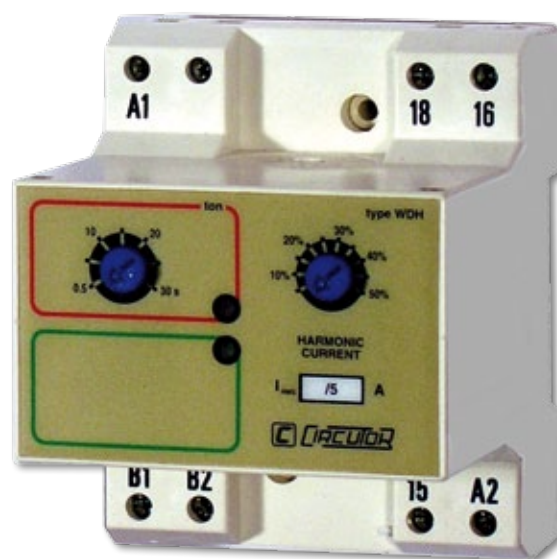


# WDH

## Harmonics detector control relay



### Description

**WDH** harmonics detectors are electronic devices with an output relay that is connected when the harmonics current level measured in the circuit exceeds a threshold that can be adjusted.

- It monitors and acts in accordance with the true root mean square of the total harmonic current in a phase. The trigger level is adjusted with the potentiometer on the front of the unit.
- Delay: the output relay activation time can be adjusted (up to 30 s).
- The reset process is automatic with currents under 10% of the trip level (Hysteresis).
- Current measurement, depending on the type:
  - With built-in current transformer (net diameter  $\varnothing$  25 mm)
  - Separate transformer, input.../5 Aac

### Application

The **WDH** current detectors are mainly used to protect transformers, capacitor banks, etc. In general, any receiver subject to harmonic overloads

### Features

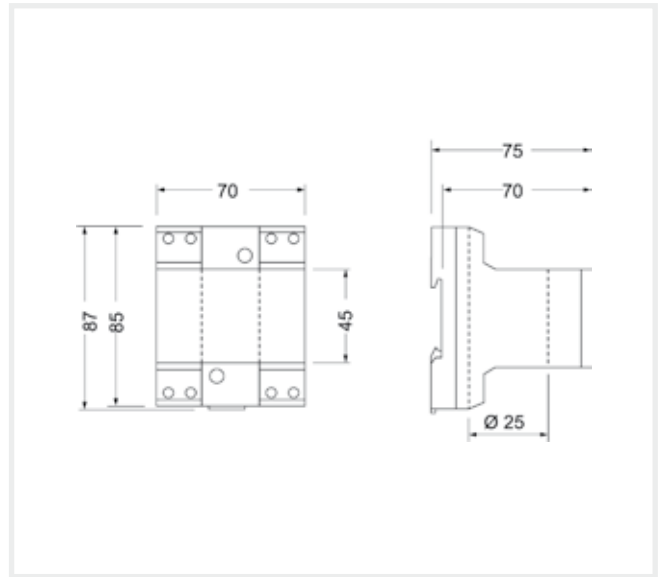
|   |  |
|---|--|
| <b>Power supply circuit</b>   |  |
| Voltage*  | 230 Vac (-15 ... +10 %)  |
| Frequency*  | 50 Hz  |
| Consumption   | 2 VA   |
| <b>Testing voltages between the circuits and the grid</b>   |  |
| Measurement circuit   | 2,500 V  |
| Relay contacts  | 1,500 V  |
| <b>Output relay</b>   |  |
| Insulation voltage ( $U_i$ )  | 250 Vac  |
| Thermal current $I_{th}$  | 5 A  |
| Interrupting power  | (10 <sup>5</sup> operations)<br>with resistive load $U_o/I_o$ : 240 Vac / 3.2 A<br>with inductive load $U_o/I_o$ : 240 Vac / 0.8 A<br>30 Vdc / 1.6 A |
| <b>Build features</b>   |  |
| Fixing  | DIN rail   |
| Dimensions  | 4 modules  |
| Weight  | 250 g  |
| Degree of protection  | IP 41  |
| Operating temperature   | 0 ... +50 °C   |
| <b>Standards</b>  |  |
| IEC 605, IEC 1010-1, EN 61010-1, EN 50 081, EN 50 082, IEC 255, UL 94, UNE 20 607, UNE 21 136, VDE 0110 |  |

(\*) Other voltages and frequencies on demand.

# WDH

Harmonics detector control relay

## Dimensions



## References

| Trigger time (adjustable) | Nominal current $I_n$     | Type         | Code   |
|---------------------------|---------------------------|--------------|--------|
| 0.5 ... 30 s              | 10 A                      | WDH / 010-30 | P32022 |
| 0.5 ... 30 s              | 20 A                      | WDH / 020-30 | P32023 |
| 0.5 ... 30 s              | 50 A                      | WDH / 050-30 | P32024 |
| 0.5 ... 30 s              | s / transformer ... / 5 A | WDH / TS     | P32020 |

## Connections

