

NLE11MN Energy-optimized MBP Compressor R290 115-127V 60Hz

General

Code number (pre-assembled CSIR start equipment)	105H5982
Approvals	UL984
Compressors on pallet	80

Application

Application	MBP			
Frequency	Hz	50	60	
Evaporating temperature	°F	–	-13 to 50	
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	
90°F	–	–	–	F ₂ –
100°F	–	–	–	F ₂ –
110°F	–	–	–	F ₂ –
Remarks on application:				

Motor

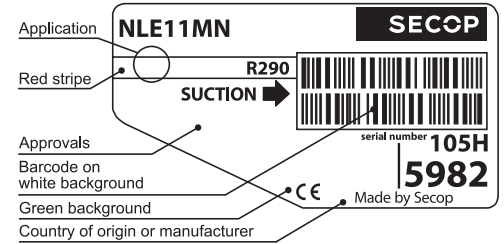
Motor type	CSIR			
LRA (rated after 4 sec. UL984), HST LST	A	40.2	–	
Cut in Current, HST LST	A	40.2	–	
Resistance, main start winding (77°F)	Ω	0.80	3.25	

Design

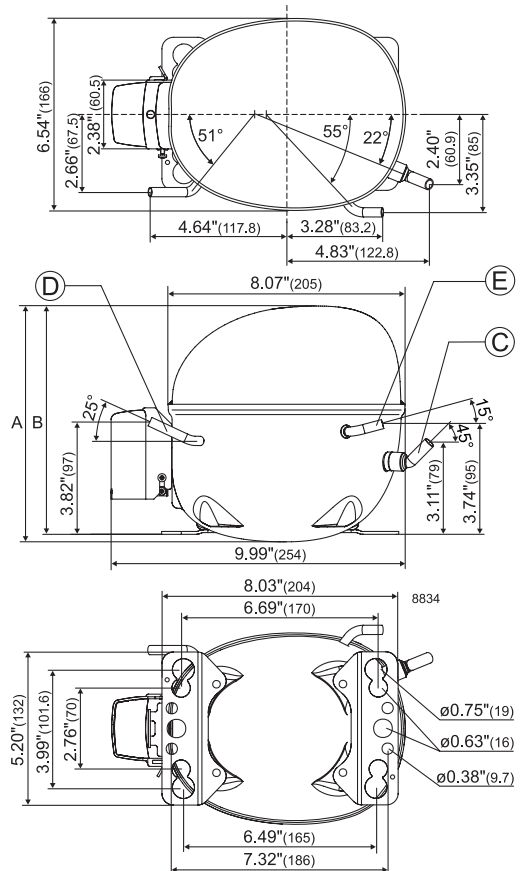
Displacement	cu.in	0.68
Oil quantity (type)	fl.oz.	10.2 (polyolester)
Maximum refrigerant charge	oz.	5.3
Free gas volume in compressor	fl.oz.	79.8
Weight without electrical equipment	lbs.	26.8

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 LBP115V, 60Hz, fan cooling F₂

Evap. temp. in °F	-49	-40	-30	-20	-13	-10	0	10	14	20	30	40	41	45	50	59
Capacity in BTU/h					2102	2289	2961	3718	4050	4581	5569	6700	6822	7326	7996	
Power cons. in W					422	437	488	539	559	589	635	678	683	698	717	
Current cons. in A					6.09	6.18	6.49	6.82	6.95	7.15	7.48	7.8	7.83	7.95	8.10	
EER in BTU/Wh					4.98	5.24	6.06	6.90	7.24	7.78	8.77	9.88	10.0	10.5	11.2	

ASHRAE MBP/HBP115V, 60Hz, fan cooling F₂

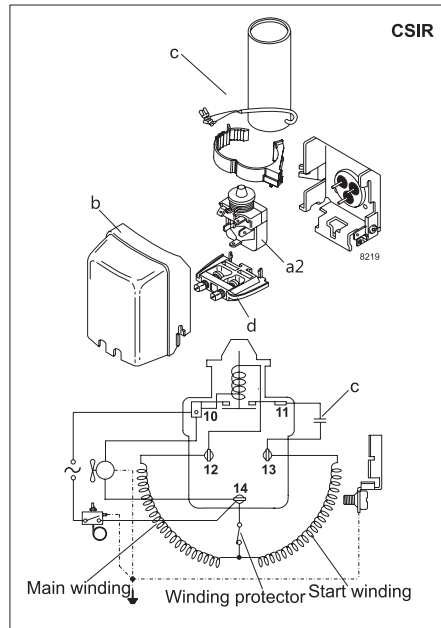
Evap. temp. in °F	-49	-40	-30	-20	-13	-10	0	10	14	20	30	40	41	45	50	59
Capacity in BTU/h					1878	2045	2643	3318	3612	4084	4959	5959	6067	6512	7101	
Power cons. in W					418	433	483	533	553	582	628	670	674	690	708	
Current cons. in A					6.09	6.18	6.49	6.82	6.95	7.15	7.48	7.80	7.83	7.95	8.10	
EER in BTU/Wh					4.50	4.73	5.47	6.22	6.53	7.02	7.90	8.89	9.00	9.44	10.0	

EN 12900 LBP115V, 60Hz, fan cooling F₂

Evap. temp. in °F	-49	-40	-30	-20	-13	-10	0	10	14	20	30	40	41	45	50	59
Capacity in W					625	674	853	1057	1148	1293	1564	1874	1908	2046	2230	
Power cons. in W					442	458	512	567	588	620	670	718	723	741	762	
Current cons. in A					6.09	6.18	6.49	6.82	6.95	7.15	7.48	7.80	7.83	7.95	8.10	
COP in W/W					1.42	1.47	1.66	1.87	1.95	2.09	2.33	2.61	2.64	2.76	2.92	

EN 12900 MBP115V, 60Hz, fan cooling F₂

Evap. temp. in °F	-49	-40	-30	-20	-13	-10	0	10	14	20	30	40	41	45	50	59
Capacity in W					581	628	798	993	1078	1216	1472	1765	1797	1927	2100	
Power cons. in W					430	443	486	529	545	570	609	645	648	662	677	
Current cons. in A					6.09	6.17	6.41	6.67	6.77	6.92	7.16	7.38	7.40	7.48	7.58	
COP in W/W					1.35	1.42	1.64	1.88	1.98	2.13	2.42	2.74	2.77	2.91	3.10	



Accessories for	NLE11MN	Figure	Code number
Starting relay	1/4 in. spade connectors	a2	117U7020
Start. capacitor 240 µF	1/4 in. spade connectors	c	117U5023
Cover		b	103N2011
Cord relief		d	103N1010

Test conditions	EN 12900		ASHRAE	
	LBP	MBP	LBP	MBP
Condensing temperature	104°F	113°F	130°F	130°F
Ambient temperature	90°F	90°F	90°F	90°F
Suction gas temperature	68°F	68°F	90°F	95°F
Liquid temperature	no subcooling		90°F	115°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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