

# Mbsm.pro, Compressor, BTF60AA, 1/7 hp, r600a, lbp, Serbian Compressor, serie T, from 180 L to 200 L, from 70 to 75 W

Category: compressor

written by [www.mbsm.pro](http://www.mbsm.pro) | 30 March 2025



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## Siberia Compressor Catalogue Overview

The **Siberia Compressor Catalogue** provides detailed specifications and performance data for various compressor series designed for refrigeration systems. These compressors are available in multiple configurations, including **R134a** and **R600a** refrigerants, catering to different cooling capacities and applications. Below is an organized breakdown of the catalog's key sections:

### 1. Compressor Series Overview

#### S Series (Low Back Pressure – LBP)

- **Refrigerants:** R600a (High Efficiency), R600a (Medium Efficiency), R134a
- **Applications:** Suitable for small to medium-sized refrigerators.

- **Key Features:**
  - Compact design
  - Low noise and vibration
  - High reliability

**V Series (Low Back Pressure – LBP)**

- **Refrigerants:** R600a, R134a
- **Applications:** Ideal for compact refrigeration units.
- **Key Features:**
  - Energy-efficient operation
  - Small footprint
  - Environmentally friendly refrigerants

**F Series (Low Back Pressure – LBP)**

- **Refrigerants:** R134a, R600a
- **Applications:** Designed for larger refrigeration systems.
- **Key Features:**
  - High cooling capacity
  - Multiple motor types (RSIR/RSCR)
  - Robust performance under varying conditions

**T Series (Low Back Pressure – LBP)**

- **Refrigerants:** R600a, R134a
- **Applications:** Versatile use in household and commercial refrigeration.
- **Key Features:**
  - Very compact size
  - Low noise and vibration
  - High reliability

**2. Performance Specifications**

**Example: T Series Compressors (R600a)**

Model	Power (HP)	Displacement (cm³)	Cooling Capacity (W)	Input Power (W)	Rated Current (A)	COP	Oil Charge (mL)
BTF60AA	1/7	6.0	105	74 / 70	0.52 / 0.40	1.42 / 1.50	180
BTF60AA®	1/7	6.0	105	68 / 64	0.50 / 0.34	1.54 / 1.65	180
BTR60AA©	1/7	6.0	105	66 / 60	0.42 / 0.29	1.60 / 1.75	180

**Example: S Series Compressors (R600a)**

Model	Displacement (cm³)	Motor Type	Cooling Capacity (W)	Input Power (W)	Rated Current (A)	COP	Oil Charge (mL)
BSR51AA	5.1	RSCR	92	53	0.26	1.75	200

Model	Displacement (cm <sup>3</sup> )	Motor Type	Cooling Capacity (W)	Input Power (W)	Rated Current (A)	COP	Oil Charge (ml)
BSR58AA 5.8		RSCR	105	60	0.29	1.75	200
BSR68AA 6.8		RSCR	120	69	0.33	1.75	200

## 3. Special Requirements for Refrigerants

### R134a Compressors

- The open time of the compressor connection pipe should not exceed **10 minutes** .
- Use dedicated vacuum pumps and charging equipment for R134a.
- Avoid using organic substances incompatible with R134a in the refrigeration system.
- Ensure strict control of moisture, impurities, paraffin, silicone oil, and chloride ions.

### R600a Compressors

- Follow safety protocols for hydrocarbon refrigerants during installation and operation.
- Do not tamper with the pre-filled specialized oil in the compressor.
- Use appropriate tools and equipment to ensure safe handling of R600a.

## 4. Refrigerator Size Estimation

The cooling capacity of a compressor determines the refrigerator size it can support. For example:

- **BTF60AA (1/7 HP):**
  - Cooling Capacity: **105 W**
  - Approximate Refrigerator Size: **157.5 – 210 liters**
    - Calculation:  $105W \times 1.5 \text{ to } 2 = 157.5 \text{ to } 210 \text{ liters}$

## 5. Outline Drawings and Packaging

Each compressor model includes detailed outline drawings and packaging specifications. For instance:

- **Packaging Dimensions:**
  - Carton Size: 1120mm×824mm×870mm
  - Container Capacity: Up to **28 units** per container.

## 6. General Requirements for Installation and Operation

- Store compressors in a dry, well-ventilated area.
- Avoid tilting or inverting during transportation.
- Install within **10 minutes** after removing protective plugs.

- Ensure reliable grounding during operation.
- Avoid high-voltage or vacuum conditions during startup.

To determine the refrigerator size (in liters) that a **1/7 HP** compressor can cool, we need to refer to the performance data of the compressors listed in the provided files. Specifically, the **BTF60AA** compressor (1/7 HP) is a good reference point for this calculation.

## Key Specifications for BTF60AA (1/7 HP):

- **Cooling Capacity:** 105 W
- **Refrigerant:** R600a
- **Voltage:** 220-240V / 50Hz

The cooling capacity of a compressor directly correlates with the volume of the refrigerator it can cool. Typically:

- **1 W of cooling capacity** can cool approximately **1.5 to 2 liters** of refrigerator volume.

## Calculation:

For the **BTF60AA** compressor with a cooling capacity of **105 W** , the approximate refrigerator volume it can cool is:  
Refrigerator Volume=Cooling Capacity (W)×Factor (1.5 to 2)Refrigerator Volume=105W×1.5to2Refrigerator Volume=157.5to210liters

## Table for 1/7 HP Compressor:

Below is a table summarizing the approximate refrigerator size (in liters) based on the cooling capacity of a **1/7 HP** compressor:

Compressor Model	Power (HP)	Cooling Capacity (W)	Approximate Refrigerator Size (Liters)
BTF60AA	1/7	105	157.5 – 210

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