

DLE4CN Energy-optimized LBP/MBP Compressor R290 115-127V 60Hz

General

Code number	102H3482
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	S	—
100°F		—	—	—	S	S	—
110°F		—	—	—	F ₂	F ₂	—
Remarks on application:							

Motor

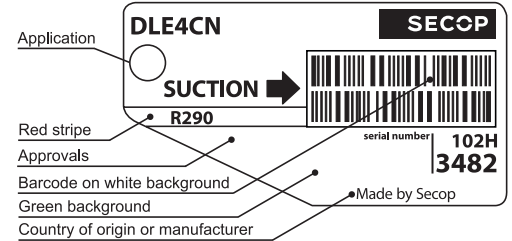
Motor type	CSIR/RSIR/RSCR			
LRA (rated after 4 sec. UL984), HST LST	A	16.7	12.4	
Cut in Current, HST LST	A	16.7	20.2	
Resistance, main start winding (77°F)	Ω	3.7	6.0	

Design

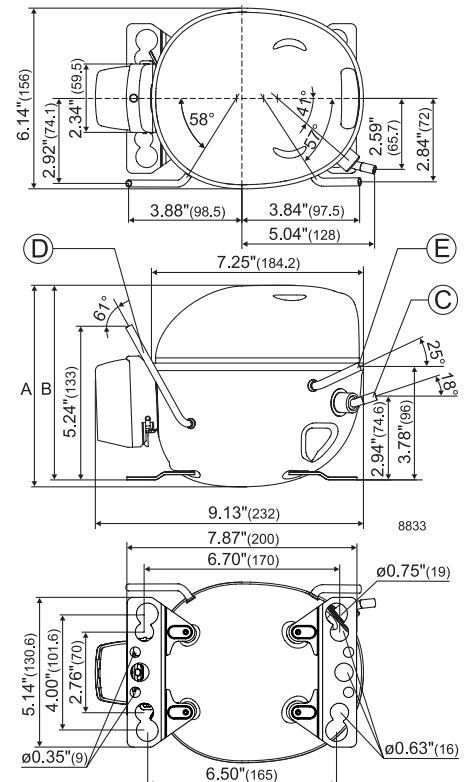
Displacement	cu.in	0.24
Oil quantity (type)	fl.oz.	7.8 (polyolester)
Maximum refrigerant charge	oz.	5.3
Free gas volume in compressor	fl.oz.	49.5
Weight without electrical equipment	lbs.	17.6

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 61°
	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	—	
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			449	600	724	782	1002	1266	1385	1579	1946	2027	2375	2421	2614		
Power cons. in W			119	136	148	153	171	188	194	204	218	221	231	232	236		
Current cons. in A			1.72	1.78	1.85	1.88	2.01	2.14	2.20	2.28	2.40	2.43	2.50	2.51	2.54		
EER in BTU/Wh			3.76	4.41	4.89	5.11	5.88	6.75	7.13	7.75	8.92	9.18	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			402	536	647	699	895	1130	1235	1407	1733	1805	2112	2153	2323		
Power cons. in W			118	135	146	152	169	186	192	201	216	218	228	229	233		
Current cons. in A			1.72	1.78	1.85	1.88	2.01	2.14	2.20	2.28	2.40	2.43	2.50	2.51	2.54		
EER in BTU/Wh			3.40	3.99	4.42	4.61	5.30	6.09	6.43	6.99	8.04	8.27	9.28	9.41	9.98		

EN 12900 LBP

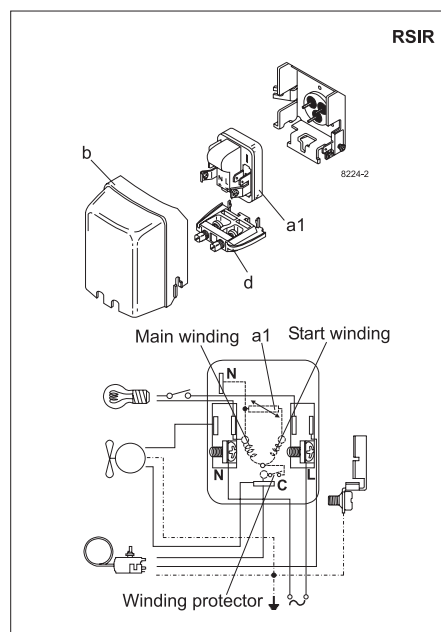
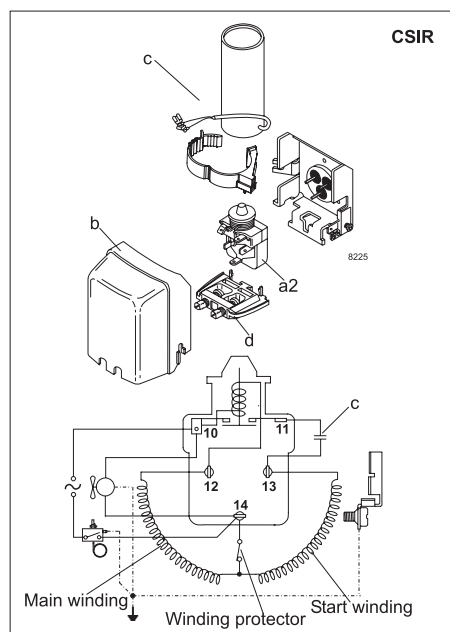
 115V, 60Hz, fan cooling F₂

Evap. temp. in °F	-49	-40	-30	-20	-13	-10	0	10	14	20	30	32	40	41	45	50	59
Capacity in W			138	181	217	233	296	371	404	458	560	582	678	690	743		
Power cons. in W			120	134	144	148	162	174	178	184	193	194	198	198	199		
Current cons. in A			1.72	1.77	1.82	1.85	1.93	2.00	2.03	2.06	2.08	2.08	2.06	2.06	2.04		
COP in W/W			1.14	1.35	1.50	1.57	1.83	2.13	2.26	2.48	2.91	3.00	3.43	3.49	3.74		

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			127	167	200	216	275	345	376	427	523	544	634	646	695		
Power cons. in W			122	137	148	153	168	182	188	195	206	208	214	215	217		
Current cons. in A			1.72	1.78	1.84	1.87	1.97	2.07	2.11	2.16	2.22	2.23	2.25	2.25	2.25		
COP in W/W			1.03	1.21	1.35	1.41	1.63	1.89	2.00	2.19	2.54	2.62	2.96	3.01	3.21		



Accessories for	DLE4CN	Figure	Code number
ePTC starting device	1/4 in. spade connectors	a1	103N0058
Starting relay	1/4 in. spade connectors	a2	117U7022
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			458	612	738	798	1023	1291	1413	1610	1985	2067	2422	2470	2666		
Power cons. in W			118	132	143	148	163	178	184	193	206	208	217	218	222		
Current cons. in A			1.09	1.20	1.29	1.33	1.47	1.61	1.66	1.74	1.85	1.87	1.92	1.93	1.95		
EER in BTU/Wh			3.89	4.62	5.16	5.40	6.27	7.24	7.67	8.36	9.65	9.93	11.20	11.30	12.00		

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

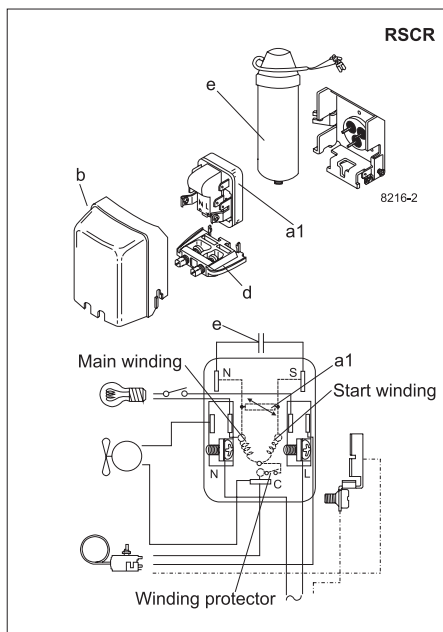
Evap. temp. in °F	-49	-40	-30	-20	-13	-10	0	10	14	20	30	32	40	41	45	50	59
Capacity in BTU/h			410	547	660	713	913	1152	1260	1436	1768	1841	2154	2196	2370		
Power cons. in W			117	131	142	146	161	176	182	191	203	206	214	215	219		
Current cons. in A			1.09	1.20	1.29	1.33	1.47	1.61	1.66	1.74	1.85	1.87	1.92	1.93	1.95		
EER in BTU/Wh			3.51	4.17	4.66	4.88	5.65	6.53	6.92	7.53	8.69	8.94	10.10	10.20	10.80		

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			140	185	221	238	302	378	412	467	571	594	691	704	758		
Power cons. in W			119	132	140	144	156	167	171	176	183	184	188	188	189		
Current cons. in A			1.07	1.16	1.23	1.26	1.37	1.46	1.49	1.52	1.56	1.56	1.56	1.55	1.54		
COP in W/W			1.18	1.40	1.57	1.65	1.94	2.27	2.41	2.66	3.12	3.22	3.68	3.74	4.01		

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			129	170	204	220	280	352	383	435	533	555	647	659	709		
Power cons. in W			121	134	144	148	162	174	179	186	195	197	203	203	205		
Current cons. in A			1.08	1.18	1.26	1.30	1.42	1.53	1.57	1.62	1.69	1.69	1.71	1.71	1.71		
COP in W/W			1.07	1.27	1.42	1.49	1.73	2.02	2.14	2.34	2.73	2.82	3.19	3.24	3.45		



Accessories for	DLE4CN	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

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