

Part 1 General

1.1 SHOP DRAWINGS AND PRODUCT DATA

- .1 Submit shop drawings and product data in accordance with Section 26 05 01.
- .2 Shop drawing information to include detailed scope of work regarding retrofit of distribution panels shown on drawings. Details to include but are not limited to:
 - .1 Number and duration of shutdowns required.
 - .2 Details of work included in each shutdown.
 - .3 Details of work not included.
- .3 Shop drawing information to include voltage, ampacity, interrupting capacity, enclosure and retro-fit dimensions, branch breaker types, quantity, and amperage.

1.2 OPERATION AND MAINTENANCE DATA

- .1 Provide data for incorporation into Electrical Maintenance Manual specified in Section 26 05 01.

1.3 PANEL RETRO-FIT

- .1 A new panel interior is to be retro-fit into existing upright switchgear assembly.
- .2 Contractor is to retain the services of a qualified electrical distribution equipment supplier to design, build, and install a retro-fit panel interior into an existing upright switchgear assembly.
- .3 New panel interior retro-fit to be CSA approved.
- .4 Retro-fit interior to have feeding installed ground and neutral bars and field adjustable depth to match existing panel.

Part 2 Products

2.1 PANELBOARDS

- .1 Panelboards: to CSA C22.2 No. 29.
- .2 In addition to CSA requirements, Manufacturer's nameplate must show fault current that panel including breakers has been built to withstand.
- .3 Panelboards to be product of one manufacturer, throughout project.
- .4 Sequence phase bussing with odd numbered breakers on left and even on right, with each breaker identified by permanent number identification as to circuit number.
- .5 Panelboards: mains, number of circuits, and number and size of branch circuit breakers as indicated.
- .6 Silver plated copper bus with full size neutral.

- .7 Mains suitable for bolt-on breakers.
- .8 Finish trim and door to match existing switchgear assembly.
- .9 Panelboards shall be complete with a factory mounted grounding bus with one terminal per circuit.

2.2 BREAKERS

- .1 Breakers to Section 26 28 21.
- .2 Breakers with thermal magnetic-tripping in panelboards except as indicated otherwise.
- .3 Breakers servicing motors to include current limiting.
- .4 Breakers less than 19mm wide will not be permitted.
- .5 All branch breakers shall be bolt-on type.
- .6 Branch breakers in panelboards shall be rated at not less than 18,000 amps symmetrical interrupting capacity at 600 volts.
- .7 Two and three pole breakers shall have one common simultaneous trip.

Part 3 Execution

3.1 INSTALLATION

- .1 Installation of retro-fit panelboard interior to be completed by manufacturer representative to CSA requirements.
- .2 Retro-fit panelboard interior as indicated and mount securely, plumb, true and square, in existing switchgear enclosure.
- .3 Connect loads to circuits as indicated.
- .4 Connect neutral conductors to common neutral bus with respective neutral identified. Circuits sharing a neutral shall be consecutive breakers in the panel (i.e. 1, 3, 5 or 12, 14,16).
- .5 Thoroughly vacuum all panelboards to remove construction debris and dust, prior to installation of panel covers.

3.2 EQUIPMENT IDENTIFICATION

- .1 Provide equipment identification in accordance with Section 26 05 01.
- .2 Nameplate for each breaker size 5 engraved in accordance with Section 26 05 01. Indicate load identification (RTU-1). Mount on exterior face of panelboard cover.

END OF SECTION 26 24 17