

Datasheets

DLE7.5CN Energy-optimized LBP/MBP R290 220-240V 50Hz

General

Code number	102H4853
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

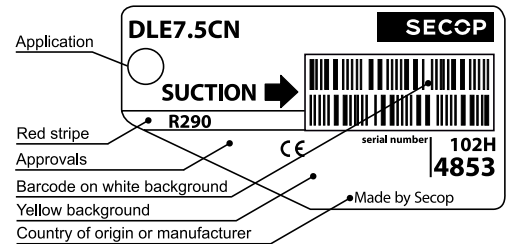
Motor type	CSIR/RSIR/RSCR		
LRA (rated after 4 sec. UL984), HST LST	A	9.3	9.2
Cut in Current, HST LST	A	9.3	14.5
Resistance, main start winding (25°C)	Ω	10.9	8.3

Design

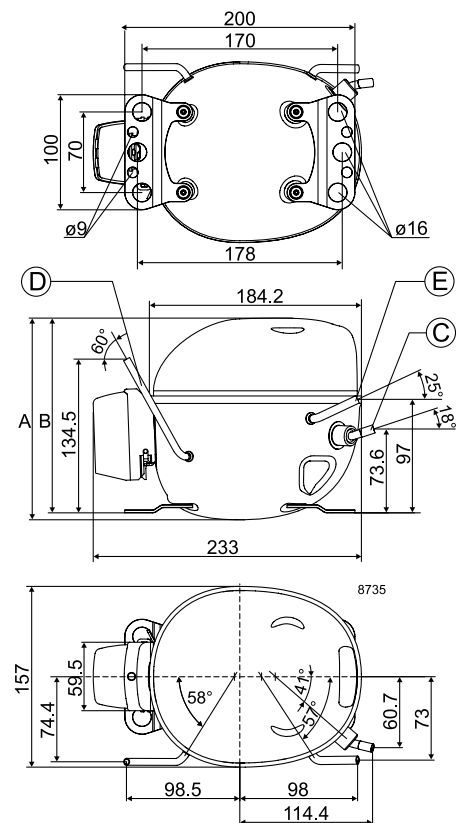
Displacement	cm ³	7.48
Oil quantity (type)	cm ³	230 (polyolester)
Maximum refrigerant charge	g	150
Free gas volume in compressor	cm ³	1465
Weight without electrical equipment	kg	8.0

Dimensions

Height	mm	A	175
		B	169
		B1	-
		B2	-
Suction connector	location/I.D. mm angle	C	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			212	268	336	362	417	512	623	706	752	900	1070	1151			
Power cons. in W			187	206	226	233	247	267	288	302	309	331	353	363			
Current cons. in A			1.40	1.45	1.50	1.52	1.55	1.62	1.68	1.73	1.76	1.83	1.91	1.95			
COP in W/W			1.13	1.30	1.49	1.55	1.69	1.92	2.16	2.34	2.43	2.72	3.03	3.17			

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

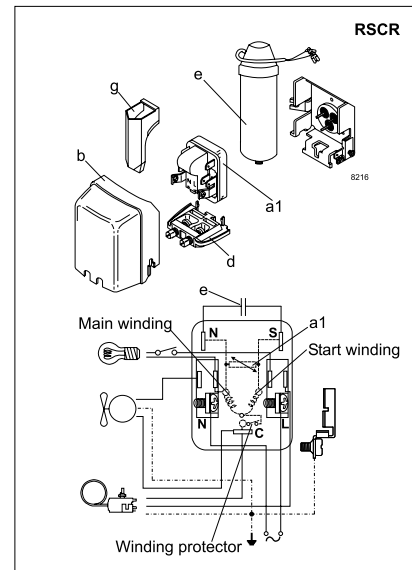
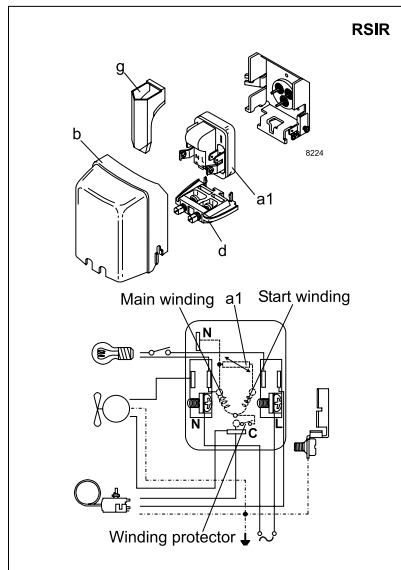
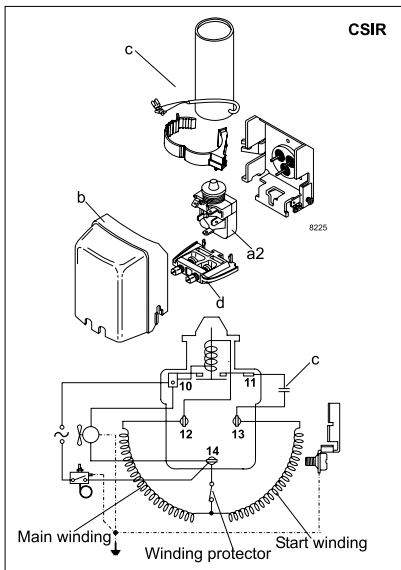
Evap. temp. in °C	-45	-40	-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10	15	20
Capacity in W			198	251	315	339	390	479	583	660	703	841	1000	1076			
Power cons. in W			193	214	236	243	258	280	302	317	325	349	373	383			
Current cons. in A			1.41	1.46	1.52	1.54	1.58	1.65	1.73	1.78	1.81	1.89	1.98	2.02			
COP in W/W			1.03	1.17	1.33	1.39	1.51	1.71	1.93	2.08	2.16	2.41	2.68	2.81			

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			209	269	339	366	422	519	633	718	765	918	1094	1179			
Power cons. in W			188	214	240	249	266	292	319	336	345	372	399	411			
Current cons. in A			1.41	1.48	1.56	1.59	1.65	1.74	1.84	1.91	1.95	2.06	2.18	2.23			
COP in W/W			1.11	1.26	1.41	1.47	1.59	1.78	1.99	2.14	2.22	2.47	2.74	2.87			

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			187	240	303	327	377	463	564	640	682	817	973	1048			
Power cons. in W			186	212	237	246	263	289	315	332	341	368	394	406			
Current cons. in A			1.41	1.48	1.56	1.59	1.65	1.74	1.84	1.91	1.95	2.06	2.18	2.23			
COP in W/W			1.00	1.14	1.28	1.33	1.43	1.60	1.79	1.93	2.00	2.22	2.47	2.58			



Accessories for	DLE7.5CN	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		103N0050
Starting relay	6.3 mm spade connectors	a2	117U7002
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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