

# SC21CNX.2 LBP Compressor R290 220-240V 50Hz

## General

Code number	104H8166
Approvals	EN 60335-2-34
Compressors on pallet	80

## Application

Application	LBP		
Frequency	Hz	50	60
Evaporating temperature	°C	-40 to -10	-
Voltage range	V	198 - 254	-
Max. condensing temperature continuous (short)	°C	55 (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		F <sub>2</sub>	-	-	-	-	-
Remarks on application:							

## Motor

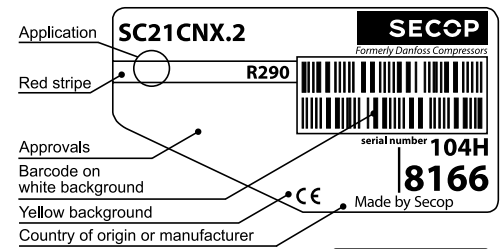
Motor type	CSIR		
LRA (rated after 4 sec. UL984), HST   LST	A	23.5	-
Cut in Current, HST   LST	A	23.5	-
Resistance, main   start winding (25°C)	Ω	3.3	14.0

## Design

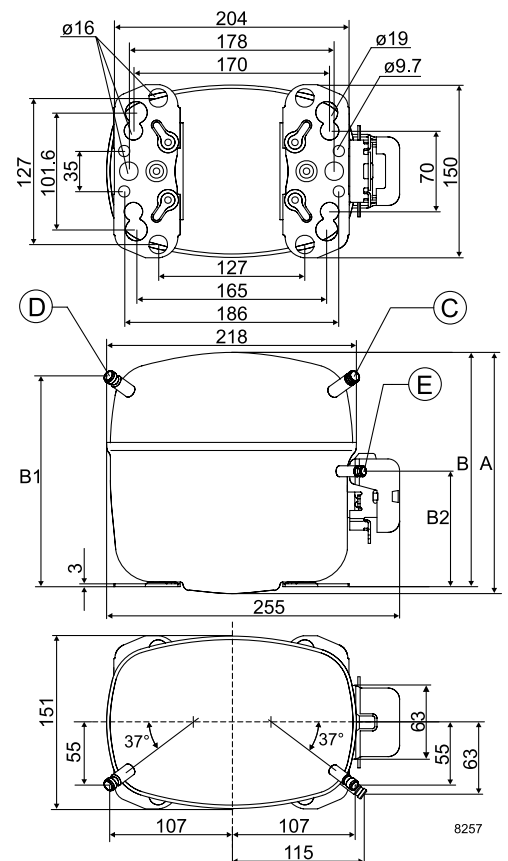
Displacement	cm <sup>3</sup>	20.95
Oil quantity (type)	cm <sup>3</sup>	600 (polyolester)
Maximum refrigerant charge	g	150
Free gas volume in compressor	cm <sup>3</sup>	1410
Weight without electrical equipment	kg	13.1

## Dimensions

Height	mm	A	219
		B	213
		B1	193
		B2	110
Suction connector	location/I.D. mm   angle	C	10.2   37°
	material   comment		Cu-plated steel   Al cap
Process connector	location/I.D. mm   angle	D	6.2   37°
	material   comment		Cu-plated steel   Al cap
Discharge connector	location/I.D. mm   angle	E	6.2   37°
	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)\***  $t_c = 45^\circ\text{C}$ , 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		339	492	654	828	891	1020	1233	1471								
Power cons. in W		431	491	555	623	647	695	772	855								
Current cons. in A		3.43	3.58	3.76	3.98	4.06	4.23	4.52	4.84								
COP in W/W		0.78	1.00	1.18	1.33	1.38	1.47	1.60	1.72								

**ASHRAE LBP\***  $t_c = 43.3^\circ\text{C}$ , 220V, 50Hz, fan cooling  $F_2$

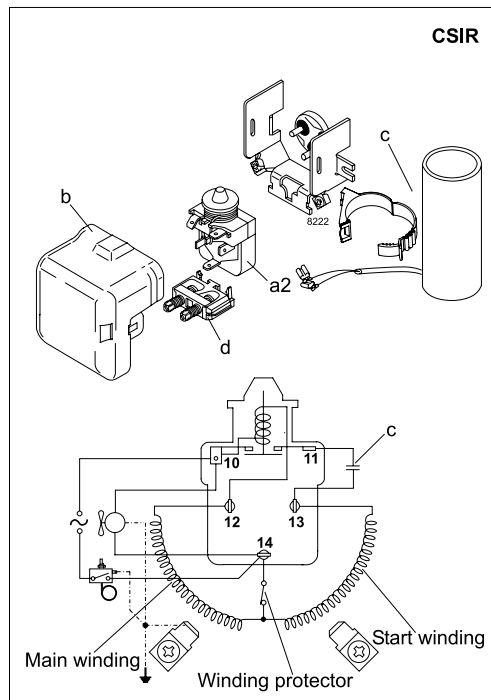
Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10	15	20
Capacity in W		396	564	741	931	999	1139	1371	1630								
Power cons. in W		432	493	556	623	646	693	767	846								
Current cons. in A		3.44	3.58	3.75	3.96	4.04	4.21	4.48	4.79								
COP in W/W		0.92	1.14	1.33	1.49	1.55	1.64	1.79	1.93								

**EN 12900 Household (CECOMAF)**  $t_c = 55^\circ\text{C}$ , 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			372	536	716	781	914	1137	1387								
Power cons. in W			512	571	639	664	717	804	901								
Current cons. in A			3.59	3.83	4.10	4.20	4.41	4.75	5.13								
COP in W/W			0.73	0.94	1.12	1.18	1.28	1.41	1.54								

**ASHRAE LBP**  $t_c = 54.4^\circ\text{C}$ , 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			462	663	882	962	1125	1398	1705								
Power cons. in W			509	568	636	662	714	801	897								
Current cons. in A			3.59	3.82	4.09	4.19	4.40	4.74	5.11								
COP in W/W			0.91	1.17	1.39	1.45	1.58	1.75	1.90								



Accessories for	SC21CNX.2	Figure	Code number	Test conditions	EN 12900/ CECOMAF(*)	ASHRAE LBP(*)
PTC starting device	6.3 mm spade connectors	-	-	Condensing temperature	55°C (*45°C)	54.4 (*43.3°C)
	4.8 mm spade connectors			Ambient temperature	32°C	32°C
Starting relay	6.3 mm spade connectors	a2	117U7013	Suction gas temperature	32°C	32°C
Cover		b	103N2009	Liquid temperature	no subcooling	32°C
Start. capacitor 125 µF	6.3 mm spade connectors	c	117U5012			
Cord relief		d	103N1004			
Protection screen for PTC		-	-			
				<b>Mounting accessories</b>	<b>Code number</b>	
				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

Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without consequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and the Danfoss logotype are trademarks of Danfoss A/S. All rights reserved.