

CABINET - INSTRUMENT TRANSFORMER

Indoor - Outdoor

480 Volts - 800 Amperes Maximum

USE: 1. For commercial and industrial installations; purchased and installed by customer.

- 2. For use on the following services: 3 phase 3 wire 480 volts, 3 phase 4 wire 277/480 volts.
- 3. To enclose 600 volt insulation class instrument transformers on indoor or outdoor meter installations.
 - 4. For installing 2 or 3 each voltage transformers and current transformers with provisions to by-pass, remove, or replace while energized.

PREVIOUS REVISION	ORIGINATED	Previous Number
04-01-10	03-94	ER 15-456-B, 03-29-90

LATEST REVISION: Relocated potential transformer enclosure from left side of CT cabinet to right side of CT cabinet. Revised to new standard format.

SPECIFICATION:

1. GENERAL:

- 1.1 All current carrying parts should be designed on the basis of 1000 amperes per square inch capacity for copper and 700 amperes per square inch capacity for aluminum.
- 1.2 Dimensions shown are minimum.
- 1.3 Spacing between opposite polarity live parts and between live parts and ground, mounted on the same surface, not over 600 volts, shall be a minimum of 2 inches and 1 inch respectively, in accordance with the National Electrical Code, 408.56, latest revision.
- 1.4 Cabinets shall be marked by the manufacturer with the voltage, current rating, number of phases for which they are designed, and with the manufacturer's name or trademark so as to be visible after installation, without disturbing interior parts or wiring, in accordance with National Electrical Code, 408.58, latest revision.



DENOTES REVISION

NORTHERN INDIANA PUBLIC SERVICE COMPANY



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2.2 Cabinet Requirements:

2.2.1 Minimum Dimensions:

- 40 Inches High
- 11 Inches Deep
- 24 Inches Wide--Insulator Barriers
- 2.2.2 Material Minimum 14 gauge steel with enamel finish or 0.10 inch aluminum.
- 2.2.3 Front cover or door to be hinged and provided with sealing device so constructed that one padlock seal will effectively prevent opening or partially opening of the cover or door.
- 2.3 Current Transformer Primary Connection Plate:
 - 2.3.1 Material 1/4" x 4" x 5" copper or 1/4" x 5" x 5" aluminum.
 - 2.3.2 Drilled and tapped for current transformer, cable lug and by-pass jumper bolts.
 - 2.3.3 Drawing shows six (6) plates for mounting 3-600 volt class current transformers. When only two (2) current transformers are required, omit neutral and provide center phase link.
- 2.4 Neutral Connection Plate:
 - 2.4.1 Material Copper or aluminum.
 - 2.4.2 Drilled and tapped for cable lug bolts, No. 10-24 brass potential tap screw, and drilled or mounting bolts.
- 2.5 Bolts:
 - 2.5.1 Material Steel, zinc plated, ½" 13 thread, with flat washer and hex head nuts. For mounting CT's: 2-1/2" long, 8 req'd for 2 CT's, 12 req'd for 3 CT's. For mounting terminal lug: 2 ½" long, 8 req'd for 2 CT's, 12 req'd for 3 CT's. For mounting two hole terminal lugs on neutral plate: 3" long, 2 req'd.
 - 2.5.2 Material Steel, zinc plated, 1/4" 20 x 1-1/2" with washer and hex head nut for mounting insulator bus, 8 req'd.
 - 2.5.3 Material Steel, zinc plated, #10 24 x ½" with washer, for potential tap in neutral plate, 1 req'd.
- 2.6 Lugs:

Two hole cable terminal lug furnished for 2-500 KCM or larger copper conductors per phase: 6 req'd for 2 CT's 8 req'd for 3 CT's

- 2.7 Knockouts--Hubs: Size and location by Customer when required.
- 2.8 Voltage Transformer Bracket: Material: Steel or aluminum.

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2.9 Voltage Transformer Gutter:

- 2.9.1 The gutter shall be made of the same material and have the same thickness as the main cabinet.
- 2.9.2 The cover of the gutter shall be adequately secured by screws and shall be sealable.
- 2.9.3 A label shall be attached to the front of the transformer gutter designating "Transformer Connections Are Not To Be Made On This Gutter Assembly".

3. ADDITIONAL SPECIFICATIONS FOR OUTDOOR CABINET:

- 3.1 Cabinet:
 - 3.1.1 The door or front cover shall be made rain-tight with suitable gasket and top shall be protected with a rain shield.
 - 3.1.2 Rain-tight screened vent shall be located in the upper portion of the cabinet.
 - 3.1.3 All conduit shall enter the cabinet through the sides or bottom or through rain-tight hub on top.
 - 3.1.4 All hardware shall be rust resistant.

4. APPROVED MANUFACTURERS:

Manufacturer	Phases	Wire	Number of		Catalog Number	
			PT's	CT's	Indoor	Outdoor (Note 1)
Erickson Electrical Equip. Co. 475 Bonnie Ln. Elk Grove Village, Illinois	3	3	2	2	CT83-C*	CT83-C*
	3	4	3	3	CT84-C*	CT84-C*

* Since all the voltage transformers used with this cabinet are installed in a side gutter, the minimum cabinet width is reduced to 24 inches.

Note 1 - Optional vent kit (CAT#VENTKIT) must be ordered and installed for outdoor installations.