

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

## General

Code number	103U2890
Approvals	EN 60335-2-34
Compressors on pallet	80

## Application

Application	LBP		
Frequency	Hz	50	60
Evaporating temperature	°C	-45 to -10	-
Voltage range	V	198 - 254	-
Max. condensing temperature continuous (short)	°C	50 (60)	-
Max. winding temperature continuous (short)	°C	125 (135)	-

## Cooling requirements

Frequency	Hz	50			60		
Application		LBP	MBP	HBP	LBP	MBP	HBP
32°C		F <sub>2</sub>	-	-	-	-	-
38°C		F <sub>2</sub>	-	-	-	-	-
43°C		-	-	-	-	-	-
Remarks on application:							

## Motor

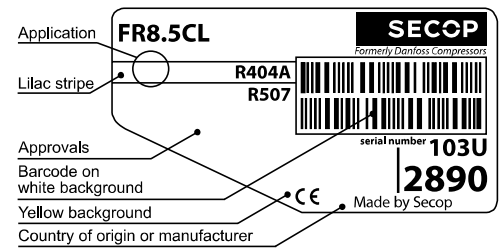
Motor type	CSIR		
LRA (rated after 4 sec. UL984), HST   LST	A	10.0	-
Cut in Current, HST   LST	A	10.0	-
Resistance, main   start winding (25°C)	Ω	7.3	12.0

## Design

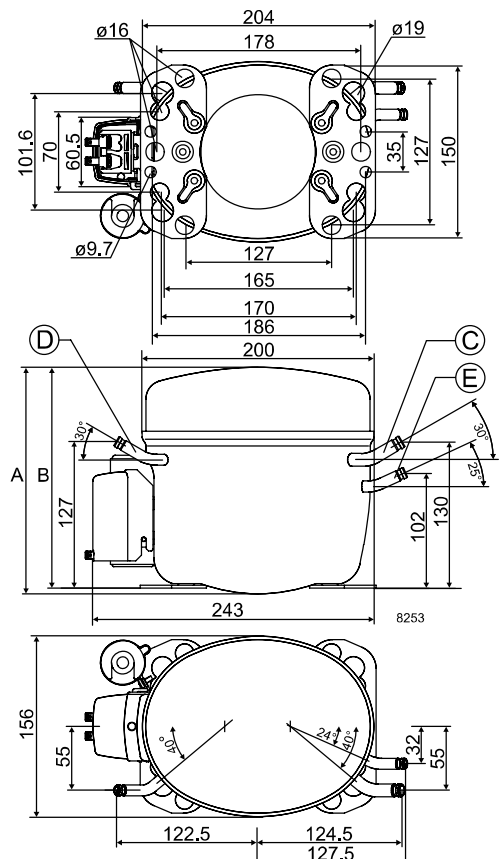
Displacement	cm <sup>3</sup>	7.95
Oil quantity (type)	cm <sup>3</sup>	450 (polyolester)
Maximum refrigerant charge	g	850
Free gas volume in compressor	cm <sup>3</sup>	1350
Weight without electrical equipment	kg	10.6

## 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:			



- 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

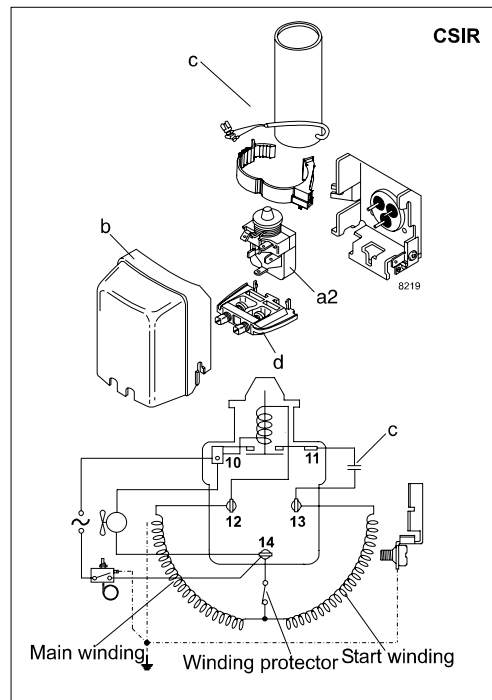


**EN 12900 Household (CECOMAF)** 220V, 50Hz, fan cooling F<sub>2</sub>

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	99	126	168	222	290	317	372	468	577								
Power cons. in W	171	198	231	271	315	331	364	417	472								
Current cons. in A	1.61	1.64	1.72	1.83	1.97	2.03	2.15	2.35	2.57								
COP in W/W	0.58	0.64	0.72	0.82	0.92	0.96	1.02	1.12	1.22								

**ASHRAE LBP\*** 220V, 50Hz, 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	115	147	195	259	338	369	434	546	674								
Power cons. in W	171	198	231	271	315	331	364	417	472								
Current cons. in A	1.61	1.64	1.72	1.83	1.97	2.03	2.15	2.35	2.57								
COP in W/W	0.67	0.74	0.84	0.96	1.07	1.11	1.19	1.31	1.43								



Accessories for	FR8.5CL	Figure	Code number
PTC starting device	6.3 mm spade connectors	a1	—
	4.8 mm spade connectors		—
Starting relay	6.3 mm spade connectors	a2	117U6010
Cover		b	103N2010
Start. capacitor 80 µF	6.3 mm spade connectors	c	117U5015
Cord relief		d	103N1010
Protection screen for PTC		g	—

Test conditions	EN 12900/CECOMAF	ASHRAE LBP*
Condensing temperature	45°C	45°C
Ambient temperature	32°C	32°C
Suction gas temperature	32°C	32°C
Liquid temperature	no subcooling	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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