

# IH5010 - DIN-RAIL SWITCH

## Qualities



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### KEY Features:

- \* Install at the breaker panel/fuse box for X-10 control of branch lighting circuits or appliances rated up to 16 A- ideal for aircon, heaters etc.
- \* Works with X-10 controller and standard latched or momentary action wall switches -including designer wall switches.

This unit can replace any pulse contact relay that is commonly used for multi switched hall and entry lighting. In discrete locations, e.g. kitchen lighting, you may prefer to install the AD10 in a small sub-junction box.

## Applications

The X-10 DIN rail switch is a remote controlled relay. Discretely installed at the junction box, it switches hard-wired circuits with several switches (e.g. hallway lighting).

The internal relay can be tripped either by external latched or momentary action wall switches or by an X-10 controller. The Din Rail Switch (AD10) responds to "standard" X-10 that is: "all units off" from any X-10 controller set to its house code regardless of unit code or alternatively individual unit control by "ON" and "OFF".

When the relay is energized, the LED above the slide switch is illuminated.

### **Slide Switch:**

Position 0: the connected load is switched off permanently and cannot be switched on by the wall switches or an X-10 controller.

Position 1: the connected load is switched on permanently and cannot be switched off by the wall switches or an X-10 controller.

Position auto: the connected load can be switched by the wall switches or an X-10 controller.

Terminal 1 is designed for toggle switches: the relay picks up when phase is present and releases when there is no voltage at the terminal.

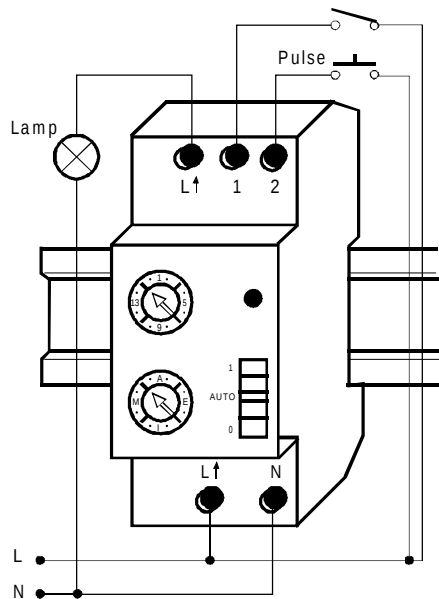
Terminal 2 is designed for pulse contacts: each time phase is applied the relay switches.

## Technical information

|                      |                                                                         |
|----------------------|-------------------------------------------------------------------------|
| Supply voltage:      | 230V + 10% -15% 50Hz                                                    |
| Supply current:      | <= 20 mA capacitive                                                     |
| Making capacity:     | 2000W (incandescent lamps)/3A (motors)/16A (resistive loads)            |
| EMC emission:        | according to EN 50081-1                                                 |
| EMC immunity:        | according to EN 50082-1                                                 |
| Electrical safety:   | according to EN 60950 and EN 60065                                      |
| Signal sensitivity:  | 15mVpp min 50 mVpp max at 120 kHz                                       |
| Input impedance:     | > = 180 Ohm (L-N) at 120 KHz                                            |
| Connections:         | screw type terminals for phase, neutral, switched phase, control 1 & 2. |
| Ambient temperature: | - 10° C to + 40° C (operation)<br>-20° C to + 70° C (storage)           |



**Switch off appropriate mains fuse and master switch !**



- Mount switch by snapping it onto the DIN rail.
- Connect phase (L) and neutral (N) to the corresponding terminals at the bottom of the switch.
- Connect load cable (light) to terminal L at the top of the switch.
- If there are several push-button switches for relay tripping (e.g hallway lighting switches), connect their cable(s) (switched phase) to terminal 2 at the top of the switch.
- In case of toggle wall switches, connect their cable (switched phase) to terminal 1 at the top of the switch.

**Terminal 1** of the switch is designed for toggle switches: the relay picks up when phase is present and releases when there is no voltage at the terminal.

**Terminal 2** is designed for pulse contacts each time phase is applied, the relay switches (i.e from OFF to ON or vice versa).

Now check the correct operation of the switch by using the slide switch on the front side:

- Switch on appropriate mains fuse and master switch.
- Set slide position to "I".
- The connected load (e.g.hallway lighting) is now switched on permanently and cannot be switched off even by the wall switches. The LED above the slide switch is illuminated.
- Set slide switch to position "O".
- The connected load (e.g.hallway lighting) is now switched off permanently and cannot be switched on by the wall switches, either.
- Now set the slide switch to position "Auto".
- The connected load (e.g.hallway lighting) can now be switched by the wall switches. Remote control by X-10 controller is now possible.
- Finally, set the rotary code switches on the front side to the desired device address (e.g.B8) with a screwdriver and note this address down in a list.

As with the other receiver modules, the device can be changed easily at any time without disconnecting any cables. Just the slide switch has finally to be in the "Auto" position, so that the relay can be controlled by the wall switches or X-10 controllers.

**Important notice:**

After the installation of the X-10 controllers, all receiver modules have first to be checked for correct function and address !

