

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	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 ₂	-	-	-	-	-
38°C		F ₂	-	-	-	-	-
43°C		F ₂	-	-	-	-	-
Remarks on application:							

Motor

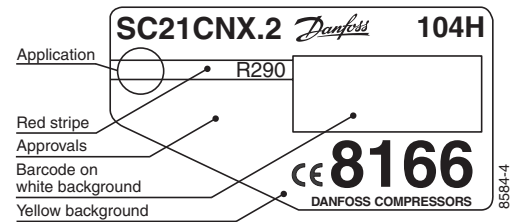
Motor type	CSIR		
LRA (rated after 4 sec. UL984), HST LST	A	23.5	-
Cut in Current, HST LST	A	23.5	-
Resistance, main start winding (25°C)	Ω	3.3	14.0

Design

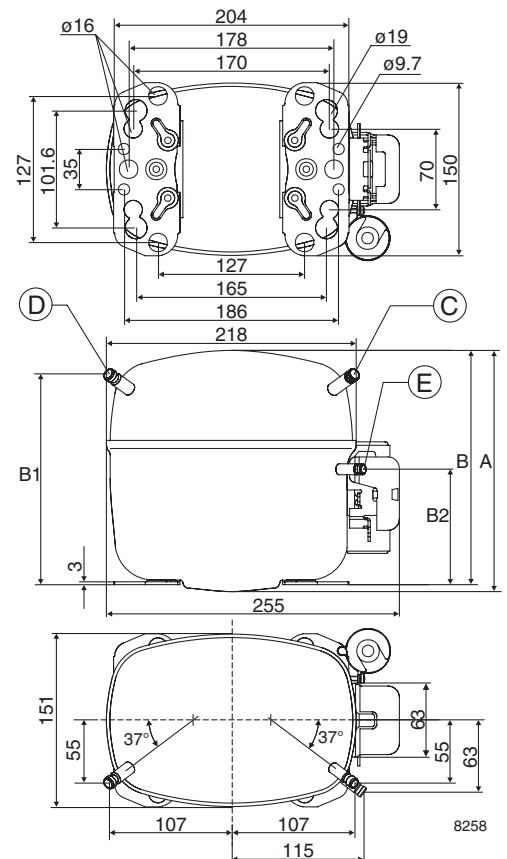
Displacement	cm ³	20.95
Oil quantity (type)	cm ³	600 (polyolester)
Maximum refrigerant charge	g	150
Free gas volume in compressor	cm ³	1410
Weight without electrical equipment	kg	13.1

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 caps	
Process connector	location/I.D. mm angle	D	6.2 37°
	material comment	Cu-plated steel Al caps	
Discharge connector	location/I.D. mm angle	E	6.2 37°
	material comment	Cu-plated steel Al caps	
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
- F₁ = Fan cooling 1.5 m/s
(compressor compartment temperature equal to ambient temperature)
- F₂ = 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

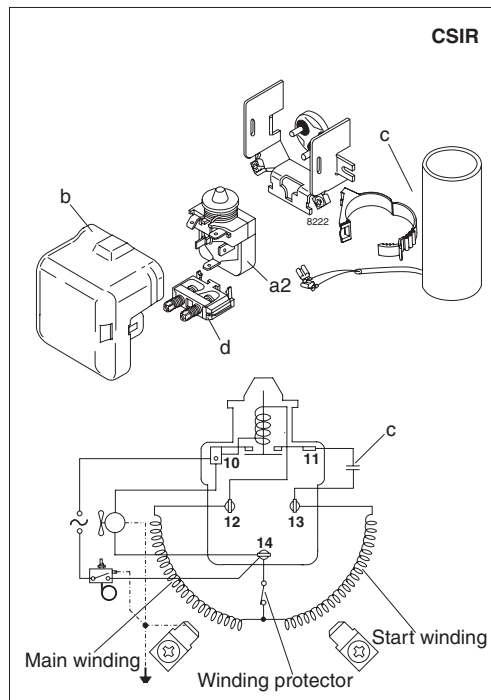
Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10	15	20
Capacity in W		396	564	741	931	999	1139	1371	1630								
Power cons. in W		432	493	556	623	646	693	767	846								
Current cons. in A		3.44	3.58	3.75	3.96	4.04	4.21	4.48	4.79								
COP in W/W		0.92	1.14	1.33	1.49	1.55	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
PTC starting device	6.3 mm spade connectors	-	-
	4.8 mm spade connectors	-	-
Starting relay	6.3 mm spade connectors	a2	117U7013
Cover		b	103N2009
Start. capacitor 125 µF	6.3 mm spade connectors	c	117U5012
Cord relief		d	103N1004
Protection screen for PTC		-	-

Test conditions	EN 12900/CECOMAF(*)	ASHRAE LBP(*)
Condensing temperature	55°C (*45°C)	54.4 (*43.3°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 compressor	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 subsequential 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.