

# EISH



## 1-phase true RMS AC ON/OFF relay



### Benefits

- **Low minimum current.** To sense the activity of small loads.
- **No auxiliary power supply needed.**
- **Solid state output.** For easy connection to PLCs or controllers.
- **Small size.** To fit panels without having to redesign them.

### Description

Small size current monitoring relay with built-in current transformer and integrated solid state output.

Self-powered from the input current with 2-wire connection for easy setup.

12 mm hole for insulated current wire to easily insert the metered cable (multiple times if needed). For mounting on DIN-rail or back panel.

### Applications

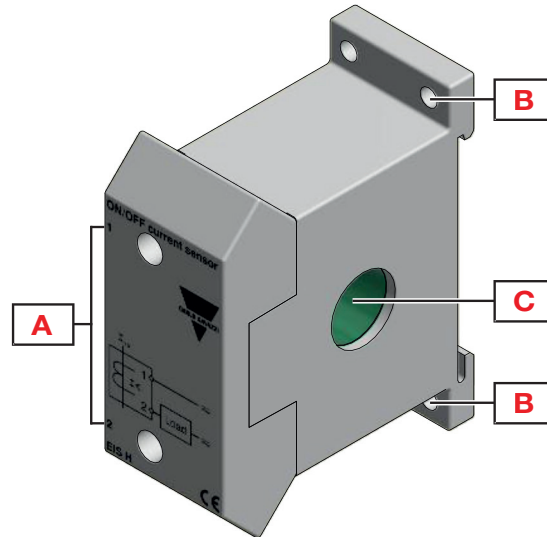
EISH is used in several building automation solutions as ON/OFF relay for water circulation pumps, extractor fans and lights.

It allows to provide prompt reaction in case of failure of the load, as pump replacement, backup or other corrective actions.

### Main features

- Detection of AC current from 200 mA up to 60 A
- No setpoint adjustment required

## Structure

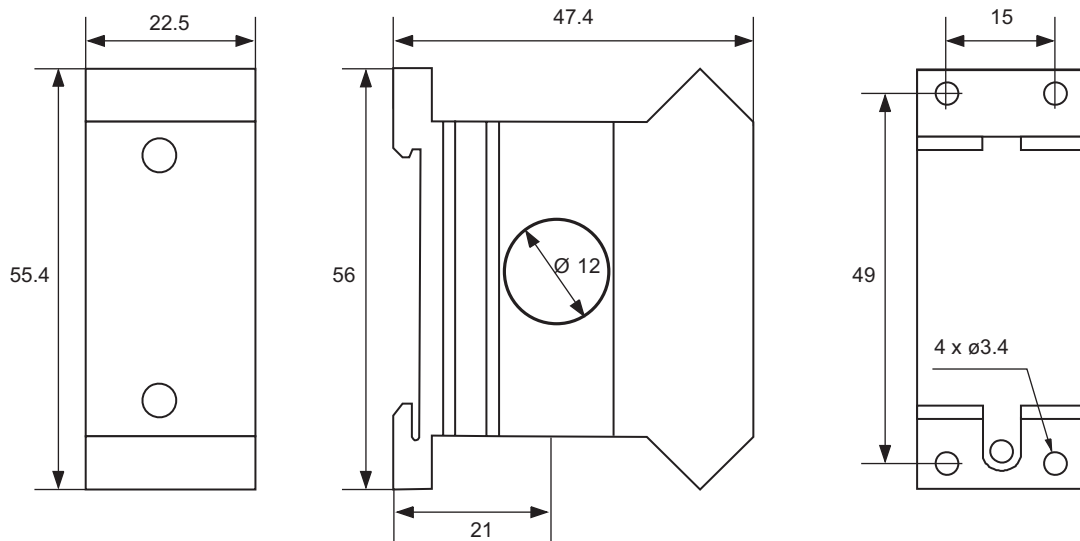


Element	Component	Function
A	Terminals	Solid state output: 1, 2
B	Wall fixing holes	Wall mounting
C	Hole	Insulated current carrying wire

## Features

### General




<b>Material</b>	Polycarbonate or Polycarbonate/ABS Alloy
<b>Colour</b>	RAL7035 (light grey)
<b>Dimensions (W x H x D)</b>	22.5mm x 55.4mm x 47.4mm
<b>Protection degree</b>	IP20
<b>Weight</b>	70 g
<b>Terminals</b>	Cable size from 1.0237mm <sup>2</sup> to 1.2908mm <sup>2</sup> (AWG18 to AWG16), stranded or solid
<b>Tightening torque</b>	Max. 0.5Nm (4.425lb.in)
<b>Terminal type</b>	Screw terminals



### Environmental

<b>Operating temperature</b>	-20° C to 50° C (-4° F to 122° F)
<b>Storage temperature</b>	-30° C to 70° C (-22° F to 158° F)
<b>Relative humidity</b>	5-95% non condensing
<b>Pollution degree</b>	2
<b>Operating max altitude</b>	2000 m amsl (6560ft)
<b>Salinity</b>	No saline environment
<b>UV resistance</b>	No

## Compatibility and conformity

CE-marking	 According to EN 60947-5-1. Complies to European LV directive 2014/35/EU and EMC directive 2014/30/EU: Immunity according to EN61000-6-2; Emissions according to EN61000-6-3
Approvals	 (GB/T14048.5)
Standards	 EN 60255-6

## Inputs

Measured variable	Current level
Current measuring	Direct through built-in current transformer
Minimum current	<b>EISH200MA024</b> : 200mA <b>EISH400MA230</b> : 400mA
Maximum current (continuous)	60 A
Maximum current for 3 s	360 A
Maximum current for 30 s	180 A
Frequency range	45 to 65 Hz

**Note:** It is possible to measure currents below the nominal range by drawing the conductor through the hole several times. If the conductor is drawn through the central hole e.g. 5 times, the transformer will register 5 AAC when the current in the conductor is 1 AAC.

## Outputs

Number of outputs	1		
Type	Solid state, NO		
Logic	When input current decreases below the minimum value the output opens, when the input current increases above the minimum value the output closes		
Contact rating	<b>EISH 024</b>	<b>EISH 230</b>	
	Current	Max. 1 A	Max. 0.5 A
	Voltage range	0.5 to 30 VAC/DC	2 to 250 VAC/DC
	Leakage current	Max. 100 uA	Max. 100 uA
	Voltage drop	Max. 0.5 V @ 1 A	Max. 2 V @ 0.5 A
Assignment	Associated to undercurrent alarm		

## Insulation

Current cable to terminals	2.5kVrms, 4kV impulse 1.2/50µs (Required basic insulation of the cable)
Overvoltage category	III (IEC 60664)

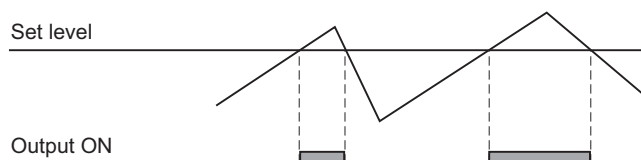
## Operating description

### Alarms

EISH alarm trips when the current drops below 200 mA (for EISH200MA024) or below 400 mA (for EISH400MA230).

Current level alarm	
Input variables	Up to 60 AAC
Reaction time	<b>EISH200MA024:</b> <250 ms from 200 mA to 0 mA <b>EISH400MA230:</b> <250 ms from 400 mA to 0 mA

## Operating diagram



## Connection Diagrams

