

9. RECORDS

- Record the 3 latest tripped faults current or "tSt" for manual trip test.
- The records are stored in non-volatile memory.
- To clear the entire record database:
 - Step 1: When the relay is healthy, press [RESET] button to step to most recent trip fault record or [FUNC] digit shown "A".
 - Step 2: Press [▲] and [▼] buttons simultaneously and hold for 3.5s or the [DATA] show "0". It will clear the entire fault records database.

10. TECHNICAL DATA

AUXILIARY SUPPLY

MK330A-230A.....	184~276 VAC
MK330A-110A.....	94~127 VAC
Rated frequency.....	50Hz or 60Hz
VA Rating.....	3 VA typical

SETTING RANGES

Sensitivity adjustment.....	30mA, 50mA,
	0.10~1.00A (step=50mA), 1.00~10.0A (step=1.00A)
Delay time adjustment.....	Instantaneous,
	0.1~3.0s (step=0.1s)
Number of shots.....	0~30 (step=1)
	0=Disable reclose function
Dead time.....	1~500sec (step=1sec)
	Persistent fault time.....
Reclaim time.....	0=Disable
	0~500min (step=1min)
Lockout self reset time.....	0=Disable
	0~200hrs (step=1hour)
Programmable contact.....	0=Disable
	0~6 (step=1)

INDICATORS

Pre-fault alarm.....	Red indicator
Leakage trip delay time.....	Red indicator
Leakage trip.....	7-segment display and red indicators
Manual test trip.....	7-segment display and red indicators
ZCT connection fault.....	7-segment display and red indicators
Trip records.....	7-segment display
Real-time leakage current.....	7-segment display

RECORDS

Fault record.....	3 latest trip fault current or "tSt" for manual trip test
Storage.....	Non-volatile memory

DIGITAL INPUT PORT

Remote reset.....	N.O. Dry contact
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OUTPUT CONTACTS

Contact rating.....	5A (NO) / 3A (NC) / AC1
Contact arrangement.....	Change over
Expected electrical life.....	10,000 at rated current
Expected mechanical life.....	5,000,000 operations

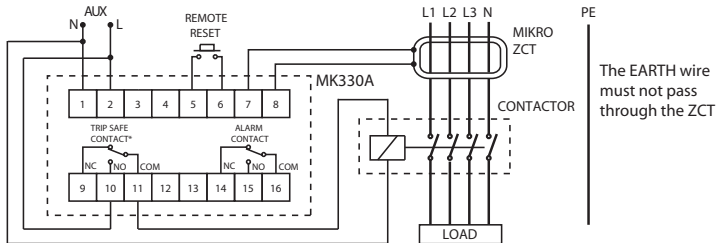
ZERO-PHASE CURRENT TRANSFORMERS

To operate with Mikro's ZCT series of current transformers

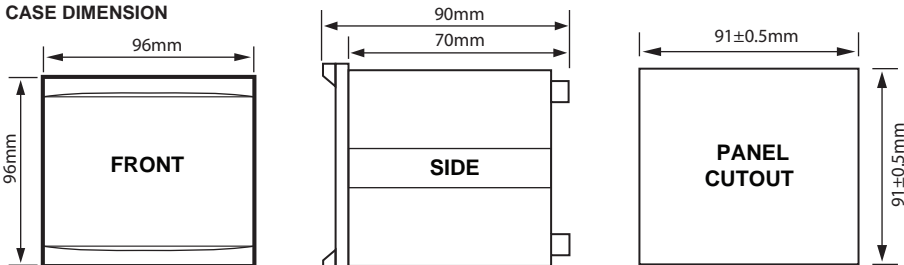
MECHANICAL

Mounting.....	Standard DIN 96x96mm panel mounting
Approximate weight.....	0.58kg (excluding ZCT)

11. CONNECTION DIAGRAM

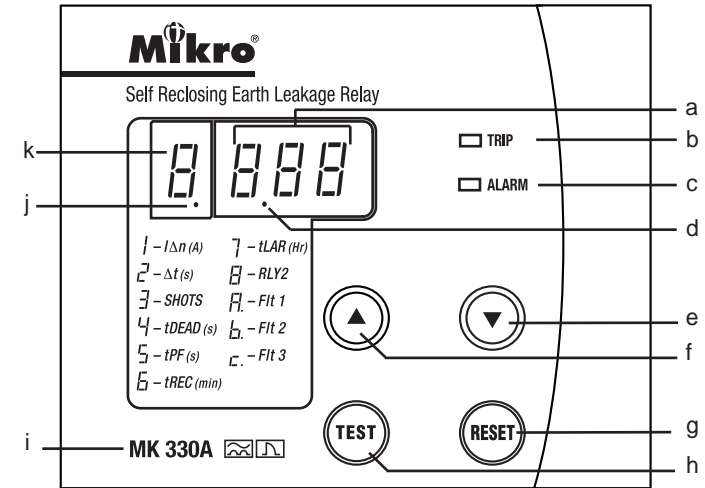


12. CASE DIMENSION



MK330A Self-Reclosing Earth Leakage Relay User's Manual

A BRIEF OVERVIEW



- a - DATA display
- b - Trip status indicator
- c - Alarm status indicator
- d - DP2 indicator
- e - Decrement button
- f - Increment button
- g - RESET button
- h - TEST button
- i - Model
- j - DP1 indicator
- k - FUNC display

Symbols

$I_{\Delta n}$	- Sensitivity setting
Δt	- Time time delay setting
SHOTS	- Nos of reclose operations
tDEAD	- Dead time
tPF	- Persistent fault monitoring time
tREC	- Reclaim time
tLAR	- Lockout auto reset time
RLY2	- Programmable Output contact
Flt 1	- Fault record #1 (Most recent)
Flt 2	- Fault record #2
Flt 3	- Fault record #3 (Oldest)

1. DESCRIPTION

The MK330A is microprocessors based earth leakage relay with built in self-reclosing function.

The earth leakage protection module is designed for measure the low-level current flowing from the live part of the installation to the earth in the absent of the insulation fault. A zero phase current transformer is connected to the relay and function as the sensor for sensing the leakage current. All conductors of the circuit to be protected shall go through the ZCT.

While the self reclosing module provide multiple number of shots operation. It also incorporates intelligent to differentiate the transient fault or persistent fault.

