

# User Manual Relay 4HP Inrush

## REL-304-D-02

The Grenton Relay 4HP (High Power) Inrush 120A module enables switching of 4 different high-current devices. The module is equipped with the energy consumption measurement bridge to allow power measurement of the connected device / receiver.



### 1. Technical Data

|                                                  |                                            |
|--------------------------------------------------|--------------------------------------------|
| Device power supply                              | 24V <sub>dc</sub>                          |
| Maximum power consumption                        | 1,7W                                       |
| Maximum device current                           | 70mA (for 24V <sub>dc</sub> )              |
| Rated load voltage                               | 230V <sub>ac</sub> or 24V <sub>dc</sub>    |
| Maximum load current per channel:                |                                            |
| AC1                                              | 16A / 250V <sub>ac</sub>                   |
| DC1                                              | 16A / 24V <sub>dc</sub>                    |
| Maximum load power per channel:                  |                                            |
| AC3 (single-phase motor)                         | 1100W / 240V <sub>ac</sub>                 |
| Maximum output current inrush per channel (20ms) | 120A                                       |
| Relay type                                       | NO, inrush                                 |
| Max. wire cross section                          | 2,5mm <sup>2</sup>                         |
| Weight                                           | 165g                                       |
| Size [DIN]                                       | 4                                          |
| Fixing                                           | Electrical box, rail DIN-3 / TH 35 / TS 35 |
| Dimensions (H/W/D)                               | 90/72/58mm                                 |
| Operating temperature range                      | 0 to +45°C                                 |

### 2. Wiring Diagram



|                        |                        |
|------------------------|------------------------|
| 1IN                    | First channel input    |
| 1OUT                   | First channel output   |
| 2IN                    | Second channel input   |
| 2OUT                   | Second channel output  |
| 3IN                    | Third channel input    |
| 3OUT                   | Third channel output   |
| 4IN                    | Fourth channel input   |
| 4OUT                   | Fourth channel output  |
| N                      | 'Neutral' signal input |
| L                      | 'Line' signal input    |
| REL1, REL2, REL3, REL4 | LED output status 1-4  |

- 'N' i 'L' signals are necessary for 230V<sub>ac</sub> loads for switch condition optimization.
- For loads up to 24V<sub>dc</sub> 'N' i 'L' are not required.

### 3. Device Status

|  |                                                       |
|--|-------------------------------------------------------|
|  | Off - no power supply                                 |
|  | On continuously for 2s - module startup               |
|  | On continuously - module in bootloader mode           |
|  | Short flash every 2s - correct module operation       |
|  | Short flash every 1s - no address (run CLU Discovery) |
|  | Fast flashing every 100ms - no TF-bus connection      |
|  | Two short flashes every 2s - voltage too low          |
|  | Short flash - change of module input or output state  |

### 4. Warnings and Cautionary Statements



#### ATTENTION I

- Before proceeding with the assembly, read the installation schematics and full instructions available at [www.grenton.com](http://www.grenton.com). Failure to follow the guidelines contained in the instructions and other requirements of due care valid as a result of the nature of the equipment (device) may be dangerous to life / health, damage the device or installation to which it is connected, damage other property or violate other applicable regulations. The manufacturer of the device, Grenton Sp. z o. o. does not bear any responsibility



#### DANGER I

- Danger to life caused by electric current!
- The components of the installation (individual devices) are designed to work in a home

for the damage (property and non-property related) resulting from the assembly and / or use of the equipment not in accordance with the instructions and / or due diligence in handling the equipment (device).

- Device power supply, permissible load or other characteristic parameters have to be in accordance with the device specification, described in particular in the "Technical data" section.
- The product is not intended for children and animals.
- If you have technical questions or comments about the device operation, contact Grenton Technical Support.
- Answers to frequently asked questions can be found at: [www.support.grenton.com](http://www.support.grenton.com).

electrical installation or directly in its vicinity. Incorrect connection or use may cause a fire or electric shock.

- All work related to the installation of the device, in particular works involving interference in the electrical installation, may be performed only by a person with appropriate qualifications or licences.
- When installing the device, make sure that the power supply voltage is disconnected from the circuit in which the device is connected or near which the assembly takes place.

### 5. CE Marking

The manufacturer declares that the device is in full compliance with the requirements of EU legislation that includes the directives of a new approach appropriate for this equipment. In particular, Grenton Sp. z o. o. declares that the device fulfills the requirements on safety, specified by law, and that it conforms to the na-

tional regulations that implement the appropriate directives: The Directive on the electromagnetic compatibility (EMC - 2014/30/UE) and the Directive on the limitation of the use of specific substances in electrical and electronic equipment (RoHS II - 2011/65/UE).



### 6. Warranty

Warranty available at [www.grenton.com/warranty](http://www.grenton.com/warranty).

### 7. Manufacturer Contact Details

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