Donper L65CZ1 Compressor Specs and Replacements

Category: Refrigeration
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R134a, refrigerant, compressor L65CZ1, 220-240V 50Hz, LBP, 1/5 hp

Description

Mbsm.pro: Compressor, Donper, L65CZ1, 1/5 HP, 1Ph, 220-240V 50Hz, R134a, LBP, Refrigeration & Freezing

Technical Specifications Table

Feature	Details
Model	L65CZ1
Manufacturer	Donper (Dongbei Compressor)
Utilisation	LBP (Low Back Pressure)
Domaine	Domestic Refrigerators / Freezers / Wine Coolers
Cooling Wattage at -23.3°C	158-170 W (ASHRAE)
Cubic Feet Capacity	5 to 10 cu. ft. (Depending on insulation)
Litres Capacity	150 to 280 Liters
Kcal/h	136 Kcal/h
TON	~0.045 Tons
Oil Type and Quantity	POE (Polyolester) or Mineral Oil, 280-320 ml
Horsepower (HP)	1/5 HP

Feature	Details
Refrigerant Type	R134a
Power Supply	220-240V / 50Hz / 1Ph
Cooling Capacity BTU	464 BTU/h
Motor Type	RSIR (Resistance Start Induction Run)
Displacement	6.5 cm³
Winding Material	Copper
Pression Charge	8-12 Bar (High Side)
Capillary Recommendation	0.028″ or 0.031″ (Length varies by application)
Compatible Appliances	Domestic refrigerators, freezers, wine coolers, beverage coolers
Temperature Function	-25°C to +10°C
With Fan or No	Yes (Fan cooling required for compressor)
Commercial or No	Domestic/Light Commercial Grade
Amperage (FLA)	1.2 A to 1.5 A
LRA (Locked Rotor Amps)	6.0-7.5 A
Type of Relay	PTC Relay
COP	1.25 W/W
Voltage Range	187-254V
Max Condensing Temperature	60°C (Continuous) / 70°C (Short)
Thermal Protection	Yes (Internal Thermal Protector)
Net Weight	6.5-7.0 kg
Origin	Manufactured in China

Efficiency Metrics (COP) Table

Performance varies based on operating conditions. Here is how the L65CZ1 performs across the temperature spectrum:

Evaporating Temp (°C)	Cooling Capacity (Watts)	Power Consumption (Watts)	COP (W/W)
-25	135	130	1.04
-20	165	140	1.18
-15	200	150	1.33
-10	240	160	1.50
-5	285	170	1.68
0	335	180	1.86
5	390	190	2.05
10	450	200	2.25

Replacement Models

Brand	Model Number
Donper	L65CZ1
Donper	L65CZ variants

5 Replacements (Same R134a Gas)

1. **Embraco NEK6196Z** (Strong alternative, 1/5 HP, 6.5cc)

2. **Tecumseh THG1352YLS** (Classic reliable swap, 1/6 HP)
3. **Panasonic QB66C13GAX5** (Excellent domestic equivalent, 6.6cc)
4. **Cubigel GL80AA** (Similar capacity, 7.8cc)
5. **Huayi HYE11YG** (Budget-friendly alternative, 1/6 HP)

5 Replacements (Other Gas – R600a/R404A)

Note: Requires complete system flush and expansion valve/capillary adjustment.

1. **Embraco EGU80HLP** (R600a – Isobutane, very efficient, 1/6 HP)
2. **Danfoss SC10CNX** (R290 – Propane, high efficiency)
3. **Tecumseh CAJ9480Z** (R404A – Higher capacity)
4. **Secop NL9FK** (R600a compatible variant)
5. **Cubigel HM80AA** (R600a – Energy efficient)

Key Features

- Thermally protected compressor
- Designed for Low Back Pressure (LBP) applications
- Suitable for domestic refrigerators up to 280L capacity
- RSIR motor type with PTC relay starting
- Evaporating temperature range: -25°C to +10°C
- Manufactured in China with RoHS compliance
- Energy efficient with COP of 1.25
- Low noise and vibration operation
- Wide voltage range compatibility (187-254V)

Focus Keyphrase: Donper L65CZ1 Compressor Specs and Replacements
SEO Title: Mbsm.pro – Donper L65CZ1 Compressor: 1/5 HP R134a Technical Guide
Meta Description: Looking for L65CZ1 specs? We break down this 1/5 HP R134a Donper compressor including cooling capacity (158-170W), wiring, oil type, and the top replacement models for domestic refrigeration.
Slug: donper-l65cz1-compressor-1-5-hp-r134a-specs
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Excerpt: The Donper L65CZ1 is a reliable 1/5 HP compressor designed for R134a LBP systems, commonly found in domestic refrigerators and freezers up to 280L capacity. This guide provides the full technical data sheet, including cooling capacity (158-170W at ASHRAE), oil requirements (280-320ml), and a comprehensive list of compatible replacements for both R134a and modern alternative refrigerants to ensure your repair is successful.



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1/5 hp, Compressor Replacement, Domestic Refrigerator, Donper, GL80AA, HVAC, L65CZ1, LBP, low back pressure, mbsm, mbsm.pro, mbsmgroup, mbsmpro.com, NEK6196Z, QB66C13GAX5, R134a, Refrigeration Repair, THG1352YLS