



# DIN 330

## Features

- Numerical auto-reclosing earth leakage relay
- Incorporated positive safety feature into trip contact
- Detection of no connection to ZCT
- Relay trip / alarm indicator
- Real-time leakage current display
- Leakage fault current recording
- Remote reset function
- Standard 35mm DIN rail mounting
- Protected against nuisance tripping

## Technical Data

### AUXILIARY SUPPLY

Model DIN330-230 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 : 30 mA, 50 mA, 0.10 A – 1.00 A (Step = 50 mA), 1.00 A – 10.0 A (Step = 1.00 A)  
 Time delay adjustment: Instantaneous, 0.1s – 3.0s Step = 0.10 sec.  
 Number of shots : 0 - 30. Step = 1. 0 = Disable auto reclose function  
 Dead time : 1 - 500 sec. Step = 1 sec.  
 Permanent fault time : 0 - 500 sec. Step = 1 sec. 0 = Disable function  
 Reclaim time : 0 - 500 minute Step = 1 min 0 = Disable function  
 Lockout auto reset time: 0 - 200 hour Step = 1 Hrs 0 = Disable function

Programmable : Option 0 = Disable contact  
 Option 1 = All (Option 2 to 6)  
 Option 2 = ZCT error  
 Option 3 = Leakage trip, test trip, re-close lockout  
 Option 4 = Re-close lockout  
 Option 5 = Pre-fault alarm, leakage trip, test trip, re-close lockout  
 Option 6 = Re-close lockout, ZCT error

### 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 safe contact : Activated when the relay is in normal power-up condition with the measured leakage current less than  $0.85 I_{\Delta n}$ .  
 Programmable contact: Activated according to user setting

### 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 :  $5 \times 10^6$  operations

### INDICATORS

50% pre-fault alarm : Red indicator (Normal blink)  
 Time delay : Red indicator (Fast blink)  
 Leakage trip : 7-segment display and red indicator  
 Reclose lockout : 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

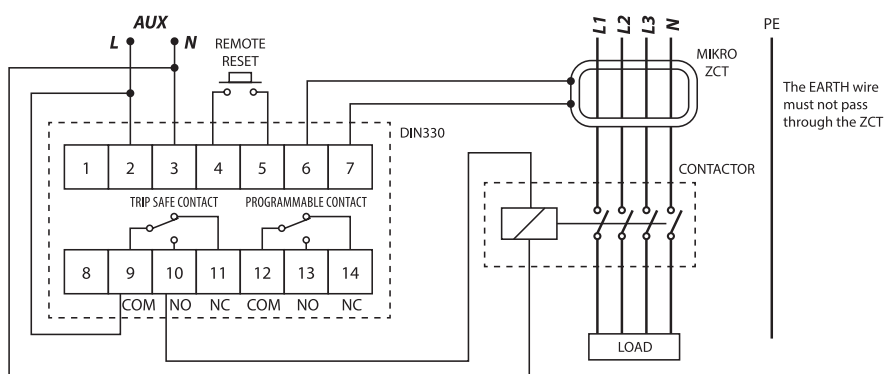
### ENVIRONMENTAL CONDITIONS

Temperature : -10°C to 55°C  
 Humidity : 5% to 95%, non-condensing

### MECHANICAL

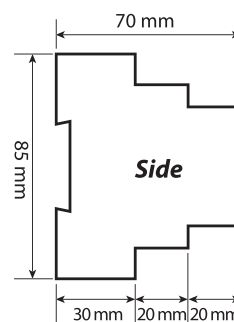
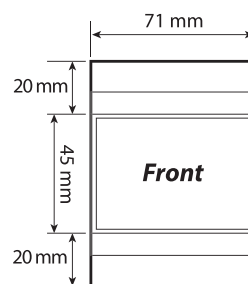
Mounting : DIN rail mounting  
 Dimension (mm) : 71(w) x 85(h) x 70(d)  
 Approximate weight : 0.4 kg (excluding ZCT)

### Typical Application Diagram



\* The trip safe contact is activated (terminal 9-10 closed) when the relay is in normal power-up condition with the measured leakage current less than 0.85 IDn.

### Case Dimensions



### Ordering Information

| MODEL           | DESCRIPTION                                  |
|-----------------|--|
| DIN330 - 230 A  | For 50 Hz system, auxiliary voltage 230 V AC |
| DIN330 - 230 A6 | For 60 Hz system, auxiliary voltage 230 V AC |