



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
- Protected 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 ⁶ 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
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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

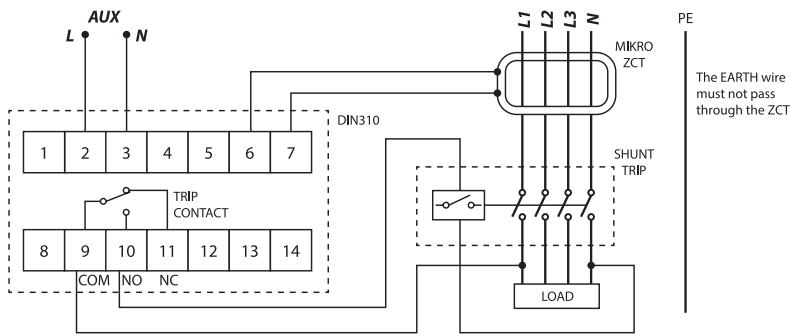
ENVIRONMENTAL CONDITIONS

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

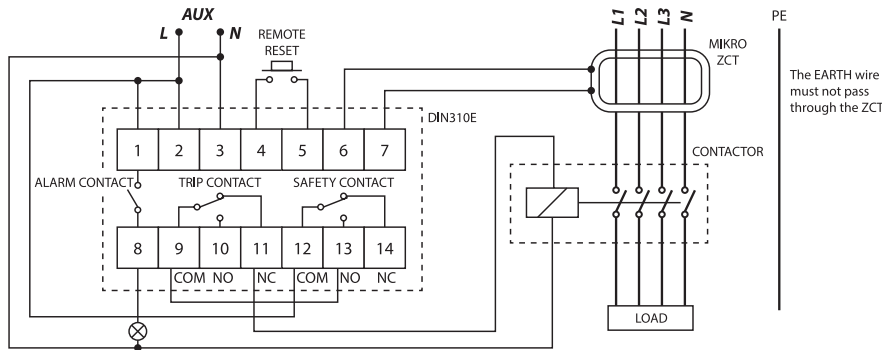
MECHANICAL

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

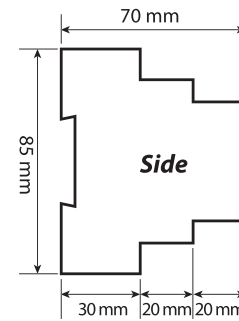
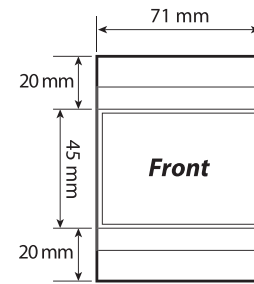
Typical Application Diagram For DIN 310



Typical Application Diagram For DIN 310E



Case Dimensions



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.