



# FG-CAP<sup>Ver.02</sup>

## POWER BACKUP



FGCAPV02-01T-PI-19430

Have this manual in the palm of your hand through the FG Finder app.

### WARNING

- BEFORE INSTALLING THE CONTROLLER WE RECOMMEND READING THE INSTRUCTION MANUAL THOROUGHLY IN ORDER TO AVOID POSSIBLE DAMAGES TO THE PRODUCT.**
  - PRECAUTIONS WHEN INSTALLING THE PRODUCT:**  
Before performing any procedure in this instrument, disconnect it from the mains; make sure the instrument has proper ventilation, avoiding installation in panels containing devices that may force it to work outside the specified temperature limits; Install the product away from sources that can generate electromagnetic disturbances, such as: motors, contactors, relays, solenoid valves, etc.
  - AUTHORIZED SERVICES:**  
The installation and maintenance of the product must only be performed by qualified personnel.
  - ACCESSORIES:**  
Only use original accessories of Full Gauge Controls.  
If you have any questions, please contact our technical support.
- DUE TO CONSTANT EVOLUTION, FULL GAUGE CONTROLS RESERVES THE RIGHT TO CHANGE THE INFORMATION CONTAINED IN THIS MANUAL.**

### 1. DESCRIPTION

The **FG-CAP** is a device manufactured by Full Gauge, which, at the option and evaluation of the technician, can replace the use of the solenoid valve, helping to close the electronic expansion valve in cases of lack of electrical power. The **FG-CAP** is used in conjunction with the power supply that comes with the products **VX-I225** and **VX-I250**. The backup system is developed using ultracapacitors that feed a high-efficiency static converter. This configuration allows for highly reliable equipment, with a useful life much longer than equivalent systems with batteries. The charge level in the ultracapacitor is guaranteed by a dedicated electronic system. With a lack of electrical energy, the charge stored in the **FG-CAP** is sufficient to close the electronic valves. When power returns, the ultracapacitors will be charged again and after the charging time, the refrigeration system will be ready for operation. The use of **FG-CAP** must be enabled in the configurations of the controllers **VX-I225** e **VX-I250**.

### 2. TECHNICAL SPECIFICATIONS

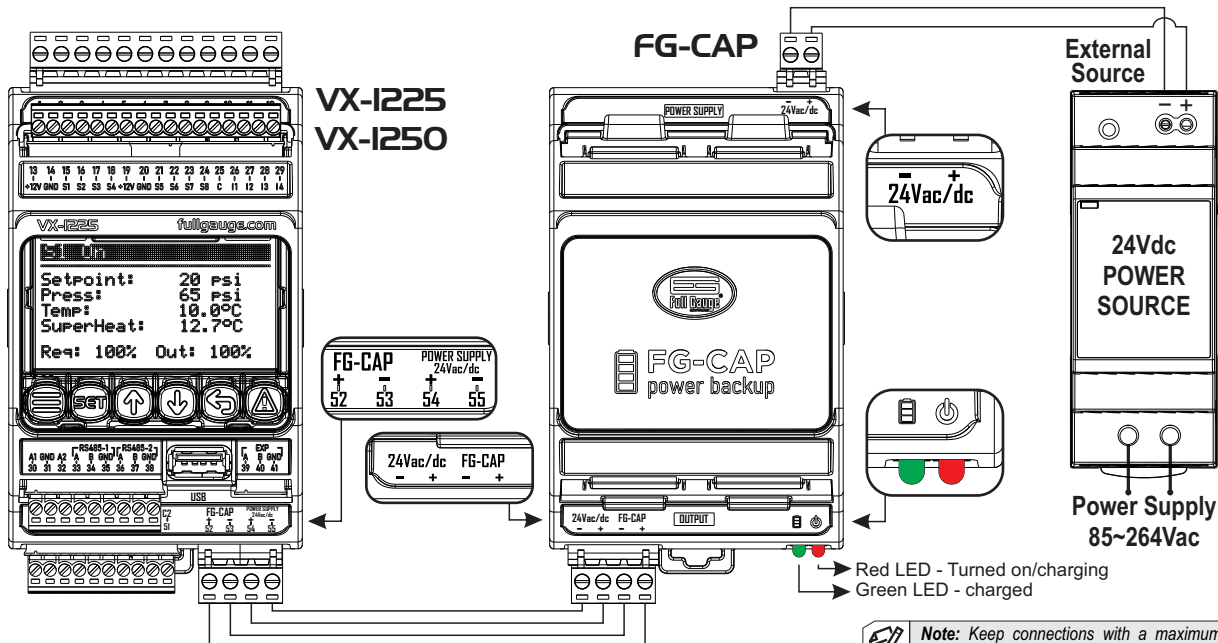
Power Supply	Preferred 24Vdc @ 1,5A or 24Vac ± 10% 1,5A
Operating temperature	0 to 50°C / 32 to 122°F
Operating humidity	10 to 90% RH (without condensation)
Maximum dimensions	70 x 136 x 60,7mm / 2,76" x 5,35" x 2,39" (LxAxP)
Fastening	DIN rail
Charging time (maximum)	300s
Consecutive closing operations	1
Degree of Protection	IP10
Rated output voltage	11Vdc ±5%

**ATTENTION:** Preferably use Full Gauge electronic expansion valves. To use models from other manufacturers, it is necessary to evaluate their electrical characteristics.

### 3. OPERATING INDICATIONS

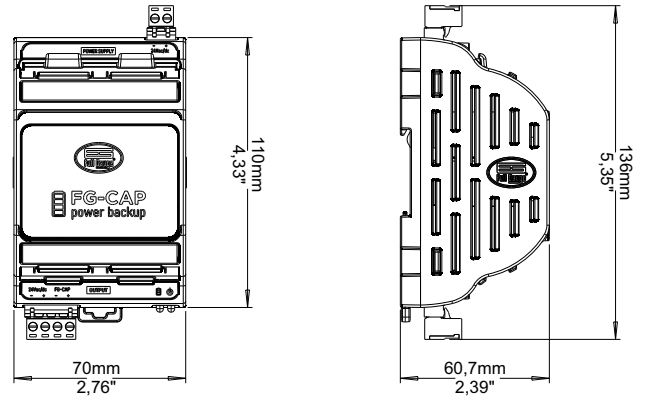
When energizing the equipment, the Red LED will turn on, indicating that the device is on, at this moment the charging of the ultracapacitors begins. When the Green LED turns on, it indicates the end of the charging process.

### 4. ELECTRIC CONNECTION



**Note:** Keep connections with a maximum of 50cm between products. Use cables with at least 1mm<sup>2</sup>.

### 5. DIMENSIONS



### 6. WARRANTY

**ENVIRONMENTAL INFORMATION**  
**Packaging:** Full Gauge products use packaging made from entirely recycled materials. Please dispose of it through specialized recyclers.  
**Product:** The components used in Full Gauge controllers can be recycled and reused if they are dismantled by specialists.  
**Disposal:** Do not burn or throw controllers in the domestic waste, once they have reached the end of their working life. Follow the current legislation applicable to your area in relation to disposing of electronic waste. If you have any questions, contact Full Gauge Controls.

**WARRANTY - FULL GAUGE CONTROLS**

Products manufactured by Full Gauge Controls, from May 2005, have a warranty period of 10 (ten) years direct from the factory and 01 (one) year from accredited retailers, starting from the consignment date on the sales invoice. After this year, the warranty will continue to be honored for purchases from retailers if the device is sent directly to Full Gauge Controls. This period is valid in Brazil. Other countries provide a guarantee for 2 years. The products are guaranteed in the event of a manufacturing fault that makes them unsuitable or inappropriate for the uses to which they were intended. The warranty is limited to the maintenance of devices manufactured by Full Gauge Controls, regardless of any other form of costs, such as any indemnity due to damage caused to other equipment.

**WARRANTY EXCEPTIONS**  
 The Warranty does not cover transport and / or insurance costs for sending products believed to have defects or to have malfunctioned to Technical Support. The following events are also not covered: natural wear of parts, external damage caused by falls or improper packing of products.

**LOSS OF WARRANTY**  
 The product will automatically no longer be covered if:  
 - The instructions for use and assembly contained in the technical description and installation procedures listed in the NBR5410 standard are not observed;  
 - It is subjected to conditions beyond the limits specified in its technical description;  
 - If it is opened up or repaired by a person who is not part of Full Gauge's technical team;  
 - The damage which has taken place was the result of a fall, blow or impact, water damage, electrical surge or atmospheric discharge.

**USING THE WARRANTY**  
 To take advantage of the warranty, the customer must send the product properly packed, together with the corresponding purchase invoice, to Full Gauge Controls. The delivery cost for the product is borne by the client. You will also need to send as much information as possible regarding the defect that has been detected, thus making it possible to streamline the analysis, testing and servicing.  
 These processes and any eventual maintenance of the product will only be carried out by Full Gauge Controls' Technical Support, at the Company's head office - Rua Júlio de Castilhos, 250 - Zip Code 91210-030 - Canoas - Rio Grande do Sul - Brazil.  
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