

# Secop ES7FT.4 Compressor 1/5 HP R134a

## Technical Specifications and Replacements

Category: Refrigeration

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### **Mbsmpro.com, Compressor, ES7FT.4, 1/5 hp, Secop, Cooling, R134a, 147 W, 1.1 A, 1Ph 220-240V 50Hz, LBP, RSIR, -35°C to -10°C, Static Cooling**

The **Secop ES7FT.4** represents a pinnacle of energy-optimized engineering for tropical refrigeration environments. Designed specifically for low back pressure (LBP) applications, this hermetic reciprocating compressor is a reliable workhorse for household refrigerators and small commercial freezers. Operating on **R134a** refrigerant, it balances thermal efficiency with the robust durability required for high-ambient temperature regions.

#### **Technical Specification Table**

<b>Attribute</b>	<b>Details</b>
<b>Model</b>	ES7FT.4 (102G4707)
<b>Utilisation</b>	LBP (Low Back Pressure)
<b>Domaine</b>	Freezing / Deep Cooling
<b>Cooling Wattage at -23.3°C</b>	147 Watts (CECOMAF)
<b>Cubic Feet Capacity</b>	Approx. 7 - 10 cu.ft
<b>Liters Capacity</b>	200 - 300 Liters
<b>Kcal/h</b>	126 kcal/h
<b>Oil Type &amp; Quantity</b>	Polyolester (POE) / 180 cm <sup>3</sup>
<b>Horsepower (HP)</b>	1/5 HP
<b>Refrigerant Type</b>	R134a
<b>Power Supply</b>	220-240V / 50Hz / 1Ph
<b>Cooling Capacity BTU</b>	502 BTU/h
<b>Motor Type</b>	RSIR (Resistance Start - Induction Run)
<b>Displacement</b>	5.70 cm <sup>3</sup>
<b>Winding Material</b>	Copper
<b>Pressure Charge</b>	Low Pressure Side
<b>Capillary Recommendation</b>	0.031" or 0.8mm (application dependent)
<b>Appliance Type</b>	Domestic Fridge, Chest Freezer, Water Dispenser

Attribute	Details
<b>Temperature Function</b>	-35°C to -10°C
<b>Cooling System</b>	Static (S)
<b>Commercial Class</b>	Semi-Commercial / Residential
<b>Amperage (RLA)</b>	1.1 A
<b>LRA (Locked Rotor Amps)</b>	5.4 A
<b>Type of Relay</b>	PTC Starter
<b>Capacitor</b>	N/A (RSIR Configuration)
<b>Country of Origin</b>	Slovakia

## Efficiency Metrics (COP) & Performance Data

The efficiency of the ES7FT.4 is measured by its Coefficient of Performance (COP). Below is the performance breakdown at various evaporating temperatures (Condensing Temp at +55°C).

Evaporating Temp (°C)	Cooling Capacity (Watts)	Power Consumption (Watts)	COP (W/W)
-35	71.6	107	0.67
-30	99.5	125	0.80
<b>-23.3 (Standard)</b>	<b>147</b>	<b>148</b>	<b>0.99</b>
-20	176	160	1.10
-15	228	179	1.27
-10	290	200	1.45

## Comparison with Alternative Models

When comparing the **ES7FT.4** to other popular 1/5 HP units, we see distinct differences in displacement and energy draw. For instance, the **ZMC GM70AZ** offers similar wattage but often utilizes different winding resistances. The Secop ES series is specifically “Energy Optimized,” meaning it prioritizes a lower amperage draw during the long run cycles typical of LBP freezing.

## Professional Recommendations & Field Notice

As an expert in the field, I recommend the following for any technician installing the ES7FT.4:

- Vacuum Procedure:** Always achieve a vacuum of at least 500 microns. R134a and POE oil are highly hygroscopic; moisture will lead to acid formation and premature motor failure.
- Filter Drier:** Replace the filter drier (minimum 15g-20g XH-9) every time the system is opened.
- Start Components:** If the compressor fails to start in high-heat environments, ensure the PTC starter is not cracked. These units rely on a clean electrical signal to engage the start winding.

## Compressor Replacements (Cross-Reference)

### 5 Direct Replacements (R134a)

- **Embraco:** EMT6170Z or EMY70HSC
- **Danfoss:** TLS7F
- **ZMC:** GL70AA
- **Tecumseh:** THG1365Y
- **Jaxipera:** ND1111Y

### 5 Replacements (Alternative Gas - R600a)

*Note: Requires complete system flushing and capillary adjustment.*

- **Secop:** TLES7.5KK.3
- **Embraco:** EMX70CLC
- **ACC/Seko:** HMK80AA
- **Donper:** L76CZ1
- **Huayi:** HYE69Y

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**Focus Keyphrase:** Secop ES7FT.4 Compressor 1/5 HP R134a Technical Specifications and Replacements

**SEO Title:** Secop ES7FT.4 Compressor | 1/5 HP | R134a | Mbsmpro.com Technical Guide

**Meta Description:** Detailed technical sheet for the Secop ES7FT.4 (102G4707) compressor. Includes 1/5 HP power ratings, R134a gas data, cooling capacity tables, and 10 expert replacement options for refrigeration repair.

**Slug:** secop-es7ft4-compressor-1-5hp-r134a-specs

**Tags:** Mbsmgroup, Mbsm.pro, mbsmpro.com, mbsm, Secop, ES7FT.4, 102G4707, 1/5 HP, R134a, LBP Compressor, Refrigerator Repair, EMT6170Z, TLS7F, GL70AA, THG1365Y, ND1111Y, TLES7.5KK.3

**Excerpt:** The Secop ES7FT.4 is a high-efficiency 1/5 HP hermetic compressor engineered for R134a LBP applications. With a displacement of 5.70 cm<sup>3</sup> and a cooling capacity of 147W at -23.3°C, it is an ideal choice for tropical refrigeration. This guide provides full technical data, COP metrics, and professional replacement cross-references for HVAC technicians.



1/5 hp, 102G4707, EMT6170Z, ES7FT.4, GL70AA, LBP compressor, mbsm, mbsm.pro, mbsmgroup, mbsmpro.com, ND1111Y, R134a, Refrigerator Repair, Secop, THG1365Y, TLS7F  
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