

1.0 GENERAL

.1 Manufacturers

.1 Subject to compliance with specifications, the following manufacturers are acceptable:

- .1 Eaton.
- .2 Schneider.

.2 Rating

.1 Switchboard: indoor, [] V, [] A, [] Phase, [] Wire, 60 Hz, minimum short circuit [] kA (rms symmetrical).

.3 Enclosure

- .1 Main incoming section to contain:
 - .1 Moulded case circuit breaker with solid state trip unit (LSIG), sized as indicated.
 - .2 Customer digital power meter: Must connect to existing BCIT Foreseer metering software.
 - .3 Surge Protection Device.
- .2 Distribution sections to contain:
 - .1 Moulded case circuit breaker with solid state trip unit, sized as indicated.
 - .2 Silver flashed copper bus, from main section to distribution sections including vertical bussing.
- .3 Blanked off spaces for future units.
- .4 Metal enclosed, free standing, floor mounted, dead front, indoor, CSA Enclosure 2, sprinkler proof cubicle unit.
- .5 Ventilating louvres: Vermin, insect, sprinkler proof with easily replaceable fibre glass filters.
- .6 Access from front only.
- .7 Steel channel sills for base mounting in single length common to multi-cubicle switchboard.
- .8 Provision for future extension.

.4 Busbars

- .1 [Three] phase and full capacity neutral silver flashed copper Busbars, continuous current rating [2000]A self-cooled, extending full width of multi-cubicle switch board], suitably supported on insulators.

- .2 Main connections between bus and major switching component to have continuous current rating to match major switching components.
- .3 Busbars and main connections: 99.30% conductivity copper.
- .4 Provision for extension of bus on [left] [right] side of unit without need for further drilling or preparation in field.
- .5 Silver surfaced joints, secured with non-corrosive bolts and Belleville washers.
- .6 Identify phases of busbars by suitable marking.
- .7 Busbar connectors, when switchboard shipped in more than one section.

.5 Grounding

- .1 Copper ground bus not smaller than 50 x 6 mm extending full width of multi-cubicle switchboard and situated at bottom.
- .2 Lugs at each end for size 2/0 AWG grounding cable.

.6 Circuit Breakers

- .1 Moulded case circuit breaker, bolt-on, solid state trip unit.
- .2 Breaker interrupting capacity: [] kAIC RMS symmetrical.
- .3 Breaker tripping devices, solid state as indicated;
 - .1 Instantaneous overcurrent relays.
 - .2 Overvoltage relay.
 - .3 Undervoltage relay.
 - .4 Time overcurrent relay.
 - .5 Time-delay relay.
 - .6 Ground fault relay.
- .4 Trip setting devices: dials.
- .5 Auxiliary contacts: 2 – N.O., 2 – N.C.
- .6 Provide spare parts as recommended by the manufacturer for a maintenance period of at least 2 years. Coordinate requirements with BCIT Facilities.

*** END OF SWITCHBOARDS SECTION ***