



## **ELECTRICAL MEASUREMENT DEVICES**

- **Multimeters**
- **Ammeters**
- **Voltmeters**
- **Frequencymeters**
- **Cos $\phi$  meters**
- **Transducers**
- **DC Ammeters**
- **DC Voltmeters**





### EPM-06CS-DIN

- Password Security
- 10-300VAC(L-N) and 10-500VAC (L-L) Measuring Range
- Under/Over Voltage Protection
- Under/Over Current Protection
- Under/Over Frequency Protection
- RS-485 Modbus Communication
- Rail Mounting

## EPM and EVM Series Multimeters

Multimeters are designed to measure the electrical parameters such as current, voltage, frequency and cosφ in industrial plants. They are storing the minimum, maximum and average values and each phase is displayed individually.

Product Code	3 ~ Voltage	3 ~ Current	Cosφ	Frequency (Hz)	I neutral	Demand	Max. Values	Min. Values	Alarm Contact	Under / Over Voltage Protection	Under / Over Current Protection	Under / Over Frequency Protection	RS-485 Comm.	CT-25 (120A)	Operating Hourmeter (Resettable)	Total Operating Hourmeter (Non-resettable)	Front Panel Mounting (96x96)	Rail Mounting (DIN6)	45-265 VAC/DC	Pcs / Box
EPM-04-96	●	●		●	●	●	●	●						○			●		●	12
EPM-04h-96	●	●		●	●	●	●	●						○	●	●	●		●	12
EPM-04-DIN	●	●		●	●	●	●	●										●	●	12
EPM-04C-96	●	●		●	●	●	●	●	●	●	●	●		○			●		●	12
EPM-04C-DIN	●	●		●	●	●	●	●	●	●	●	●		○				●	●	12
EPM-04CS-96	●	●		●	●	●	●	●	●	●	●	●	●	○			●		●	12
EPM-04CS-DIN	●	●		●	●	●	●	●	●	●	●	●	●					●	●	12
EPM-06-96	●	●	●	●	●	●	●	●									●		●	12
EPM-06-DIN	●	●	●	●	●	●	●	●										●	●	12
EPM-06C-96	●	●	●	●	●	●	●	●	●	●	●	●					●		●	12
EPM-06C-DIN	●	●	●	●	●	●	●	●	●	●	●	●		○				●	●	12
EPM-06CS-96	●	●	●	●	●	●	●	●	●	●	●	●	●				●		●	12
EPM-06CS-DIN	●	●	●	●	●	●	●	●	●	●	●	●	●	○				●	●	12
EVM-05C-96	●			●			●	●	●	●		●					●		●	12
EVM-05C-DIN	●			●			●	●	●	●		●						●	●	12



### EPM-4A-72

- True RMS Measurement
- 50mA-10kA Measuring Range
- Demand Values
- Double Isolation, Category III
- 72x72 mm
- Front Panel Mounting

## EPM Series Ammeters

Ammeters are designed to measure the current values of networks in industrial plants. The EPM-34/14 ammeters have adjustable demands between 1 to 60 minutes and from 1 to 60 seconds.

Product Code		Dimensions	3 ~ Current	1 ~ Current	CT-25 (210A)	Double Demand*	X1 CT	X5 CT	Demand	Output Contact	Front Panel Mounting	Rail Mounting	Fixed Current Terminal	230 VAC	24-250 VAC/DC	110 VAC	Pcs / Box
EPM-4A-72	Direct Ammeter with CT-25 (210A) <i>(CT-25 included)</i>	72x72		●	●			●	●		●			●		●	16
EPM-4A-96	Direct Ammeter with CT-25 (210A) <i>(CT-25 included)</i>	96x96		●	●			●	●		●						12
EPM-4C-48	Ammeter (with Output Contact) <i>(CT-25 not included)</i>	48x96		●	●			●	●	●	●			●		●	20
EPM-4C-72	Ammeter (with Output Contact) <i>(CT-25 not included)</i>	72x72		●	●			●	●	●	●			●			16
EPM-4C-96	Ammeter (with Output Contact) <i>(CT-25 not included)</i>	96x96		●	●			●	●	●	●			●			12
EPM-4D-48	Ammeter	48x96		●				●	●		●			●		●	20
EPM-4D-72	Ammeter	72x72		●				●	●		●			●		●	16
EPM-4D-96	Ammeter	96x96		●				●	●		●			●		●	12
EPM-4P-96	Ammeter <i>(CT-25 not included)</i>	96x96		●	●			●	●	●	●			●			12
EPM-R4C	Ammeter with Output Contact (Rail Mount) <i>(CT-25 not included)</i>	DIN3		●	●			●	●	●		●		●			16
EPM-14-96	Ammeter (Class 0,5; 24-250 VAC/DC Power Supply)	96x96		●		●	●	●	●		●		●		●		12
EPM-34-96	Ammeter (Class 0,5; 24-250 VAC/DC Power Supply)	96x96	●			●	●	●	●		●		●		●		12

**EVM-3S-48**



- True RMS Measurement
- 10-300VAC(LN) and 10-500VAC(LL) Measuring Range
- Selectable 3 Phase
- Non-flammable Enclosure
- Double Isolation
- Measuring Category CAT III

**EVM Series Voltmeters**

Voltmeters are designed to measure the voltage levels of systems in industrial plants.

Product Code		Selectable 3-phase	3 ~ Voltage	1 ~ Voltage	Max. Value	Min. Value	Output Contact	110/230 VAC Power Supply	24 - 250 VAC/DC	Front Panel Mounting	Rail Mounting	Pcs / Box
EVM-3-48	Voltmeter			●	●	●		●		●		20
EVM-3-72	Voltmeter			●	●	●		●		●		16
EVM-3-96	Voltmeter			●	●	●		●		●		12
EVM-3C-48	Voltmeter (with Output Contact)			●	●	●	●	●		●		20
EVM-3C-72	Voltmeter (with Output Contact)			●	●	●	●	●		●		16
EVM-3C-96	Voltmeter (with Output Contact)			●	●	●	●	●		●		12
EVM-3S-48	3-Phase Selectable Voltmeter	●						●		●		20
EVM-3S-72	3-Phase Selectable Voltmeter	●						●		●		16
EVM-3S-96	3-Phase Selectable Voltmeter	●						●		●		12
EVM-15-96	Voltmeter (Class 0,5)			●					●	●		8
EVM-3S-96	3-Phase Voltmeter (Class 0,5)		●						●	●		12



## ECR-3-72

- Double Insulation
- Measurement Category III
- IP40 Protection Class

## EFC-3-72

- Double Insulation
- Measurement Category III
- IP40 Protection Class

## EFC/ECR Series Frequencymeters/Cosφmeters

Cosφmeters are designed to measure the cosφ value of the networks in industrial plants. They also indicate whether the operating load is inductive or capacitive.

Frequencymeters are designed to measure the frequency of the operating voltage at industrial sites.

Product Code		Dimensions	0-1,00 inductive	0-1,00 capacitive	20-400 Hz	230VAC Power Supply	Pcs / Box
ECR-3-48	Cosjmeter	48x96	●	●		●	20
ECR-3-72	Cosjmeter	72x72	●	●		●	16
ECR-3-96	Cosjmeter	96x96	●	●		●	12
EFC-3-48	Frequencymeter	48x96			●	●	20
EFC-3-72	Frequencymeter	72x72			●	●	16
EFC-3-96	Frequencymeter	96x96			●	●	12



**TA-112**

- Supplied power by input
- Galvanic Isolation
- DIN 3 Enclosure
- Rail Mounting

**TA Series Current Transducer**

Transducers convert the electrical signals on their input to analog signals. They are used in control and automation devices.

Product Code			DIN 3	Pcs / Box
TA-111	Input : 0-1A AC, Output : 0-20mA DC	Current Transducer	●	16
TA-112	Input : 0-5A AC, Output: 0-20mA DC	Current Transducer	●	16



**TV-111**

- Input supplied
- Galvanic Isolation
- DIN 3 Enclosure
- Rail Mounting

**TV Series Voltage Transducer**

Transducers convert the electrical signals on their input to analog signals. They are used in control and automation devices.

Product Code			DIN 3	Pcs / Box
TV-111	Input : 0-220 VAC, Output : 0-20mA DC	Voltage Transducer	●	16







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