

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

General

Code number	105H5980
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

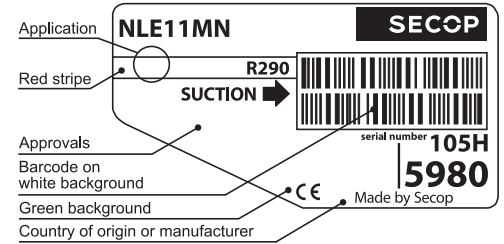
Motor type	CSIR/RSCR			
LRA (rated after 4 sec. UL984), HST LST	A	40.2	41.7	
Cut in Current, HST LST	A	40.2	51.3	
Resistance, main start winding (77°F)	Ω	0.80	3.25	

Design

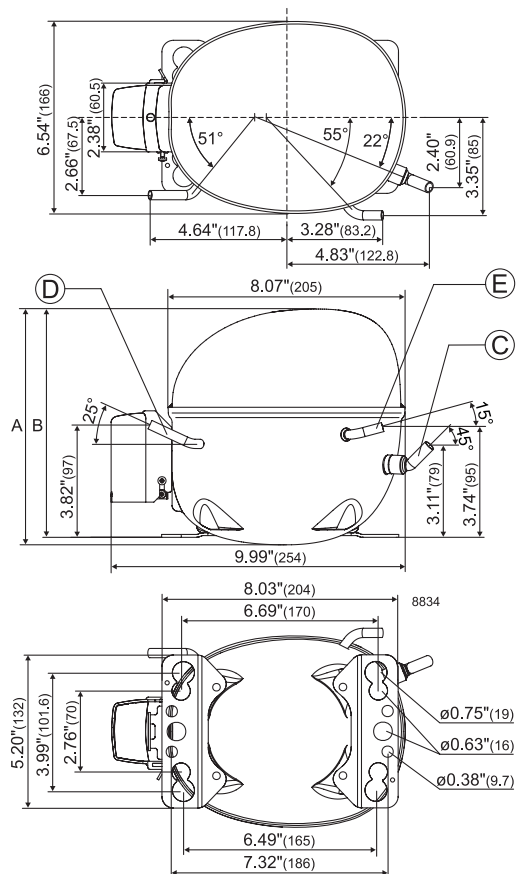
Displacement	cu.in	0.68
Oil quantity (type)	fl.oz.	10.2 (polyolester)
Maximum refrigerant charge	oz.	5.3
Free gas volume in compressor	fl.oz.	79.8
Weight without electrical equipment	lbs.	26.8

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 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	

ASHRAE MBP/HBP115V, 60Hz, RC 23.5 µF, ePTC consumption incl., fan cooling F₂

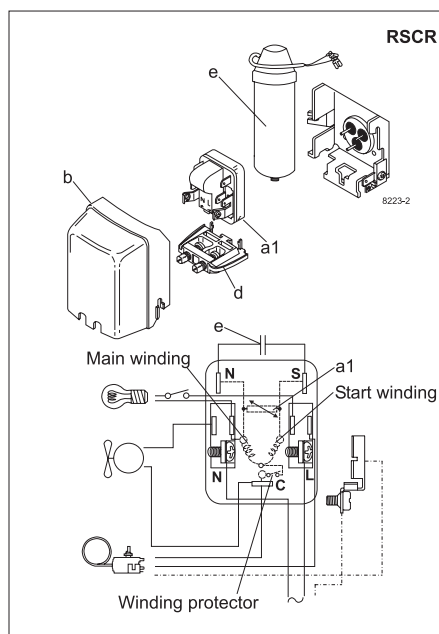
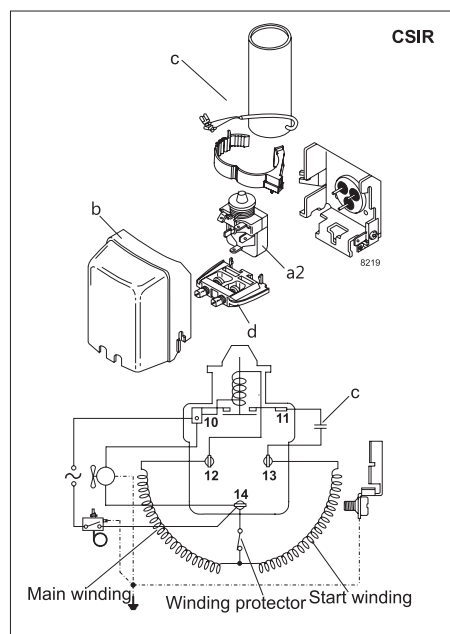
Evap. temp. in °F	-49	-40	-30	-20	-13	-10	0	10	14	20	30	40	41	45	50	59
Capacity in BTU/h					1916	2086	2691	3373	3671	4148	5032	6045	6154	6604	7201	
Power cons. in W					394	408	456	503	522	549	592	632	636	650	667	
Current cons. in A					5.74	5.83	6.12	6.43	6.55	6.74	7.05	7.36	7.38	7.50	7.64	
EER in BTU/Wh					4.87	5.11	5.90	6.71	7.04	7.56	8.50	9.57	9.68	10.2	10.8	

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	

EN 12900 MBP115V, 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	40	41	45	50	59
Capacity in W					585	633	805	1001	1088	1226	1485	1781	1813	1945	2120	
Power cons. in W					405	417	458	498	514	537	574	608	611	624	638	
Current cons. in A					5.75	5.81	6.05	6.29	6.38	6.52	6.75	6.96	6.98	7.06	7.14	
COP in W/W					1.44	1.52	1.76	2.01	2.12	2.28	2.58	2.93	2.96	3.12	3.32	



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
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
	MBP	MBP
Condensing temperature	113°F	130°F
Ambient temperature	90°F	90°F
Suction gas temperature	68°F	95°F
Liquid temperature	no subcooling	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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