



# DIN 310 310E

## Features

- Numerical earth leakage relay
- Programmable current sensitivity and time delay
- Detection of no connection to ZCT
- Relay trip indicator
- Relay alarm indicator
- Real-time leakage current display
- Leakage fault current recording
- 50% pre-fault indicator
- Standard DIN rail mounting
- Protection against nuisance tripping

## Features For DIN 310E only

- Positive safety output contact
- 50% pre-fault output contact
- Remote reset function

## Technical Data

### AUXILIARY SUPPLY

DIN310-230 A(6)	: 184 ~ 276 V AC
DIN310E-230 A(6)	: 184 ~ 276 V AC
Rated frequency	: 50 or 60 Hz
VA rating	: 3 VA typical

### PERFORMANCE

Setting accuracy	: -15% to +0%
Timing accuracy	: ±5%

### SETTING

Sensitivity adjustment	: 30mA, 50mA, 0.10~1.00A (Step=50mA) 1.00~10.0A (Step=1.00A)
------------------------	--

Time delay adjustment	: Instantaneous, 0.1~3.0sec Step=0.10 sec
-----------------------	---

### 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

### INPUT

Remote reset*	: N.O. dry contact
---------------	--------------------

### OUTPUTS

Trip Contact	: Activated if relay tripped or ZCT fault
Positive safety contact*	: Activated when ZCT is connected properly to the relay
Pre-fault alarm contact*	: Activated when leakage current exceeded 50% of sensitivity setting

### INDICATORS

50% pre-fault alarm	: Red indicator
Time delay	: Red indicator
Leakage trip	: 7-segment display and red 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 series of current transformer

### ENVIRONMENTAL CONDITIONS

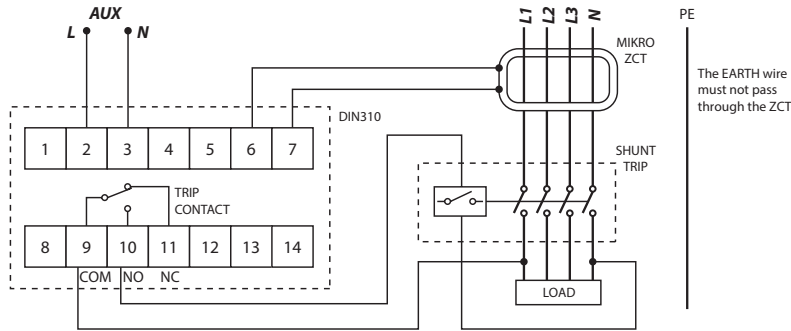
Temperature	: -5°C to +55°C
Humidity	: 56 days at 93% RH and 40°C non-condensing

### MECHANICAL

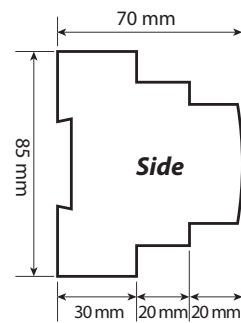
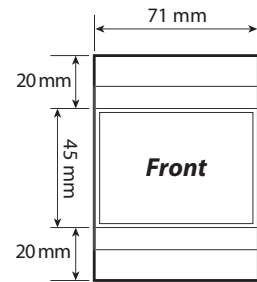
Mounting	: Panel mounting
Dimension (mm)	: 71 (w) x 85 (h) x 70 (d)
Approximate weight	: 0.4 kg (excluding ZCT)

\* Applicable to DIN310E series only

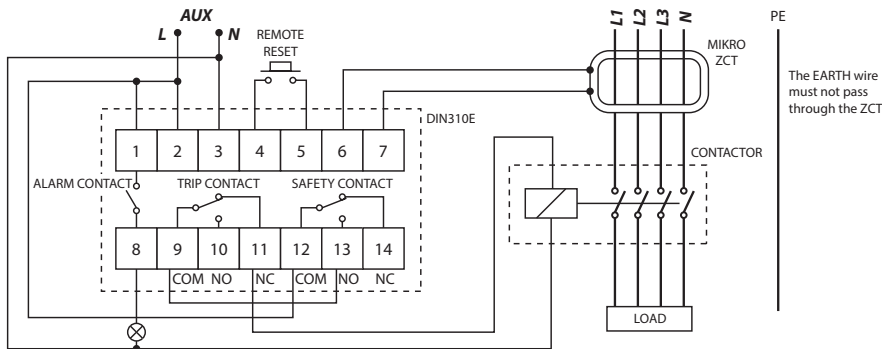
### Typical Application Diagram For DIN 310



### Case Dimensions



### Typical Application Diagram For DIN 310E



### Ordering Information

MODEL	DESCRIPTION
DIN310 - 230 A	For 50 Hz system, auxiliary voltage 230 V AC
DIN310E - 230 A	For 50 Hz system, auxiliary voltage 230 V AC
DIN310 - 230 A6	For 60 Hz system, auxiliary voltage 230 V AC
DIN310E - 230 A6	For 60 Hz system, auxiliary voltage 230 V AC

\* 60Hz system, auxiliary voltage 110V AC model available upon special request.