

## Generico Wsan-Ymi 41

# Elfo Energy Edge EVO WSAN-YMi 41 Hybrid Heat Pump User Manual

Model: WSAN-YMi 41

## 1. PRODUCT OVERVIEW

The Elfo Energy Edge EVO WSAN-YMi 41 is a monoblock air-to-water hybrid heat pump system designed for efficient heating, cooling, and domestic hot water production. This advanced unit integrates cutting-edge technology to provide optimal comfort and energy savings for residential and commercial applications.

### Key Features:

- **Hybrid System:** Combines heat pump technology for versatile climate control.
- **Advanced Inverter Technology:** Ensures quiet and energy-efficient operation.
- **Smart Control:** Equipped with an intelligent Wi-Fi control system for remote management.
- **Flexible Installation:** Designed for adaptable setup to suit various environments.
- **Energy Saving:** Engineered to reduce energy consumption and CO2 emissions, promoting a sustainable environment.



Image 1: The Elfo Energy Edge EVO WSAN-YMi 41 hybrid heat pump, showing both the outdoor monoblock unit and a typical indoor hydrobox unit. The outdoor unit features a fan and connection ports, while the indoor unit is a compact white box.

## 2. SAFETY PRECAUTIONS

It is imperative to read and understand all safety instructions before installing, operating, or maintaining the unit. Failure to comply with these instructions may result in electric shock, fire, serious injury, or property damage.

### 2.1. General Safety Warnings

- **DANGER:** Before touching electrical terminals, turn off the power switch.
- **DANGER:** When removing service panels, there is a risk of accidentally touching live components.
- **DANGER:** During installation or service operations, never leave the unit unattended after removing service panels.
- **DANGER:** Do not touch water lines during or immediately after use, as high temperatures may cause burns. Wait for water lines to return to normal temperature or wear protective gloves.
- **DANGER:** Never touch switches with wet hands. Contact between wet hands and switches can cause electric shock.
- **DANGER:** Before touching electrical components, turn off all powered parts of the unit.
- **WARNING:** Tear and discard plastic packaging bags to prevent children from playing with them, as plastic bags can pose a suffocation risk.
- **WARNING:** Securely install packaging materials that may cause injury, such as nails or other metal or wood parts.
- **WARNING:** Installation operations must be performed by dealer personnel or other qualified persons in compliance with this manual's instructions. Do not install the unit yourself. Incorrect installation can lead to water leaks, electric shock, or fire.
- **WARNING:** For installation, use only specified accessories and components. Failure to use specified components can cause water leaks, electric shock, fire, or the unit to fall from its mounting position.
- **WARNING:** Install the unit on a support that can bear its weight. Incorrect installation can cause injuries due to the appliance falling.
- **WARNING:** Electrical connections must be performed by qualified personnel, in compliance with current laws and regulations and this manual's instructions, using a separate circuit. Insufficient

power supply or incorrect electrical connections can cause electric shock or fire.

- **WARNING:** Install an automatic circuit breaker with ground fault protection in accordance with current laws and regulations. Failure to observe this measure can cause electric shock or fire.
- **WARNING:** Check the safety of all electrical cables. Use specified cable types and protect wires and connection terminals from water and other external agents. Incomplete connections or fittings can create fire hazards.
- **WARNING:** For electrical connection, arrange wires so that the front panel can be securely fastened. Failure to apply the front panel can cause terminal overheating or create risks of electric shock or fire.
- **WARNING:** At the end of installation operations, check for refrigerant leaks.
- **WARNING:** Never directly touch refrigerant leaks, as contact can cause severe cold injuries. Do not touch refrigerant pipes during or immediately after use as they may be very hot or cold. Wait for pipes to return to normal temperature or wear protective gloves.
- **WARNING:** Do not touch internal components (pump, auxiliary heater, etc.) during or immediately after use. Contact with internal components can cause burns. Wait for components to return to normal temperature or wear protective gloves.

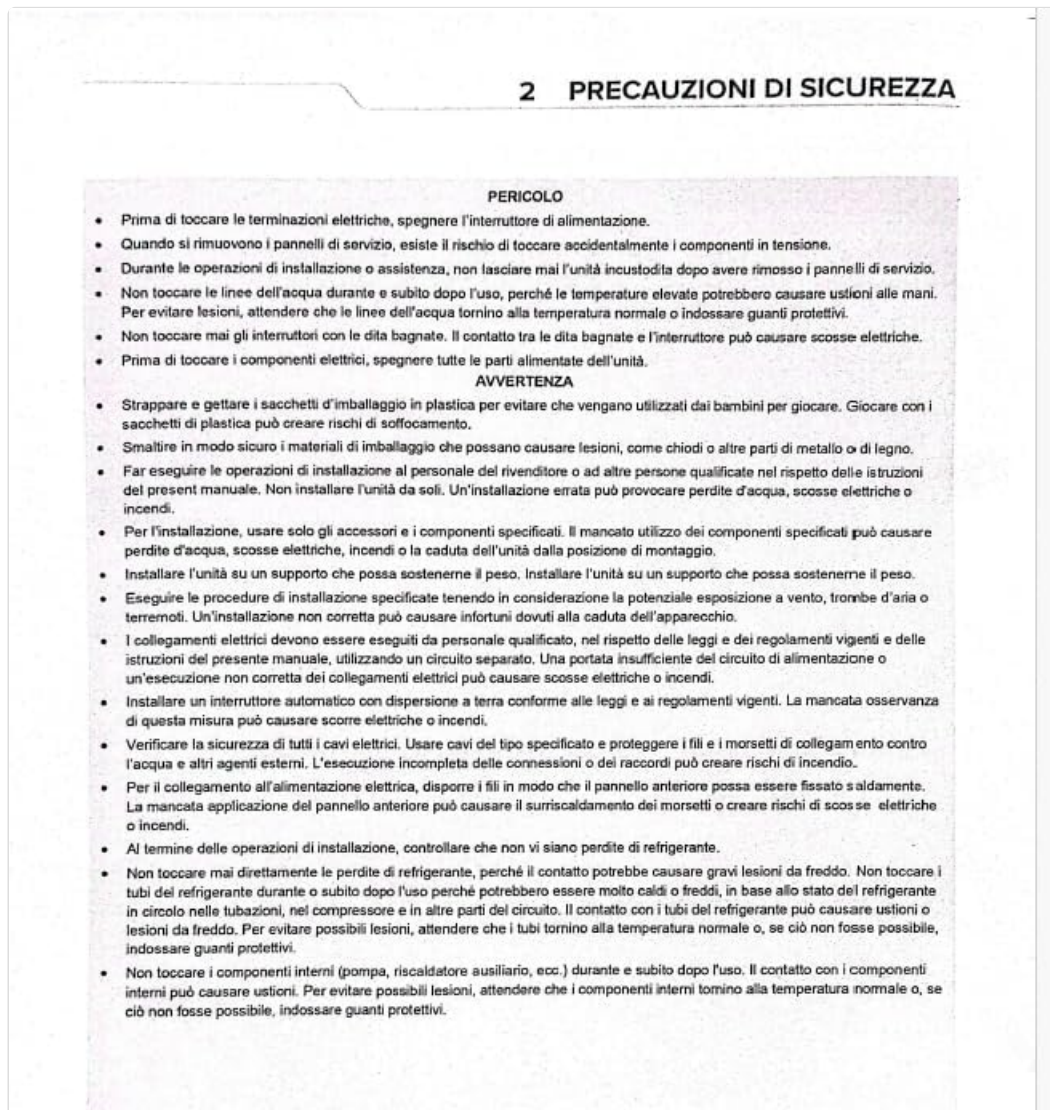


Image 2: A page from the instruction manual titled "2 PRECAUZIONI DI SICUREZZA" (2 SAFETY PRECAUTIONS), listing various DANGER and WARNING points regarding electrical safety, handling, installation, and contact with hot/cold components.

## 2.2. Important Considerations

- Connect the unit to ground. Ground resistance must comply with current laws and regulations.
- Do not connect the ground wire to gas or water pipes, lightning rods, or telephone system ground wires. Incorrect grounding can cause electric shock.
- Gas pipes: A gas leak can cause fire or explosion risks.
- Water lines: Rigid vinyl pipes do not create an effective ground.
- Lightning rods or telephone system ground wires: A lightning strike could cause an abnormal rise in electrical threshold.
- Install the power cable at least 1 meter (3 feet) away from televisions or radio devices to avoid interference or disturbances.
- Do not wash the unit. Humidity can cause electric shock or fire risks. The appliance must be installed in accordance with national electrical connection regulations. If the power cable is damaged, it must be replaced by the manufacturer, its representative, or other qualified persons to avoid dangerous situations.
- Do not install the unit in the following locations:
  - Environments exposed to mineral oil mists, sprays, or vapors. Plastic components may deteriorate and detach, or water leaks may occur.
  - Environments where corrosive gases (like sulfuric acid gas) are produced. Corrosion of copper pipes or soldered components could cause refrigerant leaks.
  - Environments with machinery emitting electromagnetic waves. Electromagnetic waves can disturb the unit's control system, causing the unit to fall from its mounting position.
  - Environments exposed to flammable gas leaks, with suspensions of carbon fibers or flammable dust, or where volatile flammable materials like gasoline or paint thinners are handled. These types of gases can create fire hazards.
  - Environments where the air is strongly saline, e.g., near coastlines.
  - Environments exposed to marked voltage fluctuations, such as factories.
  - Vehicles or ships.
  - Environments with acidic or alkaline vapors.
- The appliance is suitable for use by children aged 8 and above and persons with reduced physical, sensory, or mental capabilities or lack of experience/knowledge, provided they are adequately supervised or have received instructions on safe use and understand related hazards. Children must not play with the unit. Cleaning and maintenance operations must not be performed by unsupervised children.
- Supervise children to ensure they do not play with the appliance. If the power cable is damaged, it must be replaced by the manufacturer, its representative, or a qualified person.
- **DISPOSAL:** Do not dispose of the product as unsorted waste. The used unit must be disposed of and collected separately as differentiated waste. Do not dispose of electrical appliances with household waste; use your municipality's collection points. Contact the local authority for information on the differentiated collection system. Appliances disposed of in public landfills can release hazardous substances that, if absorbed by soil and groundwater, can enter the food chain with harmful consequences for health.
- Electrical connections must be performed by professional technicians in accordance with national regulations and the electrical diagram. A multipolar switch with a contact distance of at least 3 mm at all points and a residual current device (RCD) with a nominal voltage greater than 30 mA must be integrated into the fixed wiring in compliance with current electrical connection regulations.

#### ATTENZIONE

- Collegare l'unità a terra.
- La resistenza di terra deve essere conforme alle leggi e ai regolamenti vigenti.
- Non collegare il filo di terra a tubazioni del gas o dell'acqua, a parafulmini o a cavi di messa a terra dell'impianto telefonico.
- Una messa a terra non corretta può causare scosse elettriche.
  - Tubazioni del gas: Una perdita di gas può causare rischi di incendio o esplosione.
  - Linee dell'acqua: I tubi in vinile rigidi non creano una messa a terra efficace.
  - Parafulmini o cavi di messa a terra dell'impianto telefonico: Un fulmine potrebbe causare un innalzamento anomalo della soglia elettrica.
- Installare il cavo di alimentazione ad almeno 1 metro (3 piedi) di distanza da televisori o apparecchi radio per evitare interferenze o disturbi. (A seconda delle onde radio, è possibile che una distanza di 1 metro (3 piedi) non sia sufficiente per eliminare i disturbi)
- Non lavare l'unità. L'umidità potrebbe causare scosse elettriche o rischi di incendio. L'apparecchio deve essere installato in conformità alle normative nazionali in materia di collegamenti elettrici. Se il cavo di alimentazione è danneggiato, deve essere sostituito dal costruttore, da un suo rappresentante o da altre persone qualificate per evitare situazioni di pericolo.
- Non installare l'unità nei seguenti luoghi:
  - Ambienti esposti a nebbie di oli minerali, spruzzi o vapori di oli. I componenti di plastica potrebbero deteriorarsi e staccarsi, o potrebbero formarsi perdite d'acqua
  - Ambienti in cui vengono prodotti gas corrosivi (come gas di acido solforoso). La corrosione dei tubi in rame o dei componenti saldati potrebbe causare perdite di refrigerante.
  - Ambienti con macchinari che emettono onde elettromagnetiche. Le onde elettromagnetiche possono disturbare il sistema di controllo e causare malfunzionamenti dell'apparecchio.
  - Ambienti esposti a fuoriuscite di gas infiammabili, con sospensione di fibre di carbonio o polveri infiammabili o in cui vengono trattati materiali infiammabili volatili come benzina o diluenti per vernici. Questi tipi di gas possono creare rischi di incendio.
  - Ambienti in cui l'aria è fortemente salmastra, ad esempio in prossimità delle coste.
  - Ambienti esposti a marcate oscillazioni di tensione, come le fabbriche.
  - Veicoli o navi.
  - Ambienti con presenza di vapori acidi o alcalini.
- L'apparecchio è adatto all'uso da parte di bambini dagli 8 anni in su e di persone con ridotte capacità fisiche, sensoriali o mentali o con mancanza di esperienza o conoscenza purché siano adeguatamente sorvegliati oppure abbiano ricevuto istruzioni circa l'uso in sicurezza dell'apparecchio e abbiano compreso i pericoli correlati. I bambini non devono giocare con l'unità. Le operazioni di pulizia e di manutenzione non devono essere effettuate da bambini senza sorveglianza.
- Sorvegliare i bambini per assicurarsi che non giochino con l'apparecchio. Se il cavo di alimentazione è danneggiato, deve essere sostituito dal costruttore, dal suo rappresentante o da una persona qualificata.
- **SMALTIMENTO:** Non smaltire il prodotto come rifiuto indifferenziato. L'unità usata deve essere smaltita e conferita separatamente come rifiuto differenziato. Non smaltire gli apparecchi elettrici con i rifiuti domestici, ma utilizzare i punti di raccolta del proprio comune. Rivolgersi all'ente locale preposto per informazioni sul sistema di raccolta differenziata. Gli elettrodomestici smaltiti presso discariche pubbliche possono rilasciare sostanze pericolose che, se assorbite dal terreno e dalle falde acquifere, possono finire nella catena alimentare, con conseguenze dannose per la salute.
- I collegamenti elettrici devono essere eseguiti da tecnici professionisti in conformità alle normative nazionali in materia e al presente schema elettrico. Un interruttore onnipolare con una distanza tra i contatti di almeno 3 mm in tutti i poli e un interruttore differenziale (RCD) con tensione nominale superiore a 30 mA devono essere integrati nel cablaggio fisso in ottemperanza alle normative vigenti in materia di collegamenti elettrici.

Image 3: A page from the instruction manual titled "ATTENZIONE" (ATTENTION), providing critical information on grounding, installation locations to avoid, child safety, and proper disposal of the unit.

### 3. FEATURES AND TECHNOLOGY

The Elfo Energy Edge EVO series, including the WSAN-YMi 41, incorporates advanced features for superior performance and user convenience.

# Edge EVO 2.0 - EXC

## WiSAN-YME 1 S 2.1÷14.1



Image 4: A diagram illustrating the features of the Edge EVO 2.0 - EXC series (similar to WSAN-YMi 41), categorized by Energy Saving, Health, Comfort, Reliability, Practicality, and Management & Connectivity. It highlights features like R-32 refrigerant, Wi-Fi control, and high-temperature water production.

### 3.1. Advanced Capabilities

- **Space-saving:** Installed outdoors, does not require an indoor unit (hydrobox is separate).
- **Designed for harsh climates:** Excellent performance at low temperatures with optional auxiliary resistances from 3 to 9kW.
- **High-temperature distribution:** Allows for water temperatures up to 65°C.
- **Modular:** Combines up to 6 units in cascade for powers up to 180kW.
- **Advanced Connectivity:** Management via dedicated MSmartLife App or Modbus port with ELFOControl EVO included as standard.

## 4. SETUP AND INSTALLATION

Installation of the Elfo Energy Edge EVO WSAN-YMi 41 must be performed by qualified and certified technicians in accordance with all local and national regulations. Ensure the installation site meets all requirements for space, ventilation, and electrical supply.

### 4.1. Pre-Installation Checks

- Before making connections, verify that there are no embedded electrical/hydraulic conduits in the installation area (walls, floors).
- Before installation, verify that the electrical supply conforms to the unit's requirements (grounding, dispersion, adequate section for the load). If requirements are not met, installation is prohibited until the power supply is adequately adjusted.
- When installing multiple units centrally, check the load balancing of the three-phase power supply and avoid connecting multiple units to the same phase.
- The unit must be securely fastened; reinforcement measures should be adopted if necessary.

## 5. OPERATING INSTRUCTIONS

The WSAN-YMi 41 heat pump is designed for user-friendly operation, primarily through its intelligent Wi-Fi control system and dedicated mobile application.

### 5.1. Initial Startup

1. Ensure all electrical and hydraulic connections are secure and verified by a qualified technician.
2. Turn on the main power supply to the unit.
3. Follow the instructions in the separate Wi-Fi module manual to connect the unit to your home network.
4. Download and install the MSmartLife App on your smartphone or tablet.
5. Register your unit within the app and configure initial settings such as operating mode (heating, cooling, DHW), desired temperatures, and weekly schedules.

### 5.2. Daily Operation

- Adjust temperature settings and operating modes via the mobile app or the unit's interface/thermostat.
- Utilize the weekly scheduling feature for optimized energy consumption.
- Monitor the unit's performance and status through the app.

## 6. MAINTENANCE

Regular maintenance is crucial for the longevity and efficient operation of your heat pump. All maintenance procedures, especially those involving refrigerant or electrical components, must be performed by certified personnel.

### 6.1. Routine Checks

- Periodically inspect the outdoor unit for any obstructions (leaves, debris) around the fan and coils. Clean as necessary.
- Ensure the drainage system is clear and free of blockages.
- Check for any unusual noises or vibrations during operation.
- For units containing fluorinated greenhouse gases, leak checks are required: at least every six months for units containing 5 tonnes of CO<sub>2</sub> equivalent or more, but less than 50 tonnes of CO<sub>2</sub> equivalent, or at least every 12 months if a leak detection system is installed. Keep a detailed record of all inspections.

### 6.2. Professional Maintenance

- Annual professional inspection is recommended to check refrigerant levels, electrical connections, and overall system performance.
- Cleaning of coils and internal components should be performed by a technician.

## 7. TROUBLESHOOTING

This section provides general guidance for common issues. For complex problems, contact qualified service personnel.

### 7.1. Common Issues and Solutions

- **Unit not turning on:** Check power supply, circuit breaker, and ensure the unit is properly connected.
- **Insufficient heating/cooling:** Verify temperature settings, check for obstructions around the outdoor unit, and ensure filters are clean (if applicable to indoor hydrobox).
- **Unusual noises:** Could indicate loose parts or fan issues. Turn off the unit and contact a technician.
- **Wi-Fi connectivity issues:** Check home router, unit's Wi-Fi module status, and ensure the app is updated.

## 8. SPECIFICATIONS

Detailed technical specifications for the Elfo Energy Edge EVO WSAN-YMi 41 heat pump.

| Specification      | Value                                                                                 |
|--------------------|---------------------------------------------------------------------------------------|
| Manufacturer       | CLIVET                                                                                |
| Model Number       | WSAN-YMi 41                                                                           |
| Product Dimensions | 40.2 x 121 x 94.5 cm                                                                  |
| Item Weight        | 99 Kilograms                                                                          |
| ASIN               | B0DHS7WXZ6                                                                            |
| Country of Origin  | Italy                                                                                 |
| Brand              | Generico                                                                              |
| Special Feature    | Wi-Fi Enabled                                                                         |
| Color              | White                                                                                 |
| Power Source       | Corded Electric                                                                       |
| Form Factor        | Portable (Note: This refers to the monoblock design, not easily moved once installed) |
| Control Method     | App                                                                                   |
| Warranty Type      | Full                                                                                  |

## 9. REFRIGERANT INFORMATION

This unit contains fluorinated greenhouse gases. Release into the atmosphere is prohibited.

**Refrigerant Type:** R32

**GWP (Global Warming Potential) Volume:** 675

The installation, operation, and maintenance of this hermetically sealed appliance containing fluorinated gases must only be performed by qualified personnel.

### 9.1. Refrigerant Quantity by Model

| Model (kW) | Refrigerant (kg) | Tonnes of CO2 Equivalent |
|------------|------------------|--------------------------|
| 5kW        | 2.00             | 1.35                     |
| 7kW        | 2.00             | 1.35                     |
| 9kW        | 2.00             | 1.35                     |
| 12kW       | 2.80             | 1.89                     |
| 14kW       | 2.80             | 1.89                     |
| 16kW       | 2.80             | 1.89                     |

## 2 PRECAUZIONI DI SICUREZZA

- Prima di effettuare i collegamenti verificare che nella zona di installazione (pareti, pavimenti) non siano presenti condotti elettrici / idraulici murati.
- Prima dell'installazione verificare che l'alimentazione elettrica sia conforme ai requisiti dell'unità (messa a terra, dispersione, sezione adeguata al carico). Se i requisiti non sono rispettati è vietata l'installazione fino a che l'alimentazione non viene adeguata.
- Quando si installano più unità in modo centralizzato, controllare il bilanciamento del carico dell'alimentazione trifase, e evitare che più unità vengano collegate alla stessa fase dell'alimentazione trifase.
- L'unità deve essere fissata saldamente, adottare misure di rinforzo, se necessario

### NOTA

#### Informazioni sui gas fluorurati

Questa unità contiene gas fluorurati. Per informazioni specifiche sul tipo di gas e sulla quantità di gas, fare riferimento all'etichetta dati applicata sull'unità. È sempre necessario attenersi alle norme nazionali relative all'impegno del gas.

L'installazione, l'assistenza, la manutenzione e la riparazione dell'unità devono essere eseguite da un tecnico certificato.

La disinstallazione e il riciclaggio dell'unità deve essere eseguito da un tecnico certificato.

Se nell'impianto è installato un dispositivo di rilevamento delle perdite, è necessario controllare l'assenza di perdite almeno ogni 12 mesi. Quando si eseguono i controlli per individuare l'assenza di eventuali perdite dell'unità, si raccomanda di tenere un registro dettagliato di tutte le ispezioni.

### INFORMAZIONI SUL REFRIGERANTE

Questa unità contiene gas fluorurato, è vietato il rilascio nell'aria.

Tipo refrigerante: R32;

Volume di GWP: 675.

GWP= potenziale di riscaldamento globale

| Modello | Volume di refrigerante caricato nell'unità in fabbrica |                                           |
|---------|--------------------------------------------------------|-------------------------------------------|
|         | Refrigerante/kg                                        | Tonnellate di CO <sub>2</sub> equivalente |
| 5kW     | 2.00                                                   | 1.35                                      |
| 7kW     | 2.00                                                   | 1.35                                      |
| 9kW     | 2.00                                                   | 1.35                                      |
| 12kW    | 2.80                                                   | 1.89                                      |
| 14kW    | 2.80                                                   | 1.89                                      |
| 16kW    | 2.80                                                   | 1.89                                      |

### ATTENZIONE

Questa unità è un'apparecchiatura sigillata ermeticamente che contiene gas fluorurati ad effetto serra.

L'installazione, il funzionamento e la manutenzione sono consentiti solo a persone qualificate.

Frequenza dei controlli delle perdite di refrigerante:

per le unità che contengono gas fluorurati ad effetto serra in quantità di 5 tonnellate di CO<sub>2</sub> equivalente o superiore, ma di meno di 50 tonnellate di CO<sub>2</sub> equivalente almeno ogni sei mesi, o dov'è installato un sistema di rilevamento delle perdite, almeno ogni 12 mesi.

Image 5: A page from the instruction manual providing information on fluorinated gases, including the refrigerant type (R32), GWP, and a table showing refrigerant quantity and CO2 equivalent for different models.

## 10. WARRANTY AND SUPPORT

The Elfo Energy Edge EVO WSAN-YMi 41 comes with a full warranty. For specific details regarding warranty coverage and terms, please refer to the warranty card included with your product or contact the manufacturer.

### 10.1. Returns and Defects

If you wish to return a product within 30 days of receipt because you have changed your mind, please consult the return policy on the purchase platform. If you have received a defective or damaged product, please consult the defective/damaged product policy. For specific information on purchases made on marketplaces, consult the marketplace's help page.

## 10.2. Technical Support

For technical assistance, installation queries, or troubleshooting beyond the scope of this manual, please contact your certified installer or the manufacturer's authorized service center. Ensure you have your model number (WSAN-YMi 41) and purchase details ready when contacting support.