



## Multifunctional Programmable Timer, Counter

**EYM-4450** (48x48mm DIN 1/16)

**EYM-4950** (96x48mm DIN 1/8)

**EYM-7750** (72x72mm DIN 1/8)

**EYM-9950** (96x96mm DIN 1/4)



- 6 digits Process (PV) and 6 digits Set (SV) Value Display

- Operation with 2 Set Values

- Reset, Pause and ChA-ChB Counting Inputs

- Configurable,

**Counter,**

**Totalizer Counter,**

**Batch Counter,**

**Timer,**

**Chronometer,**

**Frequencymeter and**

**Tachometer Functions**

- Programmable Time Bases for Timer and Chronometer (Second, Minute, Hour)

- Operation with Automatic and Manual Reset

- Output Module System

- NPN/PNP Type Operation

- INC, DEC, INC / INC, INC / DEC, UP / DOWN, x1 / x2 / x4 Counting with Phase Shifting Property in Counter Function

- Multiplication Coefficient and Decimal Point Position

- Different Alarm Alternatives in Frequencymeter and Cycle Measuring Functions

- Absolute or Offset Operation in Counter Function

- RS-232 (standard) or RS-485 (optional) Serial Communication with Modbus ASCII or RTU Protocol

### SPECIFICATIONS

#### INPUTS

**Counting Inputs:** Ch-A, Ch-B (Switch, proximity, capacitive sensor or encoder can be connected.)

**Reset Input:** Switch, proximity or capacitive sensor can be connected.

**Pause Input:** Switch, proximity or capacitive sensor can be connected.

**Input Type Selection:** It can be selected NPN/PNP with DIP switch that is located on the device.

**Reset Function:** Automatic or manual

**Count Input Types:** INC, DEC, INC/DEC, INC/INC, UP/DOWN, x1 / x2 / x4 phase shifting (for incremental encoder) counting

EYM Series Programmable Timer & Counter can be used in package machines, production and quality control rollers, in cutting and processing machine of glass, plastic, marble, sheet, iron, fabric all measuring and controlling of dimension, count, total count, speed, cycle, productivity, time and can be adapted easily to all mechanical construction and automation system. They can be used in many application with their control outputs, serial communication unit and output modules.

**OUTPUT FUNCTIONS**

There are programmable output functions for Counter, Batch Counter, Timer, Chronometer. Different alarm functions can be programmed for frequencymeter and cycle measuring operations.

**OUTPUT**

**Output Modules:** There are two module sockets for plugging the output modules.

- Relay Output Module
- SSR Output Module (Max.20mA @18V $\overline{\text{---}}$ )
- Digital(Transistor) Output Module(Max.40 mA @18V $\overline{\text{---}}$ )

**ENVIRONMENTAL RATINGS and PHYSICAL SPECIFICATIONS**

**Operating Temperature:** 0...50°C

**Humidity:** 0-90%RH (none condensing)

**Protection Class:** IP65 at front, IP20 at rear

**Dimensions:**

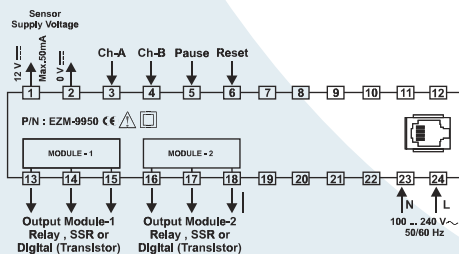
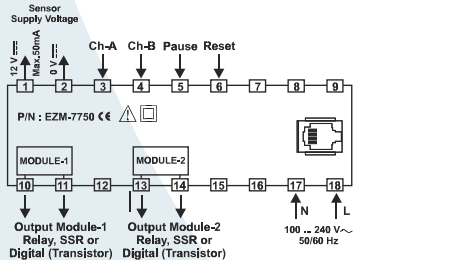
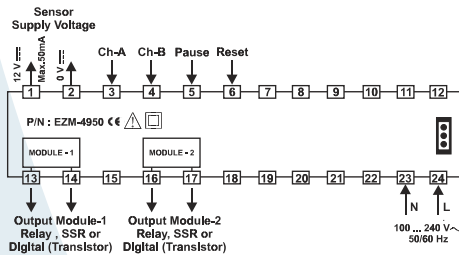
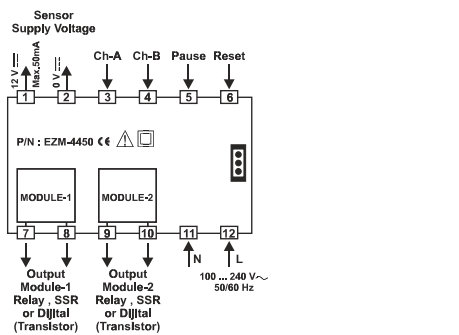
EZM-4450 : (48 x 48mm, Depth:116 mm)

EZM-4950 : (96 x 48mm, Depth:86.5 mm)

EZM-7750 : (72 x 72mm, Depth:87.5 mm)

EZM-9950 : (96 x 96mm, Depth:87.5 mm)

**ELECTRICAL WIRING**



**ORDERING INFORMATION**

<b>EZM-4450</b> (48x48 DIN 1/16)	A	BC	D	E	/	FG	HI	/	U	V	W	Z
<b>EZM-4950</b> (96x48 DIN 1/8)												
<b>EZM-7750</b> (72x72 DIN Size)												
<b>EZM-9950</b> (96x96 DIN 1/4)		00	0	/		/				0	0	

A Supply Voltage	
1	100-240V $\sim$ (-15%;+10%) 50/60Hz
2	24 V $\sim$ (-15%;+10%) 50/60Hz    24V $\overline{\text{---}}$ (-15%;+10%)
9	Customer

D Serial Communication	
0	None
1	RS-232
2	RS-485

E Output-1	
0	None

FG Module-1	Module Codes
00	None
01	Relay Output Module EMO-400,EMO-700,EMO-900
02	SSR Driver Output Module (Maximum 20mA@18V $\overline{\text{---}}$ ) EMO-410,EMO-710,EMO-910
03	Digital (Transistor) Output Module (Maximum 40mA@18V $\overline{\text{---}}$ ) EMO-420,EMO-720,EMO-920

HI Module-2	Module Codes
00	None
01	Relay Output Module EMO-400,EMO-700,EMO-900
02	SSR Driver Output Module (Maximum 20mA@18V $\overline{\text{---}}$ ) EMO-410,EMO-710,EMO-910
03	Digital (Transistor) Output Module (Maximum 40mA@18V $\overline{\text{---}}$ ) EMO-420,EMO-720,EMO-920

**Note-1:** EMO-4xx is used in EZM-4450 and EZM-4950

EMO-7xx is used in EZM-7750

EMO-9xx is used in EZM-9950

**Note-2:** EMO-400 Relay Output Module's rating is 3A@250V $\sim$ (on resistive load)  
EMO-700 and EMO-900 is 5A@250V $\sim$ (on resistive load)

**Note-3:** EMO-X10, EMO-X20 and EMC-X10 are not available on the Devices which have got 12V  $\overline{\text{---}}$  power supply voltage

U Function	
0	Counter / Totalizer Counter
1	Batch Counter
2	Timer
3	Frequencymeter / Tachometer
4	Chronometer

V Input Type	
0	NPN
1	PNP