

Datasheets

DLE4.8CN Energy-optimized LBP/MBP R290 220-240V 50Hz

General

Code number	102H4565
Approvals	EN 60335-2-34 w. Annex AA
Compressors on pallet	100

Application

Application	LBP/MBP			
	Hz	50	60	
Frequency	Hz	50	60	
Evaporating temperature	°C	-35 to 7.2	-	
Voltage range	V	198 to 254	-	
Max. condensing temperature continuous (short)	°C	55 (65)	-	
Max. winding temperature continuous (short)	°C	125 (135)	-	

Cooling requirements

Frequency	Hz	50			60		
		LBP	MBP	HBP	LBP	MBP	HBP
32°C		F ₂	F ₂	-	-	-	-
38°C		F ₂	F ₂	-	-	-	-
43°C		F ₂	F ₂	-	-	-	-

Remarks on application:
For evaporation temperatures higher than 0 °C do not run compressor at condensing temperatures higher 50 °C in steady state operation.

Motor

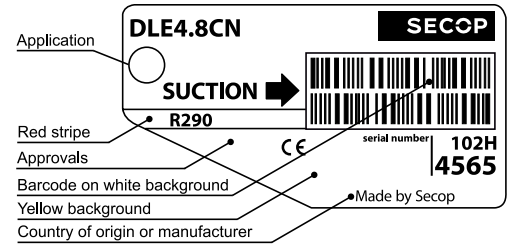
Motor type	CSIR/RSIR/RSCR		
LRA (rated after 4 sec. UL984), HST LST	A	6.6	5.7
Cut in Current, HST LST	A	6.6	9.9
Resistance, main start winding (25°C)	Ω	17.6	18.5

Design

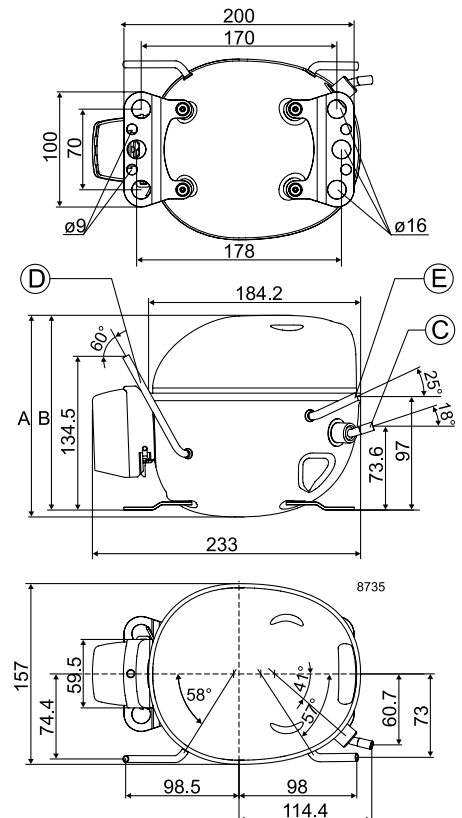
Displacement	cm ³	4.80
Oil quantity (type)	cm ³	230 (polyolester)
Maximum refrigerant charge	g	150
Free gas volume in compressor	cm ³	1390
Weight without electrical equipment	kg	8.2

Dimensions

Height	mm	A	175
		B	169
		B1	-
		B2	-
Suction connector	location/I.D. mm angle	C	8.2 18°
	material comment		Copper Rubber plug
Process connector	location/I.D. mm angle	D	6.2 60°
	material comment		Copper Rubber plug
Discharge connector	location/I.D. mm angle	E	6.2 25°
	material comment		Copper Rubber plug
Oil cooler connector	location/I.D. mm angle	F	-
	material comment		-
Connector tolerance	I.D. mm		±0.09
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



EN 12900 LBP 220V, 50Hz, CSIR/RSIR, fan cooling F₂

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10	15	20
Capacity in W			115	164	214	231	268	328	398	451	480	575	687	742			
Power cons. in W			121	132	145	149	157	169	180	187	190	198	203	205			
Current cons. in A			0.86	0.90	0.95	0.96	0.99	1.03	1.06	1.08	1.09	1.12	1.14	1.14			
COP in W/W			0.96	1.24	1.48	1.56	1.71	1.94	2.21	2.41	2.53	2.91	3.38	3.63			

EN 12900 MBP 220V, 50Hz, CSIR/RSIR, fan cooling F₂

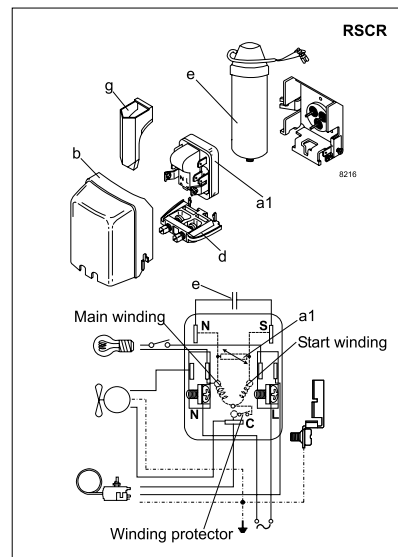
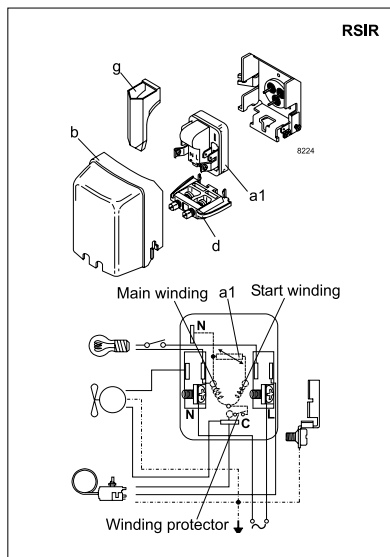
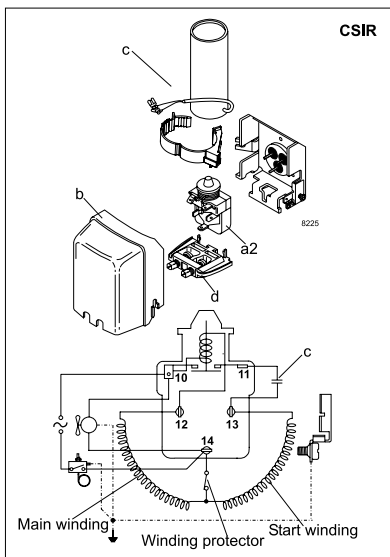
Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10	15	20
Capacity in W			105	150	196	213	247	304	369	419	446	536	643	695			
Power cons. in W			123	136	150	154	164	178	191	199	203	213	221	224			
Current cons. in A			0.87	0.91	0.96	0.97	1.00	1.05	1.09	1.12	1.13	1.17	1.20	1.21			
COP in W/W			0.85	1.10	1.31	1.38	1.51	1.71	1.94	2.10	2.20	2.51	2.90	3.10			

ASHRAE LBP 220V, 50Hz, CSIR/RSIR, fan cooling F₂

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10	15	20
Capacity in W			128	176	225	242	278	339	410	464	494	595	715	775			
Power cons. in W			119	134	150	155	166	183	200	210	215	229	242	246			
Current cons. in A			0.89	0.94	0.99	1.01	1.05	1.10	1.16	1.20	1.22	1.28	1.34	1.36			
COP in W/W			1.08	1.31	1.50	1.56	1.67	1.85	2.05	2.21	2.30	2.59	2.96	3.14			

ASHRAE MBP/HBP 220V, 50Hz, CSIR/RSIR, fan cooling F₂

Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10	15	20
Capacity in W			114	157	201	217	249	303	366	413	440	529	636	689			
Power cons. in W			118	132	148	154	165	181	197	208	213	227	239	243			
Current cons. in A			0.89	0.94	0.99	1.01	1.05	1.10	1.16	1.20	1.22	1.28	1.34	1.36			
COP in W/W			0.97	1.19	1.36	1.41	1.51	1.67	1.85	1.99	2.07	2.34	2.66	2.83			



Accessories for	DLE4.8CN	Figure	Code number
PTC starting device	6.3 mm spade connectors	a1	-
	4.8 mm spade connectors		-
ePTC starting device	4.8 mm spade connectors	a2	103N0050
Starting relay	6.3 mm spade connectors	a2	117U7001
Start. capacitor 60 µF	6.3 mm spade connectors	c	117U5014
Cover		b	103N0491
Run capacitor 5 µF (optional)	6.3 mm spade connectors	e	-
	4.8 mm spade connectors		117-7129
Cord relief		d	103N1010
Protection screen for PTC		g	-

Test conditions	EN 12900		ASHRAE	
	LBP	MBP	LBP	MBP
Condensing temperature	40°C	45°C	54.4°C	54.4°C
Ambient temperature	32°C	32°C	32.2°C	35°C
Suction gas temperature	20°C	20°C	32.2°C	35°C
Liquid temperature	no subcooling		32.2°C	46.1°C

Mounting accessories	Code number	
Bolt joint for one comp.	Ø: 16 mm	118-1917
Bolt joint in quantities	Ø: 16 mm	118-1918
Snap-on in quantities	Ø: 16 mm	118-1919

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