

# SC12CNX.2 LBP/MBP Compressor R290 115V 60Hz



## General

Code number	104H7270
Approvals	UL984
Compressors on pallet	80

## Application

Application	LBP/MBP	
Frequency	Hz	50 60
Evaporating temperature	°F	- -49 to 41
Voltage range	V	- 95 - 135
Max. condensing temperature continuous (short)	°F	- 131 (149)
Max. winding temperature continuous (short)	°F	- 257 (275)

## Cooling requirements

Frequency	Hz	50			60		
Application		LBP	MBP	HBP	LBP	MBP	HBP
90°F		-	-	-	F <sub>2</sub>	F <sub>2</sub>	-
100°F		-	-	-	F <sub>2</sub>	F <sub>2</sub>	-
110°F		-	-	-	F <sub>2</sub>	F <sub>2</sub>	-
Remarks on application:							

## Motor

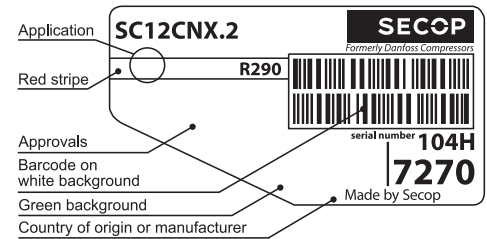
Motor type	CSIR		
LRA (rated after 4 sec. UL984), HST   LST	A	41.9	-
Cut in Current, HST   LST	A	41.9	-
Resistance, main   start winding (77°F)	Ω	1.0	4.3

## Design

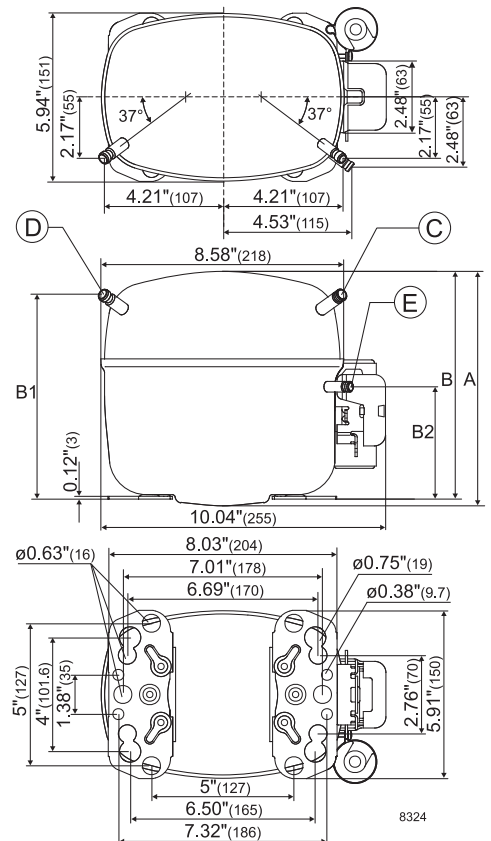
Displacement	cu.in	0.78
Oil quantity (type)	fl.oz.	19.4 (polyolester)
Maximum refrigerant charge	oz.	5.3
Free gas volume in compressor	fl.oz.	49.4
Weight without electrical equipment	lbs.	27.8

## Dimensions

Height	inch	A	8.23
		B	8.00
		B1	7.20
		B2	3.93
Suction connector	location, I.D. in.   angle	C	0.378-0.385   37°
	material   comment		Cu-plated steel   Al cap
Process connector	location, I.D. in.   angle	D	0.252-0.259   37°
	material   comment		Cu-plated steel   Al cap
Discharge connector	location, I.D. in.   angle	E	0.252-0.259   37°
	material   comment		Cu-plated steel   Al cap
Oil cooler connector	location, I.D. in.   angle	F	-
	material   comment		-
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



**ASHRAE LBP**

115V, 60Hz, fan cooling F<sub>2</sub>

Evap. temp. in °F	-49	-40	-30	-20	-13	-10	0	10	14	20	30	40	41	45	50	59	68
Capacity in BTU/h	268	589	1005	1500	1899	2085	2776	3587	3949	4533	5627	6887	7022	7583			
Power cons. in W	179	259	339	411	456	475	533	586	606	635	682	726	731	748			
Current cons. in A	4.77	5.06	5.39	5.74	6.00	6.11	6.49	6.89	7.06	7.31	7.74	8.18	8.23	8.41			
EER in BTU/Wh	1.50	2.27	2.97	3.65	4.16	4.39	5.21	6.12	6.51	7.13	8.25	9.48	9.61	10.14			

**ASHRAE HBP/MBP**

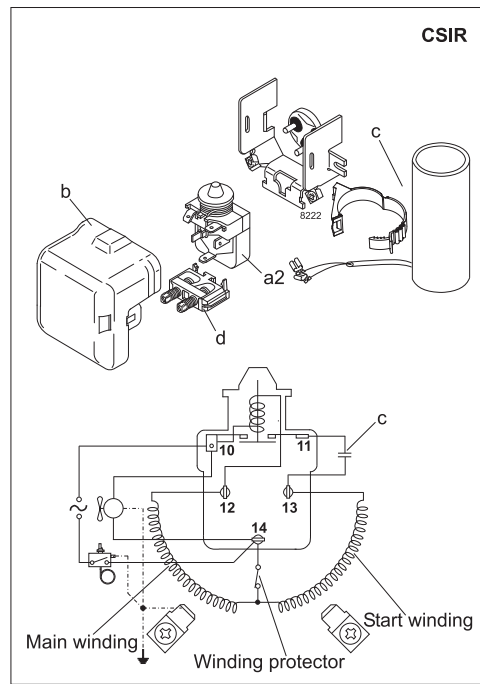
115V, 60Hz, fan cooling F<sub>2</sub>

Evap. temp. in °F	-49	-40	-30	-20	-13	-10	0	10	14	20	30	40	41	45	50	59	68
Capacity in BTU/h	239	524	895	1334	1689	1855	2468	3187	3506	4023	4990	6101	6220	6714			
Power cons. in W	179	259	339	411	456	475	533	586	606	635	682	726	731	748			
Current cons. in A	4.77	5.06	5.39	5.74	6.00	6.11	6.49	6.89	7.06	7.31	7.74	8.18	8.23	8.41			
EER in BTU/Wh	1.34	2.02	2.64	3.25	3.70	3.90	4.63	5.43	5.78	6.33	7.32	8.40	8.51	8.98			

**EN 12900 Household (CECOMAF)\***

115V, 60Hz, fan cooling F<sub>2</sub>

Evap. temp. in °F	-49	-40	-30	-20	-13	-10	0	10	14	20	30	40	41	45	50	59	68
Capacity in W	131	212	320	448	552	600	780	990	1084	1235	1516	1838	1872	2015			
Power cons. in W	226	288	349	404	439	453	497	537	553	576	613	649	653	668			
Current cons. in A	4.99	5.20	5.45	5.72	5.91	6.00	6.30	6.61	6.74	6.94	7.28	7.64	7.68	7.83			
COP in W/W	0.58	0.74	0.91	1.11	1.26	1.33	1.57	1.84	1.96	2.14	2.47	2.83	2.87	3.02			



Accessories for	SC12CNX.2	Figure	Code number	Test conditions	ASHRAE LBP	ASHRAE HBP/MBP	EN 12900/CECOMAF*
PTC starting device	1/4 in. spade connect.	-	-	Condensing temp.	130°F	130°F	113°F
	3/16 in. spade connect.		-	Ambient temp.	90°F	90°F	90°F
Starting relay	1/4 in. spade connect.	a2	117U7020	Suction gas temp	90°F	95°F	90°F
Cover		b	103N2008	Liquid temperature	90°F	115°F	no subcooling
Start. capacitor 240 µF	1/4 in. spade connect.	c	117U5023				
Cord relief		d	103N1004				
Protection screen for PTC		-	-				
				<b>Mounting accessories</b>	<b>Code number</b>		
				Bolt joint for one comp.	Ø: 5/8 in.	118-1917	
				Bolt joint in quantities	Ø: 5/8 in.	118-1918	
				Snap-on in quantities	Ø: 5/8 in.	118-1919	

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