

ADIT

Earth Fault Relay



The ADIT is an adjustable current and time earth fault relay, used in the following areas: transformers, motors, line feeders and switch gear.

Key Features:

- Manufactured and supported in South Africa
- Fully electronic
- Requires auxiliary power supply
- Easy to use
- High impact plastic enclosure
- LED status indicator
- ADIT suitable for panel door mounting
- Low and high voltage applications
- Independent time and current settings
- Normally open and normally closed contacts
- Same settings for 1A and 5A CT's
- Sensitivity - 25mA to 2000mA

Functions:

- Current settings:
 - 1 Amp CT - 2.5 to 200%
 - 5 Amp CT - 0.5 to 40%
- Time settings:
 - 1 Amp unit - 0.25 to 2.5 seconds
 - 5 Amp unit - 0.25 to 2.5 seconds

System Applications:

- Protection of high and low voltage systems
 - H.V systems
 - Transformer protection
 - Motor protection
 - Dropped overhead line protection
 - Neutral compensator restricted earth fault protection
 - L.V systems
 - Switchgear incomer circuit protection
 - High current sub-feeder protection
 - Protection of large motors
 - Protection of rising mains

SPECIFICATIONS

- Operating conditions: 0 – 70 Deg C Ambient.
- Trip accuracy: $\pm 20\%$ @ 25mA & $\pm 10\%$ @ >50mA
- Auxiliary supply.
 - Model AD-55A: 220VAC and 380-550VAC $\pm 20\%$.
 - Model AD-12A: 110VAC/DC - 220VAC/DC $\pm 20\%$.
- Relay outputs:
 - Contact form = 1 x N/O & 1 x N/C
 - Contact load = 5A 550V AC ($\cos\phi$ @ 1). = 5A 48V DC (L/R = 0ms).
 - Contactor coil operation.AC15 = 1.5A 480V AC.
 - Solenoid operation.DC13 = 2A 60V DC, 50ms.
- LED trip indication will continue for approximately 8hrs after auxiliary power failure. Note relays will be de-energised during this period. With auxiliary power off for 8hrs, the full backup time will only be available when powered for approximately 3hrs.

MILLI-AMP THRESHOLD SETTINGS

Table of settings for switch position:

CURRENT		TIME	
Switch position	Milli-amp sensitivity	Switch position	Definite time in seconds
0	25	0	0.40
1	50	1	0.63
2	100	2	1.00
3	150	3	1.60
4	250	4	2.50
5	300	5	5.00
6	800	6	10.00
7	2000	7	20.00
* 8	25	* 8	0.40
* 9	50	* 9	0.63

* Note position 8 & 9 are not used, but will select settings as indicated.

PERCENTAGE OF CT SECONDARY

Table of percentage settings for 1A & 5A CT:
This table is to assist the users of the superseded electro-mechanical ADIT.

ADIT-E mA setting	%In [1A CT]	%In [5A CT]
25	2.5	0.5
50	5	1
100	10	2
150	15	3
250	25	5
300	30	6
800	80	16
2000	200	40

