

Datasheets

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

General

Code number	105H6093
Code number (pre-assembled CSIR start equipment)	105H6095
Approvals	UL984
Compressors on pallet	80
Compressors on pallet (with CSIR start equipment)	60

Application

Application	Hz	LBP/MBP		
		LBP	MBP	HBP
Frequency	Hz	50	60	
Evaporating temperature	°F	-	-31 to 45	
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		
		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

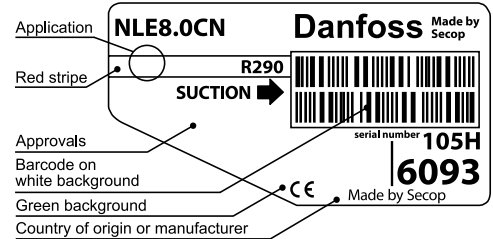
Motor type	CSIR/RSIR/RSCR		
LRA (rated after 4 sec. UL984), HST LST	A	25.5	21.7
Cut in Current, HST LST	A	25.5	29.4
Resistance, main start winding (77°F)	Ω	2.1	6.3

Design

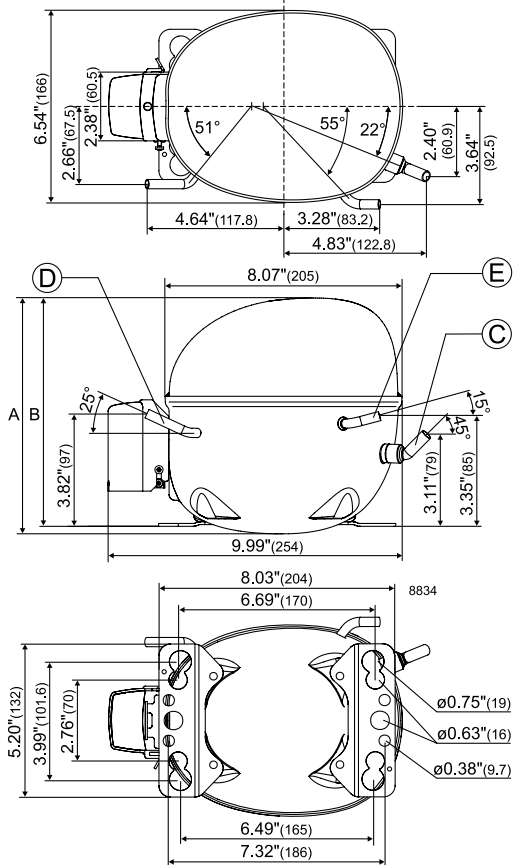
Displacement	cu.in	0.49
Oil quantity (type)	fl.oz.	10.8 (polyolester)
Maximum refrigerant charge	oz.	5.3
Free gas volume in compressor	fl.oz.	79.8
Weight without electrical equipment	lbs.	24.0

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 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			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/HBP

 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			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 LBP

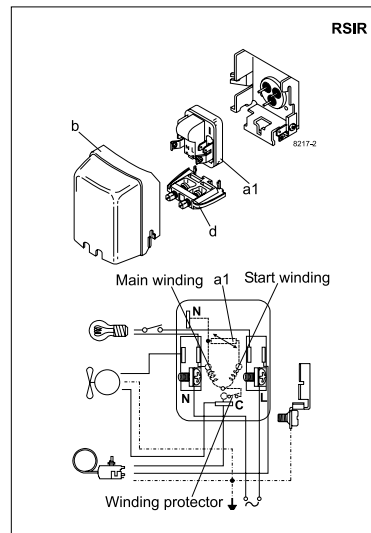
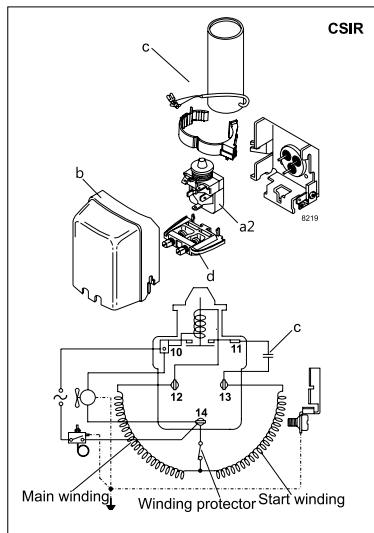
 115V, 60Hz, fan cooling F₂

Evap. temp. in °F	-49	-40	-30	-20	-13	-10	0	10	14	20	30	32	40	41	45	50	59
Capacity in W			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 MBP

 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			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
ePTC starting device	1/4 in. spade connectors	a1	103N0058 *)
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

*) Remarks: RSIR and RSCR option available in 4th quarter 2015

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

ASHRAE LBP

115V, 60Hz, RC 20 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			875	1206	1463	1581	2017	2530	2761	3137	3853	4010	4695	4787	5170		
Power cons. in W			206	240	263	272	304	334	346	363	389	394	413	416	424		
Current cons. in A			2.95	3.12	3.26	3.32	3.54	3.76	3.85	3.98	4.18	4.22	4.36	4.38	4.44		
EER in BTU/Wh			4.24	5.03	5.57	5.81	6.64	7.57	7.98	8.64	9.89	10.20	11.40	11.50	12.20		

ASHRAE MBP/HBP

115V, 60Hz, RC 20 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			860	1141	1363	1467	1850	2305	2509	2842	3476	3615	4219	4300	4636		
Power cons. in W			219	248	268	277	304	330	340	354	375	379	394	396	403		
Current cons. in A			2.98	3.12	3.23	3.28	3.45	3.62	3.69	3.78	3.93	3.95	4.04	4.05	4.09		
EER in BTU/Wh			3.94	4.60	5.09	5.30	6.09	6.99	7.39	8.03	9.26	9.53	10.70	10.90	11.50		

EN 12900 LBP

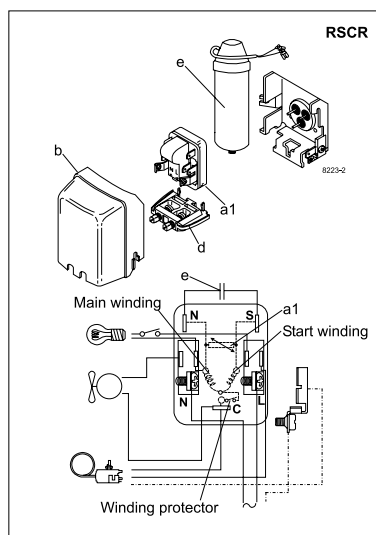
115V, 60Hz, RC 20 µF, ePTC consumption incl., fan cooling F₂

Evap. temp. in °F	-49	-40	-30	-20	-13	-10	0	10	14	20	30	32	40	41	45	50	59
Capacity in W			284	370	439	471	592	736	800	906	1107	1151	1342	1368	1474		
Power cons. in W			217	243	260	267	290	311	319	330	346	349	360	361	365		
Current cons. in A			2.98	3.10	3.19	3.23	3.37	3.50	3.55	3.62	3.72	3.74	3.79	3.80	3.81		
COP in W/W			1.31	1.52	1.69	1.76	2.04	2.36	2.51	2.75	3.20	3.30	3.73	3.79	4.04		

EN 12900 MBP

115V, 60Hz, RC 20 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			264	349	417	448	564	702	764	865	1057	1099	1281	1306	1407		
Power cons. in W			209	236	255	263	288	311	320	332	351	354	367	368	374		
Current cons. in A			2.98	3.12	3.23	3.27	3.44	3.60	3.67	3.76	3.89	3.92	4.00	4.01	4.04		
COP in W/W			1.26	1.48	1.63	1.70	1.96	2.26	2.39	2.60	3.01	3.10	3.49	3.55	3.77		



Accessories for	NLE8.0CN	Figure	Code number
ePTC starting device	1/4 in. spade connectors	a1	103N0058 *)
Run capacitor 20 µF (optional)	1/4 in. spade connectors	e	n/a *)
Cover		b	103N2011
Cord relief		d	103N1010

*) Remarks: RSIR and RSCR option available in 4th quarter 2015

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