

MODEL JAK-OS RevenueSense™

Revenue Metering Current Transformer



Application

RevenueSense™ is a revenue metering current transformer which maintains IEEE 0.15 accuracy class from 1% of rated current up through rating factor. This is accomplished using the specialized amorphous core material which minimizes electrical core losses. The result is an extremely accurate CT that can maintain high accuracy over a extended range of current. Model JAK-OS is designed for indoor or outdoor service, and is available in bar-type or window-type designs.

Features

- Voltage Class: 0.6 kV
- Frequency: 50-60 Hz
- Window Size: 3.062"
- Insulation Level: 10 kV BIL
- Application: Indoor/Outdoor

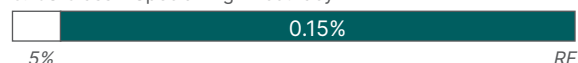
Benefits

- Maximize revenue metering accuracy with special high accuracy rating extended beyond IEEE requirements
- Simplify CT selection and billing multipliers, improving productivity and minimizing risk of error
- Reduce inventory and part number requirements, reducing asset and operational costs

0.15 Class – High Accuracy



0.15S Class – Special High Accuracy



Model JAK-OS

CURRENT RATIO (Amps)	IEEE METERING ACCURACY (60 Hz)	RATING FACTOR		PRIMARY BAR		HOLE TYPE	CATALOG NUMBER		
		30°C	55°C				NO BASE	LOW BASE	HIGH BASE
400:5	0.15SB0.2 ¹	3.0	2.0	No			750X333019 ⁴	750X333020 ⁴	750X333021 ⁴
400:5	0.15SB0.2 ¹	3.0	2.0	Yes	0821C34762-4	2-Hole	750X333119 ⁴	750X333120 ⁴	750X333121 ⁴
500:5	0.15SB0.2 ¹	4.0	3.0	No			750X333636	750X333637	750X333640
500:5	0.15SB0.2 ¹	3.0	2.0	Yes	0821C34762-4	2-Hole	750X333641	750X333642	750X333643
600:5	0.15SB0.2 ¹	3.0	2.0	No			750X333001 ⁴	750X333002 ⁴	750X333003 ⁴
600:5	0.15SB0.2 ¹	3.0	2.0	Yes	0821C34762-10	4-Hole	750X333101 ⁴	750X333102 ⁴	750X333103 ⁴
600:5	0.15SB0.5 ¹	2.0	1.5	No			750X333011 ⁴	750X333012 ⁴	750X333013 ⁴
600:5	0.15SB0.5 ¹	2.0	1.5	Yes	0821C34762-4	2-Hole	750X333111 ⁴	750X333112 ⁴	750X333113 ⁴
800:5	0.15SB0.5 ¹	2.0	1.5	No			750X333618 ⁴	750X333619 ⁴	750X333620 ⁴
800:5	0.15SB0.5 ¹	2.0	1.5	Yes	0821C34762-10	4-Hole	750X333622 ⁴	750X333623 ⁴	750X333624 ⁴
1,000:5	0.15SB0.5 ¹	2.0	1.5	No			750X333015 ⁴	750X333016 ⁴	750X333017 ⁴
1,000:5	0.15SB0.5 ¹	2.0	1.5	Yes	0821C34762-10	4-Hole	750X333115 ⁴	750X333116 ⁴	750X333117 ⁴

(1) Exceeds IEEE definition for special high accuracy. Maintains 0.15 Accuracy from 1% to Rating Factor.

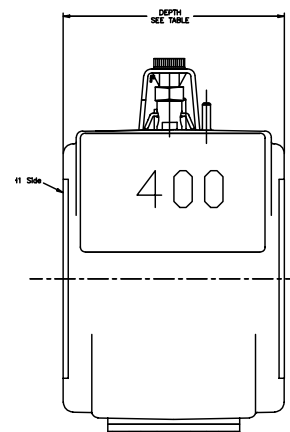
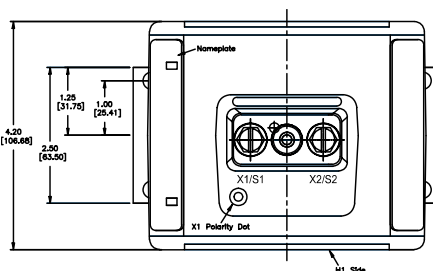
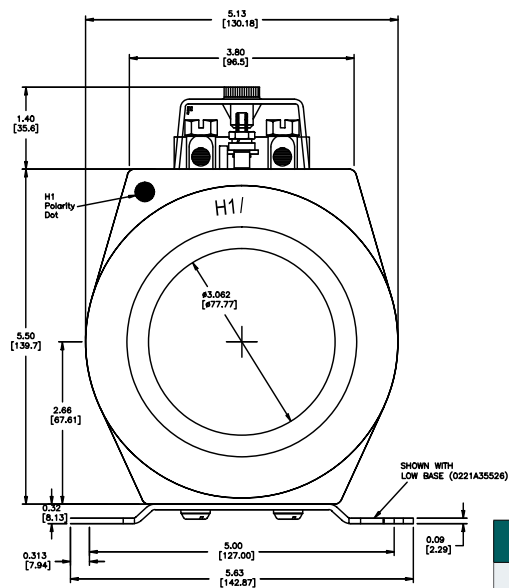
(2) Wide-base and secondary conduit box options available, upon request. Contact info@spectrumind.com for more details.

(3) Other designs available, upon request. Contact info@spectrumind.com for more details.

(4) Measurement Canada Approval: AE-2421

JAK-OS

Weight & Dimensions



REFERENCE DRAWINGS			WEIGHT		
Outline	Primary Bar	Transformer	Primary Bar, add	Low Base, add	High Base, add
0121C50035	0821C34762	12 lbs	3 lbs	0.7 lbs	1 lbs



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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 manufactured with high-efficiency material that reduces energy losses, allowing for higher accuracy over a wider range. The secondary winding is made of heavy enameled copper wire 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.

