

# SC18CNX.2 LBP Compressor R290 220-240V 50Hz

## General

Code number	104H8866
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 (65)	-
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

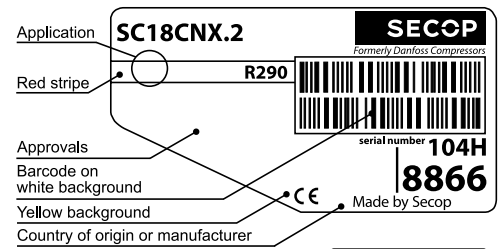
Motor type	CSIR		
LRA (rated after 4 sec. UL984), HST   LST	A	24.0	-
Cut in Current, HST   LST	A	24.0	-
Resistance, main   start winding (25°C)	Ω	4.2	14.6

## Design

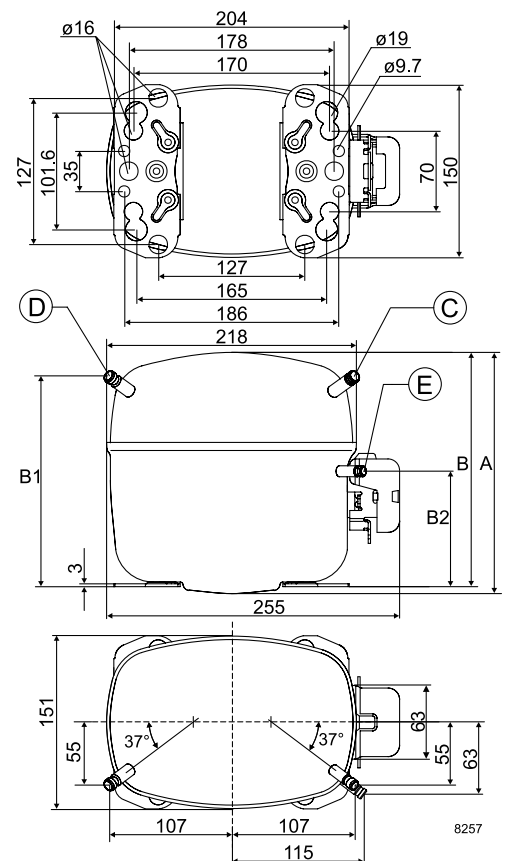
Displacement	cm <sup>3</sup>	17.69
Oil quantity (type)	cm <sup>3</sup>	600 (polyolester)
Maximum refrigerant charge	g	150
Free gas volume in compressor	cm <sup>3</sup>	1410
Weight without electrical equipment	kg	13.1

## Dimensions

Height	mm	A	209
		B	203
		B1	183
		B2	100
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		244	384	531	689	747	863	1057	1273								
Power cons. in W		337	417	484	541	559	591	637	682								
Current cons. in A		2.96	3.15	3.34	3.52	3.58	3.69	3.85	4.01								
COP in W/W		0.72	0.92	1.10	1.27	1.34	1.46	1.66	1.87								

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

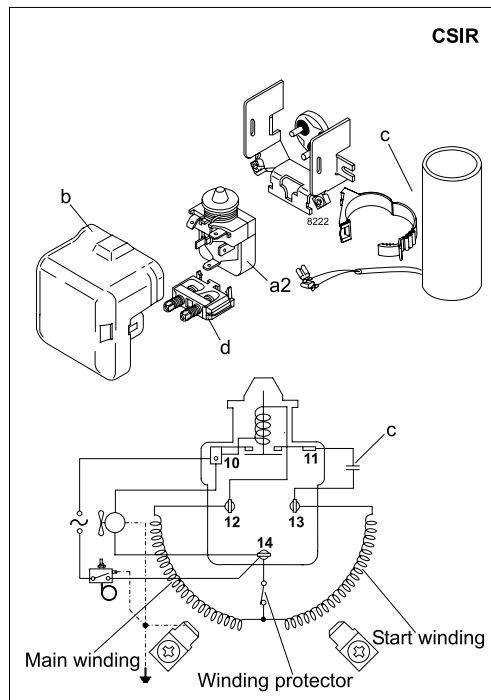
Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10	15	20
Capacity in W		291	443	603	776	839	966	1176	1412								
Power cons. in W		345	420	482	535	551	581	624	667								
Current cons. in A		2.98	3.16	3.33	3.50	3.55	3.66	3.81	3.95								
COP in W/W		0.84	1.06	1.25	1.45	1.52	1.66	1.88	2.12								

**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			275	424	587	646	768	970	1197								
Power cons. in W			404	502	588	614	663	732	798								
Current cons. in A			3.30	3.57	3.82	3.91	4.07	4.31	4.55								
COP in W/W			0.68	0.84	1.00	1.05	1.16	1.32	1.50								

**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			342	525	724	797	945	1193	1472								
Power cons. in W			404	500	584	610	658	726	790								
Current cons. in A			3.28	3.54	3.80	3.88	4.04	4.28	4.50								
COP in W/W			0.85	1.05	1.24	1.31	1.44	1.64	1.86								



Accessories for	SC18CNX.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	117U7011	Suction gas temperature	32°C	32°C
Cover		b	103N2009	Liquid temperature	no subcooling	32°C
Start. capacitor 80 µF	6.3 mm spade connectors	c	117U5017	<b>Mounting accessories</b>		
Cord relief		d	103N1004	Bolt joint for one comp.	Ø: 16 mm	118-1917
Protection screen for PTC		-	-	Bolt joint in quantities	Ø: 16 mm	118-1918
				Snap-on in quantities	Ø: 16 mm	118-1919

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