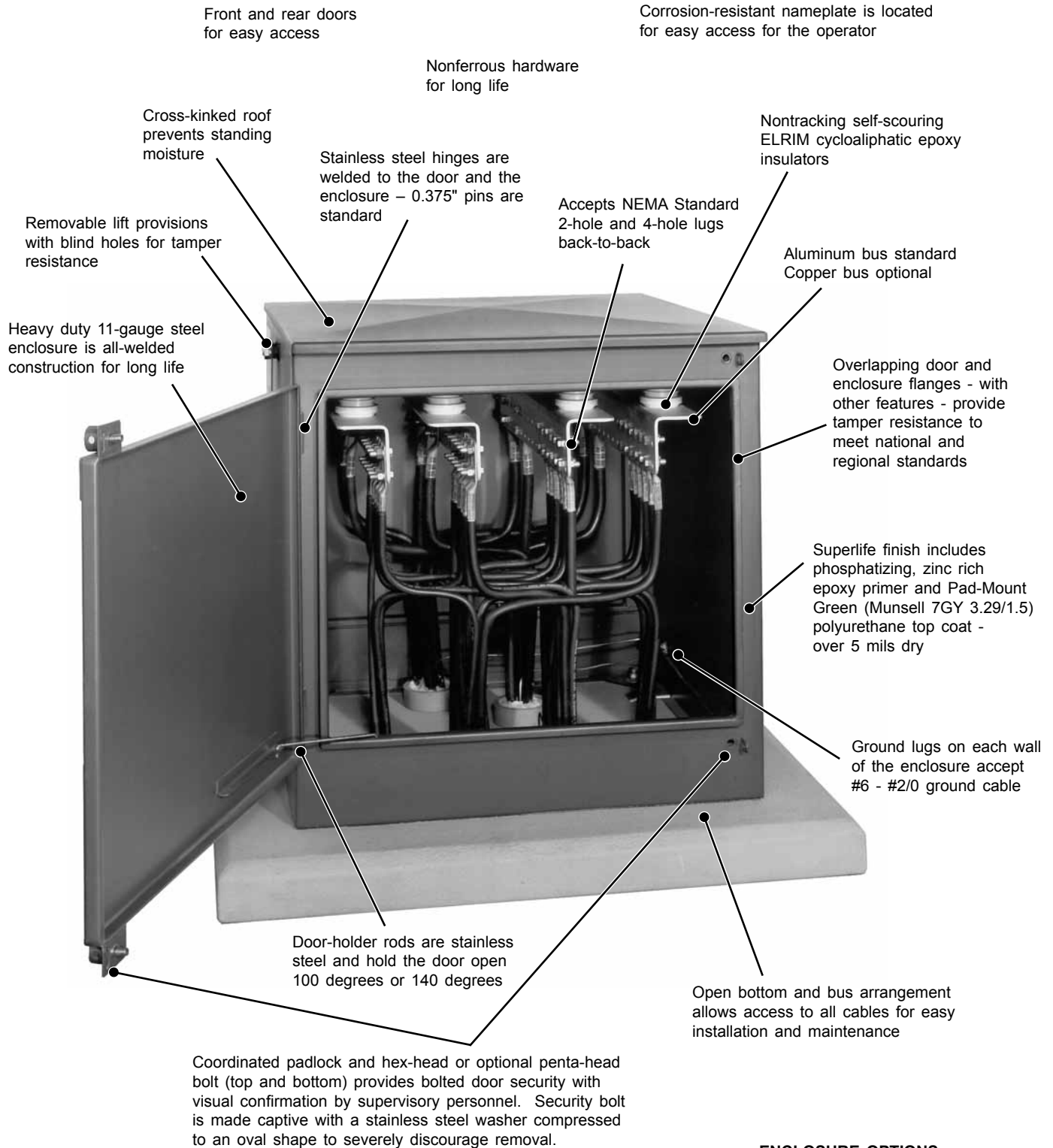




600-Volt Secondary Bus Enclosure

Three-Phase Pad-Mounted - Outdoor

Bulletin
340-062
Page 1 2010



Front and rear doors for easy access

Corrosion-resistant nameplate is located for easy access for the operator

Nonferrous hardware for long life

Cross-kinked roof prevents standing moisture

Stainless steel hinges are welded to the door and the enclosure - 0.375" pins are standard

Nontracking self-scouring ELRIM cycloaliphatic epoxy insulators

Removable lift provisions with blind holes for tamper resistance

Accepts NEMA Standard 2-hole and 4-hole lugs back-to-back

Aluminum bus standard
Copper bus optional

Heavy duty 11-gauge steel enclosure is all-welded construction for long life

Overlapping door and enclosure flanges - with other features - provide tamper resistance to meet national and regional standards

Superlife finish includes phosphatizing, zinc rich epoxy primer and Pad-Mount Green (Munsell 7GY 3.29/1.5) polyurethane top coat - over 5 mils dry

Ground lugs on each wall of the enclosure accept #6 - #2/0 ground cable

Door-holder rods are stainless steel and hold the door open 100 degrees or 140 degrees

Open bottom and bus arrangement allows access to all cables for easy installation and maintenance

Coordinated padlock and hex-head or optional penta-head bolt (top and bottom) provides bolted door security with visual confirmation by supervisory personnel. Security bolt is made captive with a stainless steel washer compressed to an oval shape to severely discourage removal.

ENCLOSURE OPTIONS:

- 1) 0.125" #5052H32 Aluminum
- 2) 12-gauge #304L Stainless Steel



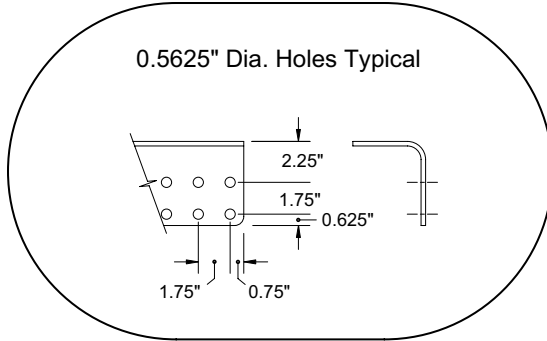
600-Volt Secondary Bus Enclosure

Three-Phase

Pad-Mounted - Outdoor

Bulletin
340-062
Page 2 2010

Bus Selection Information

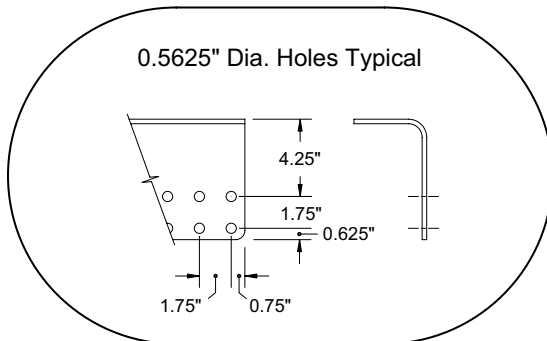


Standard Bus:

Four Single 0.25" x 8" Aluminum Bus
1,500/1,750 Amp at 30/45 degree C rise over
40 degree C Ambient

Alternate Bus:

Four Single 0.25" x 8" Copper Bus
2,000/2,300 Amp at 30/45 degree C rise over
40 degree C Ambient

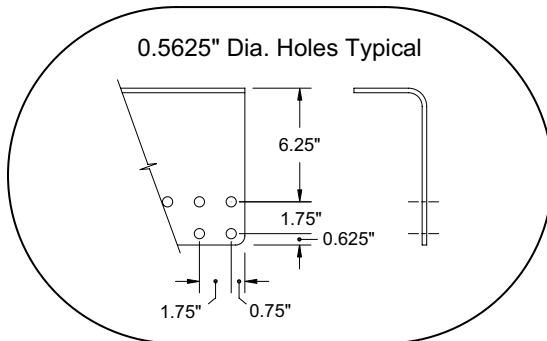


Standard Bus:

Four Single 0.25" x 10" Aluminum Bus
1,800/2,100 Amp at 30/45 degree C rise over
40 degree C Ambient

Alternate Bus:

Four Single 0.25" x 10" Copper Bus
2,400/2,800 Amp at 30/45 degree C rise over
40 degree C Ambient

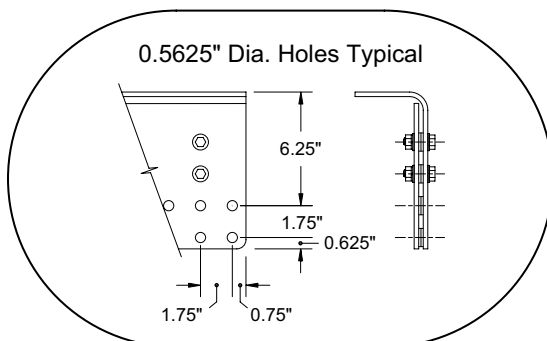


Standard Bus:

Four Single 0.25" x 12" Aluminum Bus
2,100/2,500 Amp at 30/45 degree C rise over
40 degree C Ambient

Alternate Bus:

Four Single 0.25" x 12" Copper Bus
2,800/3,400 Amp at 30/45 degree C rise over
40 degree C Ambient



Standard Bus:

Four Sets: 1 - 0.25" x 12" and
1 - 0.25" x 8" Aluminum Bus
2,700/3,400 Amp at 30/45 degree C rise over
40 degree C Ambient

Alternate Bus:

Four Sets: 1 - 0.25" x 12" and
1 - 0.25" x 8" Copper Bus
3,600/4,500 Amp at 30/45 degree C rise over
40 degree C Ambient



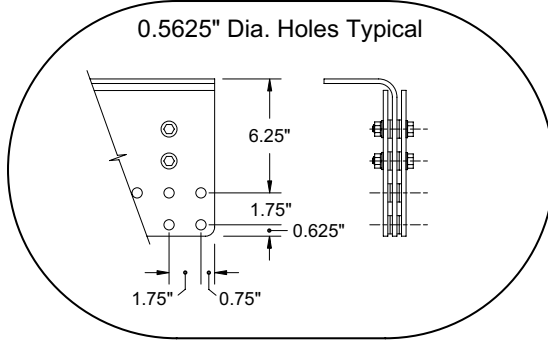
600-Volt Secondary Bus Enclosure

Three-Phase

Pad-Mounted - Outdoor

Bulletin
340-062
Page 3 2010

Bus Selection Information

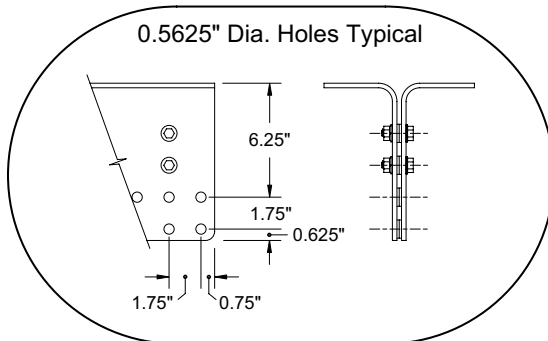


Standard Bus:

Four Sets: 1 - 0.25" x 12" and
2 - 0.25" x 8" Aluminum Bus
3,000/3,800 Amp at 30/45 degree C rise over
40 degree C Ambient

Alternate Bus:

Four Sets: 1 - 0.25" x 12" and
2 - 0.25" x 8" Copper Bus
4,000/5,100 Amp at 30/45 degree C rise over
40 degree C Ambient

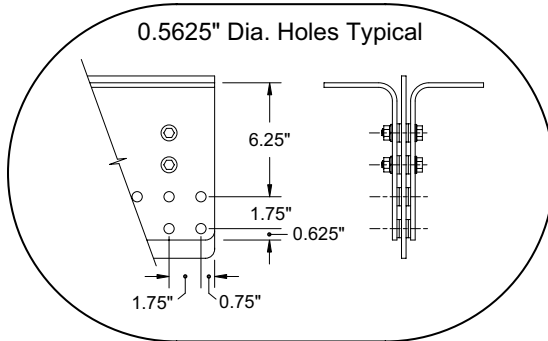


Standard Bus:

Four Sets: 2 - 0.25" x 12" Aluminum Bus
3,200/4,000 Amp at 30/45 degree C rise over
40 degree C Ambient

Alternate Bus:

Four Sets: 2 - 0.25" x 12" Copper Bus
4,250/5,300 Amp at 30/45 degree C rise over
40 degree C Ambient

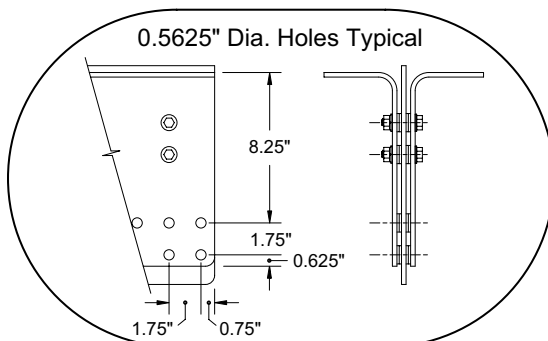


Standard Bus:

Four Sets: 2 - 0.25" x 12" and
1 - 0.25" x 10" Aluminum Bus
3,750/4,650 Amp at 30/45 degree C rise over
40 degree C Ambient

Alternate Bus:

Four Sets: 2 - 0.25" x 12" and
1 - 0.25" x 10" Copper Bus
5,000/6,200 Amp at 30/45 degree C rise over
40 degree C Ambient



Standard Bus:

Four Sets: 2 - 0.25" x 14" and
1 - 0.25" x 12" Aluminum Bus
4,500/5,500 Amp at 30/45 degree C rise over
40 degree C Ambient

Alternate Bus:

Four Sets: 2 - 0.25" x 14" and
1 - 0.25" x 12" Copper Bus
6,000/7,400 Amp at 30/45 degree C rise over
40 degree C Ambient

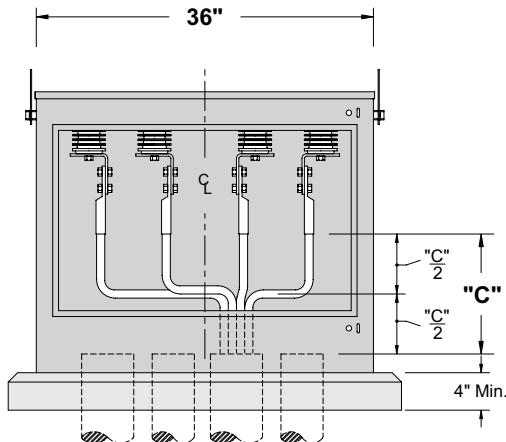


600-Volt Secondary Bus Enclosure

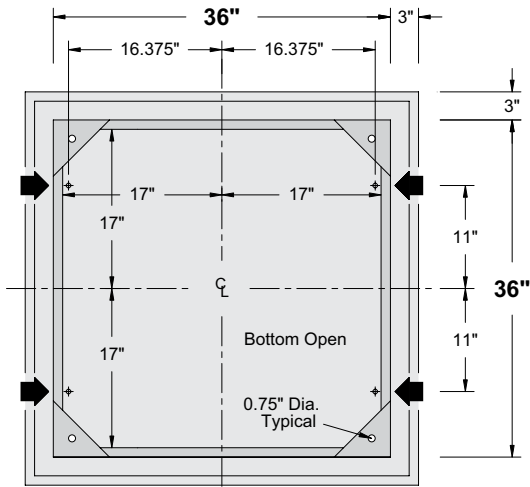
Three-Phase Pad-Mounted - Outdoor

Bulletin
340-062
Page 4 2010

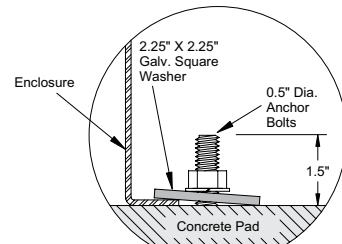
Cable Training and Anchor Bolt Locations



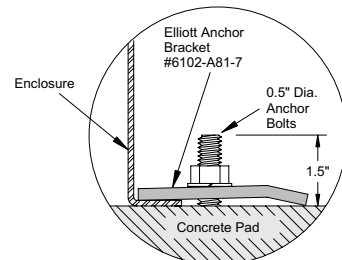
Front & Rear View
Door Removed



+ Anchor Bolt Locations
Section BB
and Typical Pad Dimensions



Alternate #1



Alternate #2

Catalog Number	Dim. "C"
ESBE-0.6-331-36W36D-30H	Measure in the Field
ESBE-0.6-331-36W36D-36H	Measure in the Field
ESBE-0.6-331-36W36D-42H	Measure in the Field
ESBE-0.6-331-36W36D-48H	Measure in the Field

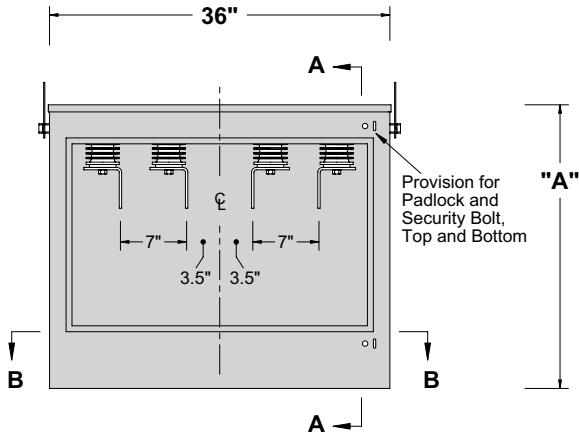
Secondary Bus Enclosures are available in other size enclosures, bus ratings and current transformer provisions. If you do not find a model to fit your need, please contact our representative or the factory.



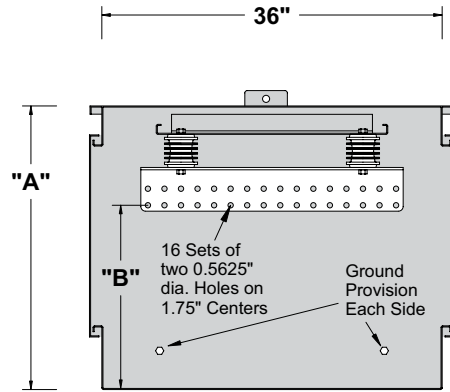
600-Volt Secondary Bus Enclosure

Three-Phase Pad-Mounted - Outdoor

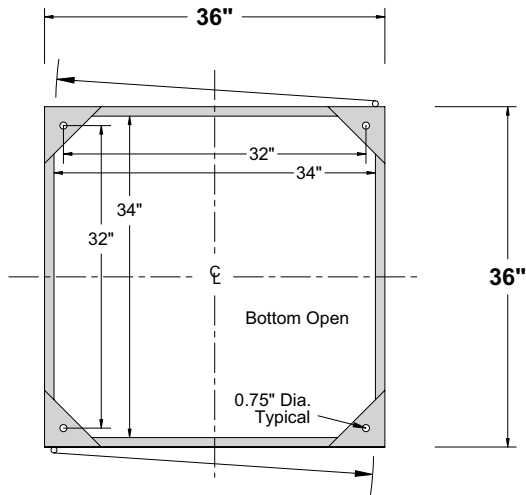
Bulletin
340-062
Page 5 2010



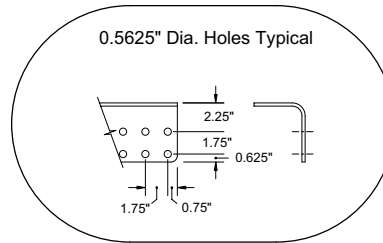
Front & Rear View
Door Removed



Section AA



Section BB



Standard Bus:
Four Single 0.25" x 8" Aluminum Bus
1,500/1,750 Amp at 30/45 degree C rise over
40 degree C Ambient

Alternate Bus:
Four Single 0.25" x 8" Copper Bus
2,000/2,300 Amp at 30/45 degree C rise over
40 degree C Ambient

Catalog Number	Dim. "A"	Dim. "B"
ESBE-0.6-331-36W36D-30H	30"	19.375"
ESBE-0.6-331-36W36D-36H	36"	25.375"
ESBE-0.6-331-36W36D-42H	42"	31.375"
ESBE-0.6-331-36W36D-48H	48"	37.375"

Secondary Bus Enclosures are available in other size enclosures, bus ratings and current transformer provisions. If you do not find a model to fit your need, please contact our representative or the factory.

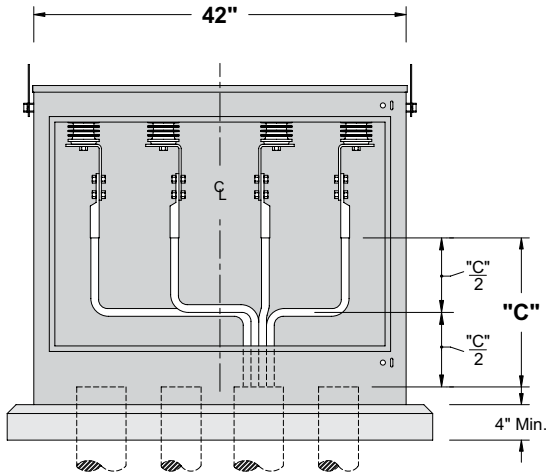


600-Volt Secondary Bus Enclosure

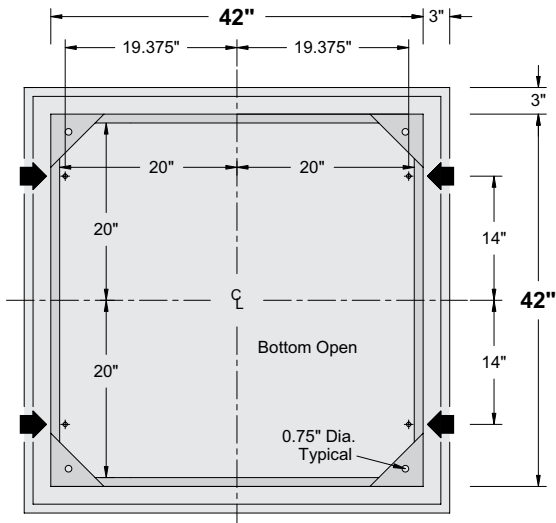
Three-Phase Pad-Mounted - Outdoor

Bulletin
340-062
Page 6 2010

Cable Training and Anchor Bolt Locations

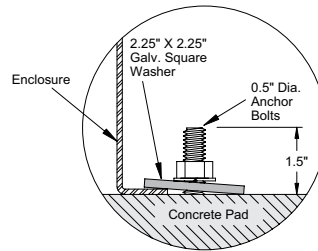


Front & Rear View
Door Removed

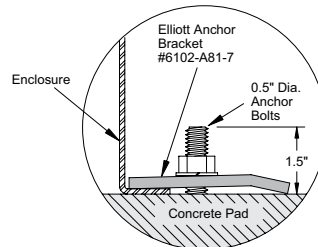


➔ ◀ Anchor Bolt Locations

Section BB
and Typical Pad Dimensions



Alternate #1



Alternate #2

Catalog Number	Dim. "C"
ESBE-0.6-331-42W42D-36H	Measure in the Field
ESBE-0.6-331-42W42D-42H	Measure in the Field
ESBE-0.6-331-42W42D-48H	Measure in the Field
ESBE-0.6-331-42W42D-54H	Measure in the Field

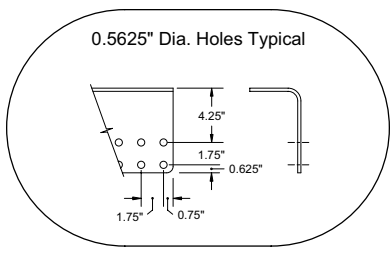
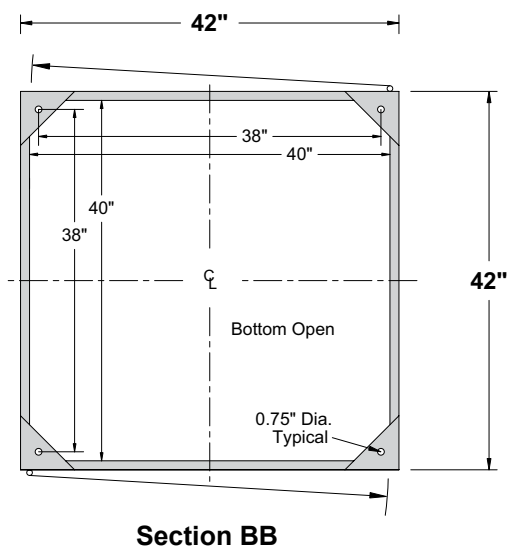
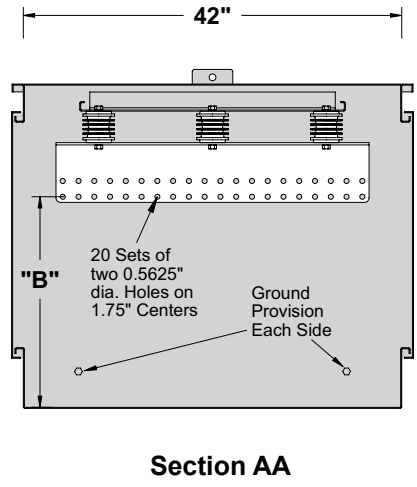
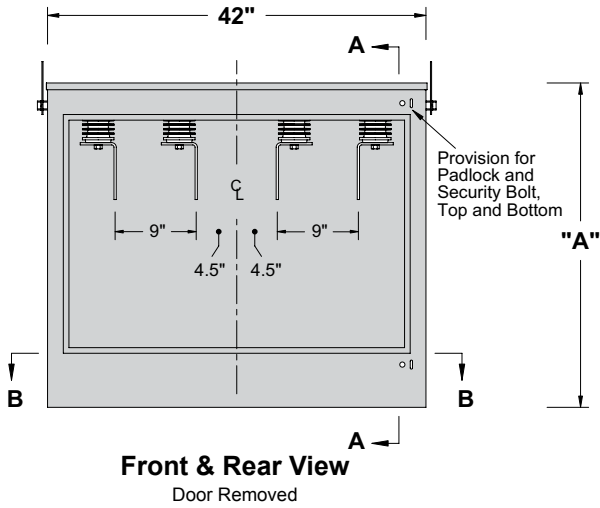
Secondary Bus Enclosures are available in other size enclosures, bus ratings and current transformer provisions. If you do not find a model to fit your need, please contact our representative or the factory.



600-Volt Secondary Bus Enclosure

Three-Phase Pad-Mounted - Outdoor

Bulletin
340-062
Page 7 2010



Standard Bus:
Four Single 0.25" x 10" Aluminum Bus
1,800/2,100 Amp at 30/45 degree C rise over
40 degree C Ambient

Alternate Bus:
Four Single 0.25" x 10" Copper Bus
2,400/2,800 Amp at 30/45 degree C rise over
40 degree C Ambient

Catalog Number	Dim. "A"	Dim. "B"
ESBE-0.6-331-42W42D-36H	36"	23.375"
ESBE-0.6-331-42W42D-42H	42"	29.375"
ESBE-0.6-331-42W42D-48H	48"	35.375"
ESBE-0.6-331-42W42D-54H	54"	41.375"

Secondary Bus Enclosures are available in other size enclosures, bus ratings and current transformer provisions. If you do not find a model to fit your need, please contact our representative or the factory.

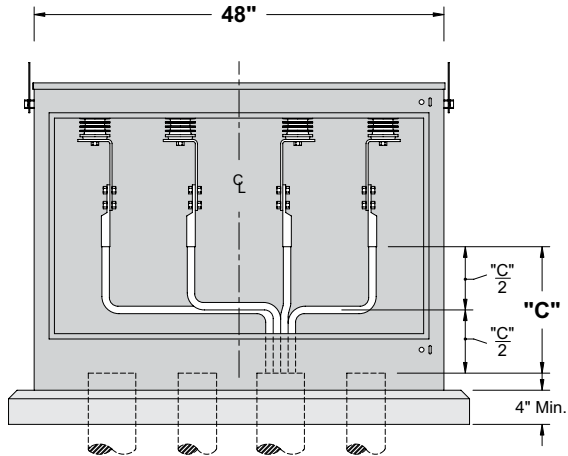


600-Volt Secondary Bus Enclosure

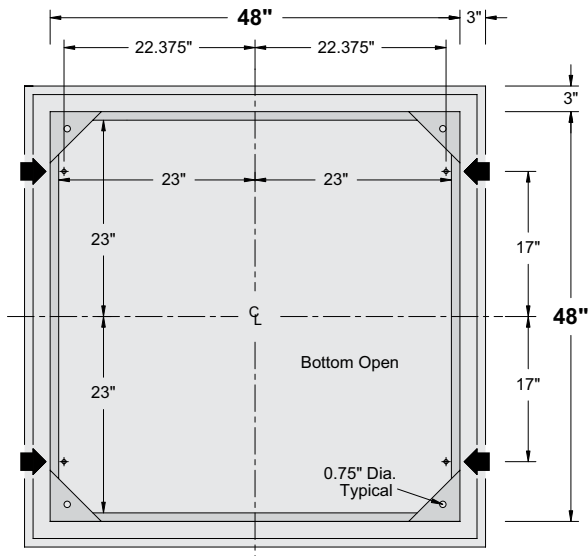
Three-Phase Pad-Mounted - Outdoor

Bulletin
340-062
Page 8 2010

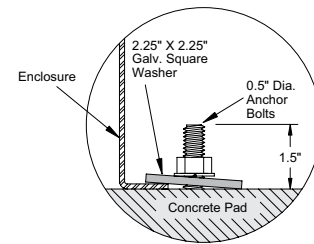
Cable Training and Anchor Bolt Locations



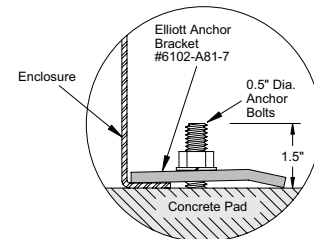
Front & Rear View
Door Removed



+ ← Anchor Bolt Locations
Section BB
and Typical Pad Dimensions



Alternate #1



Alternate #2

Catalog Number	Dim. "C"
ESBE-0.6-331-48W48D-36H	Measure in the Field
ESBE-0.6-331-48W48D-42H	Measure in the Field
ESBE-0.6-331-48W48D-48H	Measure in the Field
ESBE-0.6-331-48W48D-54H	Measure in the Field

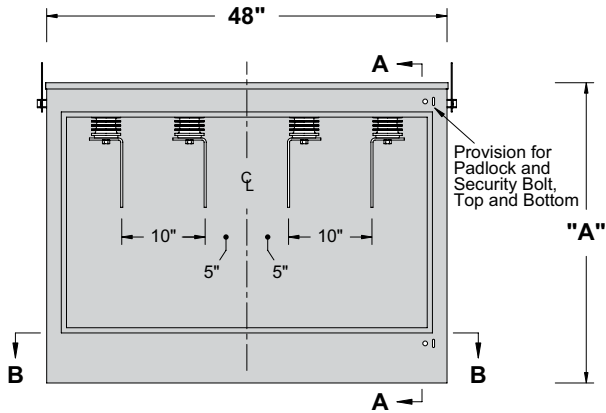
Secondary Bus Enclosures are available in other size enclosures, bus ratings and current transformer provisions. If you do not find a model to fit your need, please contact our representative or the factory.



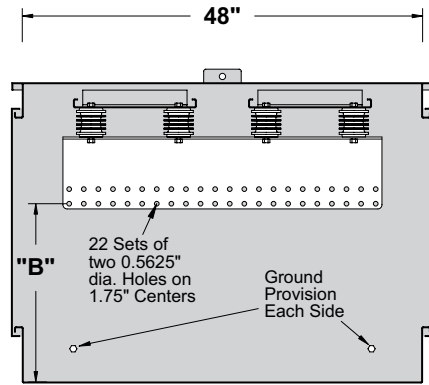
600-Volt Secondary Bus Enclosure

Three-Phase Pad-Mounted - Outdoor

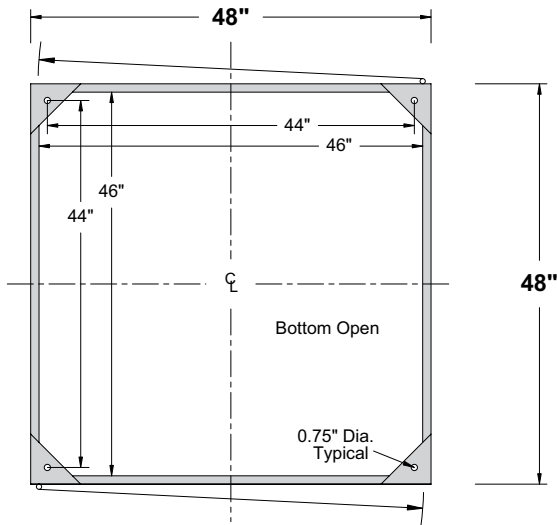
Bulletin
340-062
Page 9 2010



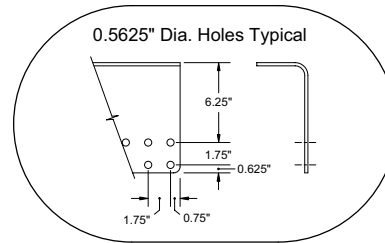
Front & Rear View
Door Removed



Section AA



Section BB



Standard Bus:
Four Single 0.25" x 12" Aluminum Bus
2,100/2,500 Amp at 30/45 degree C rise over
40 degree C Ambient

Alternate Bus:
Four Single 0.25" x 12" Copper Bus
2,800/3,400 Amp at 30/45 degree C rise over
40 degree C Ambient

Catalog Number	Dim. "A"	Dim. "B"
ESBE-0.6-331-48W48D-36H	36"	21.375"
ESBE-0.6-331-48W48D-42H	42"	27.375"
ESBE-0.6-331-48W48D-48H	48"	33.375"
ESBE-0.6-331-48W48D-54H	54"	39.375"

Secondary Bus Enclosures are available in other size enclosures, bus ratings and current transformer provisions. If you do not find a model to fit your need, please contact our representative or the factory.

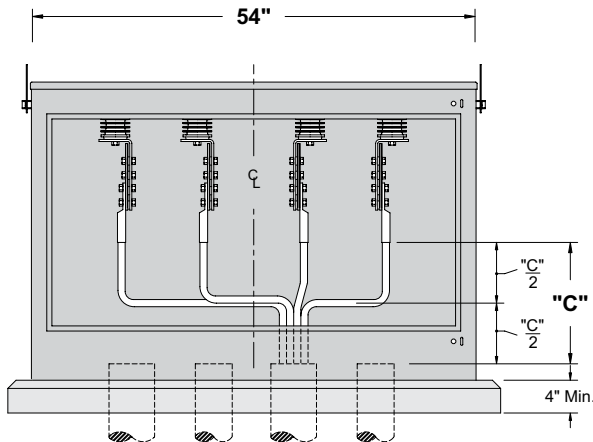


600-Volt Secondary Bus Enclosure

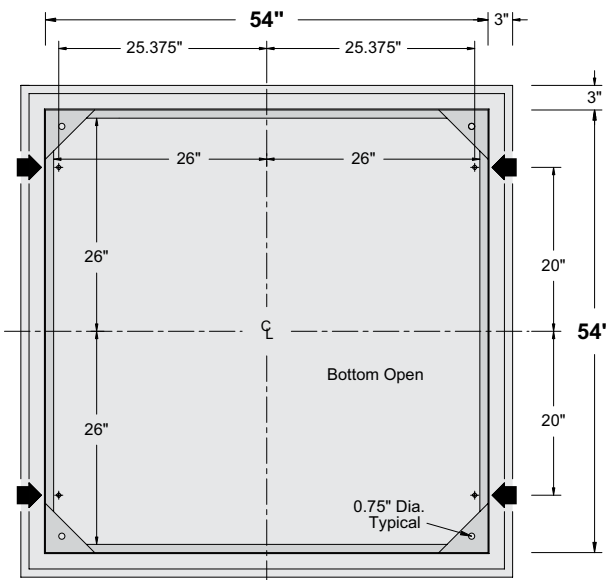
Three-Phase Pad-Mounted - Outdoor

Bulletin
340-062
Page 10 2010

Cable Training and Anchor Bolt Locations

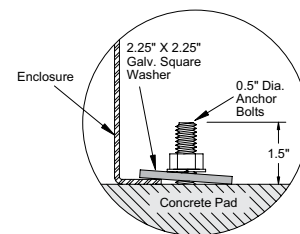


Front & Rear View
Door Removed

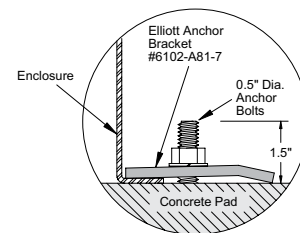


➔ Anchor Bolt Locations

Section BB
and Typical Pad Dimensions



Alternate #1



Alternate #2

Catalog Number	Dim. "C"
ESBE-0.6-331-54W54D-36H	Measure in the Field
ESBE-0.6-331-54W54D-42H	Measure in the Field
ESBE-0.6-331-54W54D-48H	Measure in the Field
ESBE-0.6-331-54W54D-54H	Measure in the Field

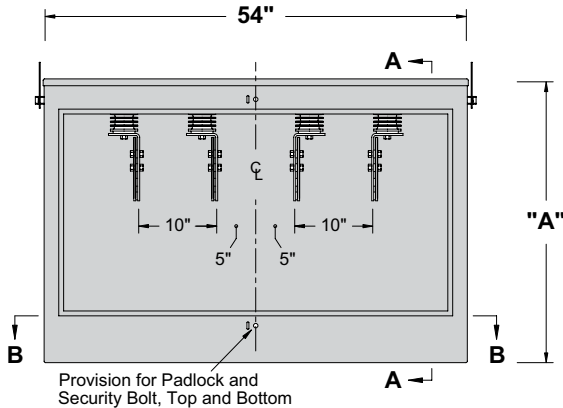
Secondary Bus Enclosures are available in other size enclosures, bus ratings and current transformer provisions. If you do not find a model to fit your need, please contact our representative or the factory.



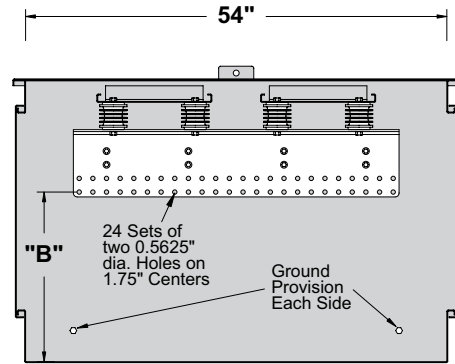
600-Volt Secondary Bus Enclosure

Three-Phase Pad-Mounted - Outdoor

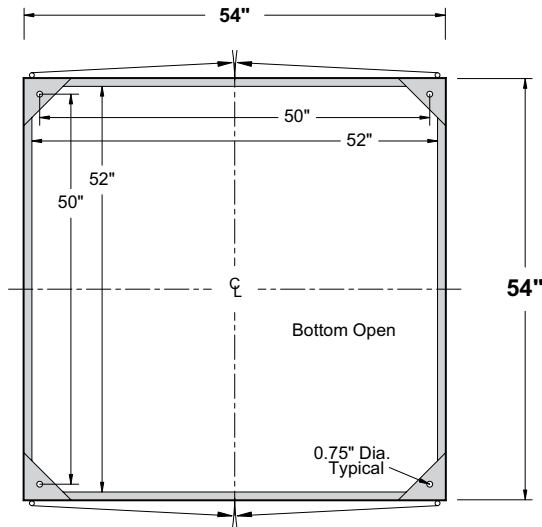
Bulletin
340-062
Page 11 2010



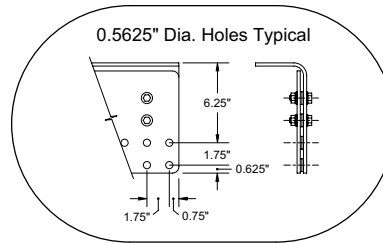
Front & Rear View
Doors Removed



Section AA



Section BB



Standard Bus:
Four Sets: 1 - 0.25" x 12" and
1 - 0.25" x 8" Aluminum Bus
2,700/3,400 Amp at 30/45 degree C rise over
40 degree C Ambient

Alternate Bus:
Four Sets: 1 - 0.25" x 12" and
1 - 0.25" x 8" Copper Bus
3,600/4,500 Amp at 30/45 degree C rise over
40 degree C Ambient

Catalog Number	Dim. "A"	Dim. "B"
ESBE-0.6-331-54W54D-36H	36"	21.375"
ESBE-0.6-331-54W54D-42H	42"	27.375"
ESBE-0.6-331-54W54D-48H	48"	33.375"
ESBE-0.6-331-54W54D-54H	54"	39.375"

Secondary Bus Enclosures are available in other size enclosures, bus ratings and current transformer provisions. If you do not find a model to fit your need, please contact our representative or the factory.

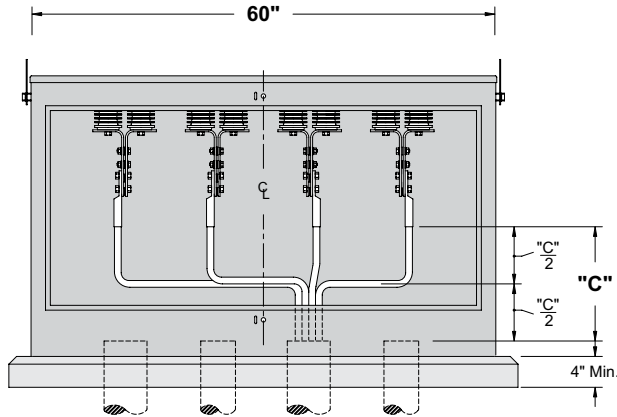


600-Volt Secondary Bus Enclosure

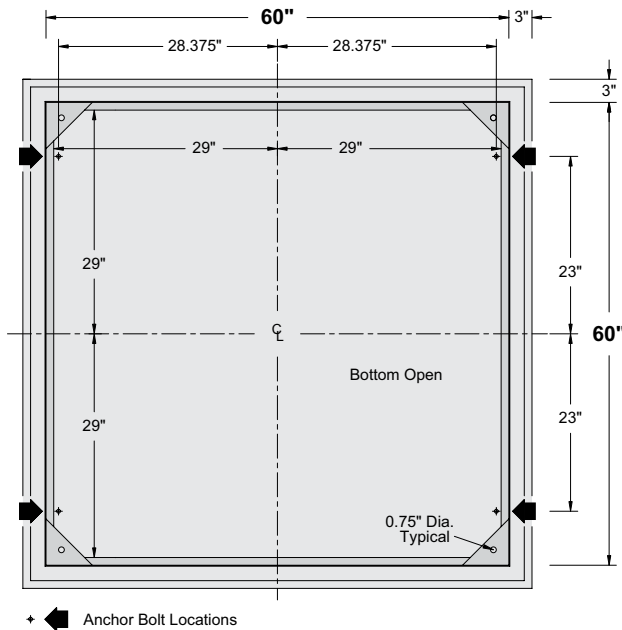
Three-Phase Pad-Mounted - Outdoor

Bulletin
340-062
Page 12 2010

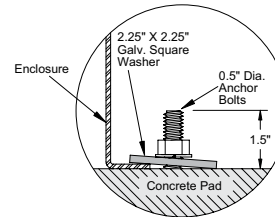
Cable Training and Anchor Bolt Locations



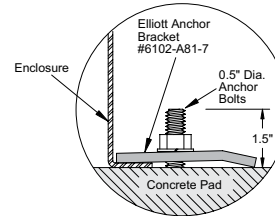
Front & Rear View
Door Removed



Section BB
and Typical Pad Dimensions



Alternate #1



Alternate #2

Catalog Number	Dim. "C"
ESBE-0.6-331-60W60D-36H	Measure in the Field
ESBE-0.6-331-60W60D-42H	Measure in the Field
ESBE-0.6-331-60W60D-48H	Measure in the Field
ESBE-0.6-331-60W60D-54H	Measure in the Field

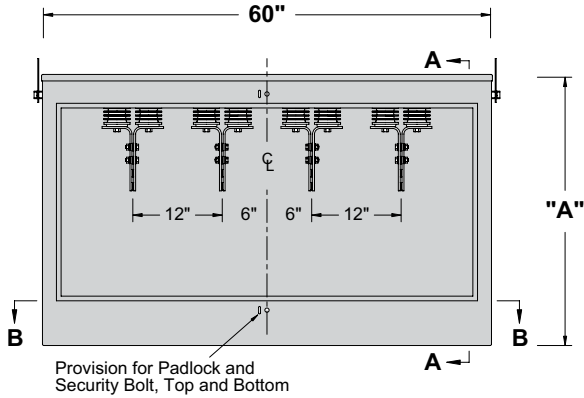
Secondary Bus Enclosures are available in other size enclosures, bus ratings and current transformer provisions. If you do not find a model to fit your need, please contact our representative or the factory.



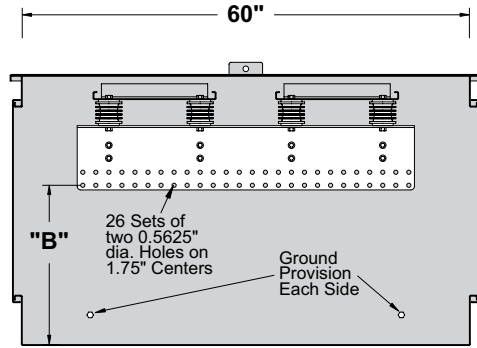
600-Volt Secondary Bus Enclosure

Three-Phase Pad-Mounted - Outdoor

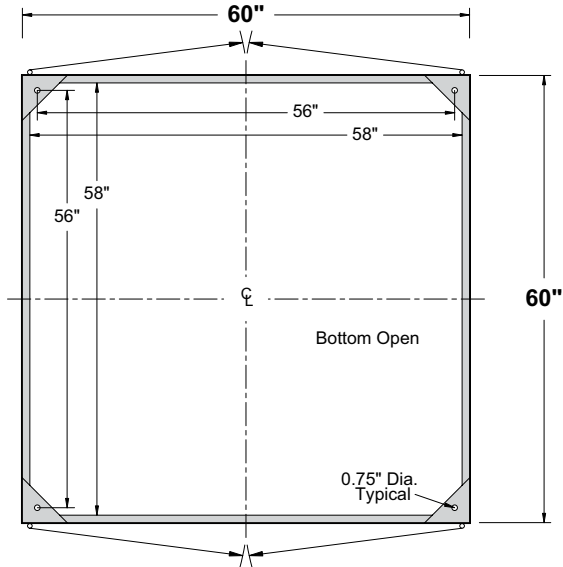
Bulletin
340-062
Page 13 2010



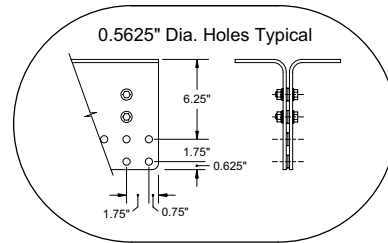
Front & Rear View
Doors Removed



Section AA



Section BB



Standard Bus:
Four Sets: 2 - 0.25" x 12" Aluminum Bus
3,200/4,000 Amp at 30/45 degree C rise over
40 degree C Ambient

Alternate: Bus:
Four Sets: 2 - 0.25" x 12" Copper Bus
4,250/5,300 Amp at 30/45 degree C rise over
40 degree C Ambient

Catalog Number	Dim. "A"	Dim. "B"
ESBE-0.6-331-60W60D-36H	36"	21.375"
ESBE-0.6-331-60W60D-42H	42"	27.375"
ESBE-0.6-331-60W60D-48H	48"	33.375"
ESBE-0.6-331-60W60D-54H	54"	39.375"

Secondary Bus Enclosures are available in other size enclosures, bus ratings and current transformer provisions. If you do not find a model to fit your need, please contact our representative or the factory.

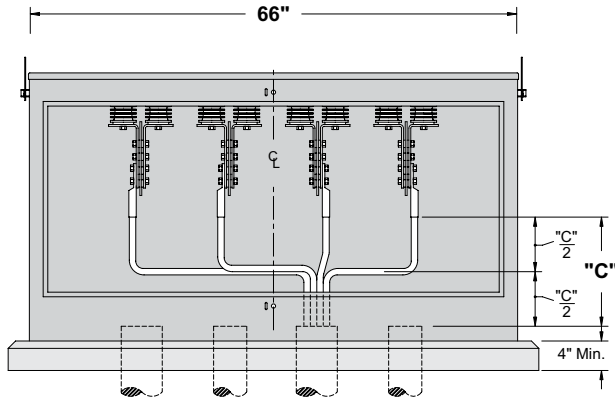


600-Volt Secondary Bus Enclosure

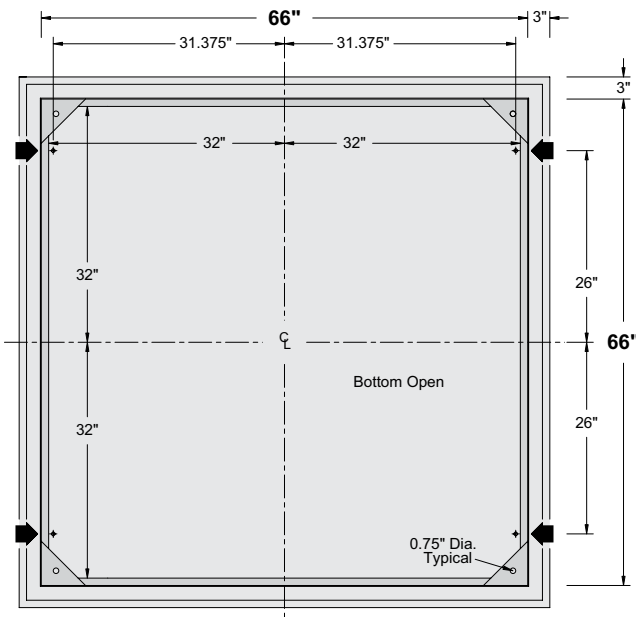
Three-Phase Pad-Mounted - Outdoor

Bulletin
340-062
Page 14 2010

Cable Training and Anchor Bolt Locations

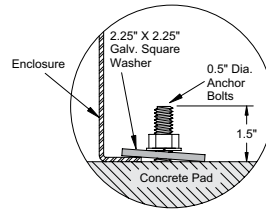


Front & Rear View
Door Removed

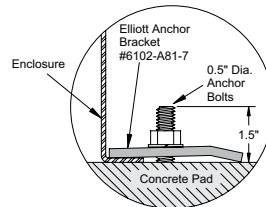


➔ Anchor Bolt Locations

Section BB
and Typical Pad Dimensions



Alternate #1



Alternate #2

Catalog Number	Dim. "C"
ESBE-0.6-331-66W66D-36H	Measure in the Field
ESBE-0.6-331-66W66D-42H	Measure in the Field
ESBE-0.6-331-66W66D-48H	Measure in the Field
ESBE-0.6-331-66W66D-54H	Measure in the Field

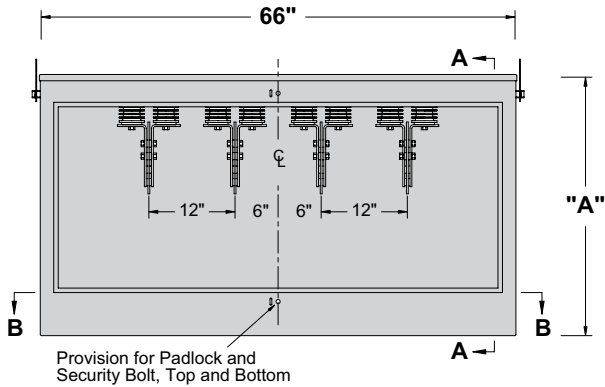
Secondary Bus Enclosures are available in other size enclosures, bus ratings and current transformer provisions. If you do not find a model to fit your need, please contact our representative or the factory.



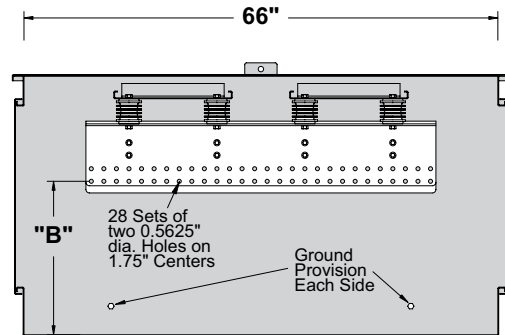
600-Volt Secondary Bus Enclosure

Three-Phase Pad-Mounted - Outdoor

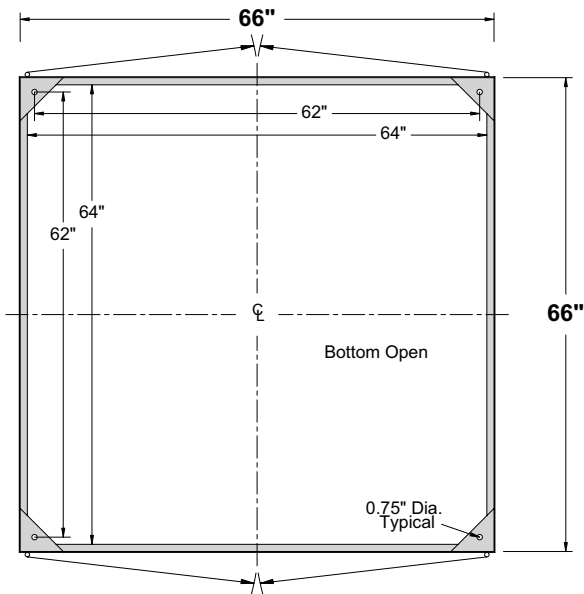
Bulletin
340-062
Page 15 2010



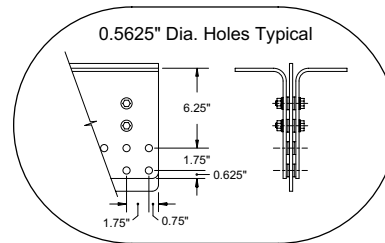
Front & Rear View
Doors Removed



Section AA



Section BB



Standard Bus:

Four Sets: 2 - 0.25" x 12" and
1 - 0.25" x 10" Aluminum Bus
3,750/4,650 Amp at 30/45 degree C rise over
40 degree C Ambient

Alternate Bus:

Four Sets: 2 - 0.25" x 12" and
1 - 0.25" x 10" Copper Bus
5,000/6,200 Amp at 30/45 degree C rise over
40 degree C Ambient

Catalog Number	Dim. "A"	Dim. "B"
ESBE-0.6-331-66W66D-36H	36"	21.375"
ESBE-0.6-331-66W66D-42H	42"	27.375"
ESBE-0.6-331-66W66D-48H	48"	33.375"
ESBE-0.6-331-66W66D-54H	54"	39.375"

Secondary Bus Enclosures are available in other size enclosures, bus ratings and current transformer provisions. If you do not find a model to fit your need, please contact our representative or the factory.



600-Volt Secondary Bus Enclosure

Three-Phase Pad-Mounted - Outdoor

Bulletin
340-062
Page 16 2010

Typical Specification

General

The secondary bus enclosure shall be 600 volt class, suitable for use on systems that do not exceed 600 volts to ground (nor 1000 volts phase to phase). The bus shall be constructed for connection to the electrical system with two-hole and/or four-hole NEMA Standard bolt-on cable-terminal lugs (terminal lugs shall be supplied by the user). Tamper resistance shall meet the Enclosure Security requirements of IEEE Standard C57.12.28 (Pad-Mounted Equipment—Enclosure Integrity) to resist unauthorized entry, protect authorized and unauthorized persons, and provide positive safety features when installed in areas accessible to the general public. The enclosure shall be constructed for outdoor installation in areas subject to heavy precipitation and in areas of windblown contamination. The equipment shall be completely assembled prior to shipment.

Enclosure Construction

The enclosure shall be tamper-resistant, all-welded construction utilizing 11-gauge minimum sheet steel. Corner plates and braces shall be used as necessary to assure rigidity. The enclosure top shall be cross-kinked to provide watershed and rigidity. The enclosure shall be open bottom with a 1-inch flange inside, all around. The door(s) shall be furnished with a stainless steel door holder that will latch the door open 100 degrees and 140 degrees and resist accidental closing. Door(s) shall be provided with provisions for padlocking and a recessed hex-head (or optional penta-head) security bolt to prevent unauthorized entry (coordinated to prevent installation of the padlock until the security bolt is tightened *when closing the door(s)* and to prevent a wrench from operating the security bolt until the padlock is removed *when opening the door(s)*). The security bolt shall be made captive with a stainless steel washer compressed to an oval shape to severely discourage removal. Hinges shall be stainless steel (with stainless steel pins not less than 0.3125-inch diameter) and shall be welded to both the enclosure and the door(s) to maintain door alignment for the life of the equipment. The enclosure shall be nonventilated to minimize the entrance of airborne contamination, insects, rodents or reptiles. The protective finish shall include necessary grinding, 5-stage cleaning and phosphatizing, two-component rust-inhibiting zinc rich epoxy primer and a Pad-Mount Green two-component polyurethane top coat finish (Munsell color 7GY 3.29/1.5). The primer and top coat shall be electronically monitored during application to insure proper ratio and mixing of each component. Total average thickness of paint (after curing) shall be not less than 5 mils. The protective coating shall meet the Enclosure Coating System requirements of IEEE Standard C57.12.28 (Pad-Mounted Equipment—Enclosure Integrity). Removable lift provisions, adequate to withstand handling with normal utility equipment, shall be provided on the outside of the enclosure. Threaded openings for lift provision bolts shall be blind holes to prevent the entrance of wire or other foreign objects into the enclosure when lift provisions are removed.

Bus and Bus Mountings

The bus shall be aluminum (Alternate #1—bare copper, Alternate #2—tin-plated copper) with all burrs and sharp corners removed prior to installation. It shall be punched with multiple sets (Alternate #1—as shown on the drawings, Alternate #2—specify number) of two 0.5625-inch diameter holes on 1.75-inch centers to accommodate both two-hole and four-hole NEMA standard cable-terminal lugs. When the bus for each phase is constructed with more than one conductor, two 0.25-inch x 0.5625-inch ID x 1-inch OD spacers shall be supplied for each set of two 0.5625-inch diameter holes. The spacers shall be the same metal alloy as the bus conductor. A minimum of two insulators shall be provided for each bus. The insulators shall be cycloaliphatic epoxy and shall be mounted in a manner that will allow field replacement with standard tools without removal of cables that may be bolted to the bus. Insulators and bus bars shall be installed with stainless steel mounting hardware to provide long life and reduced maintenance. All components shall be arranged to allow visual inspection without de-energizing or removing the equipment from service.

Grounding Provisions

Two high-conductivity bronze eyebolt-type ground lugs, which accept #6 through #2/0 copper conductor, shall be installed in the cable terminating compartment (located on each side of the door opening in an accessible position).

Accessory Equipment

An anodized aluminum nameplate shall be installed inside one door on the cable compartment. It shall be located at the top corner farthest from the cables when the door is open. The nameplate will provide Type of Equipment, Model Number, Amps Continuous, kV Maximum, BIL, Serial Number, Date Manufactured and Weight of Equipment.

When specified, one "Warning - Keep Out! - Hazardous Voltage" sign, Elliott #7201-W2003-316, shall be provided on the outside of each door.

When specified, four anchor-bolt brackets, Elliott #6102-A81-7 or approved equal, shall be supplied with each secondary bus enclosure to provide a means of clamping the equipment to the concrete pad.

Packaging

Each secondary bus enclosure shall be bolted to a solid-top wood pallet (to prevent the forks of a forklift truck from entering the open bottom of the equipment) to prevent hidden damage. The equipment shall be wrapped with 0.125-inch thick polyethylene foam or other suitable material to minimize damage to the finish during shipment.

Drawings

When specified, drawings shall be furnished for each secondary bus enclosure that include:

- 1) enclosure dimensions and location of components.
- 2) proposed cable-training layout and dimensions.
- 3) proposed pad dimensions and location of anchor bolts.