



All the Energy you Need

PRIORITY SWITCH

Mod.: SP230



Operating Manual



NDS ENERGY s.r.l.

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1. INTRODUCTION:

The Priority Switch is a management system of 230V, when the plant has two power sources, the main and an inverter connected to the battery.

By connecting the input of the **Priority Switch** to the two power sources, the main will always have the priority to supply the plant 230V.

There are two outputs: the first one to connect all the loads to be used only when the main is present; the second one for all the accessories that can be supplied both from the inverter and from the main.

This manual contains important operating and safety instructions, before starting to use the device it is important to read and understand the safety instructions.

The product photos in this manual are for reference only with the purpose of explanation; the product you have purchased may be different.

Keep the operating manual always within reach and near the appliance for easy reference on security, operation and maintenance key information.

The information in this manual are subject to change without notice.

NDS Energy reserves the right to make changes and improvements to the product at any time without prior notice and without obligation to apply these changes to the devices previously distributed.

1.1 Safety notes:

- Before each use, check the device, the connection cable and the connector. If you detect any anomaly do not use it! It is strictly forbidden to open the device. Repairs may only be performed by a qualified technician and by using original spare parts.
- Do not place the device in easily inflammable surfaces or environments (ex .: paper, cloth etc ...). The heat during use may increase the fire hazard.
- During operation, the device should be placed in a well ventilated area.
- If the connection cables are damaged, they must be replaced by a qualified technician to eliminate the risk of accidents.

1.2 WARNING:

- Keep the device away from children
- The device must be protected from the sunlight or direct heat sources to prevent overheating.
- DO NOT install the unit in a sealed environment, otherwise it can overheat.
- To avoid the risk of electric shock and / or fire, make sure that the electrical system is in good condition.
- DO NOT use the unit with damaged cables and / or inadequate section.
- DO NOT use the device in an environment with high humidity or direct contact with splashes of water and / or liquid or in the rain.



2. FUNCTIONING:

The SP 230 allows the management of the energy source (from 230Vac or inverter) in a completely automatic way. In fact it distributes on the related output ("OUTPUT" on the product label), the energy coming from the main (" MAIN 230 IN" on the product label) or from the inverter ("INVERTER" on the product label), to make more efficient the consumption of the batteries that powers the inverter. The basic logic is in fact to supply the various loads 230Vac, by giving priority to the public main. When this one is disconnected from the system, the SP230 automatically switches the power from the inverter (and therefore from the batteries), on the output 230Vac.

The device also has a dedicated connection to loads that can NOT or do NOT have to be supplied when the public main is not available (eg the battery charger system, the refrigerator, etc.). This connection in fact ("MAIN 230V OUT" on the product label), will be powered only when there is the 230V coming from the main (" MAIN 230 IN" on the product label).

2.1 Visualizations:

The green indicator situated under the writing "INVERTER" indicates the presence of voltage on the connector "INVERTER".

The green indicator situated under the writing "OUTPUT" indicates the presence of voltage on the connector "OUTPUT".

The green indicator situated under the writing "MAIN 230V IN" indicates the presence of voltage on the connector "MAIN 230V IN".

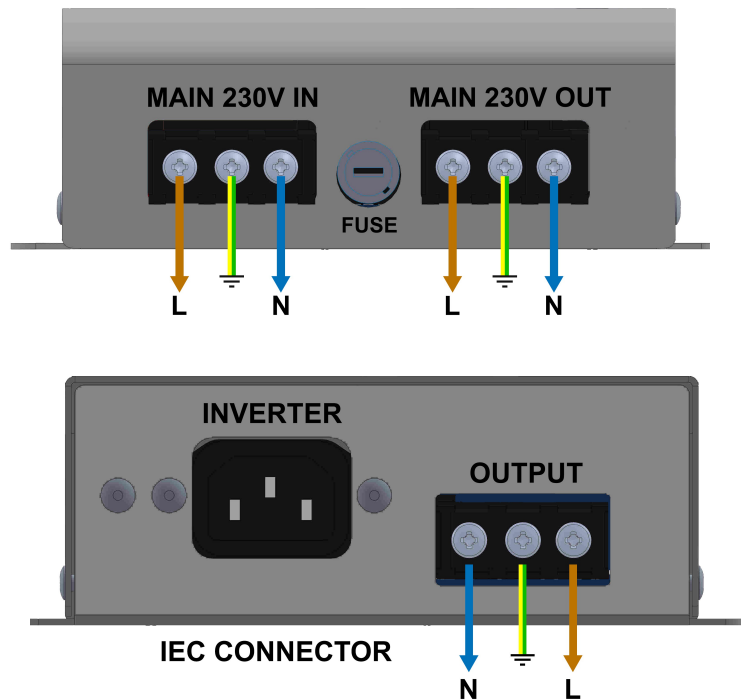
3. INSTALLATION:

Install the device, as shown in the following photos, respecting the following caption:

N (color blue connection) = Neutral

L (color brown connection) = Phase

Connection color buttercup-yellow / green = Ground



RECOMMENDATIONS:

- *Use cables with at least 1.5mm².*
- *Use cable ends with hole M3 / M4 for the fixing of cables to the connectors.*
- *Verify after the installation, that the cables have not parties (or filaments) discovered and isolated, which can come into contact with the casing of the device or with the user.*
- *After fixing all the cables, make sure they are tight.*

6. WARRANTY

The manufacturer guarantees the proper functioning of the SP230 and undertakes to make free replacement of parts that deteriorate for construction defects within 24 months from the date of purchase, as evidenced by the validation card (to be filled in all its part and send back to the manufacturer).

The defects resulting from improper installation, use, tampering or negligence shall not be covered by warranty.

Furthermore, we assume no liability for any direct or indirect damages.

The SP230 returned, even if under warranty, will have to be shipped "Freight paid" and shall be returned on as "Freight collect".

The certificate of warranty shall be valid only if accompanied by a official receipt or delivery document.

Any dispute will be under the competent jurisdiction of the court of Pescara (Italy)

Mod......**Serial n.**

Purchase Date

Stamp and signature of the reseller

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