

Compressor, LG, BMH089NHMV, 1/4 hp

Category: Refrigeration

written by www.mbsmpro.com | January 5, 2026



Here is the comprehensive, SEO-optimized professional article based on the technical data for the LG BMH089NHMV compressor.

Mbsmpro.com, Compressor, LG, BMH089NHMV, 1/4 hp, R600a, Inverter, BLDC, LBP, 3PH, 220-240V, 51-225Hz, Cooling, Freezing

The **LG BMH089NHMV** is a high-efficiency, variable-speed inverter compressor designed for modern refrigeration systems. Operating on the eco-friendly **R600a refrigerant**, this BLDC (Brushless DC) motor unit is a cornerstone of LG's "Smart Inverter" technology, offering superior energy savings and precise temperature control compared to traditional fixed-speed models. Engineered for Low Back Pressure (LBP) applications, it is commonly found in large-capacity household and commercial refrigerators ranging from 150L to 170L.

Technical Specifications and Performance Data

The BMH089NHMV is part of the BMH series, characterized by its medium-sized chassis and a displacement of **8.9 cc/rev**. Unlike standard compressors that run at a constant speed, this inverter model adjusts its frequency between **60 Hz and 225 Hz**, allowing it to modulate cooling capacity from 36W to 348W depending on the real-time demand of the appliance.

Technical Parameter Specification Detail

Model Number	LG BMH089NHMV
Refrigerant Type	R600a (Isobutane)
Horsepower	1/4 HP
Motor Type	BLDC / Inverter (3-Phase)
Voltage	220-240V
Frequency Range	60 - 225 Hz
Displacement	8.9 cc/rev
Cooling Capacity	188W (at standard LBP)
Application	LBP (Low Back Pressure)

Performance Comparison: BMH089NHMV vs. BMG089NHMV

While these two models share the same displacement, they often differ in their wire construction or generation code. The BMH series frequently utilizes **Aluminum (Al) wire** to balance cost-effectiveness with thermal efficiency, whereas some BMG variants may use copper.

Feature	LG BMH089NHMV	LG BMG089NHMV
Displacement	8.9 cc/rev	8.9 cc/rev
Wire Material	Aluminum (Al) Wire	Copper or Al (Model dependent)
Cooling Cap (W)	~188 W	~188 W
Max Frequency	225 Hz	225 Hz
Efficiency (EER)	High (Inverter)	High (Inverter)

The Inverter Advantage: Efficiency and Noise Reduction

The BMH089NHMV employs a sleeve-less aluminum connecting rod and a specialized oil pumping system to minimize friction points. This design is critical for the variable speed range of **1,200 to 4,500 rpm**, ensuring that the compressor remains stable even at ultra-low speeds. In terms of noise, the integrated suction muffler design reduces pulsation, making it significantly quieter than its fixed-speed counterparts.

- **Energy Savings:** Consumes up to 40% less energy than conventional compressors by avoiding frequent on/off cycles.
- **Durability:** Reduced mechanical stress due to soft-start and soft-stop capabilities.
- **Precision:** Maintains a consistent internal temperature, extending the shelf life of fresh food.

SEO Metadata

- **Focus Keyword:** LG BMH089NHMV Compressor
- **SEO Title:** LG BMH089NHMV Compressor: 1/4 HP R600a Inverter Technical Data
- **Meta Description:** Get full specs for the LG BMH089NHMV inverter compressor. 1/4 HP, R600a, 220-240V BLDC motor for high-efficiency cooling. Learn performance data and comparison.
- **Slug:** lg-bmh089nhmv-compressor-specifications-r600a
- **Tags:** LG, BMH089NHMV, 1/4 HP, R600a, Inverter Compressor, BLDC Motor, LBP, Mbsmgroup, Mbsm.pro, mbsmpro.com, mbsm, Refrigeration Parts, LG Refrigerator.
- **Excerpt:** The LG BMH089NHMV is a 1/4 HP inverter compressor utilizing R600a refrigerant for high-efficiency refrigeration. With a variable speed range of 60-225 Hz and a displacement of 8.9 cc/rev, this BLDC motor unit provides precise cooling capacity up to 188W, making it ideal for modern household and commercial LBP applications.