

## GENERAL CHARACTERISTICS

The electronic relay type UB1/2/C is designed for the protection against insulation faults in DC systems. The severe quality control and the characteristics of the components make the relay extremely reliable and suitable to heavy duty and hard environment. Special care has been devoted to the immunity from E.M.I. even performing high accuracy and sensitivity.

## SETTINGS

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

## SIGNALIZATIONS

- ❑ 1 Green led for signalization of auxiliary supply presence and relay regular operation.
- ❑ 1 Red led for signalization of fault on positive polarity.
- ❑ 1 Yellow led for signalization of fault on negative polarity.

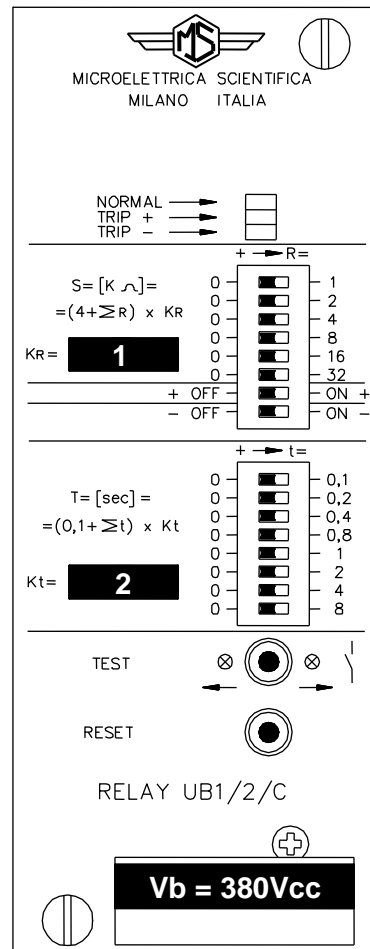
## COMMANDS

- ❑ Test spring lever switch: when pressed it simulates a voltage beyond the trip level and allows the complete functional check of the relay. In one position the 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 relays.
- ❑ Output relays reset after trip can be:
  - manual by reset push button on front face
  - manual by remote push button connected to the relevant terminals provided on the relay
  - automatic with 5% differential 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 independent output relays are provided: 1 for the (+) trip element and 1 for the (-) trip element, each with the following combinations of available contacts: 1N/O+1N/C (standard version); 2N/O or 2N/C (on request). Also, on request, two time start signalization relays, one for each element, with one N.O contact are available. Trip relays are normally energized (deenergized on trip). On request they can be normally deenergized (energized on trip). Time start signalization relays are always provided in the normally deenergized version.



## ORDERING DATA

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

## OPTIONS

On request are provided:

- ☐ Time start output (**TO**) relays R2 and R4.
- ☐ Blocking input (**BI**).

## OVERALL DIMENSIONS

See Overall Dimensions - 1 Module Relay.

## ELECTRICAL CHARACTERISTICS

Rated input voltage : 24(-20%) / 380(+20%)Vcc

Burden on input voltage : 1,5mA a 390V (0,6W)

Burden on auxiliary supply : 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.  $\pm$  20% permanent

## STANDARD SETTING RANGES (Different on request)

### RESISTANCE SETTING

- ☐  $S = [4 + (0 - 63)] \times K_R$  step 1  $\times K_R$
- ☐  $K_R = 1 : S = (4 - 67) \times K_\Omega$

### TIME DELAY SETTING

- ☐  $T = 0.1 + [(0 - 8)] \times K_t$
- ☐  $K_t = 2 : T = (0.2 - 33.2)s$

## WIRING DIAGRAM

