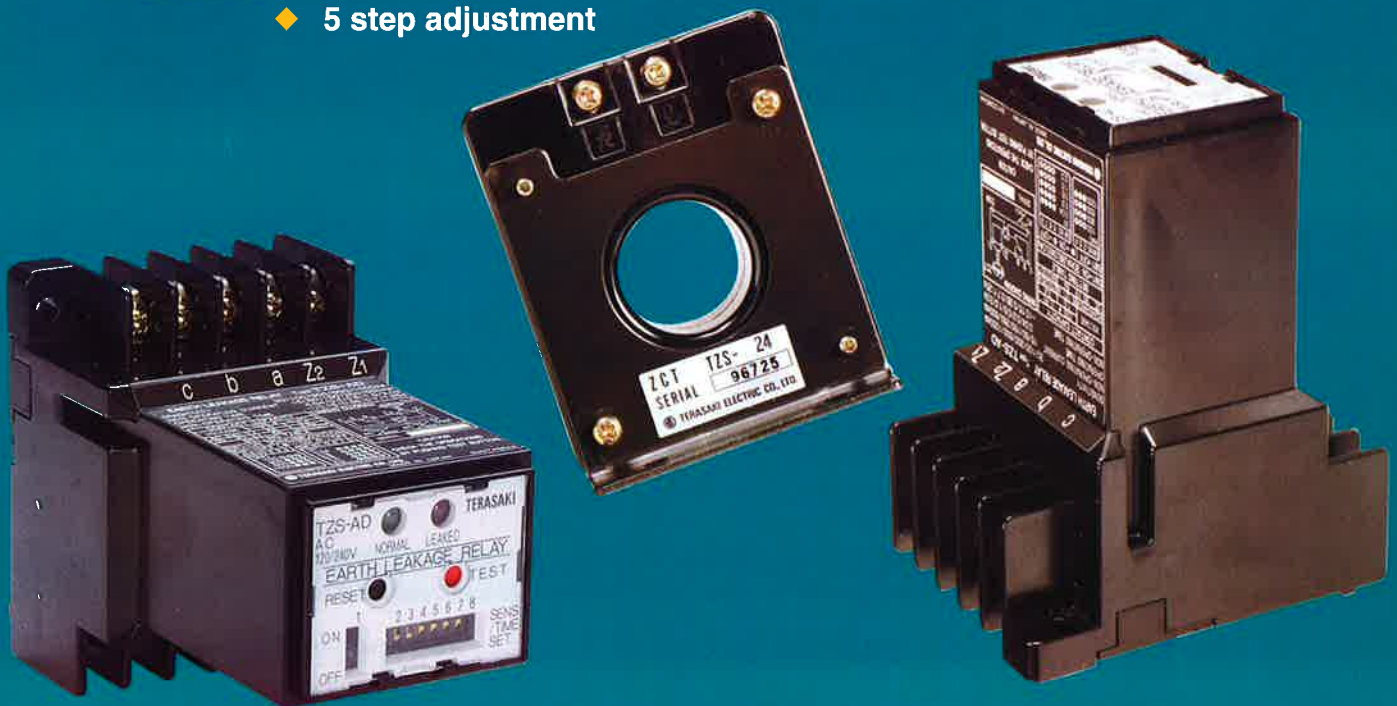


Residual current relay adjustable type TZS



- ◆ Adjustable sensitivity (30mA - 1A)
- ◆ Adjustable time 0.2 - 2 secs
- ◆ Rugged construction
- ◆ Unaffected by Harmonics
- ◆ Extremely reliable operation
- ◆ Dual voltage 120-240 volt
- ◆ Interchangeable with previous models
- ◆ Designed and manufactured with "state-of-the-art" technology
- ◆ 5 step adjustment



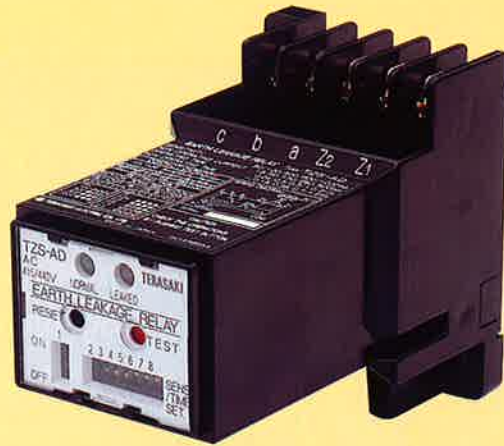
Five (5) step sensitivity current adjustment 30/100/300/500/1,000mA

Time delay setting adjustable from inst. to 2 seconds in 5 steps.

- ◆ Surface or flush mounting
- ◆ Inbuilt test circuit
 - ◆ Output contacts reset on loss of control power or via reset button
 - ◆ Contact rating 120/240V AC 3.5A ind. 6A res.
 - ◆ Output contacts reset manually or electrically
- ◆ Interchangeable with previous models

TZS Residual Current Relays

- ◆ Adjustable sensitivity and current with dip switch.
- ◆ Immune to false tripping via harmonics.
- ◆ High vibration withstand.
- ◆ Indication – LED.
- ◆ Reset function – electrical or manual.
- ◆ Automatic reset on loss of control power.
- ◆ Separate CT with maximum internal diameter of 100mm.



Selection Table

Mounting	Voltage specify	Adj. sensitivity	Adj. time range	Cat. No.
Surface	120/240AC	30mA-1amp ¹⁾	0~2 sec.	TZSAD120/240
Surface	415/440AC	30mA-1amp ¹⁾	0~2 sec.	TZSAD415/440
Flush (collar only)				TPDOSZ Flush collar
Surface Mount				
Dimensions (mm) W/H/D				60/78/100
Weight (kg) (relay only)				0.22
Standard features				
Earth leakage detection				solid state current operated type
Internally mounted contact				1 C/O
Earth leakage indication				LED
Reset function (electrical)				Standard
Test button				Standard
Power source				IVA

Operating Time Range and Non-operating Time Range

Rated operating time (sec)	Operating time range (sec)	Non-operating time range (sec)
0.3	0.2 ~ 0.36	0.15
0.5	0.4 ~ 0.6	0.38
1	0.8 ~ 1.2	0.7
2	1.3 ~ 2	1.25

Toroidal Current Transformers

Diam.	Max. wire size	Current rating (4 wire)	Cat. No.
15mm	5.5mm ²	49A	TZS-15
24mm	22mm ²	115A	TZS-24
40mm	80mm ²	257A	TZS-40
68mm	250mm ²	556A	TZS-68
100mm	600mm ²	990A	TZS-100

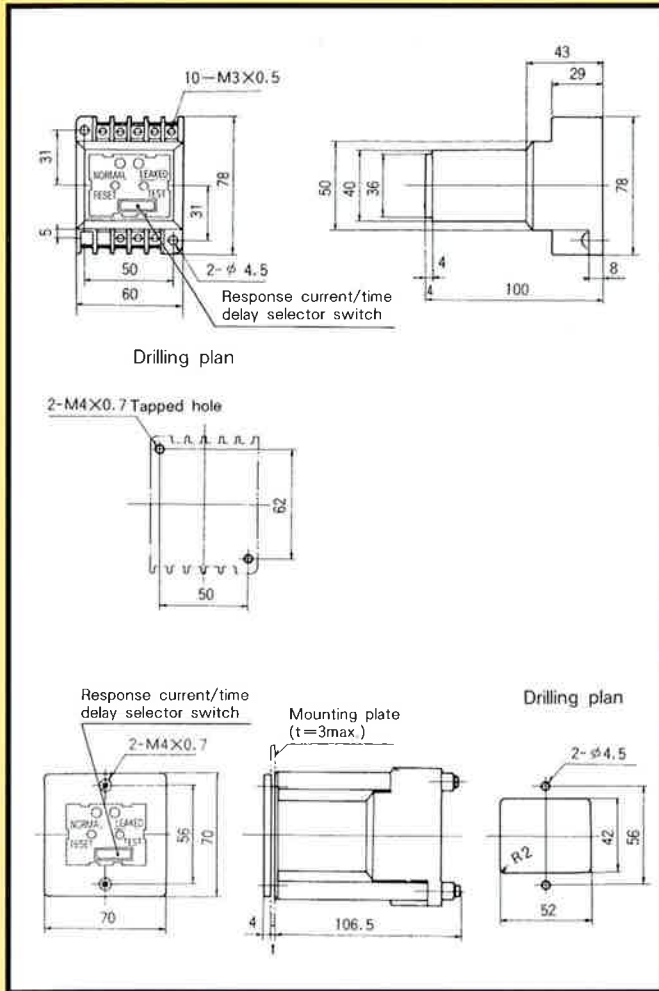
Contact Rating

Volts	RESIS.	IND.
120V AC	6A	3.5A
240V AC	6A	3.5A
30V DC	6A	3.5A

Note: ¹⁾ Tripping time is fixed (below 40ms) when current is set at 30mA.

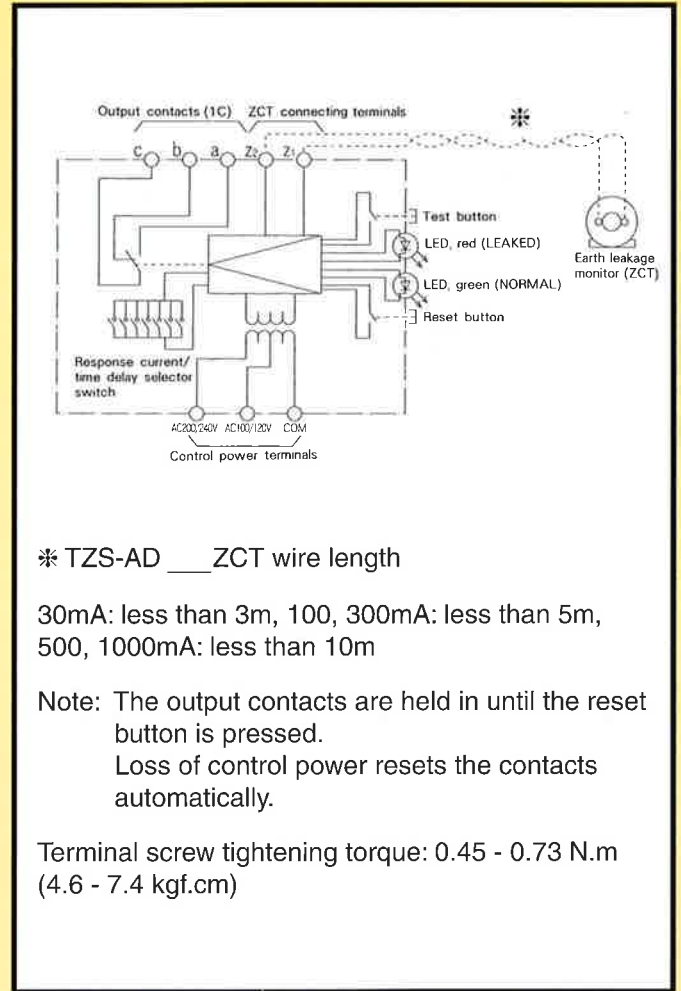
Outline Dimensions

• Earth Leakage Relay



Connection Diagram

• Earth Leakage Relay



* TZS-AD ___ ZCT wire length

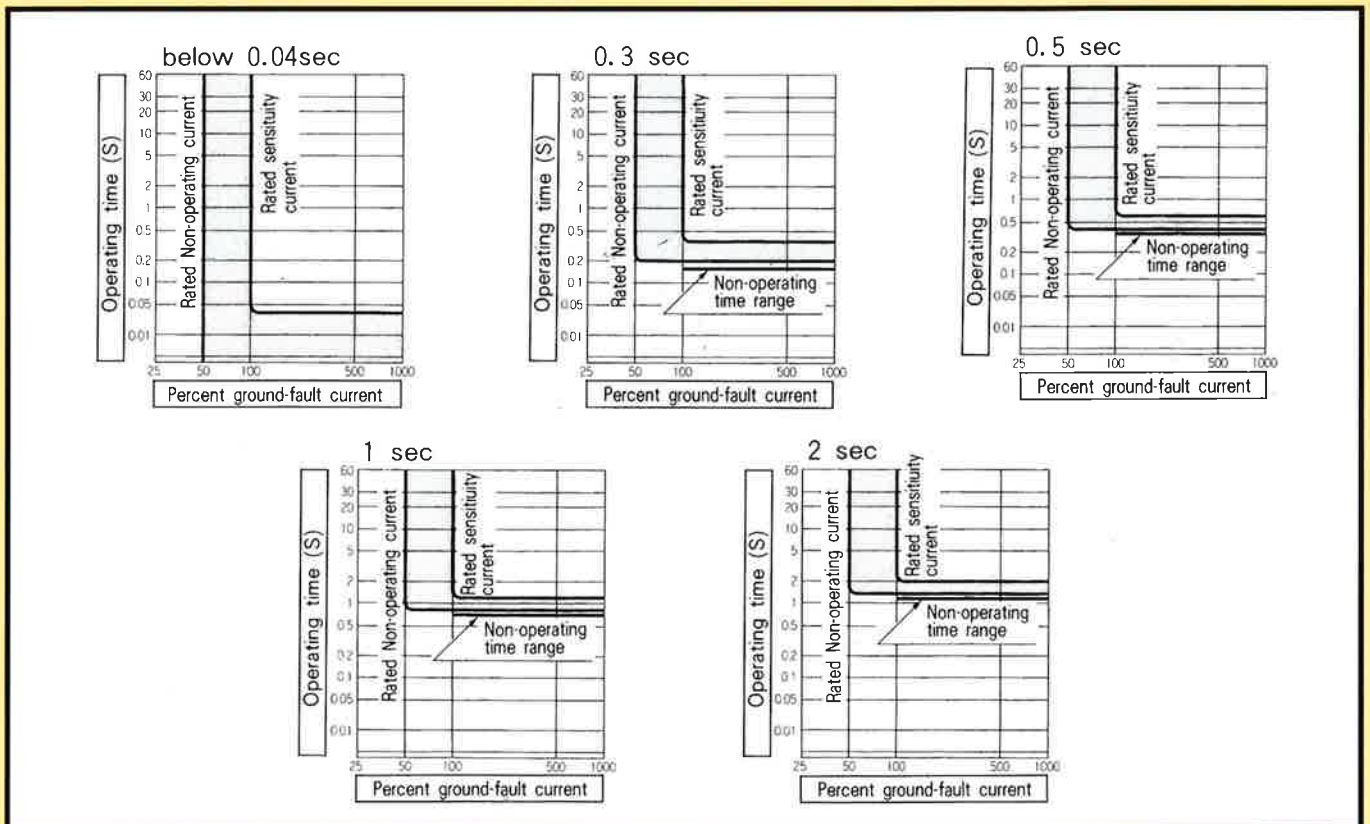
30mA: less than 3m, 100, 300mA: less than 5m, 500, 1000mA: less than 10m

Note: The output contacts are held in until the reset button is pressed.

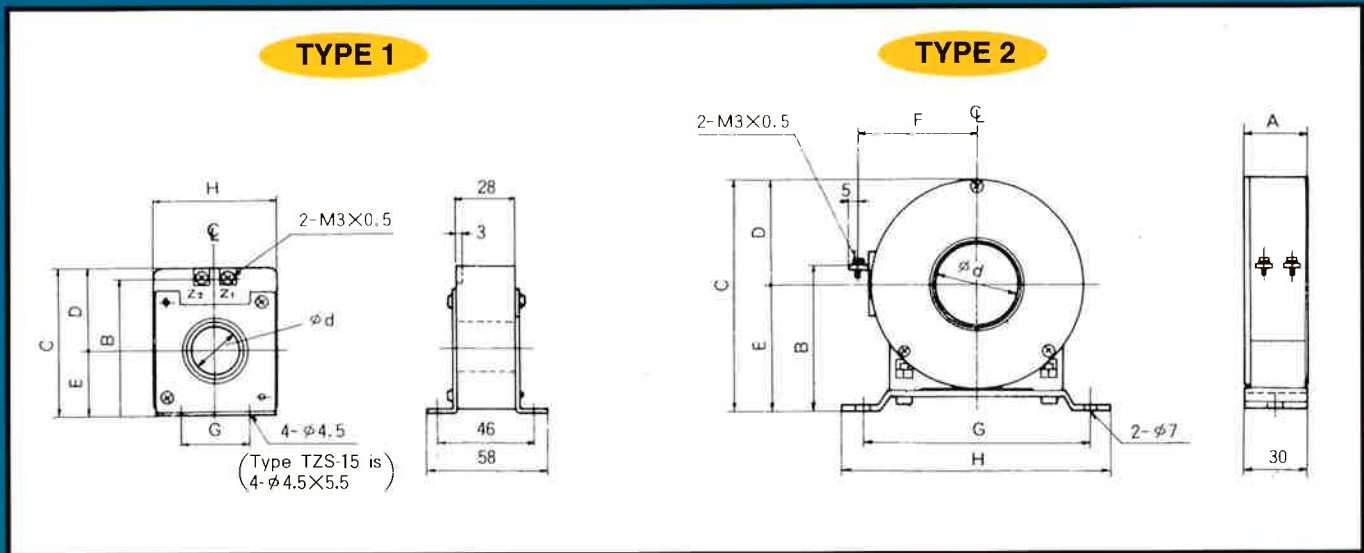
Loss of control power resets the contacts automatically.

Terminal screw tightening torque: 0.45 - 0.73 N.m (4.6 - 7.4 kgf.cm)

Earth Leakage Trip Characteristic



• Earth Leakage Monitor (ZCT)



ZCT Type Cat. No.	Type	Relay Type Cat. No.	Contact Rating	ød	A	B	C	D	E	F	G	H
TZS-15	I	TZS-AD	15	15	—	55	60	32	28	—	25	46
TZS-24	1	TZS-AD	24	24	—	67	72	40	32	—	34	58
TZS-40	2	TZS-AD	40	40	30	71	113	51	62	57	110	130
TZS-68	2	TZS-AD	68	68	42	85	141	65	76	70	134	150
TZS-100	2	TZS-AD	100	100	45	105	181	85	96	90	150	170

Add on Earth Leakage Blocks for MCCB's (125A - 250A)

Type: ELB – refer price list catalogue CPB.