

# **Jiaxipera TT1113GY Compressor 1/5 HP R600a technical specifications and professional replacement guide for domestic refrigeration and freezing systems**

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## **Focus Keyphrase**

Jiaxipera TT1113GY Compressor 1/5 HP R600a technical specifications and professional replacement guide for domestic refrigeration and freezing systems

## **SEO Title**

Mbsmpro.com, Compressor, Jiaxipera, TT1113GY, 1/5 hp, Cooling, R600a, 155 W, 0.9 A, 1Ph 220-240V 50Hz, LBP, RSIR, -30°C to -10°C, Household Refrigerator

## Meta Description

Discover the full technical profile of the Jiaxipera TT1113GY compressor. Expert insights on this 1/5 HP R600a LBP unit, including cooling capacity, wiring, and replacement alternatives.

## Slug

jiaxipera-tt1113gy-compressor-1-5-hp-r600a-specifications

## Tags

Mbsmgroup, Mbsm.pro, mbsmpro.com, mbsm, Jiaxipera TT1113GY, R600a Compressor, 1/5 HP Compressor, HMK95AA, EMX55CLC, TLES8.7KK.3, NLX8.8KK, GLY90AA, TT1114GY, Jiaxipera Replacement, Refrigerator Repair, HVAC Expert

## Excerpt

The Jiaxipera TT1113GY is a cornerstone of modern domestic refrigeration, operating as a 1/5 HP Low Back Pressure compressor optimized for R600a refrigerant. This high-efficiency unit is widely used in household refrigerators and freezers, offering a cooling capacity of 155 Watts. This guide covers all essential technical data, electrical characteristics, and professional replacement options.

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## Technical Specification Table

Feature	Detailed Specification
<b>Model</b>	TT1113GY

<b>Utilisation (mbp/hbp/lbp)</b>	LBP (Low Back Pressure)
<b>Domaine (Freezing/Cooling)</b>	Domestic Refrigeration / Freezing
<b>Cooling wattage at -23.3°C</b>	155 W
<b>Cubic feet can this compressor cool?</b>	12 - 16 cu.ft. (depending on insulation)
<b>Litres can this compressor cool?</b>	300 - 450 Liters
<b>Kcal/h</b>	133 Kcal/h
<b>Oil Type and quantity</b>	Mineral / Alkylbenzene (180 ml)
<b>Horsepower (HP)</b>	1/5 HP
<b>Refrigerant Type</b>	R600a (Isobutane)
<b>Power Supply</b>	220-240V / 50Hz / 1 Phase
<b>Cooling Capacity BTU</b>	529 BTU/h
<b>Motor Type</b>	RSIR (Resistance Start - Inductive Run)
<b>Displacement</b>	8.9 cm <sup>3</sup>
<b>Winding Material</b>	Copper/Aluminum (OEM standard)
<b>Pression Charge</b>	Low side (typical 0.5 to 1.5 psi running)
<b>Capillary Recommendation</b>	0.031" ID (Length varies by cabinet)
<b>Refrigerator Compatibility</b>	Whirlpool, Beko, Haier, Bosch, Hisense

<b>Temperature function</b>	-35°C to -10°C
<b>With fan or no</b>	Static Cooling (No fan required)
<b>Commercial or no</b>	Domestic Only
<b>Amperage in function</b>	0.8 A - 1.1 A
<b>Lara (LRA)</b>	6.5 A
<b>Type of relay</b>	PTC Starter
<b>Capacitor</b>	No (Usually 4µF or 5µF optional for RSCR)
<b>Origin/Export</b>	China / Worldwide

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## **Compressor Replacements (Equivalent Performance)**

### **5 Replacements in same gas (R600a)**

1. **ACC / Secop:** HMK95AA
2. **Embraco:** EMX55CLC
3. **Danfoss:** TLES8.7KK.3
4. **GMCC:** SZ90E1H
5. **Wanbao:** HML110YE

### **5 Replacements in different gas (R134a)**

*Note: Requires system flush, oil check, and capillary adjustment.*

1. **Embraco:** EMI 70HER
2. **ZMC:** GM70AZ
3. **Tecumseh:** THG1365Y
4. **GMCC:** SE54E1J

## 5. Jiaxipera: N1113KZ

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### The Engine of Domestic Cooling: An Expert Look at the Jiaxipera TT1113GY

In the world of modern appliances, the transition toward eco-friendly refrigerants has made the **Jiaxipera TT1113GY** a standard-bearer for efficiency and reliability. As someone who has spent years in the field, diagnosing cooling cycles and performing heart transplants on refrigerators, I can tell you that this 1/5 HP unit is a workhorse designed for longevity—provided it is handled with professional care.

The TT1113GY is specifically engineered for **Low Back Pressure (LBP)** applications. This means it thrives in environments where it needs to pull heat out of a frozen space and maintain temperatures well below zero. What makes this model stand out in the current market is its optimization for **R600a (Isobutane)**.

#### Performance Metrics and Thermodynamic Efficiency

Understanding the efficiency of a compressor requires looking at the **Coefficient of Performance (COP)**. The TT1113GY is designed to provide maximum cooling output while minimizing electricity draw. This is vital for modern energy-star ratings.

#### Efficiency Metrics (COP) Table

Evaporating Temp (°C)	Cooling Capacity (Watts)	Power Consumption (Watts)	COP (W/W)

-30	108	92	1.17
-25	142	105	1.35
**-23.3 (Standard)**	**155**	**112**	**1.38**
-20	185	120	1.54
-15	240	135	1.77
-10	310	150	2.06

### **Comparison: Jiaxipera TT1113GY vs. Standard R134a Units**

When comparing this R600a unit to older R134a compressors like the GM70AZ, there are distinct differences. The R600a molecules are larger, and the compressor runs at a lower discharge pressure. This results in quieter operation and a significant reduction in environmental impact (Global Warming Potential). However, the TT1113GY uses about 40-50% less refrigerant charge by weight than an R134a counterpart, making precise charging critical for field technicians.

### **Expert Insights: Field Worker Perspective**

If you are replacing a compressor, here is what my experience has taught me about the TT1113GY:

1. **Cleanliness is Godliness:** Because R600a uses mineral or alkylbenzene oil, moisture is your worst enemy. Always replace the filter drier and use a high-grade vacuum pump.
2. **Capillary Precautions:** The TT1113GY has a 8.9cc displacement. If you are retrofitting this into a cabinet that previously held a smaller 7.5cc unit, monitor your frost pattern closely; you may need to adjust the capillary length to prevent liquid slugging back to the compressor.

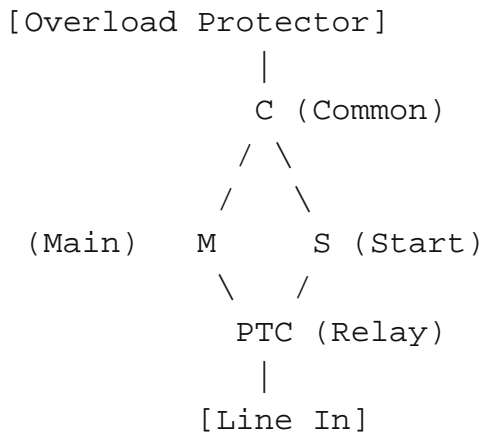
3. **Startup Reliability:** The RSIR motor is simple and effective. If you encounter startup issues, 90% of the time it is a failing PTC relay rather than the windings themselves.

### Pro Tip for Longevity

Ensure the condenser coils are free of dust. While the TT1113GY is a “static cooling” unit (often not needing a fan), it relies on convection. In tight kitchen cabinets, heat buildup is the number one killer of these compressors. Giving the unit “room to breathe” will extend its life by years.

### Internal Electrical Configuration (RSIR)

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*(This schematic represents the typical PTC/RSIR wiring for the TT1113GY without a run capacitor.)*



1/5 HP Compressor, EMX55CLC, GLY90AA, HMK95AA, Jiaxipera Replacement, Jiaxipera TT1113GY, mbsm, mbsm.pro, mbsmgroup, mbsmpro.com, NLX8.8KK, R600a compressor, Refrigerator Repair, TLES8.7KK.3, TT1114GY

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