

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

Motor

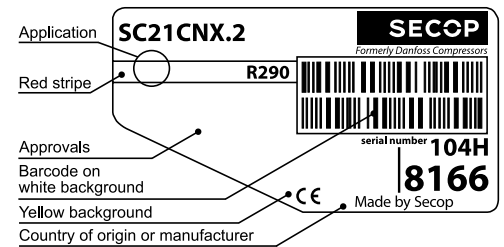
Motor type	CSIR		
LRA (rated after 4 sec. UL984), HST LST	A	23.5	-
Cut in Current, HST LST	A	23.5	-
Resistance, main start winding (25°C)	Ω	3.3	14.0

Design

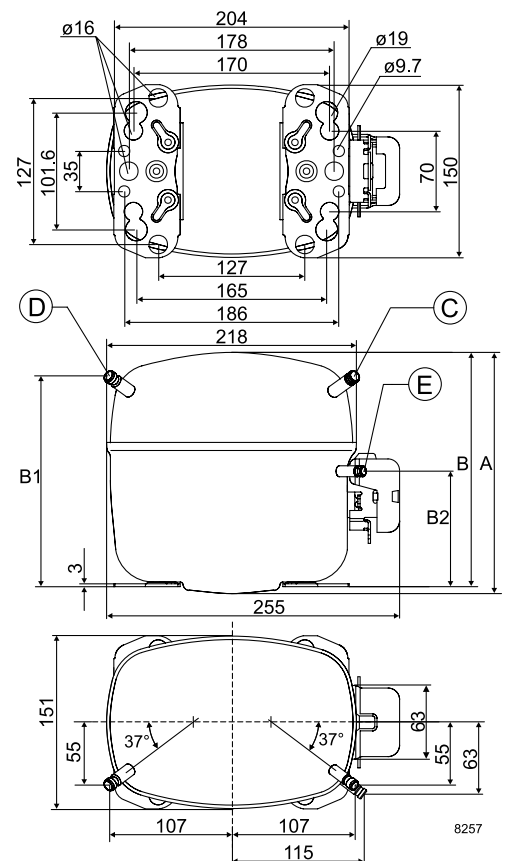
Displacement	cm ³	20.95
Oil quantity (type)	cm ³	600 (polyolester)
Maximum refrigerant charge	g	150
Free gas volume in compressor	cm ³	1410
Weight without electrical equipment	kg	13.1

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 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
- 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

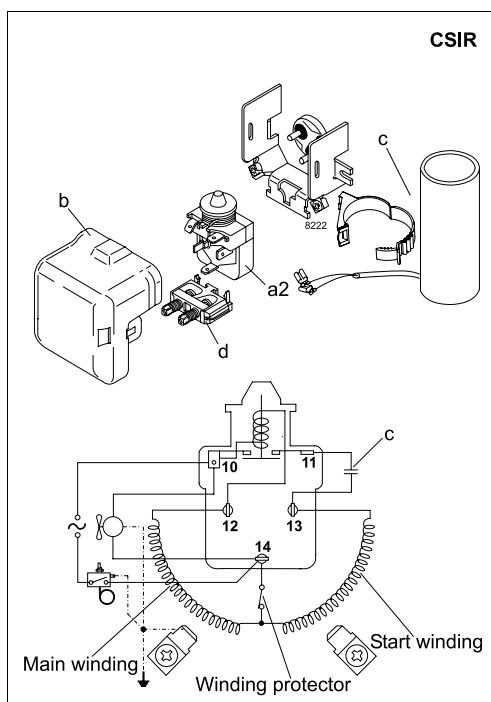
Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10	15	20
Capacity in W		396	564	741	931	999	1139	1371	1630								
Power cons. in W		432	493	556	623	646	693	767	846								
Current cons. in A		3.44	3.58	3.75	3.96	4.04	4.21	4.48	4.79								
COP in W/W		0.92	1.14	1.33	1.49	1.55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