

# FUJI SINGLE PHASE AC INTEGRATING WATT-HOUR METER, MODEL E-24

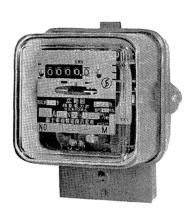
For a single phase ac integrating watt-hour meter, double-rating based on JIS C 1210. 1211-1955 has been used in Japan.

However, as the home electrification has advanced in the present day, the demand for the extension of the watt-hour metering range from the present double-rating to triple-rating has increased in order to simplify the meter exchanging operation and the parts stocking. To satisfy such demand the new Japanese Industrial Standards JIS C 1210. 1211–1965 of the single phase ac integrating watt-hour meter has been established.

Introduced here is the Model E-24 which has been developed through many years of research by our company in strict adherence to the New Japanese Industrial Standards.

### 1. Features

- 1) The measurement is accurate because of the minimal meter error caused by the variation (indicated current 1/1 to 1/60) due to the wide range of load.
- 2) In order to keep the friction of register at a minimum, an aluminum alloy plate has been used for the wheel. Also, to ensure longer usage, the improve ments have been made to decrease the mechanical friction of the rotating conductors.
- 3) A double jewel bearing has been incorporated in its lower bearing to ensure longer life.
- 4) A temperature compensator has been incorporated initially in the damping magnet and secondary, in the voltage elements in order to improve its temperature characteristics and reduce its self-heating effect.
- 5) The temperature rise of the current coil and the terminals has been kept to a minimum, thereby reducing its deterioration from the effect of heat. The increase of the heat effect due to overloading has been checked by the use of highly heat-resistant



material for current coil bobbin and Class E insulation for the coil.

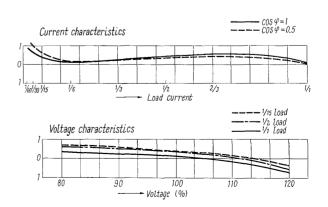
- 6) For ease of repair and adjustment, the clearance of the gap in the damping magnet has been widened.
- 7) It has been designed so that the connecting piece for test can be slided sideways when experimenting and can be secured readily after its use.

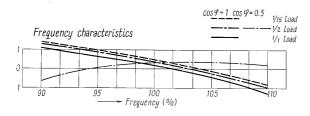
## 2. Standard Ratings

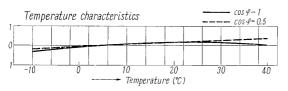
- 1) Rated voltage...100 v & 200 v
- 2) Rated frequency...50 cps & 60 cps
- 3) Rated current...30 amp, 60 amp, 120 amp

Can be manufactured with ratings other than those mentioned above.

#### 3. Characteristic Curves



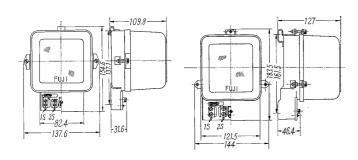




## 4. Dimensions

Below 30 amp

Above 60 amp



## 5. Miscellaneous

Upon request, it is possible to install the extended terminal cover and reverse turning prevention device as specified.