

# MB SERIES

# PREDETERMINING ELECTRIC COUNTER

- 4 or 5 DIGITS
- PANEL MOUNT (by BAIL/CLIP)
- BUILT-IN RESET GUARD
- **BUILT-IN SURGE PROTECTION CIRCUIT**
- DUSTPROOF COVER
- ECONOMICAL



# MODEL SELECTION

TYPE	MODEL	DIGITS	RESET MODE	WEIGHT
ADDITION PRESET COUNTER	MB-4111	4	MANUAL	260g
	MB-5111	5	MANUAL	260g
	MB-4211	4	ELECTRIC /	290g
	MB-5211	5	MANUAL	290g

# SPECIFICATIONS

Model	MB-4111	MB-5111	MB-4211	MB-5211		
Display	4 (3.8 × 2.6mm)	5 (3.8 × 2.6mm)	4 (3.8 × 2.6mm)	5 (3.8 × 2.6mm)		
Power Source	DC24V, AC100/110V, AC200/220V (50 / 60 Hz)					
Voltage Fluctuation	± 10%					
Power Consumption	Count: 5.0 VA (AC); 3.6 W (DC) / Reset: 25 VA (AC); 16 W (DC)					
Continuous Energizing	Permissible (count), less than 1 minute (reset)					
Counting Method	One pulse – One count (energizing – $\frac{1}{2}$ count, unenergized – $\frac{1}{2}$ count )					
Counting Speed	10 Hz (maximum)					
Pulse Width	50msec. ON, OFF					
Make (Duty)	1:1					
Reset Time	(manual) approx. 0.5 seconds					
Output	1C Relay AC 250V 5A					
Connection	Screw Terminal					
Operating Temperature	-5°C ∼ +40°C (non-freezing)					
Operating Humidity	85%RH maximum (non-condensing)					
Test Voltage	AC1,500V for 1 minute					
Insulation Resistance	$20$ M $\Omega$ minimum (500VDC megger)					
Vibration	Endurance : 16.7Hz, double amplitude 4mm / Malfunction : 10 ~ 55Hz, double amplitude 0.5mm					
Shock	Endurance: 300 m/s <sup>2</sup> (30G) / Malfunction: 50 m/s <sup>2</sup> (5G)					
Construction	Gray, plastic (Noryl)					
Weight	260 grams	260 grams	290 grams	290 grams		

## OPERATING PROCEDURE

- Be sure to cut off the counting input (pulse) before resetting. (Otherwise, counting operation or control output failure may take place).
- 1. SETTING THE PRESET VALUE
- The unit does not count during opening of the cover).
- Do not reset during operation and opening of the cover.
- · Lubrication is not required.
  - 1. While pressing the Reset Button, open the presetting cover by pressing the cover button.
  - 2. Turn each of the Preset thumbwheels until desired setting is reached.
  - 3. Close the presetting cover firmly after completion of presetting, while pressing the reset button.
  - 4. If the presetting cover is open or is not closed completely, the output will not occur when preset is reached.

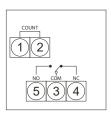
#### 2. RESETTING

- 1. Prese the Reset Button until all displayed digits becomes "0".
- 2. Slowly release the reset button.
- 3. If the reset button is not completely pushed or not slowly relesed, it may cause incorrect operation.

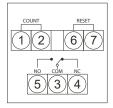
### MAINTENANCE AND REPLACEMENT

- If the digital numbers are hard to read due to sticking dirt, clean them with soft cloth moistened with neutral detergent. (Do not use organic solvents or caustic soda which will affect the counter surfaces).
- Do not apply oil to the counter. Oil will affect smooth operation of the counter or gather dust that may cause trouble.
- If the counter should fail to operate normally, return it to us along with the details of the trouble.

### CONNECTION



MB-4111 MB-5111



MB-4211 MB-5211

### DIMENSIONS

