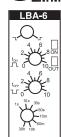
# TIFUNCTIONAL TIME RELAYS

are microprocessor-based electronic time relays. They have precisely adjustable time ranges (between 0,1 s-30 hours for MCB-7; 0,1 s-999 minutes for MCB-8; 0,5 s-30 hours for MCB-9) and up to 4 different operating modes. With their thin and narrow designs, these time relays are designed for multi-purpose applications.

#### LBA-6

ER MODE

# EM MODE



**LBA-6** is a time relay that works as ER Mode or EM Mode according to the users needs. It can be adjusted between 0,1 seconds and 30 hours.

# ModeSelection (Function Table)









#### **TIME TABLE**

| TIME<br>INTERVAL | ADJUSTABLE<br>TIME RANGE |
|------------------|--------------------------|
| LBA-6            | LBA-6                    |
| 1 sec            | 0.1-1 sec                |
| 10 sec           | 0.1-10 sec               |
| 30 sec           | 0.1-30 sec               |
| 60 sec           | 0.1-60 sec               |
| 10 min           | 0.1 sec-10 min           |
| 60 min           | 0.1 sec-60 min           |
| 10 hours         | 0.1 sec-10 h             |
| 30 hours         | 0.1 sec-30 h             |

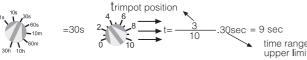
#### **Adjusting The Times** Adjusting the ON and OFF Times

LBA-6: The ON-OFF time is adjusted according to the following formula by using the time range selection trimpot.

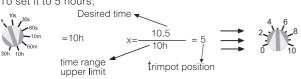
- a, limit of the selected time range;
- t, desired time;
- x, trimpot position;

$$X = \frac{10.t}{a}$$
 and  $t = \frac{x}{10}$ .a

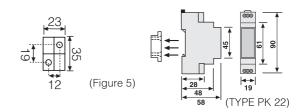
If  $t_{\text{On}}$  or  $t_{\text{Off}}$  trimpot is at position 3 Example (LBA-6):



To set it to 5 hours;



#### **Dimensions**



## **Connection Diagram**



### **Technical Data**

Rated Voltage (Un) :12 - 240 V AC/DC Operating Range : (0.9-1.1) x Un Operating Frequency: 50/60 Hz.
Output Contact: 1 Changed

1 Changeover 8A/2000 VA (NO: 8A, NC: 6A)Cosφ =1

Repetition Error : +/-0.1% Reset Time : <=150 msec. Ambient Temperature : -5°C; +50°C Dimensions : Type PK22 Protection Class : IP 20

: Terminal connection, Rail-mount (Panel mount is Connection

available with the plastic adapter part.

Refer to fig. 5)

: 2.5 kg. (24 pcs. per package) Package Weight

#### Caution:

1) Operating voltage must raise to the indicated value in less than 1sec.

2) Do not use with generator.

#### PRECAUTIONS FOR INSTALLATION AND SAFE USE

Failure to follow those instructions will result in death or serious injury.

- Disconnect all power before installing the equipment.

- When the device is connected to the network, do not remove the front panel.

- Do not try to clean the device with solvent or the like. Only clean with dry cloth.

- Verify correct terminal connections when wiring.

Electrical equipment should be serviced only by your component seller.
Device is for panel mount only.
An F type fuse with 1 ampere limit current value must be used.



 $\sum$  No responsibility is assured by the manufacturer or any of its subsidiaries for any consequences arising out of the use of this material.

