

FR8.5CL LBP Compressor R404A/R507 220-240V 50Hz

Data Sheet (Replaces CF.53.B1.02)

General

Compressor	FR8.5CL
Code number	103U2890

Application

Application	LBP	
Evaporating temperature range	°C	-45 to -10
Voltage range	V/Hz	198 - 254 /50
Motor type	CSIR	
Max. ambient temperature	°C	38
Comp. cooling at ambient temp.	32°C	F ₂
	38°C	F ₂

Design

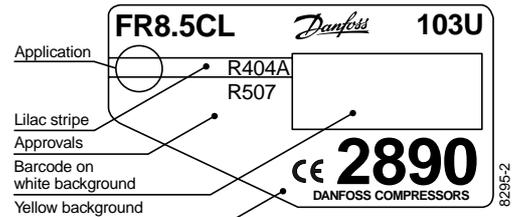
Displacement	cm ³	7.95
Oil quantity	cm ³	450
Maximum refrigerant charge	g	850
Free gas vol. in compressor	cm ³	1350
Weight without electrical equipment	kg	10.6

Motor

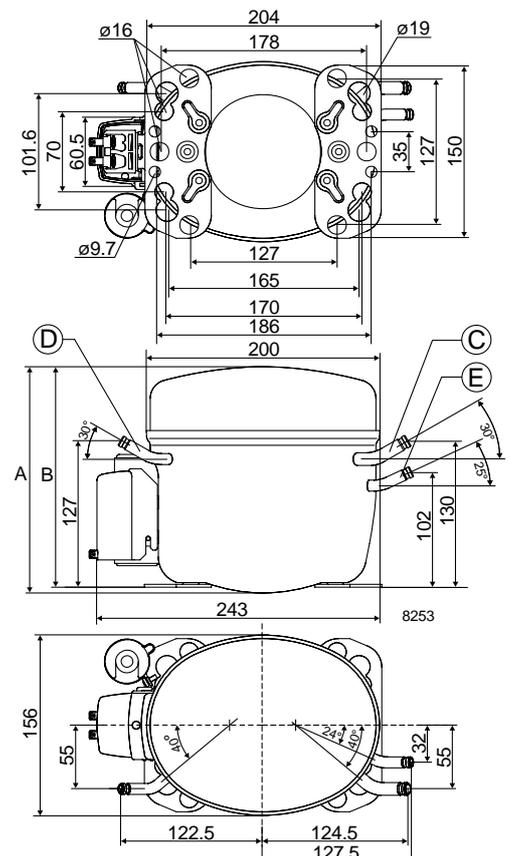
Motor size	watt	275
LRA (rated after 4 sec. UL984) HST	A	10.0
Cut-in current HST	A	10.0
Resistance, main and start winding (25°C)	Ω	7.3/12.0
Approvals	EN 60335-2-34	

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
Compressors on a pallet	pcs.	80	



- 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



Capacity (EN 12900/CECOMAF)

watt

Comp.°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10
FR8.5CL	99	126	168	222	290	317	372	468	577

Capacity (ASHRAE)

watt

Comp.°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10
FR8.5CL	115	147	195	259	338	369	434	546	674

Power consumption

watt

Comp.°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10
FR8.5CL	171	198	231	271	315	331	364	417	472

Current consumption

A

Comp.°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10
FR8.5CL	1.61	1.64	1.72	1.83	1.97	2.03	2.15	2.35	2.57

COP (EN 12900/CECOMAF)

W/W

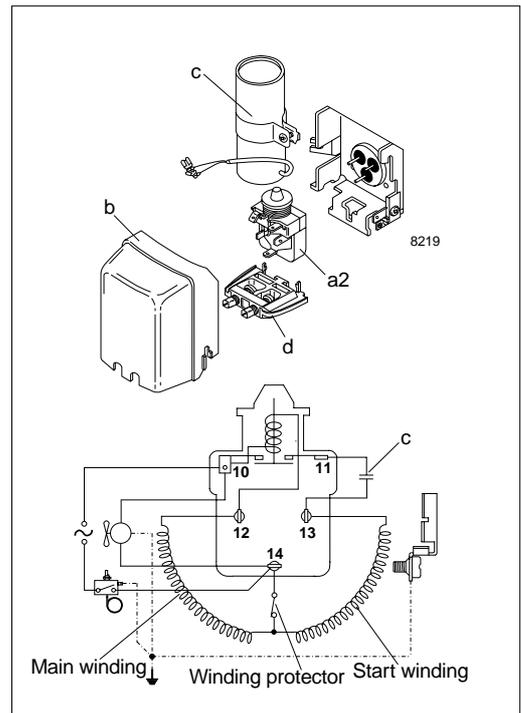
Comp.°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10
FR8.5CL	0.58	0.64	0.72	0.82	0.92	0.96	1.02	1.12	1.22

COP (ASHRAE)

W/W

Comp.°C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10
FR8.5CL	0.67	0.74	0.84	0.96	1.07	1.11	1.19	1.31	1.43

Test conditions	EN 12900/CECOMAF	ASHRAE
Condensing temperature	45°C	45°C
Ambient and suction gas temp.	32°C	32°C
Liquid temperature	45°C	32°C
Fan cooling F ₂ , 220V 50Hz		



Accessories

Devices	Fig.	FR8.5CL
Starting relay	a2	117U6010
Cover	b	103N2010
Starting capacitor 80 µF	c	117U5015
Cord relief	d	103N1010
Mounting accessories		
Bolt joint for one compressor		118-1917
Bolt joint in quantities		118-1918
Snap-on in quantities		118-1919