

# **DEVELCO PRODUCTS Smart DIN Relay with Built-In Power Metering Functionality Instruction Manual**

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### **Product description**

Develop Products' Smart DIN Relay consists of a DIN rail unit with built-in relay. The Smart DIN Relay communicates via ZigBee and enables the user to configure machines and appliances in clusters, providing the operator with the ability to control groups of units, instead of having to control each device separately.

The Smart DIN Relay also includes built-in power metering functionality, which enables the user to monitor the power consumption of each group of units in the building, resulting in increased awareness of energy consumption and waste. All data loggings are transmitted to a data concentrator.

# **Precautions**

**WARNING:** Electrical equipment should only be installed, accessed, serviced, and maintained by qualified electrical personnel. Working with high voltage is potentially lethal. Persons subjected to high voltage may suffer cardiac arrest, burn injuries, or other severe injuries. To avoid such injuries, make sure to disconnect the power supply before you start the installation.

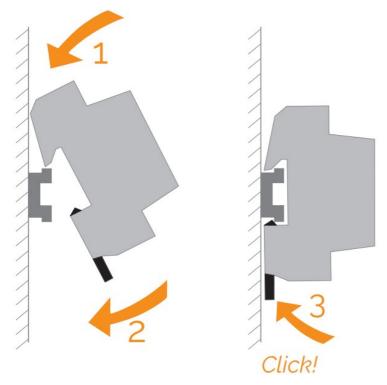
**WARNING:** For safety reasons, it is recommended that the equipment is installed in a way that makes it impossible to reach or touch the terminal blocks by accident. The best way to make a safe installation is to install the unit in an enclosure. Further, access to the equipment should be limited through use of lock and key, controlled by qualified electrical personnel.

WARNING: The Smart DIN Relay must always be protected by fuses on the incoming side

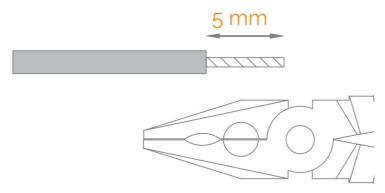
- Be careful that no liquid gets into the Smart **DIN** Relay since it may damage the equipment.
- Do not remove the product label as it contains important information.
- · Avoid switching maximum loads frequently on or off, in order to sustain a long life

# **Getting started**

- 1. Disconnect the main power. For the duration of electrical work, electricity must be disconnected from the main switch of the property by removing the fuses for the work area.
- 2. Place the Smart DIN Relay on the DIN-rail and make sure it snaps onto it.

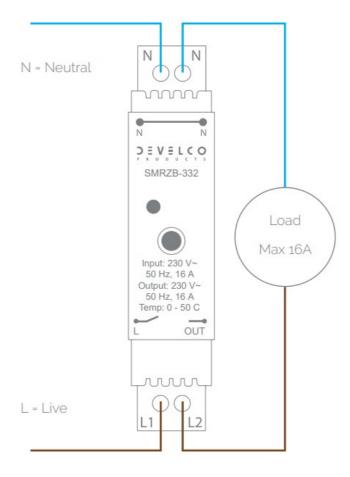


3. Strip the cable insulation to 5 mm



- 4. Connect appropriate cables as shown under wiring diagram and tighten the screws (0.8 Nm)
- 5. Turn on the main power
- 6. Smart DIN Relay will now start searching (up to 15 minutes) for a Zigbee network to join
- 7. Make sure that the Zigbee network is open for joining devices and will accept the Smart DIN Relay
- 8. While the Smart DIN Relay is searching for a network, the LED is flashing red
- 9. When the LED stops flashing, the Smart DIN Relay has successfully joined the Zigbee network
- 10. The Smart DIN Relay's output is active when the green LED is on

# Wiring diagram



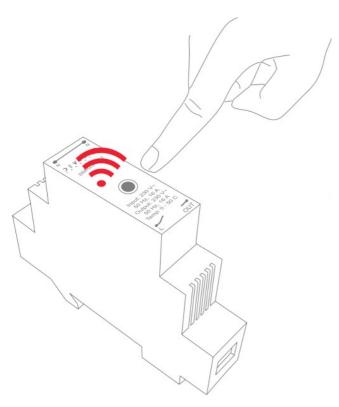
Connect Blue (Neutral) and Brown (Live) to 230VAC / 50Hz

# Resetting

Resetting is needed if you want to connect your Smart DIN Relay to another gateway, if you need to perform a factory reset to remove abnormal behavior, or if you need to reset accumulative registers and logs.

#### **STEPS FOR RESETTING**

- 1. Press and hold down the button on the device.
- 2. Hold the button down until the red LED flashes continuously, then release the button.



3. After releasing the button, the red LED will stay on for 2-5 seconds. During that time, the device must not be switched off or unplugged

# **Fault finding**

- In case of a bad or weak signal, change the location of your gateway or insert a Zigbee router as a ranges extender.
- If the search for a gateway has timed out, a short press on the button will restart it

## **Modes**

#### **SEARCHING GATEWAY MODE**

The red LED is flashing every second

#### **ON MODE**

Green LED means that the Smart DIN Relay output is active (relay is on). The relay can be switched on and off by pushing the button.

#### **OFF MODE**

When there is no light in the LED, the Smart DIN Relay output is inactive.

#### Other information

- The Smart DIN Relay will automatically switch off if the load exceeds 16 A or the internal temperature gets too high
- In case of power failure, the device will restore itself to the on/off status it had before the power failure

# **Disposal**

Dispose the product properly at the end of life. This is electronic waste which should be recycled.

# **CE** certification

The CE mark affixed to this product confirms its compliance with the European Directives which apply to the product and, in particular, its compliance with the harmonized standards and specifications.



#### IN ACCORDANCE WITH THE DIRECTIVES

- Radio Equipment Directive (RED) 2014/53/EU
- Low Voltage Directive (2014/35/EU)
- RoHS Directive 2015/863/EU amending 2011/65/EU

#### Other certifications

• Zigbee Home Automation 1.2 certified



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#### **Documents / Resources**



<u>DEVELCO PRODUCTS Smart DIN Relay with Built-In Power Metering Functionality</u> [pdf] I nstruction Manual

h6500255, Smart DIN Relay with Built-In Power Metering Functionality, Smart DIN Relay, DIN Relay, Relay

# References

O <u>Develor Products</u> - White label products for security, home care, and energy management.

