

Datasheets

DLE5.7CN Energy-optimized LBP/MBP R290 220-240V 50Hz

General

Code number	102H4652
Approvals	EN 60335-2-34 w. Annex AA
Compressors on pallet	100

Application

Application	LBP/MBP		
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		
Application		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

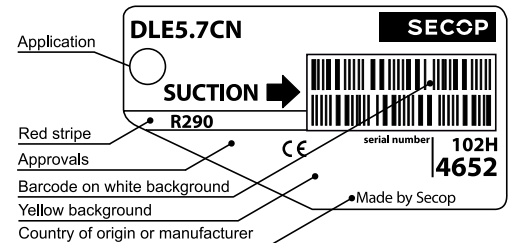
Motor type	CSIR/RSIR/RSCR		
LRA (rated after 4 sec. UL984), HST LST	A	8.8	7.4
Cut in Current, HST LST	A	8.8	11.9
Resistance, main start winding (25°C)	Ω	13.5	14.3

Design

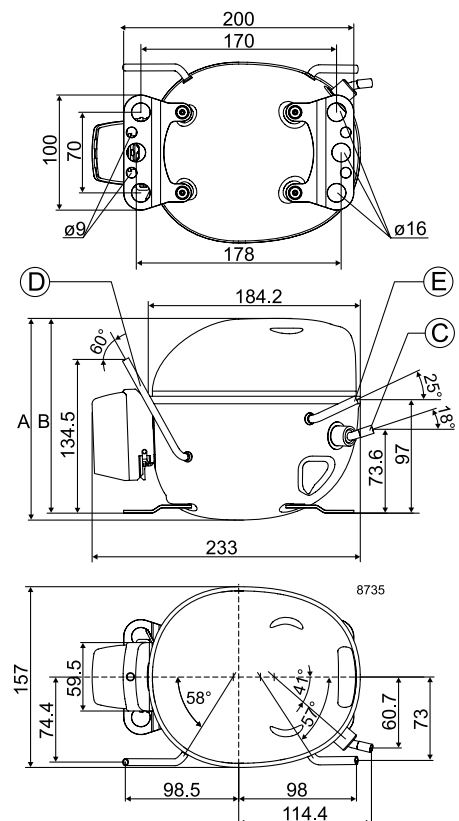
Displacement	cm ³	5.70
Oil quantity (type)	cm ³	230 (polyolester)
Maximum refrigerant charge	g	150
Free gas volume in compressor	cm ³	1465
Weight without electrical equipment	kg	8.0

Dimensions

Height	mm	A	175
		B	169
		B1	-
		B2	-
Suction connector	location/I.D. mm angle	C	6.2 18°
	material comment	Cu-plated steel Rubber plug	
Process connector	location/I.D. mm angle	D	4.5 60°
	material comment	Copper Rubber plug	
Discharge connector	location/I.D. mm angle	E	5.0 25°
	material comment	Copper Rubber plug	
Oil cooler connector	location/I.D. mm angle	F	-
	material comment	-	
Connector tolerance	I.D. mm	±0.09, on 5.0 +0.12/+0.22 on 4.5 +0.10/-0.20	
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			169	215	267	287	328	400	483	547	582	697	832	897			
Power cons. in W			145	162	179	184	194	208	222	230	234	245	256	260			
Current cons. in A			1.13	1.17	1.21	1.23	1.25	1.30	1.34	1.36	1.38	1.42	1.45	1.47			
COP in W/W			1.17	1.33	1.50	1.56	1.69	1.92	2.18	2.38	2.49	2.84	3.25	3.45			

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

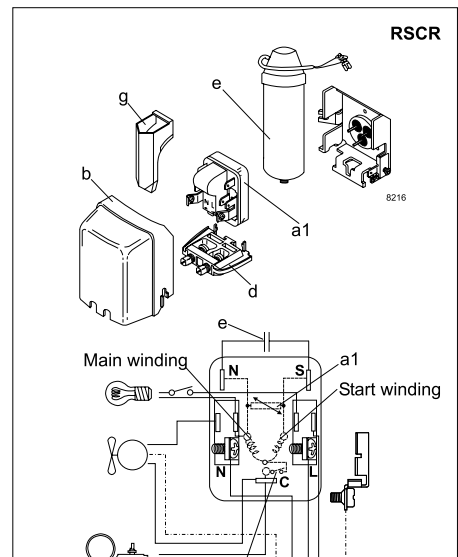
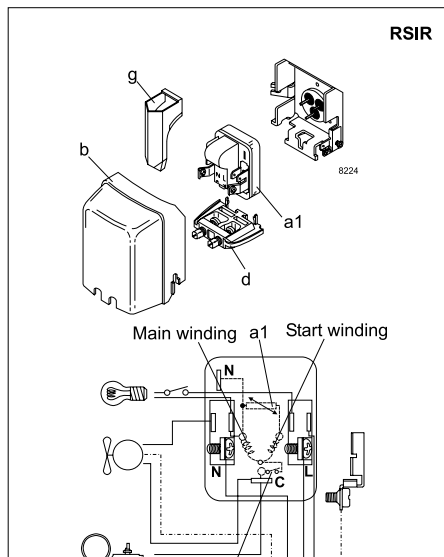
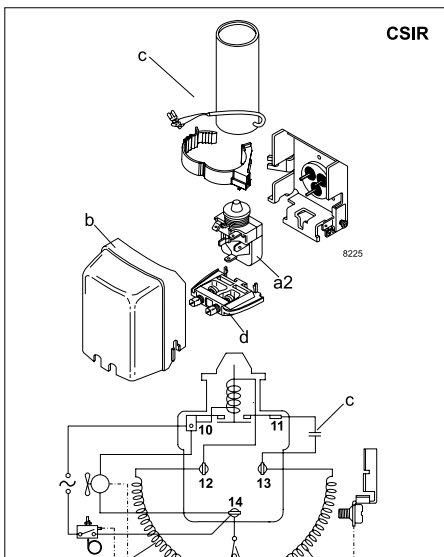
Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10	15	20
Capacity in W			158	203	252	271	309	376	454	513	546	654	780	841			
Power cons. in W			148	167	184	190	201	218	233	243	248	262	276	281			
Current cons. in A			1.13	1.18	1.23	1.24	1.27	1.32	1.37	1.40	1.42	1.47	1.52	1.54			
COP in W/W			1.07	1.22	1.37	1.42	1.54	1.73	1.95	2.11	2.20	2.49	2.83	2.99			

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			168	220	277	298	341	415	501	566	603	722	862	930			
Power cons. in W			149	169	188	195	208	227	245	258	264	282	300	308			
Current cons. in A			1.15	1.20	1.26	1.28	1.32	1.38	1.45	1.50	1.52	1.59	1.67	1.70			
COP in W/W			1.12	1.30	1.47	1.53	1.64	1.83	2.04	2.20	2.28	2.56	2.87	3.03			

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			150	197	247	266	304	370	447	505	537	643	766	827			
Power cons. in W			148	167	186	193	205	224	243	255	261	279	296	304			
Current cons. in A			1.15	1.20	1.26	1.28	1.32	1.38	1.45	1.50	1.52	1.59	1.67	1.70			
COP in W/W			1.02	1.18	1.33	1.38	1.48	1.65	1.84	1.98	2.06	2.31	2.59	2.72			



Accessories for	DLE5.7CN	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	117U7015
Start. capacitor 80 µF	6.3 mm spade connectors	c	117U5015
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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