# **DUAL LEVEL D.C. CURRENT RELAY**

BI2/C



CAT. **A6**-88

### **GENERAL CHARACTERISTICS**

Five basic versions are available:

□ BI2/C/S function 76 definite time + function 76 definite time
function 76 inverse time + function 76 definite time
function 76 very inverse time + function 76 definite time
function 76 extremely inverse time + function 76 definite time
function 76 definite time
function 76 definite time
function 76 definite time

On request all versions are fitted with blocking input and output associated to the second definite time element or with time start signalling relay.

#### **SETTINGS**

Settings are made on front face by means of four 4-pole DIP SWITCHES that allow to obtain a wide and accurate setting range for the following regulations:

- ☐ Trip level of first current element I₁
- □ Trip time delay T₁ of first current element
- ☐ Trip level of second current element I₂
- Trip time delay T<sub>2</sub> of second current element

### **SIGNALIZATIONS**

- □ 1 Green led for signalization of auxiliary power supply presence and relay regular operation.
- □ 1 Red led for first level trip signalization.
- □ 1 Yellow led for second level trip signalization.

# **COMMANDS**

- □ Three position spring lever switch for test: when operated it simulates a current flow of 5 times the rated input current and allows the complete functional check of the relay and of the trip time delays. In one position test function does not operate the output relays; in the other it also operates the 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 relay terminal board
  - automatic by connecting a bridge on remote reset terminals

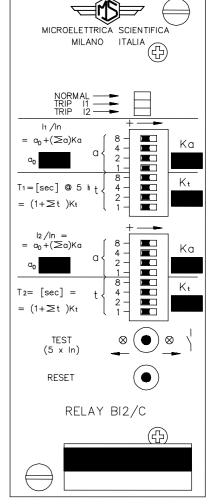
The trip signal LEDS can be reset only by the front face reset push button.

### **OUTPUT RELAYS**

Three output relays are provided:

- □ R1+R2, always included, each with the following choice of contacts combination: 1 NO + 1 NC (standard version) or, on request, 2 NO or 2 NC
- R3, on request, with 1 contact NO (standard) or 1 NC.

The output relays are normally deenergized and are energized on tripping. On request the relays R1 and R2 can be provided in the normally energized version (deenergized on tripping).



# ORDERING DATA

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

# **OPTIONS**

On request following options are provided:

- □ Blocking Input (BI).
- □ Blocking Output (BO) relay R3.
- □ Starting Time Output (TO) relay R3.



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### **OVERALL DIMENSIONS**

See Overall Dimensions - 1 Module Relay.

# **ELECTRICAL CHARACTERISTICS**

Rated input current via : In/60mV or 100mV Burden on current input : R≥100Ω

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

Auxiliary supply standard : Type 1 : 24-110 V d.c./a.c.  $\pm$  20% permanent voltage : 90-220 V d.c./ a.c.  $\pm$  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
BI2C/S I1- Definite time I2- Definite time	I1= 0,5-2 xIn	0,1xin	T1= 1-16 sec.	1sec.
	I1= 0,25-4 xIn	0,25xin	T1= 0,5-8 sec.	0,5sec.
	I1= 0,5-8 xIn	0,5xin	T1= 0,1-1,6 sec.	0,1sec.
	I2= 1-16 xIn	1xin	T2= 0,05-0,8 sec.	0,05sec.
BI2C/IM	I1= 0,5-2 xIn	0,1xln	T1= 2-32 s @ 5xl1	2sec.
I1-Thermal image	I1= 0,25-4 xIn	0,25xln	T1= 0,5-8s @ 5xl1	0,5sec.
I2- Definite time	I2= 1-16 xIn	1xln	T2= 0,05-0,8 sec.	0,05sec.
BI2C/I	I1= 0,5-2 xIn	0,1xln	T1= 1-16 s @ 5xl1	1sec.
I1-Inverse time	I1= 0,25-4 xIn	0,25xln	T1= 0,5-8s @ 5xl1	0,5sec.
I2- Definite time	I2= 1-16 xIn	1xln	T2= 0,05-0,8 sec.	0,05sec.
BI2C/VI	I1= 0,5-2 xIn	0,1xln	T1= 0,5-8 s @ 5xl1	0,5sec.
I1-Very inverse time	I1= 0,25-4 xIn	0,25xln	T1= 0,1-1,6s@ 5xl1	0,1sec.
I2- Definite time	I2= 1-16 xIn	1xln	T2= 0,05-0,8 sec.	0,05sec.
BI2C/EI I1-Extremely inverse time I2- Definite time	I1= 0,5-2 xIn	0,1xln	T1= 0,5-8 s @ 5xl1	0,5sec.
	I1= 0,25-4 xIn	0,25xln	T1= 0,1-1,6s@ 5xl1	0,1sec.
	I2= 1-16 xIn	1xln	T2= 0,05-0,8 sec.	0,05sec.

# **WIRING DIAGRAM**

