

# Model JAK-0W Encompass™

## Extended Range Revenue Metering Current Transformer

### Application

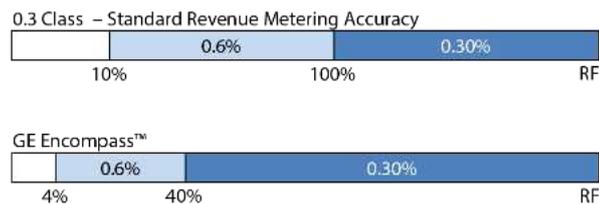
Encompass™ is an extended range revenue metering current transformer. Model JAK-0W is designed for both indoor and outdoor service. Suitable for operating meters and instruments, on both single-phase two-wire circuits and polyphase circuits. The window type transformer can also be used on three-wire single-phase circuits.

### Features

- Voltage Class: 0.6 kV
- Frequency: 50-60 Hz
- Window Size: 3.062"
- 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



### Unit Selection Model JAK-0W

Current Ratio (Amps)	IEEE Metering Accuracy (60 Hz)	Rating Factor		Primary Bar	Catalog Number		
		30 °C	55 °C		No Base	Low Base	High Base
100:5	0.3 B0.2 <sup>1</sup>	4.0	3.0	No	750X133815	750X133726	750X133816
200:5	0.3 B0.2 <sup>1</sup>	4.0	3.0	No	750X133817	750X133725	750X133818
500:5	0.3 B0.5 <sup>1</sup>	4.0	3.0	No	750X133655	750X133629	750X133633
500:5	0.3 B0.5 <sup>1</sup>	4.0	3.0	Yes	750X133470	750X133630	750X133634

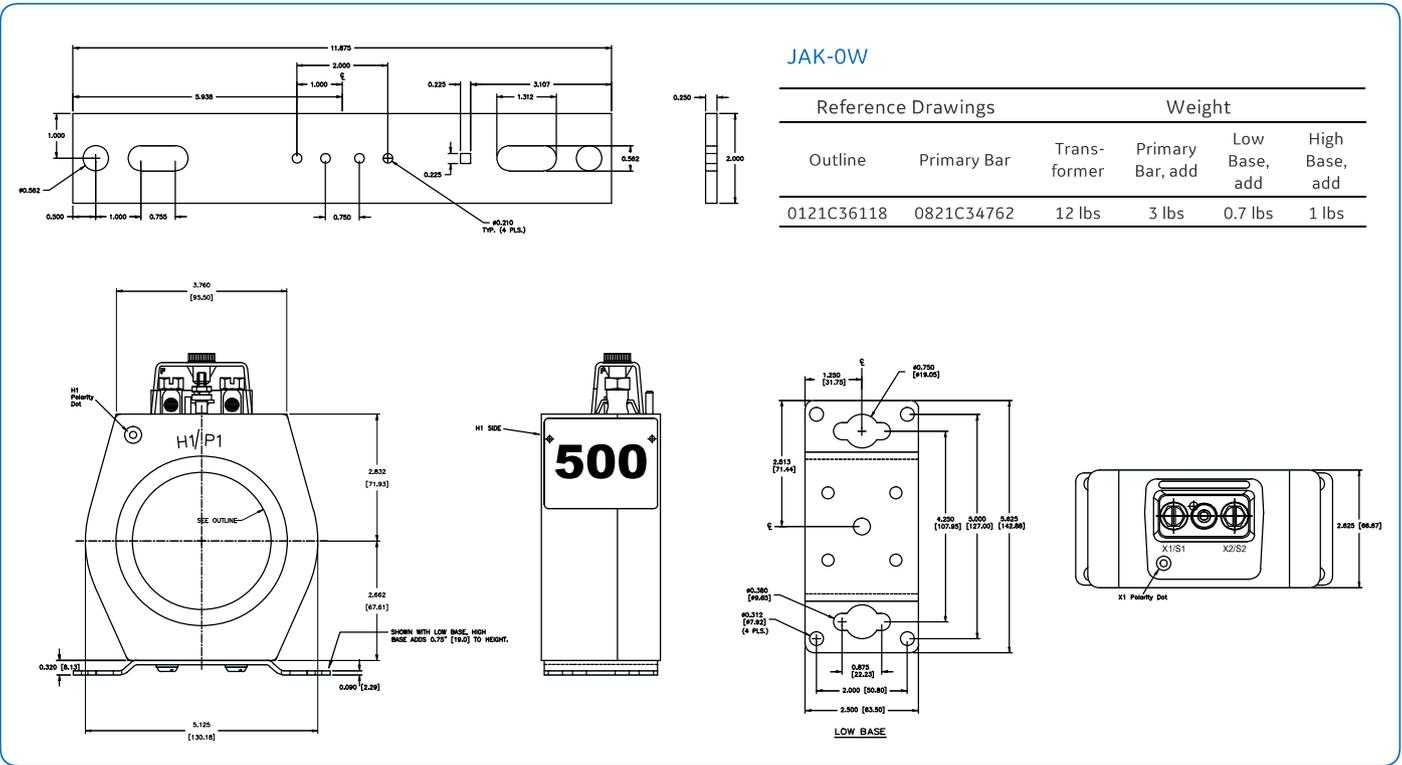
(1) Exceeds IEEE definition for standard revenue metering accuracy.

Maintains 0.6 Accuracy Class from 4 % to 40 % of rated current and 0.3 Accuracy Class from 40 % through Rating Factor.

(2) Wide-base and secondary conduit box options available, upon request.

(3) Other designs available, upon request.

# JAK-OW



## JAK-OW

Reference Drawings		Weight			
Outline	Primary Bar	Transformer	Primary Bar, add	Low Base, add	High Base, add
0121C36118	0821C34762	12 lbs	3 lbs	0.7 lbs	1 lbs

## Construction and Insulation

The core and coil assembly is encapsulated in resin within a molded case. The case is molded with GE 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

The H1 polarity mark is indented into the body, above the window at one end. The X1 polarity mark is also molded into the body adjacent to the secondary terminal. Both marks are white for visibility.

## Nameplates

The nameplate is laser engraved aluminum. It is attached to the top of the unit and has provision for attaching the user's identifying tag. The nominal current rating is marked on the side of the unit in large numerals.

## Primary Bars (Optional)

Formed from flat copper bar, they are tin-plated. They can be supplied mounted to the transformer, or separately for assembly into window-type units; they can be rotated to bring the terminal pads into any orientation. The bar is supported and held in place by two end plates, which act as small animal barriers. One plate is permanently attached to the bar; the other has a slot allowing it to be slipped over the bar where it is held in place by two setscrews. Holes in the plate allow ventilation and drainage of any water which might accumulate in the window. A potential connector is provided, adjacent to the fixed end plate.

## Baseplate and Mounting

The transformer can be mounted in any position and may be suspended from the bus-bar or cable. It has provision for attaching three optional bases. Bases are made from stainless steel. The high base increases the transformer height to provide interchangeability with 600 V bar-type current transformers.

## Maintenance

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