# **EARTH FAULT CURRENT RELAY DESENSITISED TO THE THIRD HARMONIC**

**UB0/A-..** 



### **GENERAL CHARACTERISTICS**

Two basic versions are available:

- UB0/A-D function 51N definite time
- UB0/A-I function 51N inverse time (see time-current curves page 78-79)

On request both versions are fitted with blocking input and output or with time start output.

### **SETTINGS**

Settings are made on front face by means of two 8-pole DIP-SWITCHES that allow to obtain a wide and accurate setting range for the trip level as well as for the trip time delay.

- Trip level Is
- Trip time delay T

### **SIGNALIZATIONS**

- □ 1 Green Led for signalization of auxiliary supply presence and relay regular operation.
- 1 Red Led for trip signalization.
- □ 1 Yellow Led for trip memory.

#### **COMMANDS**

- Test spring lever switch: when pressed it simulates a current flow of 2 times the maximum set current and allows the complete functional check of the relay and of the trip time delay. In one position test function does not operate the output relays; in the other it also operates the output relays.
- ON-OFF switch that enables or blocks the tripping of the main output relay.
- Output relays reset after trip can be:
  - manual by reset push button on the front face
  - manual by remote push button connected to the relevant terminals provided on the relay terminal board
  - automatic by connecting a bridge on remote reset terminals.

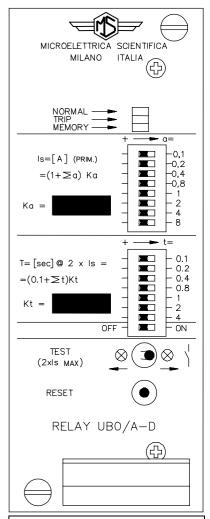
The trip memory LED can be reset only by the front face reset push button.

# **OUTPUT RELAYS**

Two output relays are provided:

- R1 with two Change-over contacts
- R2, on request, with one Change-over contact

Output relay R1 is normally deenergized and it is energized on trip. On request it can be normally energized and deenergized on trip. Output relay R2 is normally deenergized and it is energized on trip.



#### **ORDERING DATA**

- Relay Type
- Rated Input Current
- Auxiliary Power Supply
- Setting Ranges
- Output Relays Configuration
- Execution
- Options on Request

### **OPTIONS**

On request the following options are provided:

- □ Blocking input (BI).
- □ Blocking output (BO) relay R2.
- □ Starting time output (TO) relay R2.



CAT. **A3**-88

### **OVERALL DIMENSIONS**

See Overall Dimensions - 1 Module Relay.

# **ELECTRICAL CHARACTERISTICS**

Rated input current : 1A or 5A Burden on input current : 0.02VA@1A; 0.2VA@5A

Burden on supply voltage : 3W(d.c.); 6VA(a.c.)

Auxiliary power supply : Type 1 : 24-110 V d.c./ a.c.  $\pm$  20% permanent

Type 2 : 90-220 V d.c./ a.c. ± 20% permanent

# STANDARD SETTING RANGES (Different on request) – time/current curves (page 78-79)

RELAY TYPE	CURRENT SETTING	step of	TIME DELAY SETTING	step of
UBO/A-D	Io = 0,1 - 1,75 A (1)	0,01x A	T = 0.05-4.3  sec.	0,05sec.
F51N-Definite time	Io = 1-17,5 A (2)	0,1 x A	T = 0.1-8.6  sec. (3)	0,1 sec
UBO/A-I	lo = 0,1 - 1,75 A	0,01x A	T = 0,05- 4,3 s@2xls	0,05sec.
F51N-Inverse time	lo = 1-17,5 A	0,1 x A	T = 0,1 - 8,6 s @2xls	0,1 sec.

The set current is in secondary Amperes if the relay is connected on a CT.

In case of connection on a core balance transformer the current is in primary amperes.

- (1) Standard for C.T. connection
- (2) Standard for core balance CT connection ratio 100/1A
- (3) Standard value

# **WIRING DIAGRAM**

