

# EVCIS-24K-MD, The gas r410a charge weight is approximately 1.80 kg

Category: Air Conditioner  
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Based on the technical data provided for the Evvoli air conditioning unit, here is the professional breakdown, technical table, and SEO-optimized article.

## Gas Charge Calculation

To find the precise weight of the refrigerant, we use the Global Warming Potential (\$GWP\$) formula provided on the label:

$$\frac{\text{CO}_2 \text{ Equivalent (tonnes)}}{\text{GWP}} \times 1000 = \text{Weight in kg}$$

For R410A (GWP = 2088) and a 3.76 tonnes CO<sub>2</sub> equivalent: The gas charge weight is approximately 1.80 kg (1800 grams).



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## Technical Specifications Table

Attribute	Specification Details
Model	EVCIS-24K-MD
Utilisation (mbp/hbp/lbp)	HBP (High Back Pressure)
Domaine (Freezing/Cooling)	Air Conditioning (Cooling & Heating)
Oil Type and quantity	POE Oil (Polyolester) / Approx. 650ml - 750ml
Horsepower (HP)	2.5 HP
Refrigerant Type	R410A
Power Supply	220-240V ~ 50Hz, 1Ph
Cooling Capacity BTU	24,000 Btu/h
Heating Capacity BTU	26,000 Btu/h
Motor Type	Rotary (CSR/PSC)

Attribute	Specification Details
<b>Displacement</b>	22.0 to 25.0 cm <sup>3</sup>
<b>Winding Material</b>	High-Grade Copper
<b>Pression Charge</b>	Discharge: 4.2MPa / Suction: 1.5MPa
<b>Capillary</b>	0.070" – 0.080" ID (Typical for 2.0 Ton)
<b>Modele Refrigerator Compatibility</b>	Not for refrigerators; designed for Split AC Units
<b>Temperature function</b>	T1 Climate (-7°C to +43°C)
<b>With fan or no</b>	Yes (External Condenser Fan required)
<b>Commercial or no</b>	Light Commercial / Residential
<b>Amperage in function</b>	20.0 A (Maximum Load)
<b>LRA (Locked Rotor Amps)</b>	62 A – 70 A
<b>Type of relay</b>	Power Contactor / Start Relay
<b>Capacitor or no and valeur</b>	Run Capacitor: 55µF – 60µF / 450V

### 5 Compressor replacements (Same Gas: R410A)

1. **GMCC** PA240X2C-4FT
2. **Highly** ASD225RK-PA6AG
3. **Panasonic** 5PS225DAB02
4. **Rechi** 44R423A
5. **LG** GP250P

### 5 Compressor replacements (Other Gas: R22 Compatibility)

*Note: Requires flushing system and changing oil/capillary.*

1. **Panasonic** 2K32C225
2. **GMCC** PH370G2C
3. **Copeland** ZR28K3-PFV
4. **Tecumseh** AW5524E
5. **Mitsubishi** KH197

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## Mbsmpro.com, Compressor, EVCIS-24K-MD, 2.5 hp, Evvoli, Cooling, R410A, 24000 BTU, 20.0A, 1Ph 220-240V 50Hz, HBP

The Evvoli EVCIS-24K-MD is a high-performance rotary compressor system specifically engineered for split-type air conditioners. Delivering a powerful 24,000 BTU cooling capacity, this unit is built to withstand extreme operating pressures, reaching up to 4.2MPa on the discharge side. Utilizing R410A refrigerant, it meets modern environmental standards while providing superior heat transfer compared to legacy R22 systems.

## Performance Dynamics and Comparison

When comparing the EVCIS-24K-MD to standard 18,000 BTU units, the power jump is significant. While an 18K unit typically draws 12-14 Amps, this 24K beast requires a stable 20.0A feed. This makes it ideal for large living spaces or small commercial offices where consistent cooling (and heating at 26,000 BTU) is non-negotiable.

## Expert Engineering Insights

- **Thermal Efficiency:** The unit features an IPX4 resistance class, meaning the outdoor electrical components are protected against splashing water from any direction, crucial for rainy or humid climates.
- **Installation Note:** Vacuuming the system is not optional. Moisture in an R410A system reacts with POE oil to form acid, which will eventually eat through the copper windings.
- **Protection:** Due to the 20A draw, ensure the use of a dedicated circuit breaker.

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**Focus Keyword:** Evvoli EVCIS-24K-MD 24000 BTU R410A Compressor Specifications

**SEO Title:** Mbsmpro.com, Evvoli EVCIS-24K-MD, 2.5 hp, 24000 BTU, R410A, 220V Technical Data

**Meta Description:** Full technical specs for Evvoli EVCIS-24K-MD Split AC. 24,000 BTU, R410A gas (1.8kg), 20A current. Includes compressor replacements (GMCC, Panasonic, LG) and wiring insights.

**Slug:** evvoli-evcis-24k-md-compressor-specs-r410a

**Tags:** Mbsmgroup, Mbsm.pro, mbsmpro.com, mbsm, Evvoli, EVCIS-24K-MD, R410A, 24000 BTU, 2.5 HP, GMCC PA240X2C, Highly ASD225RK, Panasonic 5PS225, Rechi 44R423A, LG GP250P, Split AC Repair, HVAC Engineering.

**Excerpt:** The Evvoli EVCIS-24K-MD is a robust 2.5 HP rotary compressor designed for 24,000 BTU split-type air conditioners. Running on R410A refrigerant with a 20.0A rated current, it offers high-efficiency cooling and heating (26,000 BTU). This technical guide explores its pressure limits, electrical requirements, and the best replacement compressors for HVAC professionals and field workers.

# SPLIT TYPE AIR CONDITIONER



MODEL	EVCIS-24K-MD		
GAS TYPE	R410A		
COOLING CAPACITY	24000Btu/h		
HEATING CAPACITY	26000Btu/h		
EXCESSIVE OPERATING PRESSURE	DISCHARGE	4.2MPa	
	SUCTION	1.5MPa	
POWER SOURCE	220-240V~50Hz,1Ph		
RATED CURRENT	20.0A		
RATED INPUT	4000W		
OUTDOOR UNIT RESISTANCE CLASS		IPX4	
Contains fluorinated greenhouse gases			
GWP: 2088; 3.76 tonnes CO2 equivalent.			
Importer: Evvoli s.r.l			
Produced for EVVOLI s.r.l.			
Via dell'Annunciata 23/4 - 20121			
Milan - Italy			
www.evvoli.com			
MADE IN P.R.C			
CAUTION			

**OUTDOOR UNIT** **CAUTION**  
 1. Ensure to evacuate the air inside the indoor unit and pipes with vacuum pump.  
 as the additional amount of refrigerant



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[mbsmpro.com-EVCIS-24K-MD](http://mbsmpro.com-EVCIS-24K-MD) The gas r410a charge weight is approximately 180 kgDownload