

NLE11CNL Energy-optimized LBP Compressor R290 115-127V 60Hz

General

Code number	105H5981
Approvals	UL984
Compressors on pallet	80

Application

Application	LBP			
Frequency	Hz	50	60	
Evaporating temperature	°F	–	-31 to 14	
Voltage range	V	–	95 - 135	
Max. condensing temperature continuous (short)	°F	–	149 (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 ₂	–	–
100°F		–	–	–	F ₂	–	–
110°F		–	–	–	F ₂	–	–
Remarks on application:							

Motor

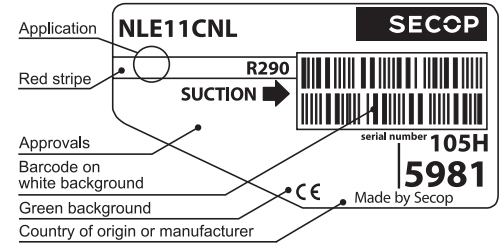
Motor type	CSIR/RSCR			
LRA (rated after 4 sec. UL984), HST LST	A	28.7	29.9	
Cut in Current, HST LST	A	28.7	39.2	
Resistance, main start winding (77°F)	Ω	1.10	3.61	

Design

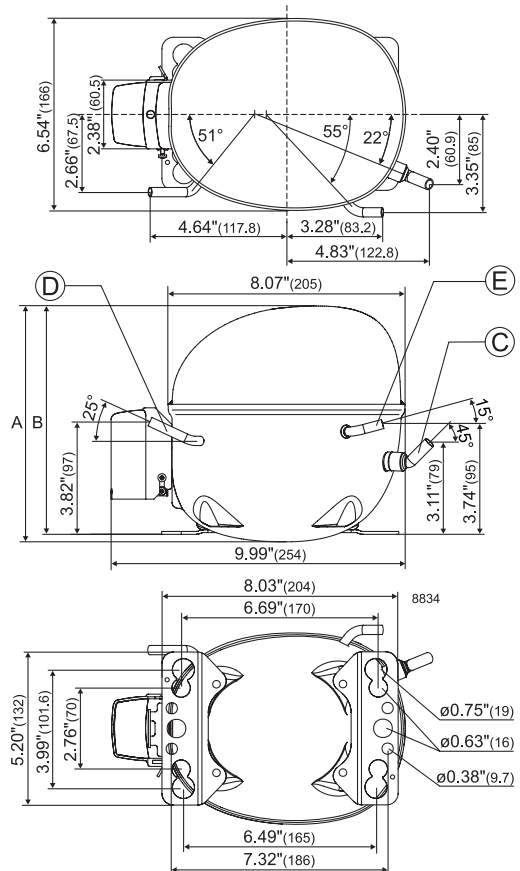
Displacement	cu.in	0.68
Oil quantity (type)	fl.oz.	10.2 (polyolester)
Maximum refrigerant charge	oz.	5.3
Free gas volume in compressor	fl.oz.	79.8
Weight without electrical equipment	lbs.	26.7

Dimensions

Height	inch	A	7.99
		B	7.76
		B1	—
		B2	—
Suction connector	location, I.D. in. angle	C	0.320-0.327 45°
	material comment	Copper Rubber plug	
Process connector	location, I.D. in. angle	D	0.252-0.259 25°
	material comment	Copper Rubber plug	
Discharge connector	location, I.D. in. angle	E	0.252-0.259 15°
	material comment	Copper Rubber plug	
Oil cooler connector	location, I.D. in. angle	F	—
	material comment	—	
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



ASHRAE LBP

 115V, 60Hz, fan cooling F₂

Evap. temp. in °F	-49	-40	-30	-20	-13	-10	0	10	14	20	30	32	40	41	45	50	59
Capacity in BTU/h			1339	1753	2115	2288	2933	3678	4001								
Power cons. in W			301	359	397	413	467	521	543								
Current cons. in A			4.10	4.41	4.68	4.80	5.22	5.67	5.85								
EER in BTU/Wh			4.45	4.89	5.33	5.53	6.28	7.06	7.37								

ASHRAE LBP

 115V, 60Hz, RC 23.5 µF, ePTC consumption incl., fan cooling F₂

Evap. temp. in °F	-49	-40	-30	-20	-13	-10	0	10	14	20	30	32	40	41	45	50	59
Capacity in BTU/h			1370	1793	2162	2337	2991	3746	4074								
Power cons. in W			282	336	372	387	437	487	508								
Current cons. in A			3.83	4.13	4.38	4.49	4.89	5.31	5.48								
EER in BTU/Wh			4.86	5.34	5.82	6.04	6.85	7.69	8.02								

EN 12900 LBP

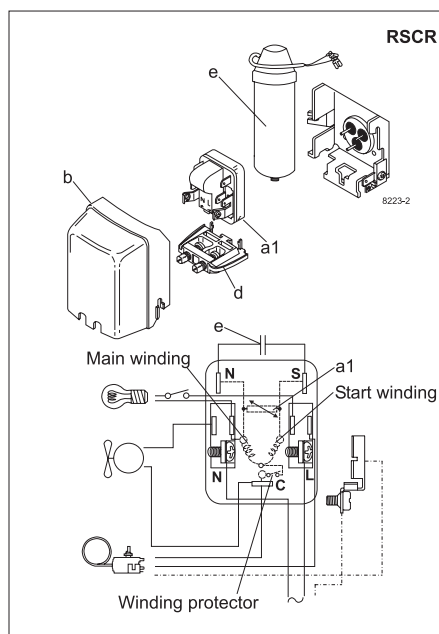
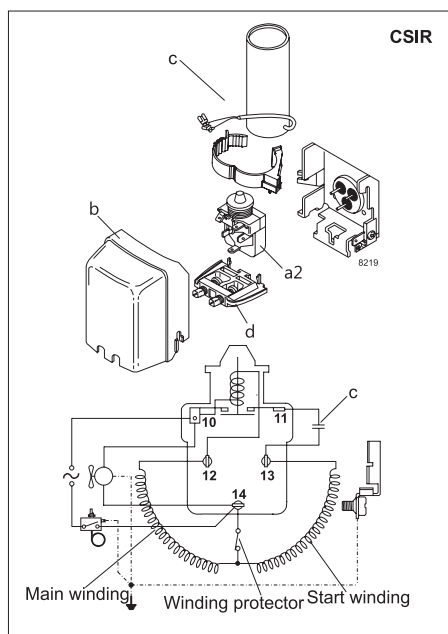
 115V, 60Hz, fan cooling F₂

Evap. temp. in °F	-49	-40	-30	-20	-13	-10	0	10	14	20	30	32	40	41	45	50	59
Capacity in W			399	518	620	667	845	1049	1137								
Power cons. in W			314	375	416	433	490	547	571								
Current cons. in A			4.10	4.41	4.68	4.80	5.22	5.67	5.85								
COP in W/W			1.27	1.38	1.49	1.54	1.73	1.92	1.99								

EN 12900 LBP

 115V, 60Hz, RC 23.5 µF, ePTC consumption incl., fan cooling F₂

Evap. temp. in °F	-49	-40	-30	-20	-13	-10	0	10	14	20	30	32	40	41	45	50	59
Capacity in W			399	520	623	671	851	1057	1146								
Power cons. in W			294	351	389	405	458	512	534								
Current cons. in A			3.83	4.13	4.38	4.49	4.89	5.31	5.48								
COP in W/W			1.36	1.48	1.60	1.66	1.86	2.06	2.15								



Accessories for	NLE11CNL	Figure	Code number
Starting relay	1/4 in. spade connectors	a2	117U7020
Start. capacitor 180 µF	1/4 in. spade connectors	c	117U5039
ePTC starting device	1/4 in. spade connectors	a1	103N0058
Run capacitor 23.5 µF (optional)	1/4 in. spade connectors	e	117-7114
Cover		b	103N2011
Cord relief		d	103N1010

Test conditions	EN 12900	ASHRAE
	LBP	LBP
Condensing temperature	104°F	130°F
Ambient temperature	90°F	90°F
Suction gas temperature	68°F	90°F
Liquid temperature	no subcooling	90°F

Mounting accessories	Code number
Bolt joint for one comp. Ø: 3/4 in.	118-1949
Bolt joint for one comp. Ø: 5/8 in.	118-1946
Snap-on for one comp. Ø: 5/8 in.	118-1947

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