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| Version | Date | Description of Revisions |
| 1 | August 30, 2006 | Approved final document. |
| 2 | February 19, 2010 | Modified ‘Related Sections’ and approved suppliers |
| 3 | June 25, 2013 | Final Draft – Consolidated Comments Spec Update Project. Incorporation of new Commissioning and Computerized Maintenance Management System Data Requirements Specification cross references. |
| 4 | July 30, 2014 | Changes to reflect renaming of commissioning specification and final review (AV) |
| **5** | **February 4, 2015** | **Updated, Finalized Specification – Reference eDOCS #5630511 v7 (AV) and amended company corporate name** |
| 6 | February 10, 2017 | Removed name manufacturers and added to the performance based specifications. (CPD PMO, OMM) (AV) Added reference standards (Ontario Electrical Safety Code, 26th edition, 2015, NEMA 250-2014) (AAM) |

NOTE:

This is a CONTROLLED Document. Any documents appearing in paper form are not controlled and should be checked against the on-line file version prior to use.

**Notice:** This Document hardcopy must be used for reference purpose only.

**The on-line copy is the current version of the document.**

# GEneral

## Related Sections

### [Under "Related Sections", identify other Sections that are related to, and/or dependent on, the work results or information specified elsewhere. The list should be limited to Sections with specific information that the reader might expect to find in this Section, but is specified elsewhere. For example, if hardware for aluminum entrances is specified in the aluminum entrance Section, a cross-reference would be appropriate in the finish hardware Section. The purpose of this cross-referencing is for information only, to aid in finding those other requirements—not to define the scope of the Section.

### Cross-referencing here may also be used to coordinate assemblies or systems whose components may span multiple Sections and which must meet certain performance requirements as an assembly or system.

### Contractor is responsible for coordination of the Work. Contractor is responsible for being familiar with and incorporating all required elements of cross-referenced Specifications cited.

### This Section is to be completed/updated during the design development by the Consultant. If it is not applicable to the section for the specific project it may be deleted.]

### [List Sections specifying installation of products supplied but not installed under this Section and indicate specific items.]

### Section [\_\_\_\_\_\_ – \_\_\_\_\_\_\_\_\_\_\_\_]: Execution requirements for ...[item]... specified under this Section.

### [List Sections specifying products installed but not supplied under this Section and indicate specific items.]

### Section [\_\_\_\_\_\_ – \_\_\_\_\_\_\_\_\_\_\_\_]: Product requirements for ...[item]... for installation under this Section.

### [List Sections specifying related requirements.]

### Section [\_\_\_\_\_\_ – \_\_\_\_\_\_\_\_\_\_\_\_]: [Optional short phrase indicating relationship].

### Section 01250 – Substitutions

### Section 01425 - Computerized Maintenance Management System Data Requirements

### Section 01810 – Equipment Testing and Facility Commissioning

### Section 16010 – Electrical General Requirements

### [Division 13 – SCADA and Instrumentation - insert applicable specifications]

### Product requirements for [item]... for installation under this Section

## References

### Canadian Standards Association (CSA)

#### Ontario Electrical Safety Code, 26th edition, 2015

### National Electrical Manufacturers Association

#### NEMA 250-2014 Enclosures for electrical equipment (1,000 V Maximum)

## Measurement and Payment

*[Choose one of the following payment language provisions that best suits the individual project.*

*If this Section is not specifically referenced by an item in the Bid Form, please use the following language:*

### The work of this Section will not be measured separately for payment. All costs associated with the work of this Section shall be included in the Contract Price.

*OR If this Section is specifically referenced in the Bid Form, use the following language and identify the relevant item in the Bid Form:*

### All costs associated with the work of this Section shall be included in the price(s) for Item No(s). \_\_\_ in the Bid Form.

*If the work of this Section is to be measured and paid for by several different methods, please amend the standard wording given above to reflect the different methods of measurement and payment.*]

## Product Data

### Submit product data in accordance with Section 01300 – Submittals.

### Submit the manufacturer's data for all disconnect switches.

### Identify the motor or equipment served by each switch on each nameplate inscription.

### All other required information as detailed in the equipment information template and electronically up-loadable to the CMMS (Maximo). Comply with Section 01425 - Computerized Maintenance Management System Data Requirements

# PRODUCTS

## Disconnect Switches

### Supply and install safety switches, fused or non-fused, as required complete with fuses as shown on the Contract Drawings or required by Ontario Electrical Code. *[Consultant to amend previous sentence as required]* Safety switches shall be quick make and quick break construction with safety interlock and kW (HP) ratings as indicated in the Contract Documents.

### Fusible and non-fusible, disconnect switch in NEMA Enclosure type 1, size as indicated in the Contract Documents.

### Provision for padlocking in off switch position by [three] locks.

### Mechanically interlocked door to prevent opening when the handle is in the ON position.

### Fuses: On load side of switch size as indicated in the Contract Documents.

### Fuse holders: re-locatable and suitable without adaptors, for type and size of fuse indicated in the Contract Documents.

### Quick-make, quick-break action.

### ON-OFF switch position indication on switch enclosure cover.

### Switches shall be housed in a NEMA [xx] enclosure when located indoors and NEMA 4X enclosure when located outdoors.

### For switches 100A and over, provide non-tracking arc shrouds.

### Supply neutral bar.

### Provide ground bar for ground termination.

### Provide dry auxiliary contact interlocked with switch mechanism.

### There shall be a window in the door that allows for quick and easy viewing of the inside.

## Equipment Identification

### Provide equipment identification in accordance with Section 16010 - Electrical General Requirements.

### Indicate the name of the load controlled on a size 4 nameplate.

# EXECUTION

## Installation

### Install disconnect switches complete with fuses if applicable.

### Provide spare fuses after the completion of the fuse study and tests as defined in the Contract Documents. [Consultant to ensure the fuse study, testing procedures and coordination study referred to above are part of the Contract Documents. Consultant to insert citation for where these documents are located in the Contract]

## Commissioning

### For all commissioning activities on systems where components of this Section are integral to functionality, refer to Section 01810 – Equipment Testing and Facility Commissioning. All inspection and testing activities shall be completed in accordance with the commissioning plan that shall be provided to the Consultant prior to the start of commissioning activities.

**END OF SECTION**