

DLE5.7CN Energy-optimized LBP/MBP Compressor R290 115-127V 60Hz

General

Code number	102H3682
Approvals	UL984
Compressors on pallet	100

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		—	—	—	S*	F ₂	—
100°F		—	—	—	S*	F ₂	—
110°F		—	—	—	F ₂	F ₂	—

Remarks on application:

- * Run capacitor 15 µF compulsory with static cooling (S)
- * Evaporation tray not allowed with static cooling (S)
- * Decreased cooling capacity by 1.5% (COP by 2%.) for static cooling (S)

Motor

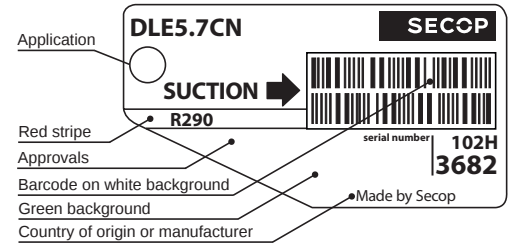
Motor type	CSIR/RSIR/RSCR			
LRA (rated after 4 sec. UL984), HST LST	A	21.1	17.6	
Cut in Current, HST LST	A	21.1	25.4	
Resistance, main start winding (77°F)	Ω	2.7	6.4	

Design

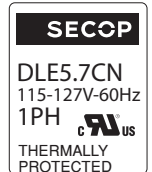
Displacement	cu.in	0.35
Oil quantity (type)	fl.oz.	7.8 (polyolester)
Maximum refrigerant charge	oz.	5.3
Free gas volume in compressor	fl.oz.	49.5
Weight without electrical equipment	lbs.	18.1

Dimensions

Height	inch	A	6.90
		B	6.64
		B1	–
		B2	–
Suction connector	location, I.D. in. angle	C	0.320-0.327 18°
	material comment		Copper Rubber plug
Process connector	location, I.D. in. angle	D	0.252-0.259 60°
	material comment		Copper Rubber plug
Discharge connector	location, I.D. in. angle	E	0.252-0.259 25°
	material comment		Copper Rubber plug
Oil cooler connector	location, I.D. in. angle	F	–
	material comment		–

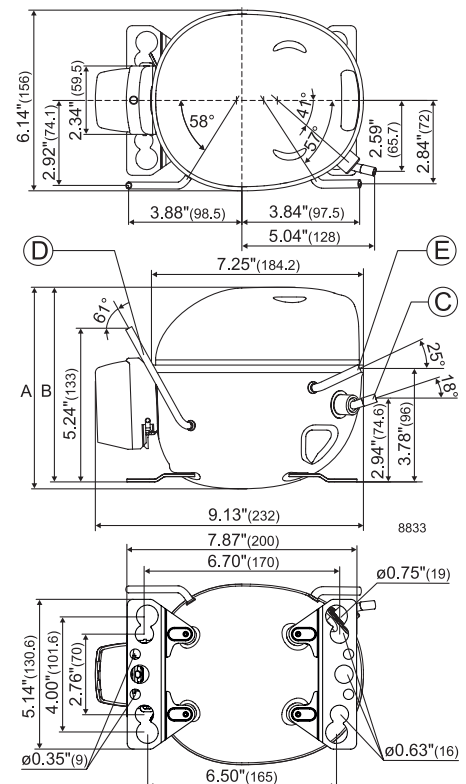


Yellow warning label



Approval mark

- 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			681	914	1100	1187	1507	1882	2050	2321	2830	2941	3419	3483	3746		
Power cons. in W			179	206	225	233	260	286	296	311	334	338	355	357	364		
Current cons. in A			2.60	2.74	2.85	2.90	3.08	3.27	3.34	3.45	3.63	3.67	3.80	3.82	3.88		
EER in BTU/Wh			3.81	4.44	4.90	5.10	5.80	6.59	6.93	7.47	8.48	8.70	9.64	9.77	10.3		

ASHRAE MBP/HBP115V, 60Hz, fan cooling F₂

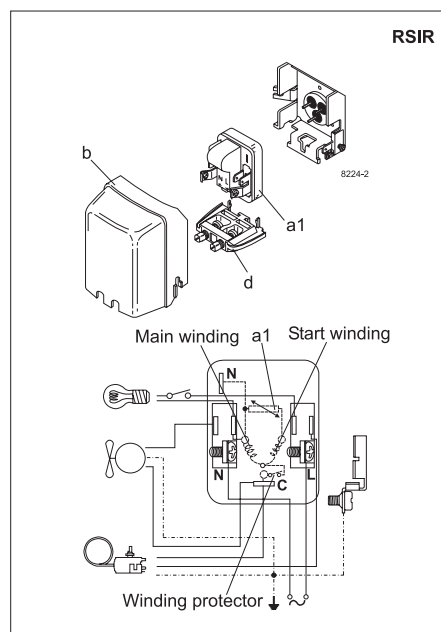
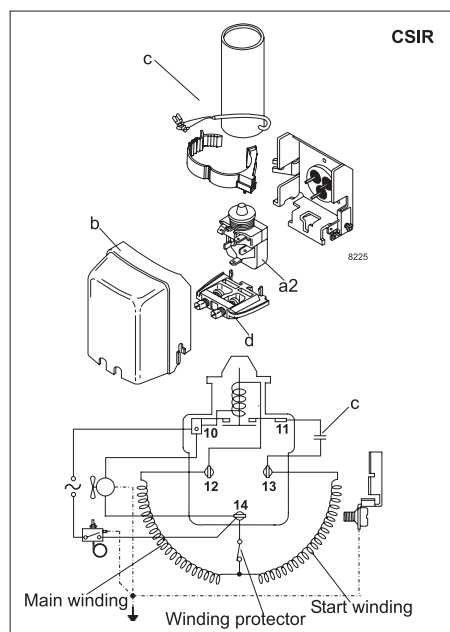
Evap. temp. in °F	-49	-40	-30	-20	-13	-10	0	10	14	20	30	32	40	41	45	50	59
Capacity in BTU/h			609	817	983	1060	1345	1680	1828	2069	2521	2619	3041	3097	3329		
Power cons. in W			177	204	222	230	257	283	293	307	330	334	350	352	359		
Current cons. in A			2.60	2.74	2.85	2.90	3.08	3.27	3.34	3.45	3.63	3.67	3.80	3.82	3.88		
EER in BTU/Wh			3.44	4.01	4.42	4.60	5.24	5.94	6.25	6.73	7.64	7.84	8.68	8.79	9.26		

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			207	269	321	345	435	541	588	665	809	841	976	994	1068		
Power cons. in W			181	202	218	224	246	267	275	287	306	309	322	324	330		
Current cons. in A			2.58	2.68	2.75	2.79	2.92	3.05	3.11	3.18	3.31	3.33	3.42	3.43	3.47		
COP in W/W			1.14	1.33	1.47	1.54	1.77	2.03	2.14	2.32	2.65	2.72	3.03	3.07	3.24		

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			191	251	299	321	405	505	549	621	755	785	911	927	997		
Power cons. in W			184	207	224	231	254	277	286	299	319	323	338	339	346		
Current cons. in A			2.59	2.70	2.79	2.83	2.97	3.12	3.18	3.26	3.41	3.43	3.53	3.55	3.59		
COP in W/W			1.04	1.21	1.34	1.39	1.59	1.82	1.92	2.07	2.36	2.43	2.70	2.73	2.88		



Accessories for	DLE5.7CN	Figure	Code number
ePTC starting device	1/4 in. spade connectors	a1	103N0058
Starting relay	1/4 in. spade connectors	a2	117U7011
Start. capacitor 240 µF	1/4 in. spade connectors	c	117U5023
Cover		b	103N0492
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

ASHRAE LBP115V, 60Hz, RC 15 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			686	921	1111	1199	1524	1905	2074	2347	2858	2969	3445	3508	3769		
Power cons. in W			170	195	212	219	244	268	278	291	312	316	332	333	340		
Current cons. in A			2.47	2.59	2.69	2.74	2.90	3.07	3.13	3.24	3.40	3.43	3.56	3.57	3.63		
EER in BTU/Wh			4.03	4.74	5.24	5.46	6.24	7.10	7.47	8.06	9.15	9.38	10.4	10.5	11.1		

ASHRAE MBP/HBP115V, 60Hz, RC 15 µF, ePTC consumption incl., fan cooling F₂

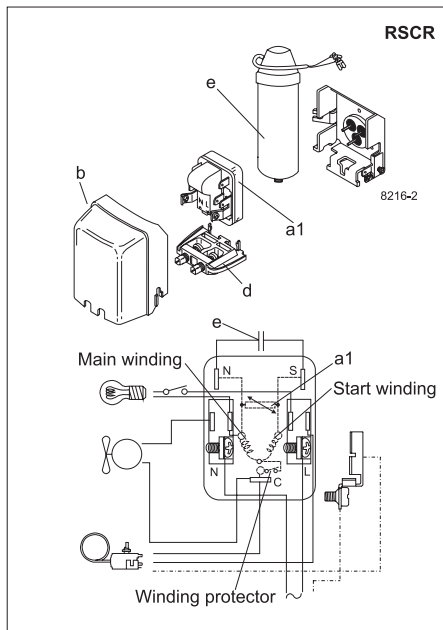
Evap. temp. in °F	-49	-40	-30	-20	-13	-10	0	10	14	20	30	32	40	41	45	50	59
Capacity in BTU/h			613	824	993	1071	1361	1699	1850	2092	2545	2643	3064	3119	3350		
Power cons. in W			168	193	210	217	242	265	275	288	309	313	327	329	336		
Current cons. in A			2.47	2.59	2.69	2.74	2.9	3.07	3.13	3.24	3.40	3.43	3.56	3.57	3.63		
EER in BTU/Wh			3.64	4.28	4.73	4.93	5.63	6.40	6.74	7.27	8.24	8.45	9.36	9.48	9.97		

EN 12900 LBP115V, 60Hz, RC 15 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			209	272	324	348	440	547	595	672	817	849	983	1001	1074		
Power cons. in W			172	191	205	211	231	251	258	269	286	289	301	303	308		
Current cons. in A			2.45	2.53	2.60	2.63	2.74	2.86	2.91	2.98	3.10	3.12	3.20	3.21	3.24		
COP in W/W			1.21	1.42	1.58	1.65	1.90	2.18	2.30	2.50	2.86	2.93	3.26	3.31	3.49		

EN 12900 MBP115V, 60Hz, RC 15 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			201	270	326	351	447	558	608	688	838	870	1009	1028	1104		
Power cons. in W			170	195	212	219	244	268	278	291	312	316	332	333	340		
Current cons. in A			2.47	2.59	2.69	2.74	2.90	3.07	3.13	3.24	3.40	3.43	3.56	3.57	3.63		
COP in W/W			1.18	1.39	1.54	1.60	1.83	2.08	2.19	2.36	2.68	2.75	3.05	3.08	3.25		



Accessories for	DLE5.7CN	Figure	Code number
ePTC starting device	1/4 in. spade connectors	a1	103N0058
Run capacitor 15 µF (optional)	1/4 in. spade connectors	e	117-7118
Cover		b	103N0492
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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