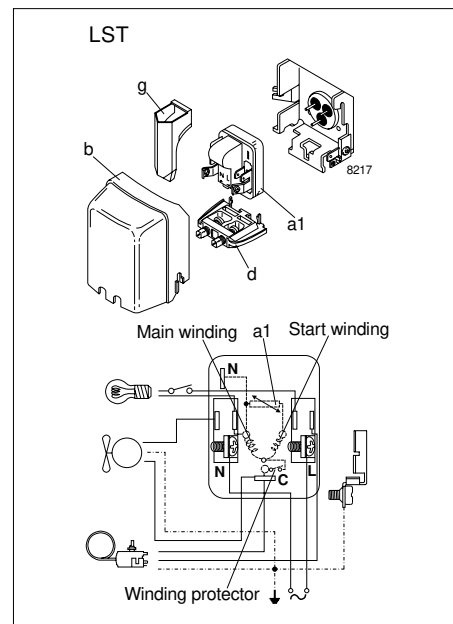
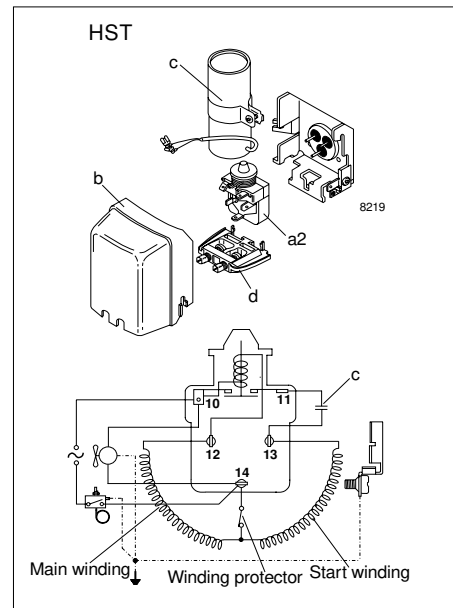
W/W

Evap. temp in °C	-30	-25	-23.3	-20	-15	-10	-5	0	5	7.2	10
FR7.5G, 50Hz	0.71	0.97	1.05	1.20	1.41	1.61	1.83	2.05	2.30	2.42	2.58
FR7.5G, 60Hz	0.74	1.00	1.08	1.22	1.42	1.62					

Test conditions	EN 12900/CECOMAF	ASHRAE
Condensing temperature	55°C	55°C
Ambient and suction gas temp.	32°C	32°C
Liquid temperature	55°C	32°C
50Hz: Fan cooling F_{21} , 220V		
60Hz: Fan cooling F_{22} , 220V		

Accessories

Devices	Fig.	FR7.5G
PTC starting device 6.3 mm spades 4.8 mm spades	a1	103N0011 103N0018
Starting relay	a2	117U6001
Cover	b	103N2010
Starting capacitor 80 µF	c	117U5015
Cord relief	d	103N1010
Protection screen for PTC	g	103N0476
Mounting accessories		
Bolt joint for one compressor		118-1917
Bolt joint in quantities		118-1918
Snap-on in quantities		118-1919



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