



# DIN 310C

## Features

- Numerical earth leakage relay
- Detection of no connection to ZCT
- Relay trip indicator
- Real-time leakage current display
- Leakage fault current recording
- Standard DIN rail mounting
- Protection against nuisance tripping
- Type A
- For Tankless Multipoint Water Heater Application
- Ability to differentiate between overload tripping and earth leakage tripping

## Technical Data

### AUXILIARY SUPPLY

DIN310C-230A : 184~276 V AC  
 Rated frequency : 50 or 60 Hz  
 VA rating : 3 VA typical

### PERFORMANCE

Setting accuracy : -20% to 0%  
 Timing accuracy : ±5%

### SETTING

Sensitivity : 10mA  
 Time delay : Instantaneous

### OUTPUT CONTACTS

Rated voltage : 250 V AC  
 Contact rating : 5 A (NO)  
 3 A (NC)  
 Expected electrical life: 100,000 operations at rated current  
 Expected mechanical life : 5 x 10<sup>6</sup> operations

### RECORD

Fault record : 3 latest tripped fault currents or "tSt" for manual test trip  
 Storage : Non-volatile memory

### OUTPUTS

Trip Contact : Activated if relay tripped or ZCT fault

### INDICATORS

Time delay : Red indicator  
 Leakage : 7- segment display and indicator  
 ZCT Fault : 7- segment display and red indicator  
 Real time leakage current : 7-segment display

### ZERO-PHASE CURRENT TRANSFORMER

To operate with Mikro's ZCT that is included in the DIN310C bundle only (Note: Will not be able to operate properly with other Mikro's ZCT)

### ENVIRONMENTAL CONDITIONS

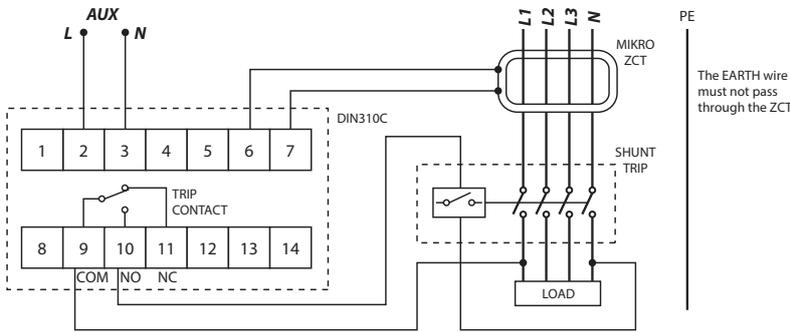
Temperature : -5°C to +55°C  
 Humidity : 56 days at 93% RH and 40°C non-condensing

### MECHANICAL

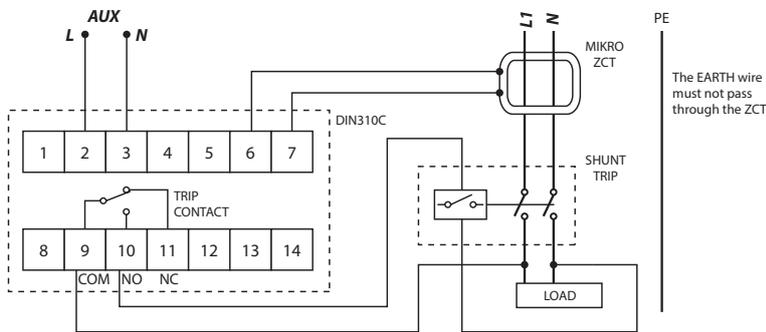
Mounting : Panel mounting  
 Dimension (mm) : 71(W) x 85(H) x 70(D) (Relay)  
 Dimension (mm) : 76(W) x 50(H) x 27(D) (ZCT)  
 Approximate weight : 0.4 kg (Relay)  
 Approximate weight : 0.095 kg (ZCT)

### Typical Application Diagram For DIN 310C

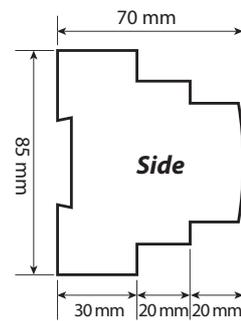
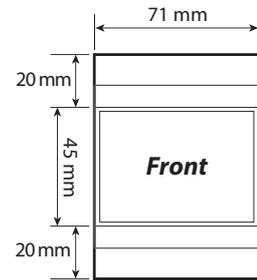
#### 3-Phase 4-Wire System



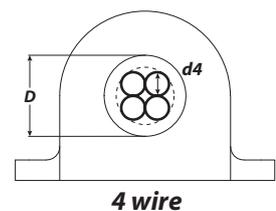
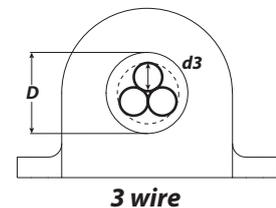
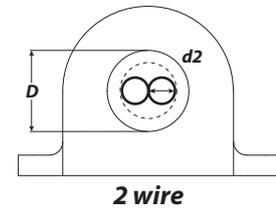
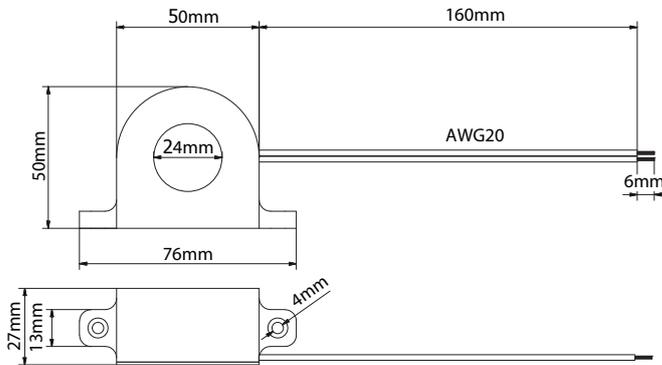
#### Single Phase System



### Case Dimensions



### ZCT and Secondary Cable Dimensions



	<i>d2, 2 wire</i> Up Until	<i>d3, 3 wire</i> Up Until	<i>d4, 4 wire</i> Up Until
Diameter (mm)	7	6.49	5.79
Maximum Cable Cross-Sectional Area (mm <sup>2</sup> )	35	25	25
Maximum Current Carrying Capacity (A)	125	89	89

Note: Selection of cable is based on 300 / 500V or 600 / 1000V, single-core, PVC insulated, PVC sheathed unarmoured cable, enclosed in conduit on a wall

### Ordering Information

MODEL	DESCRIPTION
DIN310C - 230A	For 50Hz system, auxiliary voltage 230V AC