

Encompass™ & RevenueSense™



Current Transformers with High Accuracy and Extended Range

Overview

In the current economic and regulatory climate, utilities are looking for innovative and cost effective measures for decreasing operating and asset costs while increasing accuracy of revenue metering. GE's Encompass and RevenueSense 600V Current Transformers (CT's) address utilities need for accurate and efficient revenue metering. With their extended range ratings, one Encompass or one RevenueSense CT can be used accurately over a wide variety of applications. These specialty CT's are designed for use with transformer rated meters such as GE's kV2c meter. Use of Encompass and RevenueSense CT's, particularly when used in conjunction with GE's kV2c FITZALL™ transformer rated meter, will substantially simplify and improve standardization for meter shop operations.

Key Benefits

- Reduce inventory requirements up to 90%
- Reduce time and effort in CT sizing and selection
- Minimize costly errors from incorrect billing multipliers or meter programming
- Decrease risk of stock outs and project delays
- Reduce asset and operational costs

Key Applications

- Revenue metering for commercial and industrial applications
- Cost effective extended range for revenue metering using Encompass
- Premium metering accuracy with RevenueSense

Reduce Inventory and Operational Costs

- Encompass and RevenueSense both exceed the accuracy range for standard and high accuracy revenue metering classes
- Accuracy ratings extend beyond the load test points set by IEEE® C57.13
- Mitigates multiple ratios, reducing inventory requirements and part numbers
- Simplified selection and standardization of billing multipliers resulting in improved productivity and reduced risk of error

Wider Accuracy Range with Encompass

- Maintains standard accuracy class from 4% of rated current, with typical rating factor of 4.0
- Wide range CT reduces need for multiple ratios, simplifying inventory requirements and billing multipliers
- Available at the same price point as a standard CT, in most cases

Premium Accuracy with RevenueSense

- High precision resulting in maximum billing accuracy
- CT uses specialized core material in order to minimize electrical core losses
- Maintains 0.15 high accuracy class from 1% of rated current, up through its rating factor



Customer Challenge

Traditional 600V CT's experience relatively high losses at light loads, therefore it is most effective for utilities to specify as low of a ratio as possible and operate the CT within its rating factor. However, CT's also need to be sized with consideration of maximum possible amps, so the CT is not damaged in high load conditions, leading to a desire for higher ratios. These conflicting constraints add complexity to selecting the right sized CT, and necessitate the stocking of several different sized ratio CT's to cover a broad range of potential installations.

GE's Solution

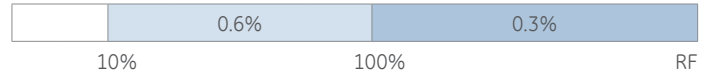
GE's portfolio of extended range 600V Current Transformers makes it possible to replace all the various CT ratios used within a particular frame size with a single ratio that covers all potential installations.

Encompass and RevenueSense are each tailored to help utilities achieve both their business and technical objectives. The Encompass solution offers utilities a single unit that exceeds current accuracy range at no additional cost compared to a standard CT, and is best suited to utilities that want a cost effective CT with an extended range. The RevenueSense solution offers utilities a single unit that exceeds accuracy range with special high accuracy features, and is best suited to utilities that want premium metering accuracy.

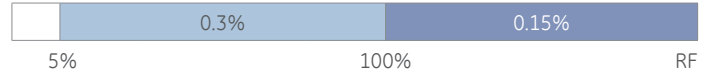
IEEE Metering Class

There are three revenue grade metering classes defined by IEEE C57.13-2008 and C57.13.6-2004. These are illustrated below, with limits shown as a percent of rated CT current:

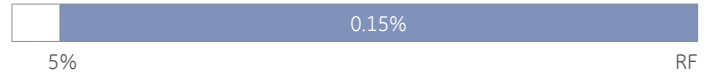
0.3 Class - Standard Accuracy



0.15 Class - High Accuracy



0.15S Class - Special High Accuracy



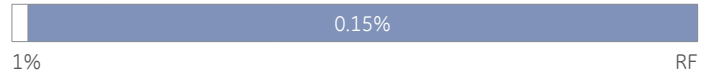
Encompass & RevenueSense Exceed IEEE Standards

Encompass and RevenueSense redefine CT performance by exceeding the operating range within their respective IEEE accuracy classes, offering utilities additional flexibility to reduce inventory, part numbers, and billing multipliers. RevenueSense also allows for a further reduction of metering losses by extending high accuracy performance down to 1% of rated current.

GE Encompass - Standard Accuracy with Extended Range



GE RevenueSense - Special High Accuracy with Extended Range



RevenueSense and Encompass CTs are ideal for multiservice facilities such as shopping malls.

Portfolio Summary: Encompass & RevenueSense

Encompass and RevenueSense 600V Current Transformers are designed for commercial and industrial applications and are typically installed with transformer rated meters like GE's kV2c. Encompass and RevenueSense models JCT, JCR, JAK, and JAD are designed for indoor or outdoor service and are available in bar-type or window-type configurations. The JAB model is specially designed for installation over the secondary bushings of pad mounted transformers from 75 kVA to 3000 kVA. A high temperature version is available for use in locations with unusually high ambient temperatures.

In most cases Encompass CT's are available at the same price point as Standard CT's. Choose this solution for a no-cost upgrade from standard range to extended range.

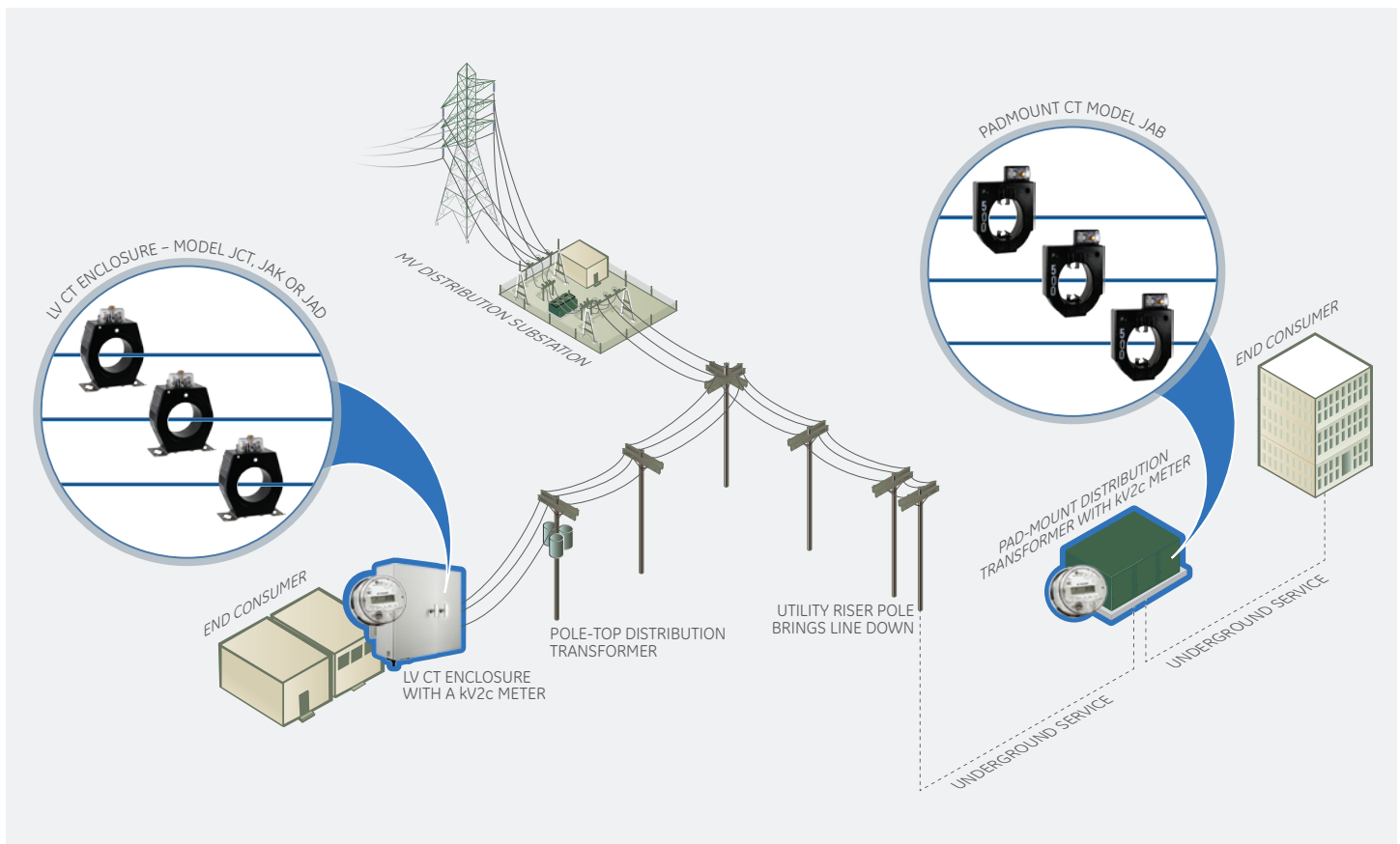
RevenueSense CT's provide both extended range and high accuracy. Choose this premium product to reduce electrical losses and increase revenue metering accuracy.

| | STANDARD CT | GE ENCOMPASS | GE REVENUE SENSE |
|----------------------|-------------------|-------------------|------------------|
| Range Type | Standard Range | Extended Range | Extended Range |
| Accuracy Type | Standard Accuracy | Standard Accuracy | High Accuracy |
| Rated Range* | 10% to RF | 4% to RF | 1% to RF |

* Operating Range stated as a % of Rated Nameplate Current

Application Overview: Secondary Metering with Current Transformers

Encompass and RevenueSense CTs provide flexibility for commercial and industrial applications, indoor or outdoor service and bar-type or window-type configurations.



Encompass Product Overview

Extended Range CT

Encompass is a specialty 600V current transformer that offers customers the benefits of wide-range CT's without paying the price premium normally associated with high accuracy units. This is accomplished by extending the accuracy range of the CT beyond what is defined by IEEE for standard revenue metering. The result is a single unit that is rated to operate accurately over a range that previously took multiple ratios (sizes) to accomplish.

Benefits

- Simplifies CT selection and billing multipliers, improving productivity and minimizing risk or error
- Reduces inventory and part number requirements reduce asset and operational costs
- Exceeds accuracy range for standard revenue metering resulting in reduced asset costs
- Extends accuracy range with no additional upgrade cost; Encompass CT's are typically available at the same price point as standard CT's
- Answers the engineering challenge to "design the most efficient CT possible without adding cost to the unit"

Redefining the Test Limits for Standard CT's

Traditionally, CT accuracy is tested at:

- 10% of rated current (light load)
- 100% of rated current (full load)
- With a rating factor between 1.0 and 4.0

With GE's Encompass CT, the 0.3 accuracy class is extended by changing the test points to:

- 4% of rated current (light load)
- 40% of rated current (full load)
- With a typical rating factor of 4.0

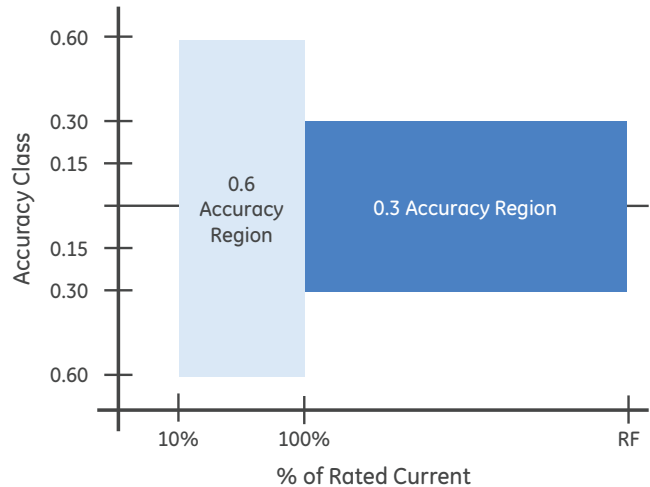
A rating factor of 4.0 means the Current Transformer meets rated accuracy at up to 4 times the rated primary current. Thus, the output on a 5 Amp CT secondary can be used up to 20 Amps if a rating factor of 4.0 is assigned to the CT ($4.0 \times 5A = 20A$). This pairs the CT output range and the meter input range when used with a CL20 transformer rated meter, maximizing the performance potential of the system.



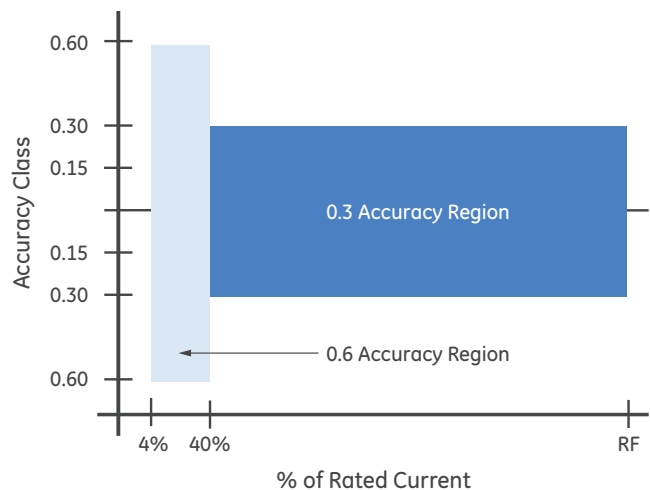
Extended Range (4% to RF). Standard Accuracy (0.3 Class).

Extending the test limits

Standard CT Test Limits



Encompass Test Limits



Encompass Business Case Example

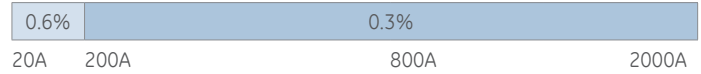
The scenario for this business case is a meter shop that needs a current transformer for 200 Amp service. The testing below examines the benefits that the meter shop could achieve by installing GE's Encompass CT (500:5) compared to a standard CT (200:5).

A 500:5 Encompass CT has $\pm 0.3\%$ accuracy from 200A to 2000A, compared to a standard 200:5 CT which has a $\pm 0.3\%$ accuracy from 200A to only 800A. Both CT's have $\pm 0.6\%$ accuracy from 20A to 200A.

200:5 Standard CT



500:5 Encompass



The 500:5 Encompass CT has equal to or better accuracy rating across the entire 20A to 2000A range. It is important to note that accuracy class only defines the "tolerance of error" allowed in a CT. Actual test results are also an important factor when evaluating CT's. At a typical burden of B-0.1, the Encompass CT test results slightly outperform a standard CT, even at the lowest test amps. All Encompass test results are well within the IEEE limits.

| | TESTED IEEE ACCURACY CLASS | | |
|----------------------------------|----------------------------|-----------|-------------|
| | 20A | 200A | 2000A |
| IEEE C57.13 Test Limits | ± 0.6 | ± 0.3 | ± 0.3 |
| 200:5 Standard CT Test Results* | 0.4 | 0.2 | (not rated) |
| 500:5 Encompass CT Test Results* | 0.3 | 0.2 | 0.1 |

*Tested Accuracy Class values shown are for illustrative purposes only, and not a guarantee of performance. Actual results may vary, within defined test tolerances.

Result and Benefits

The 500:5 Encompass unit when compared to a 200:5 standard CT has equal to or better test results at all points included even low currents and is available at an equivalent price. This comparison holds true across several other standard CT ratios, meaning one Encompass CT can functionally replace up to eight other standard ratios, allowing for an inventory reduction of up to nearly 90%.

| System Current | 20A | 40A | 60A | 80A | 100A | 200A | 400A | 600A | 800A | 1000A | 1200A | 1400A | 1600A | 1800A | 2000A |
|--------------------------------------|----------------------|-----|-----|-----|------|----------------------|------|------|----------------------|-------|-------|-------|-------|-------|-------|
| 200:5 JAK-0C (Rating Factor 4.0) | $\pm 0.6\%$ Accuracy | | | | | $\pm 0.3\%$ Accuracy | | | | | | | | | |
| 400:5 JAK-0C (Rating Factor 4.0) | $\pm 0.6\%$ Accuracy | | | | | $\pm 0.3\%$ Accuracy | | | | | | | | | |
| 1000:5 JAK-0C (Rating Factor 2.0) | | | | | | $\pm 0.6\%$ Accuracy | | | $\pm 0.3\%$ Accuracy | | | | | | |
| 500:5 JAK-0W (4% to 400%) | $\pm 0.6\%$ Accuracy | | | | | $\pm 0.3\%$ Accuracy | | | | | | | | | |

Usually only one part number for each frame size

- Reduced risk of costly stock outs
- Simplified site material ordering

Reduce meter shop inventory

- Reduced cost on inventory
- Space saving



RevenueSense Product Overview

Extended Range with High Accuracy Performance

RevenueSense is a specialty brand 600V current transformer that is both wide range and special high accuracy. This CT maintains 0.15 accuracy class (the highest class per IEEE) from 1% of its rated current up through its rating factor. This is accomplished using the specialized amorphous core material that minimizes electrical core losses. The result is an extremely accurate CT that can maintain high accuracy over a wide range of current.

Benefits

- Maximizes billing revenue with special high accuracy metering compared to standard accuracy metering
- Increases billing accuracy of metered customers
- Exceeds accuracy range for standard revenue metering resulting in reducing asset costs
- Simplifies CT selection and billing multipliers, improving productivity and minimizing risk or error
- Reduces inventory and part number requirements reduce asset and operational costs

Redefining Special High Accuracy

Per IEEE C57.13.6, a 0.15S class CT must maintain 0.15 accuracy from 5% of rated current through rating factor. This is a significantly tighter tolerance for error as compared to a standard CT: 2X better within rating factor and 4X better at light loads.

With GE's RevenueSense CT's, this tight tolerance of 0.15 accuracy is maintained for an extended range of 1% of rated current through rating factor. Similar to Encompass CT's, moving from a standard CT to a wide range CT allows for a reduction in inventory, part numbers, and billing multipliers.

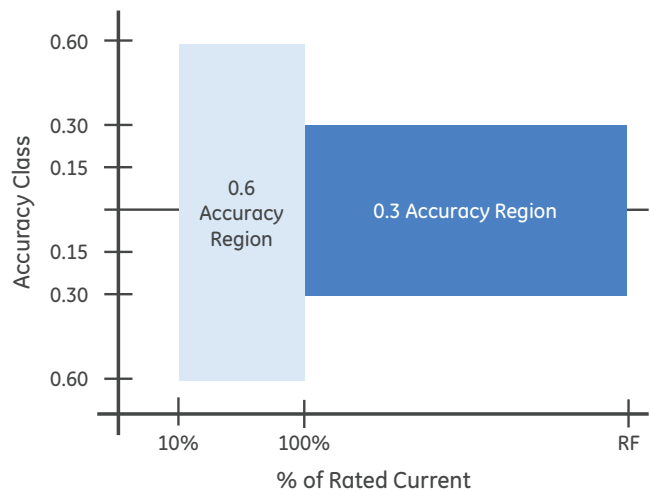
However, where Encompass CT's offer equal performance over an extended range, RevenueSense CT's offer improved high accuracy performance, allowing for increased billing accuracy and increased revenue.



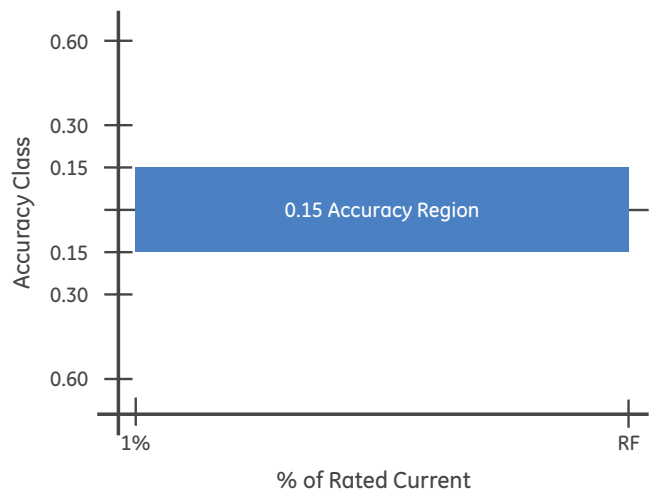
High Accuracy (0.15 Class). Extended Range (1% to RF). Premium Offering.

Extended test limits with tighter accuracy tolerances

Standard CT Test Limits



RevenueSense Test Limits



RevenueSense Business Case Example

In this business case example, a commercial customer requires premium accuracy to maximize billing revenue. The assumed hours of operation for this business are Monday to Friday, 9am to 5pm. The business is closed weeknights and weekends.

Assumptions:

- Nominal system with current of 200A
- System impedance of 0.1Ω
- Line to ground voltage of 277V
- Power factor of 0.9
- Cost per kWh of \$0.09

Load Conditions:

- Load is 100% of nominal current (200A) for 8 hours each weekday
- 10% of nominal current (20A) for 16 hours each weekday
- 5% of nominal current (2A) during weekends

Current Transformer Test Data

| MODEL | TYPE | RATIO | TESTED IEEE ACCURACY CLASS | | |
|---------|--------------|-------|----------------------------|------|------|
| | | | 2A | 20A | 200A |
| JAK-0C* | Standard | 200:5 | 0.80 | 0.40 | 0.18 |
| JAK-0S* | RevenueSense | 600:5 | 0.04 | 0.03 | 0.03 |

*Tested Accuracy Class values shown are for illustrative purposes only, and not a guarantee of performance. Actual results may vary, within defined test tolerances.

Results

| MODEL | TYPE | RATIO | kWh MEASURED | ANNUAL BILL | ADDITIONAL REVENUE VS. STANDARD CT | TYPICAL PRICE ADDER REVENUESENSE VS STANDARD CT (EACH)* |
|--------|--------------|-------|--------------|-------------|------------------------------------|---|
| JAK-0C | Standard | 200:5 | 217,211 | \$19,548.95 | - | - |
| JAK-0S | RevenueSense | 600:5 | 217,665 | \$19,589.88 | \$40.93 | \$20 |

*Example only

Results and Benefit

The RevenueSense CT, with its premium accuracy increases billing revenue by \$40.93 annually versus the standard CT. The additional cost of three high accuracy CT's is roughly \$60 in this example, **yielding a payback in less than 18 months.**



Commercial building with 200A nominal service, 277V.

Technical Information

Model: JAK
 Size: 3" Window
 Range: Up to 2000A

Cross-Reference Guide: Converting Standard Accuracy CT's to GE's Encompass or RevenueSense CT's

JAK-0W and JAK-0S Dimensions

- Approximate weight of Model JAK-0W is 8lbs.
- Approximate weight of Model JAK-0S is 12lbs.
- Add 3lbs for primary bar, 0.5lb for low base, and 1lb for high base.



| STANDARD CT MAKE AND MODEL | | | | | CHARACTERISTICS | | | RATED RANGE OF ACCURACY CLASS | | GE ENCOMPASS | GE REVENUESENSE |
|----------------------------|-----|------|-------|-------|-----------------|---------|-----|-------------------------------|--------------|--|---|
| GE | ABB | RITZ | ASTRA | ITRON | RATIO | ACCCL | RF | 0.6 ACCURACY | 0.3 ACCURACY | | |
| JAK-0C | CMF | DCCW | AB | R6M | 200:5 | 0.3B0.5 | 4 | 20A-200A | 200A-800A | JAK-0W 500:5 Maintains 0.6 accuracy from 20A-200A and 0.3 accuracy from 200A-2000A | JAK-0S 600:5 Maintains 0.15 accuracy from 6A to 1800A |
| JAK-0C | CMF | DCCW | AB | R6M | 300:5 | 0.3B0.5 | 4 | 30A-300A | 300A-1200A | | |
| JAK-0C | CMF | DCCW | AB | R6M | 400:5 | 0.3B0.5 | 4 | 40A-400A | 400A-1600A | | |
| JAK-0C | CMF | DCCW | AB | R6M | 500:5 | 0.3B0.5 | 3 | 50A-500A | 500A-1500A | | |
| JAK-0C | CMF | DCCW | AB | R6M | 600:5 | 0.3B0.5 | 2 | 60A-600A | 600A-1200A | | |
| JAK-0C | CMF | DCCW | AB | R6M | 800:5 | 0.3B0.5 | 2 | 80A-800A | 800A-1600A | | |
| JAK-0C | CMF | DCCW | AB | R6M | 1000:5 | 0.3B0.5 | 2 | 100A-1000A | 1000A-2000A | | |
| JAK-0C | CMF | DCCW | AB | R6M | 1200:5 | 0.3B0.5 | 1.5 | 120A-1200A | 1200A-1800A | | |
| JAK-0C | CMF | DCCW | AB | R6M | 2000:5 | 0.3B0.5 | 1 | 200A-2000A | 2000A | | |

Characteristics and Accuracy Range statements based on GE models only. Values from other manufacturers may vary.

JAK-0W Encompass Data Table

| CURRENT RATIO (AMPS) | IEEE METERING ACCURACY (60Hz) | RATING FACTOR | | PRIMARY BAR | CATALOG NUMBER | | |
|----------------------|-------------------------------|---------------|------|-------------|----------------|------------|------------|
| | | 30°C | 55°C | | NO BASE | LOW BASE | HIGH BASE |
| 500:5 | 0.3B0.5 ¹ | 4 | 3 | No | 750X133655 | 750X133629 | 750X133633 |
| 500:5 | 0.3B0.5 ¹ | 4 | 3 | Yes | 750X133470 | 750X133630 | 750X133634 |

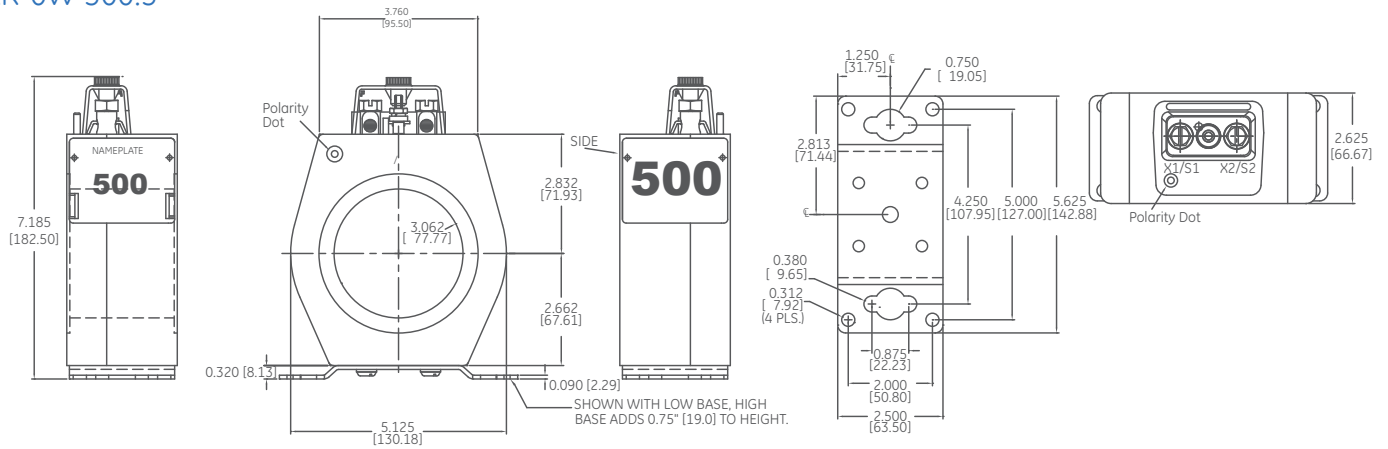
(1) Exceeds IEEE definition for standard accuracy. Maintains 0.6 Accuracy from 4% to 40% and 0.3 from 40% to Rating Factor.

JAK-0S RevenueSense Data Table

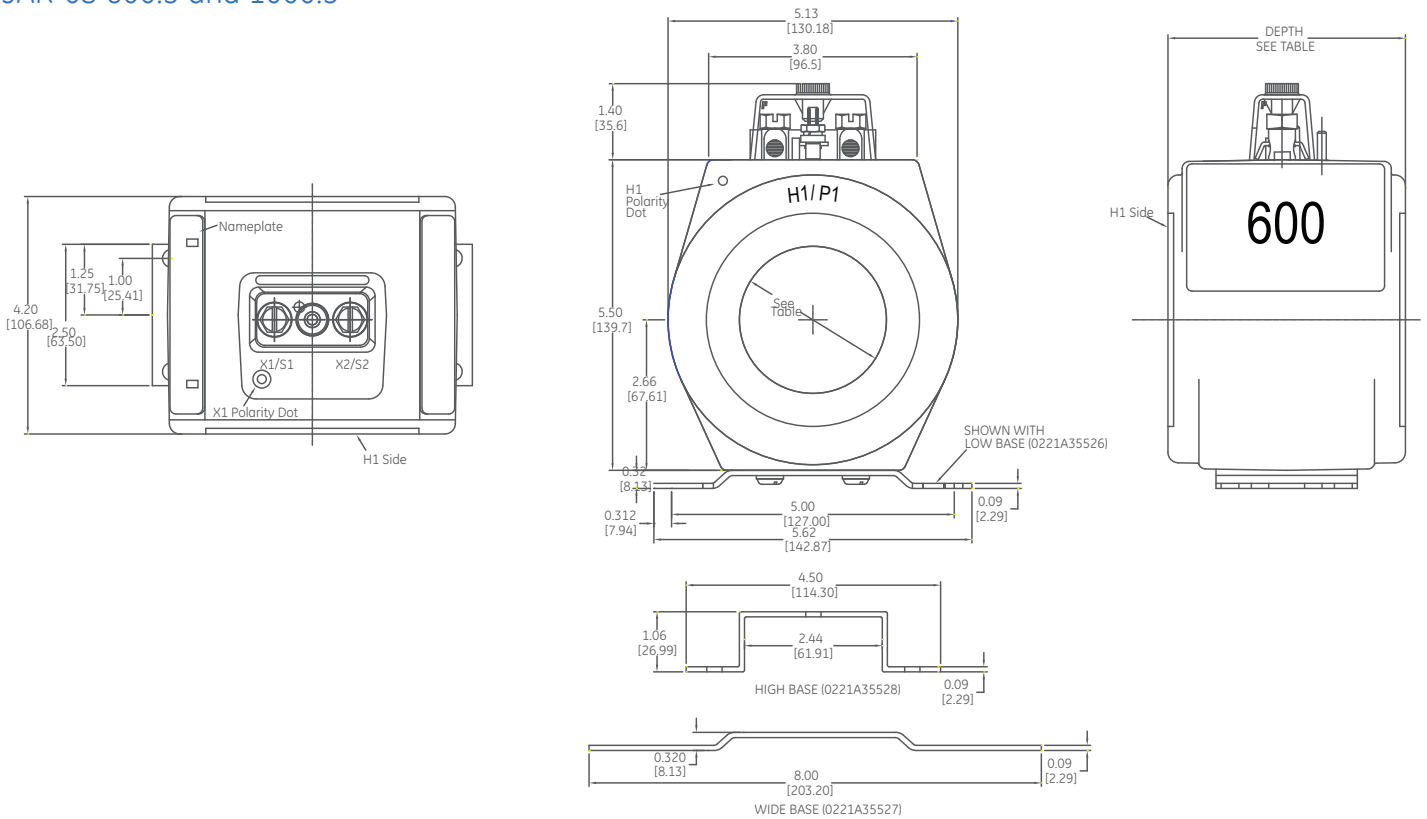
| CURRENT RATIO (AMPS) | IEEE METERING ACCURACY (60Hz) | RATING FACTOR | | PRIMARY BAR | CATALOG NUMBER | | |
|----------------------|-------------------------------|---------------|------|-------------|----------------|------------|------------|
| | | 30°C | 55°C | | NO BASE | LOW BASE | HIGH BASE |
| 600:5 | 0.15SB0.2 ² | 3 | 2 | No | - | 750X333002 | 750X333003 |
| 600:5 | 0.15SB0.2 ² | 3 | 2 | Yes | 750X333101 | 750X333102 | 750X333103 |
| 600:5 | 0.15SB0.5 ² | 2 | 1.5 | No | - | 750X333012 | 750X333013 |
| 600:5 | 0.15SB0.5 ² | 2 | 1.5 | Yes | 750X333011 | 750X333112 | 750X333113 |

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

JAK-OW 500:5



JAK-OS 600:5 and 1000:5



Technical Information

Model: JAB

Size: 4.5" x 3.5" Window

Range: Up to 4000A

Hi-Temperature Rating (85°C)

Cross-Reference Guide: Converting Standard Accuracy CT's to GE's Encompass or RevenueSense CT's

JAB-0W and JAB-0S Dimensions

Approximate weight of Model JAB is 8lbs.



| STANDARD CT MAKE AND MODEL | | | | | CHARACTERISTICS | | | RATED RANGE OF ACCURACY CLASS | | GE ENCOMPASS | GE REVENUESENSE |
|----------------------------|-----|------|-------|-------|-----------------|---------|-----|-------------------------------|--------------|---|--|
| GE | ABB | RITZ | ASTRA | ITRON | RATIO | ACCCL | RF | 0.6 ACCURACY | 0.3 ACCURACY | | |
| JAB-0C | CMV | DCDW | AP | R6P | 200:5 | 0.3B0.2 | 4 | 20A-200A | 200A-800A | JAB-0W 500:5 Maintains 0.6 accuracy from 20A-200A and 0.3 accuracy from 200A-2000A | JAB-0S 1000:5 Maintains 0.15 accuracy from 10A to 3000A |
| JAB-0C | CMV | DCDW | AP | R6P | 300:5 | 0.3B0.2 | 4 | 30A-300A | 300A-1200A | | |
| JAB-0C | CMV | DCDW | AP | R6P | 400:5 | 0.3B0.2 | 4 | 40A-400A | 400A-1600A | | |
| JAB-0C | CMV | DCDW | AP | R6P | 500:5 | 0.3B0.5 | 3 | 50A-500A | 500A-1500A | | |
| JAB-0C | CMV | DCDW | AP | R6P | 600:5 | 0.3B0.5 | 3 | 60A-600A | 600A-1800A | | |
| JAB-0C | CMV | DCDW | AP | R6P | 800:5 | 0.3B0.5 | 3 | 80A-800A | 800A-2400A | | |
| JAB-0C | CMV | DCDW | AP | R6P | 1000:5 | 0.3B0.5 | 2 | 100A-1000A | 1000A-2000A | | |
| JAB-0C | CMV | DCDW | AP | R6P | 1200:5 | 0.3B0.5 | 2 | 120A-1200A | 1200A-2400A | | |
| JAB-0C | CMV | DCDW | AP | R6P | 1500:5 | 0.3B0.5 | 2 | 200A-2000A | 2000A-4000A | JAB-0S 2000:5 Maintains 0.15 accuracy from 20A to 4000A | |
| JAB-0C | CMV | DCDW | AP | R6P | 3000:5 | 0.3B0.5 | 1.3 | 300A-3000A | 3000A-4000A | | |
| JAB-0C | CMV | DCDW | AP | R6P | 4000:5 | 0.3B0.5 | 1 | 400A-4000A | 4000A | | |

Characteristics and Accuracy Range statements based on GE models only. Values from other manufacturers may vary.

JAB-0W Encompass Data Table

| CURRENT RATIO (AMPS) | IEEE METERING ACCURACY (60Hz) | RATING FACTOR | | | HI TEMP | CATALOG NUMBER |
|----------------------|-------------------------------|---------------|------|------|---------|----------------|
| | | 30°C | 55°C | 85°C | | |
| 500:5 | 0.3B0.5 ¹ | 4 | 3 | - | No | 750X136651 |
| 1500:5 | 0.3B0.5 ¹ | 2 | 1.5 | - | No | 750X136652 |
| 500:5 | 0.3B0.5 ¹ | - | - | 4 | Yes | 750X136464 |
| 1500:5 | 0.3B0.5 ¹ | - | - | 2 | Yes | 750X136463 |

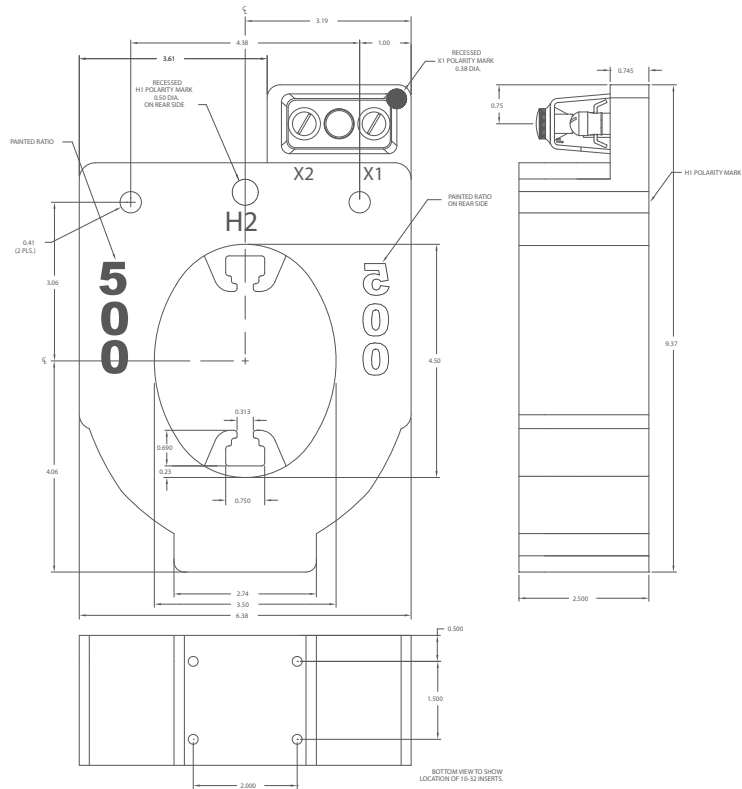
(1) Exceeds IEEE definition for standard accuracy. Maintains 0.6 Accuracy from 4% to 40% and 0.3 from 40% to Rating Factor.

JAB-0S RevenueSense Data Table

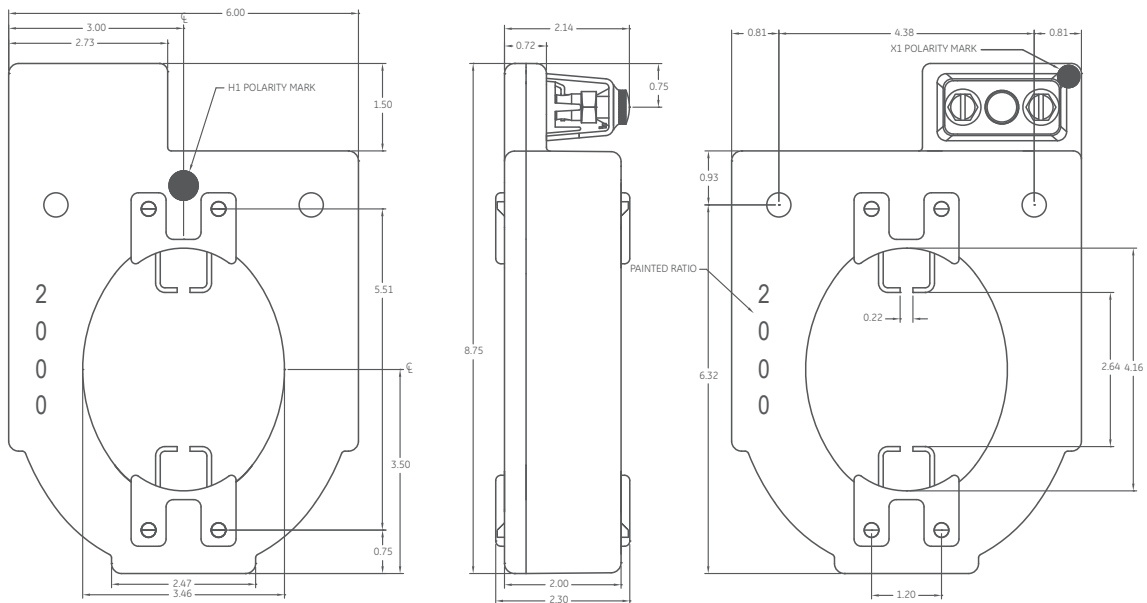
| CURRENT RATIO (AMPS) | IEEE METERING ACCURACY (60Hz) | RATING FACTOR | | | HI TEMP | CATALOG NUMBER |
|----------------------|-------------------------------|---------------|------|------|---------|----------------|
| | | 30°C | 55°C | 85°C | | |
| 1000:5 | 0.15SB0.5 ² | 3 | 2 | - | No | 750X336001 |
| 2000:5 | 0.15SB0.5 ² | 2 | 1.5 | - | No | 750X336002 |
| 1000:5 | 0.15SB0.5 ² | - | - | 2 | Yes | 750X336101 |
| 2000:5 | 0.15SB0.5 ² | - | - | 1.5 | Yes | 750X336102 |

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

JAB-0W 500:5 Hi Temp, only. Cast Resin Style



JAB-0W 500:5 Standard Temp
 JAB-0W 1500:5 Standard or Hi-Temp
 JAB-0S 1000:5 and 2000:5, Standard or Hi Temp



Technical Information

Model JCT or JCR Size: 2" Window Range: Up to 1200A

Cross-Reference Guide: Converting Standard Accuracy CT's to GE's Encompass or RevenueSense CT's

JCR-0W and JCT-0S Dimensions

- Approximate weight of Model JCR-0W is 4lbs.
- Add 2lbs for primary bar, 0.5lb for low base, and 1lb for high base.
- Approximate weight of Model JCT-0S is 6lbs, including primary bar.
- Add 0.25lb for low base, and 1lb for high base.



| TRANSFORMER TYPE | STANDARD CT MAKE AND MODEL | | | | | |
|--------------------|----------------------------|-------|------|-------|-------|--|
| | GE | ABB | RITZ | ASTRA | ITRON | |
| Miniature | JCR-0C | CSF | DCBW | TCW | R6SA | |
| Miniature | JCW-0C | CSH | - | TFW | R6S | |
| Miniature Bar-Type | JCM-0C | CBT-H | - | TAB | R6B | |
| Miniature Bar-Type | JCT-0C | CBT/1 | DCAB | TCB | R6BA | |

Characteristics and Accuracy Range statements based on GE models only. Values from other manufacturers may vary.

| RATIO | CHARACTERISTICS | | RATED RANGE OF ACCURACY CLASS | | GE ENCOMPASS | GE REVENUESENSE |
|-------|-----------------|-----|-------------------------------|--------------|---|--|
| | ACCCL | RF | 0.6 ACCURACY | 0.3 ACCURACY | | |
| 100:5 | 0.3B0.2 | 4 | 10A-100A | 100A-400A | JCR-0W 250:5 Maintains 0.6 accuracy from 10A-100A and 0.3 accuracy from 100A-1000A | JCT-0S 600:5 Maintains 0.15 accuracy from 6A to 1200A |
| 200:5 | 0.3B0.2 | 2 | 20A-200A | 200A-400A | | |
| 400:5 | 0.3B0.2 | 2 | 40A-400A | 400A-800A | | |
| 600:5 | 0.3B0.5 | 2 | 60A-600A | 600A-1200A | JCR-0W 500:5 Maintains 0.6 accuracy from 20A-200A and 0.3 accuracy from 200A-1200A | |
| 800:5 | 0.3B0.5 | 1.5 | 80A-800A | 800A-1200A | | |

JCR-0W Encompass Data Table

| CURRENT RATIO (AMPS) | IEEE METERING ACCURACY (60Hz) | RATING FACTOR | | PRIMARY BAR | CATALOG NUMBER | | |
|----------------------|-------------------------------|---------------|------|-------------|----------------|------------|------------|
| | | 30°C | 55°C | | NO BASE | LOW BASE | HIGH BASE |
| 250:5 | 0.3B0.5 ¹ | 4 | 3 | No | 750X134608 | 750X134609 | 750X134610 |
| 250:5 | 0.3B0.5 ¹ | 4 | 3 | Yes | 750X134627 | 750X134618 | 750X134646 |
| 500:5 | 0.3B0.5 ¹ | 2.4 | 1.2 | No | 750X134641 | 750X134642 | - |
| 500:5 | 0.3B0.5 ¹ | 2.4 | 1.2 | Yes | 750X134643 | 750X134644 | - |

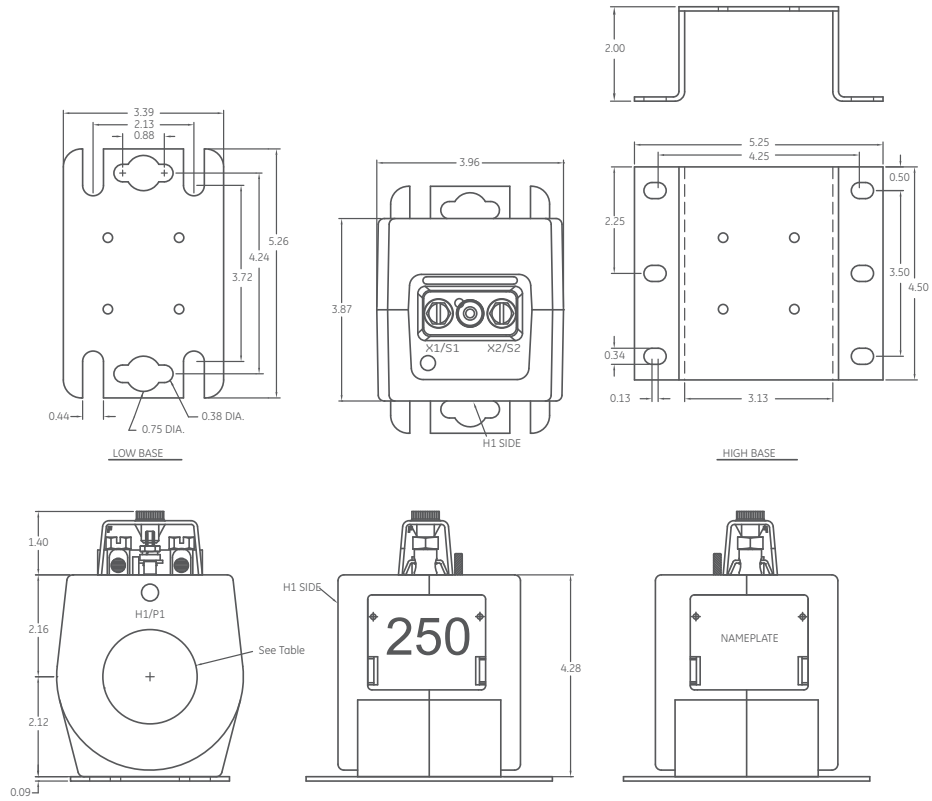
(1) Exceeds IEEE definition for standard accuracy. Maintains 0.6 Accuracy from 4% to 40% and 0.3 from 40% to Rating Factor.

JCT-0S RevenueSense Data Table

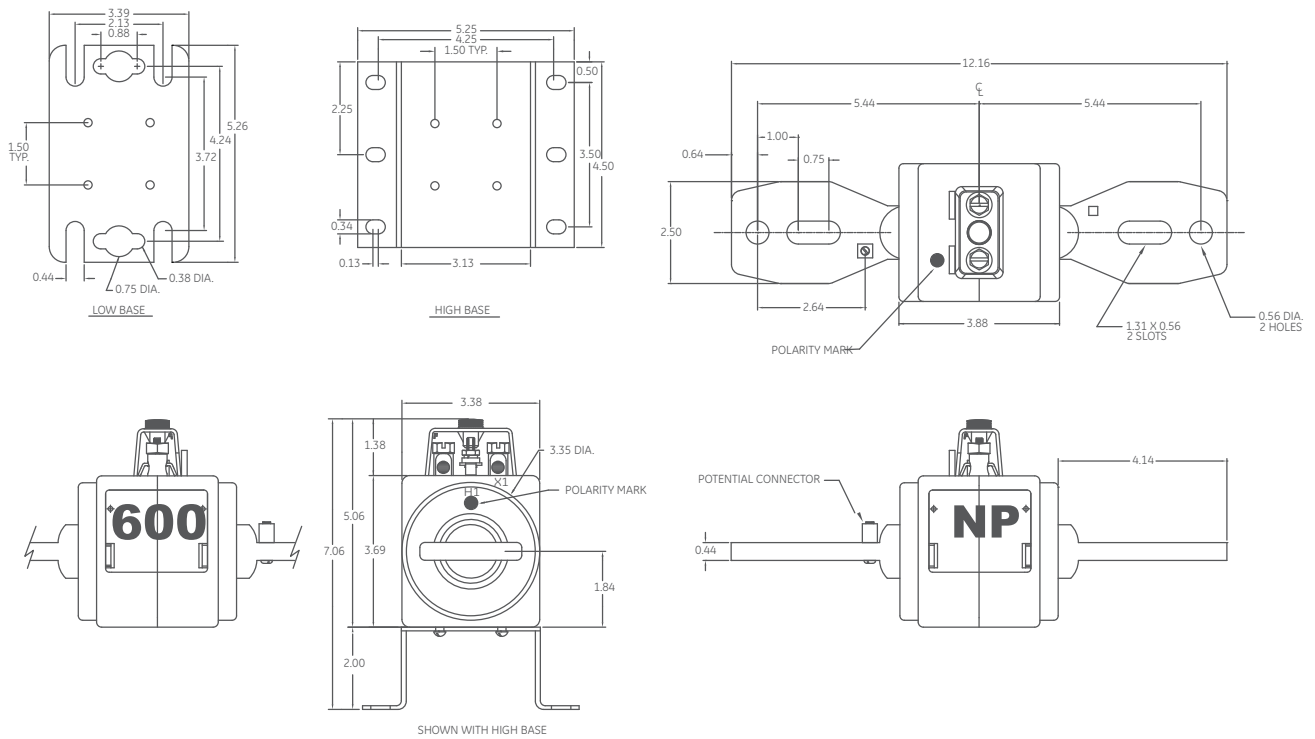
| CURRENT RATIO (AMPS) | IEEE METERING ACCURACY (60Hz) | RATING FACTOR | | PRIMARY BAR | CATALOG NUMBER | | |
|----------------------|-------------------------------|---------------|------|-------------|----------------|------------|------------|
| | | 30°C | 55°C | | NO BASE | LOW BASE | HIGH BASE |
| 600:5 | 0.15SB0.2 ² | 2 | 1.5 | Yes | 750X323001 | 750X323002 | 750X323003 |

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

JCR-0W 250:5 and 500:5



JCT-OS 600:5



Technical Information

Model: JAD
 Size: 5.75" Window
 Range: Up to 4500A

JAD-0W and JAD-0S Dimensions

Approximate weight of Model JAD is 13lbs.
 Add 2lbs for mounting base.



Cross-Reference Guide: Converting Standard Accuracy CT's to GE's Encompass or RevenueSense CT's

| STANDARD CT MAKE AND MODEL | | | | | CHARACTERISTICS | | | RATED RANGE OF ACCURACY CLASS | | GE ENCOMPASS | GE REVENUESENSE |
|----------------------------|-----|------|-------|-------|-----------------|---------|-----|-------------------------------|--------------|--|--|
| GE | ABB | RITZ | ASTRA | ITRON | RATIO | ACCCL | RF | 0.6 ACCURACY | 0.3 ACCURACY | | |
| JAD-0C | CLC | DCEW | AD | R6L | 400:5 | 0.3B0.2 | 4 | 40A-400A | 400A-1600A | JAD-0W 1000:5 Maintains 0.6 accuracy from 40A-400A and 0.3 accuracy from 400A-4000A | JAD-0S 2000:5 Maintains 0.15 accuracy from 20A to 4000A |
| JAD-0C | CLC | DCEW | AD | R6L | 500:5 | 0.3B0.2 | 4 | 50A-500A | 500A-2000A | | |
| JAD-0C | CLC | DCEW | AD | R6L | 600:5 | 0.3B0.5 | 3 | 60A-600A | 600A-1800A | | |
| JAD-0C | CLC | DCEW | AD | R6L | 800:5 | 0.3B0.5 | 3 | 80A-800A | 800A-2400A | | |
| JAD-0C | CLC | DCEW | AD | R6L | 1000:5 | 0.3B0.9 | 2 | 100A-1000A | 1000A-2000A | | |
| JAD-0C | CLC | DCEW | AD | R6L | 1200:5 | 0.3B0.9 | 2 | 120A-1200A | 1200A-2400A | | |
| JAD-0C | CLC | DCEW | AD | R6L | 1500:5 | 0.3B0.9 | 3 | 150A-1500A | 2000A-4500A | JAD-0W 1500:5 Maintains 0.6 accuracy from 60A-600A and 0.3 accuracy from 600A-4500A | JAD-0S 3000:5 Maintains 0.15 accuracy from 30A to 4500A |
| JAD-0C | CLC | DCEW | AD | R6L | 2000:5 | 0.3B0.9 | 2 | 200A-2000A | 2000A-4000A | | |
| JAD-0C | CLC | DCEW | AD | R6L | 3000:5 | 0.3B0.9 | 1.3 | 300A-3000A | 3000A-4000A | | |
| JAD-0C | CLC | DCEW | AD | R6L | 4000:5 | 0.3B0.9 | 1.1 | 400A-4000A | 4000A-4500A | | |

Characteristics and Accuracy Range statements based on GE models only. Values from other manufacturers may vary.

JAD-0W Encompass Data Table

| CURRENT RATIO (AMPS) | IEEE METERING ACCURACY (60Hz) | RATING FACTOR | | CATALOG NUMBER | |
|----------------------|-------------------------------|---------------|------|----------------|------------|
| | | 30°C | 55°C | NO BASE | WITH BASE |
| 1000:5 | 0.3B0.5 ¹ | 4 | 3 | 750X120609 | 750X120612 |
| 1500:5 | 0.3B0.9 ¹ | 3 | 2 | 750X120922 | 750X120980 |

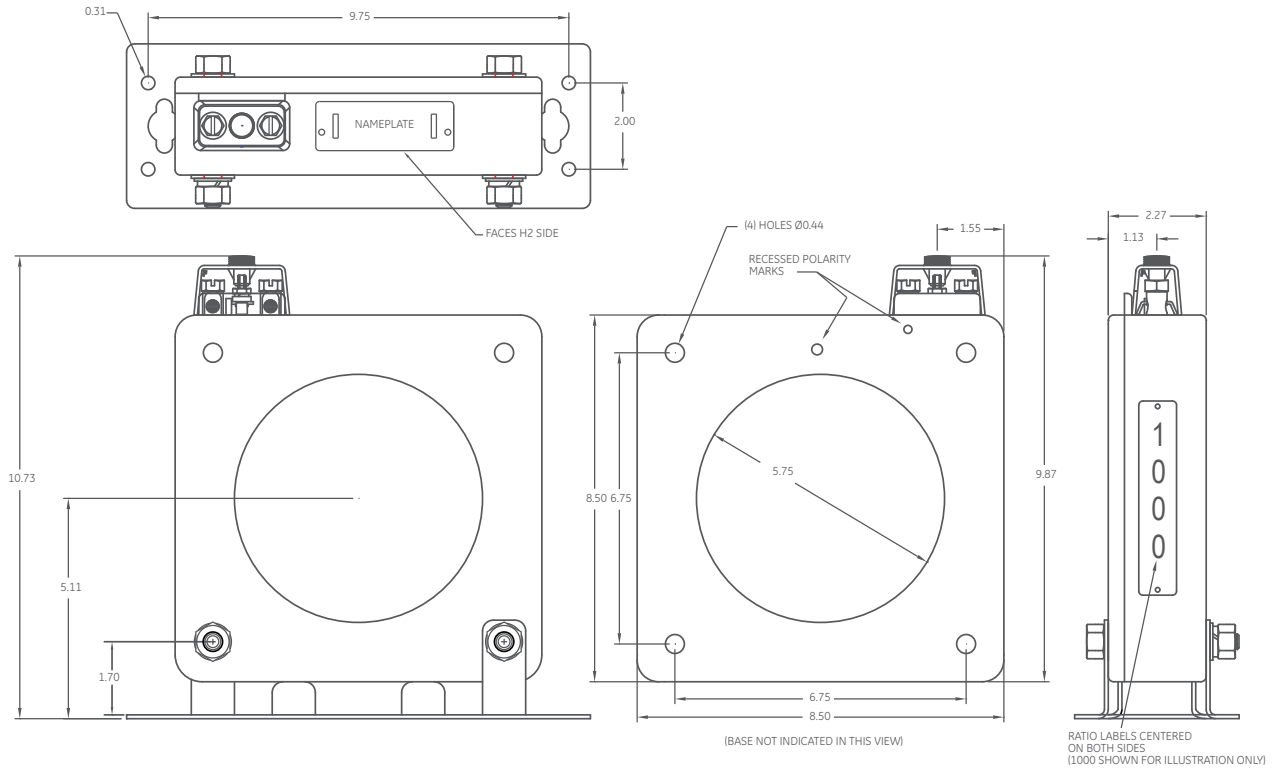
(1) Exceeds IEEE definition for standard accuracy. Maintains 0.6 Accuracy from 4% to 40% and 0.3 from 40% to Rating Factor.

JAD-0S RevenueSense Data Table

| CURRENT RATIO (AMPS) | IEEE METERING ACCURACY (60Hz) | RATING FACTOR | | CATALOG NUMBER | |
|----------------------|-------------------------------|---------------|------|----------------|------------|
| | | 30°C | 55°C | NO BASE | WITH BASE |
| 1200:5 | 0.15SB0.9 ² | 2 | 1.5 | 750X320001 | 750X320011 |
| 2000:5 | 0.15SB0.9 ² | 2 | 1.5 | 750X320002 | 750X320012 |
| 3000:5 | 0.15SB0.9 ² | 1.5 | 1 | 750X320003 | 750X320013 |

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

JAD-0W 1000:5 and 1500:5
 JAD-0S 2000:5 and 3000:5



Additional Utility Products Available from GE



LV Potential Transformers

- 600V class
- Fused and unfused models



MV Indoor Current & Potential Transformers

- 5-15kV, up to 110kV BIL class
- Polyurethane insulation
- Fused and unfused PT models
- Metering and relay accuracies



MV H-CEP Current & Potential Transformers

- 5-15kV, up to 110kV BIL class
- HCEP insulation
- Metering and relay accuracies
- High accuracy, extended range CT's available



MV HyBute 60™ Current & Potential Transformers

- 5-35kV, up to 200kV BIL class
- Butyl rubber insulation
- Metering and relay accuracies
- High accuracy, extended range CT's available



Superbute™ Potential Transformers

- 25-69kV, up to 350kV BIL class
- Butyl rubber insulation
- Up to 5kVA thermal rating
- Metering class at ZZ (400VA) burden



Superbute Current Transformers

- 25-69kV, up to 350kV BIL class
- Butyl rubber insulation
- Metering and relay accuracies
- High accuracy, extended range CT's available



kv2c ANSI Meters

- Designed for revenue class metering
- Commercial and industrial applications
- Robust revenue-grade meter design
- Two models available

GE Digital Energy

Toll Free: +1 877-605-6777

Direct: +1 678-844-6777

gedigitalenergy@ge.com

GEDigitalEnergy.com

IEEE is a registered trademark of the Institute of Electrical Electronics Engineers, Inc. GE, the GE monogram, Encompass, RevenueSense, FITZALL, Superbute and HyBute 60 are trademarks of the General Electric Company.

GE reserves the right to make changes to specifications of products described at any time without notice and without obligation to notify any person of such changes.

Copyright 2014, General Electric Company.



imagination at work