

MODEL JAD-0W ENCOMPASS™



Revenue Metering Current Transformer

Application

Encompass™ is an extended range revenue metering current transformer. Model JAD-0W is designed for both indoor and outdoor service. Suitable for operating meters, instruments and control devices. For use on higher voltage circuits with an insulated primary conductor, refer to the Applications Information section of catalog P-9186.

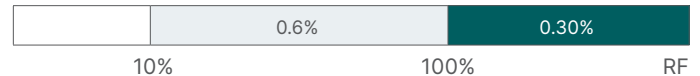
Features

- Voltage Class: 0.6 kV
- Frequency: 50-60 Hz
- Window Size: 5.75"
- Insulation Level: 10 kV BIL
- Application: Indoor/Outdoor

Benefits

- Light load test points extended beyond IEEE requirements plus high rating factors allow for one Encompass unit to functionally replace multiple standard ratios
- Simplify CT selection and billing multipliers, improving productivity and minimizing risk of error
- Reduce inventory and part number requirements, reducing asset and operational costs

0.3 Class - Standard Revenue Metering Accuracy



JAD-0W Unit Selection

CURRENT RATIO (Amps)	IEEE METERING ACCURACY (60 Hz)	RATING FACTOR		CATALOG NUMBER	
		30°C	55°C	NO BASE	WITH BASE
1,000:5	0.3B0.5'	4.0	3.0	750X120609	750X120611
1,500:5	0.3B0.9'	3.0	2.0	750X120922	750X120980

1. Exceeds IEEE definition for standard revenue metering accuracy. Maintains 0.6 Accuracy Class from 4% to 40% of rated current and 0.3 Accuracy Class from 40% through Rating Factor.
2. Primary-bar options available, upon request. Contact info@spectrumind.com for more details.
3. Other designs available, upon request. Contact info@spectrumind.com for more details.



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Weight

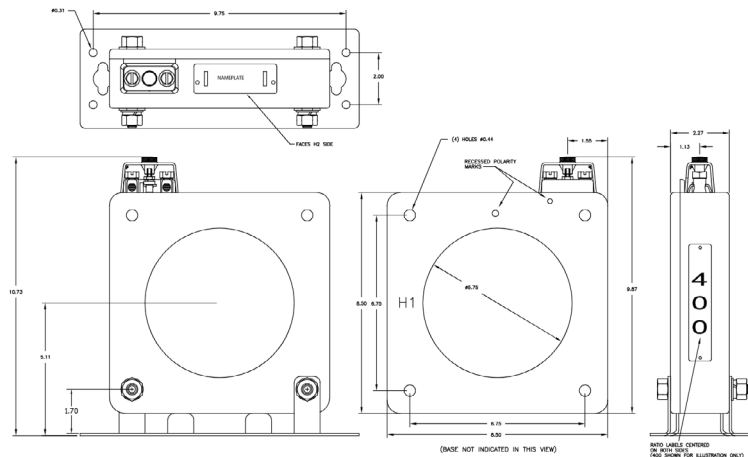
Transformer, Window Type 13 lbs Primary
Bar, add 4 lbs Mounting Base, add 2 lbs

Reference Drawings

Outline 0121C34994

Primary Bar Assembly 0821C35021

Base Assembly 0221A36647



Construction and Insulation

The core and coil assembly is encapsulated in resin within a molded case. The case is molded with Valox thermoplastic polyester resin. This tough material has excellent electrical and mechanical properties over a wide temperature range, has low water absorption and is resistant to oil and a variety of chemicals. The polyurethane resin filling completely encapsulates the winding, leads and terminals to form a waterproof unit.

Core and Coils

The core is made from high quality grain oriented silicon steel, annealed under rigidly controlled factory conditions. The secondary winding is made of heavy enameled copper wire. The secondary windings are evenly distributed around the core for maximum accuracy and resistance to stray fields from adjacent conductors.

Terminals

Secondary terminals are tin plated brass, compression type with a 0.275" diameter cross-hole for wiring and a 1/4-28 clamp screw. A shorting device is provided and interlocked to the terminal cover. The terminal cover is made of a clear plastic. Provision is made for sealing the cover.

Polarity

Primary and secondary polarity marks H1 and X1 are molded into the case.

Nameplates

The nameplate is laser engraved aluminum and is attached to the top of the unit. The nominal current rating is marked on both sides of the unit in large numerals.

Primary Conductor

Removable primary bars are formed from 1/4"x 4"tin-plated, flat copper bar, with 1/4"spacing between bars on multiple bar assemblies. The bars are retained by insulated and ventilated end caps, which permit the bars to be rotated to any desired orientation and allow the transformer to be supported in a vertical primary arrangement. A potential connector is provided adjacent to one end cap. Primary bars are available in 11 7/8" and 14 1/4" lengths, each provided with four bolt holes at each end.

Baseplate and Mounting

The transformer can be mounted in any position. An optional base plate is available, made of stainless steel. It is attached to the transformer with two bolts.

Maintenance

These transformers require no maintenance, other than occasional cleaning, if installed where air contamination is severe.

