

NLE8.0CN Energy-optimized LBP/MBP Compressor R290 115-127V 60Hz

General

Code number (pre-assembled CSIR start equipment)	105H6095
Approvals	UL984
Compressors on pallet	80

Application

Application	LBP/MBP			
Frequency	Hz	50	60	
Evaporating temperature	°F	–	-31 to 45	
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	F ₂	—
100°F		—	—	—	F ₂	F ₂	—
110°F		—	—	—	F ₂	F ₂	—
Remarks on application:							

Motor

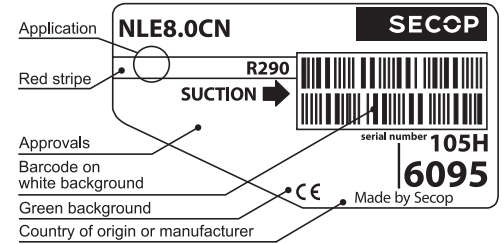
Motor type	CSIR		
LRA (rated after 4 sec. UL984), HST LST	A	25.5	–
Cut in Current, HST LST	A	25.5	–
Resistance, main start winding (77°F)	Ω	2.1	6.3

Design

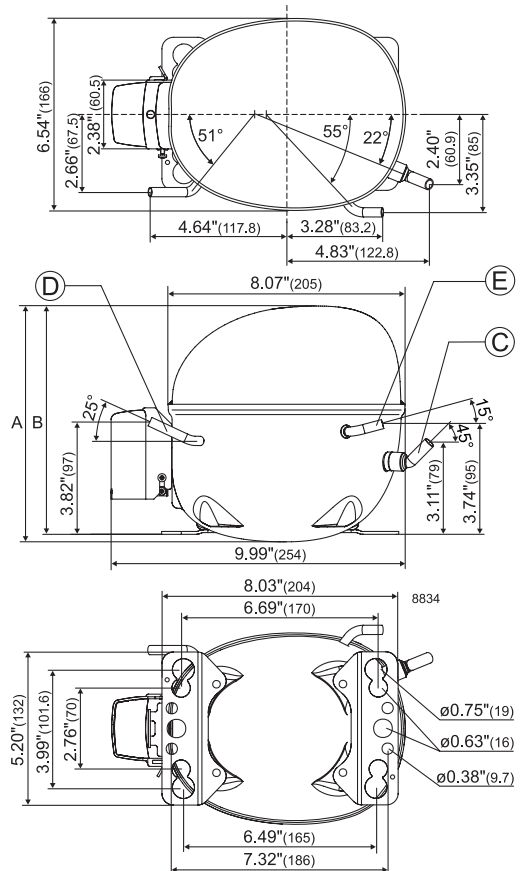
Displacement	cu.in	0.49
Oil quantity (type)	fl.oz.	10.2 (polyolester)
Maximum refrigerant charge	oz.	5.3
Free gas volume in compressor	fl.oz.	79.8
Weight without electrical equipment	lbs.	24.0

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	32	40	41	45	50	59
Capacity in BTU/h			860	1180	1430	1545	1970	2474	2702	3075	3789	3947	4636	4729	5115		
Power cons. in W			217	253	278	288	323	357	370	389	420	426	449	452	463		
Current cons. in A			3.09	3.30	3.45	3.52	3.76	4.01	4.11	4.26	4.51	4.55	4.73	4.76	4.84		
EER in BTU/Wh			3.96	4.67	5.15	5.36	6.10	6.94	7.31	7.90	9.02	9.27	10.30	10.50	11.10		

ASHRAE MBP/HBP115V, 60Hz, fan cooling F₂

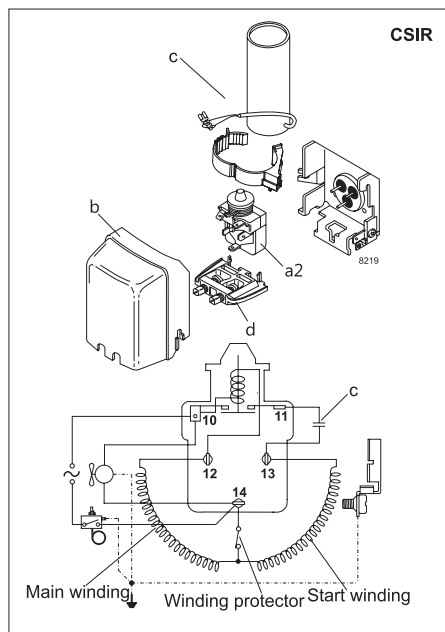
Evap. temp. in °F	-49	-40	-30	-20	-13	-10	0	10	14	20	30	32	40	41	45	50	59
Capacity in BTU/h			769	1055	1278	1380	1759	2208	2410	2741	3374	3514	4123	4205	4546		
Power cons. in W			215	250	275	285	320	353	366	385	415	421	444	446	457		
Current cons. in A			3.09	3.30	3.45	3.52	3.76	4.01	4.11	4.26	4.51	4.55	4.73	4.76	4.84		
EER in BTU/Wh			3.58	4.22	4.65	4.84	5.50	6.26	6.59	7.12	8.13	8.35	9.30	9.42	9.95		

EN 12900 LBP115V, 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			279	362	429	461	578	720	784	888	1089	1133	1325	1351	1458		
Power cons. in W			228	256	275	283	308	332	341	354	373	377	391	392	398		
Current cons. in A			3.13	3.27	3.37	3.42	3.58	3.73	3.79	3.88	4.01	4.04	4.12	4.13	4.16		
COP in W/W			1.22	1.42	1.56	1.63	1.88	2.17	2.30	2.51	2.92	3.01	3.39	3.44	3.66		

EN 12900 MBP115V, 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			260	342	407	438	551	687	748	848	1040	1082	1265	1290	1392		
Power cons. in W			220	249	270	278	306	332	342	356	379	383	398	400	407		
Current cons. in A			3.13	3.29	3.41	3.47	3.65	3.84	3.92	4.03	4.20	4.23	4.35	4.36	4.41		
COP in W/W			1.18	1.37	1.51	1.57	1.80	2.07	2.19	2.38	2.75	2.83	3.17	3.22	3.42		



Accessories for	NLE8.0CN	Figure	Code number
Starting relay	1/4 in. spade connectors	a2	117U7013
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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