

PART 1 - GENERAL

1.1 RELATED REQUIREMENTS

- .1 Section 26 09 23.01 - Metering and Switchboard Instruments.
- .2 Section 26 24 02 - Service Entrance Board.

1.2 REFERENCES

- .1 CSA International
 - .1 CSA C60044-07 (R2011), Instrument Transformers.

1.3 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submit in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Product Data:
 - .1 Submit manufacturer's instructions, printed product literature and data sheets for control and signal transformers and include product characteristics, performance criteria, physical size, finish and limitations.

1.4 CLOSEOUT SUBMITTALS

- .1 Submit in accordance with Section 01 78 00 - Closeout Submittals.
- .2 Operation and Maintenance Data: submit operation and maintenance data for control and signal transformers for incorporation into manual.

1.5 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with Section 01 61 00 - Common Product Requirements and with manufacturer's written instructions.
 - .2 Delivery and Acceptance Requirements: deliver materials to site in original factory packaging, labelled with manufacturer's name and address.
 - .3 Storage and Handling Requirements:
 - .1 Store materials indoors and in accordance with manufacturer's recommendations in clean, dry, well-ventilated area.
 - .2 Store and protect control and signal transformers from nicks, scratches, and blemishes.
 - .3 Replace defective or damaged materials with new.
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- .4 Packaging Waste Management: remove for reuse and return of pallets, crates, padding, and packaging materials as specified in Construction Waste Management Plan Waste Reduction Workplan in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.

1.6 LEED 2009 REQUIREMENTS

- .1 LEED Documentation:
 - .1 Submit Material Safety Data Sheets (MSDS) or product data sheets, for all site applied interior paints, coatings, adhesives, sealants, sealant primers, concrete curing compounds, etc. to ensure compliance with LEED Requirements for low emitting materials as per Section 01 35 21.

PART 2 - PRODUCTS

2.1 POTENTIAL TRANSFORMERS (PT's)

- .1 Primary voltage: 360V.
- .2 Secondary voltage: 120V.
- .3 Ratio: 3:1
- .4 Frequency: 60Hz.
- .5 Power factor: 0.7.
- .6 Continuous thermal rating: 200VA.
- .7 700V insulation class transformer.
- .8 Primary and secondary terminals: compression type with slot screws accessible from the top of the the transformer.
- .9 Core: high-grade, grain-oriented steel, wound core.
- .10 Primary and secondary coils: wound from coated copper.
- .11 Housing: polyurethane.

2.2 CURRENT TRANSFORMERS (CT's)

- .1 Ratio: 600:5A, 100:5A,
 - .2 Frequency: 60Hz.
 - .3 VA rating: 15VA.
 - .4 600V insulation class transformer.
 - .5 Terminals: brass studs with one flatwasher, lockwasher, and regular nut.
 - .6 2 wire CT.
 - .7 Metering accuracy: 0.3 B0.9.
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2.3 MOUNTING BRACKETS

- .1 Potential transformers mounting brackets.
- .2 Fabricate brackets and channels from electrogalvanized code gauge painted steel.

2.4 LEED 2009 REQUIREMENTS

- .1 All site applied interior paints, coatings, adhesives, sealants, sealant primers, concrete curing compounds, etc. to comply with LEED Requirements for low emitting materials as per Section 01 35 21 - LEED 2009 Requirements.

PART 3 - EXECUTION

3.1 EXAMINATION

- .1 Verification of Conditions: verify that conditions of substrate previously installed under other Sections or Contracts are acceptable for control and signal transformers installation in accordance with manufacturer's written instructions.
 - .1 Visually inspect substrate in presence of Departmental Representative.
 - .2 Inform Departmental Representative of unacceptable conditions immediately upon discovery.
 - .3 Proceed with installation only after unacceptable conditions have been remedied and after receipt of written approval to proceed from Departmental Representative.

3.2 INSTALLATION

- .1 Install instrument transformers and ensure accessibility.

3.3 CLEANING

- .1 Progress Cleaning: clean in accordance with Section 01 74 11 - Cleaning.
 - .1 Leave Work area clean at end of each day.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 - Cleaning.
- .3 Waste Management: separate waste materials for reuse and recycling in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.
 - .1 Remove recycling containers and bins from site and dispose of materials at appropriate facility.

3.4 PROTECTION

- .1 Protect installed products and components from damage during construction.
- .2 Repair damage to adjacent materials caused by control and signal transformers installation.