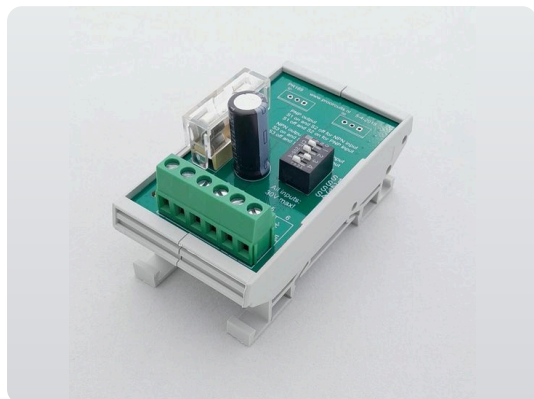


# NPN/PNP amplifier and converter for PLC outputs, up to 5 A

Article number PR169



PLC outputs, low-side (NPN) or high-side (PNP) switched, can often switch only 0.5 or 2 A: not enough for halogen lamps or hydraulic valves, for example. The PR169 reads such an output and amplifies it up to 5 A, and can convert an NPN output to PNP or vice versa. The outputs can switch digitally and pass on PWM as well. The DIP switch sets, per output, whether the input is NPN or PNP.

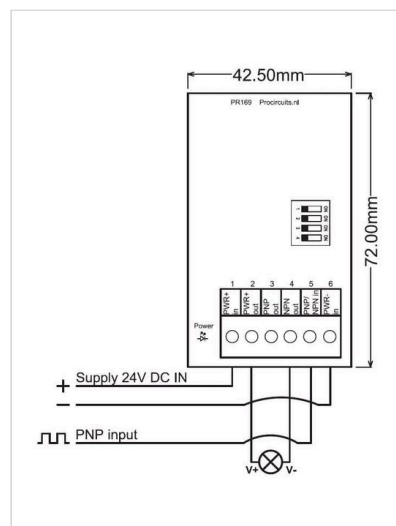
**Price on request.** Lead time on request. Not in stock? We will make it.

## Specifications

|                     |                                                                     |
|---------------------|---------------------------------------------------------------------|
| Supply              | 10 to 30 V DC                                                       |
| Input               | NPN or PNP, on terminal 5, 30 V DC max.; input frequency 1 kHz      |
| Output              | PNP output (terminal 3) and NPN output (terminal 4), digital or PWM |
| Setup               | DIP switch S1 to S4                                                 |
| Output current      | 5 A max.; the load plus on terminal 2 is fused with T6.3 A          |
| Ambient temperature | -25 to 55 °C, non-condensing                                        |
| Dimensions          | 45 x 83 mm with DIN rail enclosure, 42.5 x 72 mm without            |

## Connections

|            |                                                                        |
|------------|------------------------------------------------------------------------|
| Terminal 1 | Supply plus                                                            |
| Terminal 2 | Fused plus for the load, connected to terminal 1 through a T6.3 A fuse |
| Terminal 3 | PNP output                                                             |
| Terminal 4 | NPN output                                                             |
| Terminal 5 | NPN or PNP input (set the DIP switch first)                            |
| Terminal 6 | Supply minus                                                           |



## Setup

1. Disconnect the supply and the input signal before changing the DIP switch, to avoid damaging the module.
2. PNP output (terminal 3): set S1 on and S2 off for an NPN input, or S1 off and S2 on for a PNP input.
3. NPN output (terminal 4): set S3 on and S4 off for an NPN input, or S3 off and S4 on for a PNP input.
4. If you use only one output, set both switches of the other output to off.
5. Connect the supply to terminal 1 (plus) and terminal 6 (minus), and the input signal to terminal 5.
6. Connect the load: for the PNP output between terminal 3 and the supply minus, for the NPN output between terminal 2 (fused plus) and terminal 4.

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**More information, price and lead time:** [www.procircuits.nl/en/products/pr169](http://www.procircuits.nl/en/products/pr169)

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