PowerEgg2 Mains voltage detector and switch

PowerEgg2 is designed to detect and switch on or off 110 to 230VAC mains voltage. The controlling circuit and the controlled circuit are electrically isolated.

PowerEgg2 combines two functions in a single device:

- Mains voltage detection at the input (indicated with a contact)
- Voltage control at the output (controlled with external DC voltage or a contact)

Two IEC-320 connectors are used to connect the mains voltage – a plug (C14) at the input, a socket (C13) at the output.



group

Electrical isolation

- Mains voltage detector is electrically isolated (relay contact).
- Mains voltage output control is electrically isolated (ready for an external contact).

Output control

The "CONTROL" input allows to disconnect the mains voltage output. Three-terminal block is used to connect an external closing contact (relay contact / door contact / button) or a control voltage of 3 to 15 VDC. When the contact is closed or the voltage applied, the mains output is **disconnected**.

Main features

- 110 to 230 VAC mains voltage detection
 - o Mains power failure is indicated with a relay contact
 - o Electrically isolated output contact
- Output control
 - Pass-through mode when the control voltage / contact is not connected (Power output = Power Input)
 - o Electrically isolated control input
 - o Control voltage 3V or more, or a closed contact



Specifications

- Input voltage: 110V to 250V AC IEC-320 C14
- Power output current: max. 8A IEC-320 C13
- **Output control:** Application of external voltage to the "CONTROL" input
 - **3–12V control voltage input:** voltage range 3V (5 mA) to 12V (20mA)
 - DRY external contact connection: <1000hm / max 3mA
 - Output control logic: Application of external voltage disconnects the output
 - **Output state when control voltage applied:** Power circuit is interrupted
- Input voltage detection: Double-throw relay contact
 - Input voltage presence indication: Relay activated (NO connected to COM)
 - $_{\odot}$ Detector relay parameters: 120V / 0,5A AC, 60V / 0,3A DC, 24V / 1A DC
- Operational/storage temperature: -20°C to 80°C
- **Dimensions:** 105 x 55 x 38 mm

Note: The device may not be used as a safety circuit breaker!

Functions



Connector		Function
Power Input		Mains voltage input – IEC-320 C14
Power Output		Mains voltage output – IEC-320 C13
DETECTOR	NC	Normally Closed (NC) – Connected to the Common terminal when idle (Power Input = 0V)
	СОМ	Common – Common terminal of the mains voltage detector
	NO	Normally Open (NO) – Connected to the Common terminal when active (Power Input = 115-230V)
CONTROL	DRY	Dry Contact Input – Disconnects the output when shorted to GND
	GND	Ground – Common ground of the output control circuit
	3-12V	3-12V Input – Disconnects the input when an external voltage 3-15V against GND is applied

Voltage detector



Output disconnection



Application examples

Detector – examples

When connected to a Poseidon 3268 unit, it is possible to send an e-mail or a SNMP Trap whenever there is a power outage:

- **COM-NO:** Input2 = 1 (On) when the input voltage is **connected** to the Power Input.
- **COM-NC:** Input2 = 1 (On) when the input voltage is **NOT connected** to the Power Input.



Output control – examples

When connected to a Poseidon 3268, the WWW (or XML/SNMP, Modbus/TCP) interface can be used to turn on/off the power for a server, air conditioner, etc.

- COM-NO: When the power is turned on, Power Output = ON If Output2 = On then <u>Power Output = OFF</u>
- **COM-NC:** When the power is turned on, **Power Output = OFF** If Output2 = On then <u>Power Output = ON</u>



Dimensions



Package contents

A complete PowerEgg2 shipment contains the following items:

- 1x PowerEgg2 unit
- 1x Printed manual

Safety precautions

The device complies with standards valid in the Czech Republic and the European Union, is tested and supplied in working order. To keep the device in this condition, the following safety and maintenance instructions must be followed.

The device may not be used as a safety circuit breaker!

In particular, the device must not be used if any of the following occurs:

- The device is visibly damaged.
- The device does not operate properly.
- There are loose parts inside the device.
- The device was exposed to humidity for an extended period, or to rain.
- The device was improperly repaired by unauthorized personnel.

The manufacturer warrants the device only if it is powered with the supplied power cord, or with an approved one.