

Three-Phase - Pad-Mounted - Outdoor

Bulletin

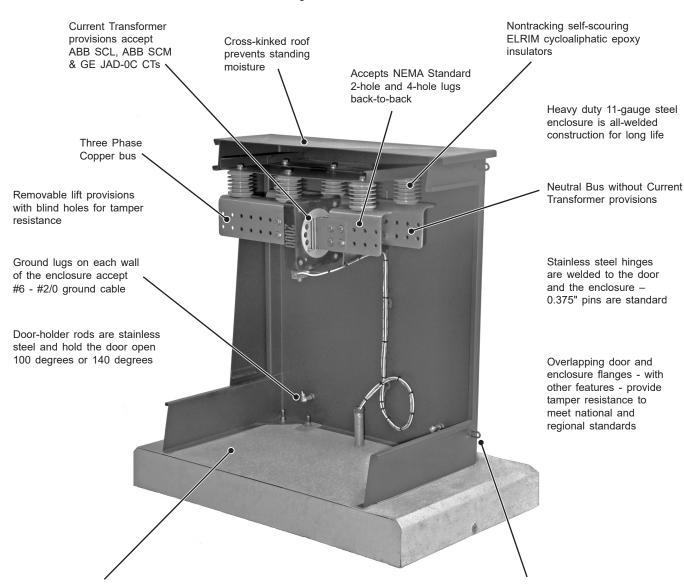
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Front and rear doors for easy access

Nonferrous hardware for long life

Corrosion proof nameplate is located to provide easy access for the operator



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

Superlife finish includes phosphatizing, rust-inhibiting epoxy primer and Pad-Mount Green (Munsell 7GY 3.29/1.5) polyurethane top coat Optional Color: Grey (Munsell 5BG 7.0/0.4)

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) 11-gauge Mild Steel
- 2) 12-gauge #304L Stainless Steel



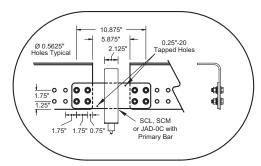
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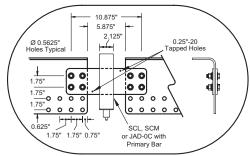
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Bus Selection Information



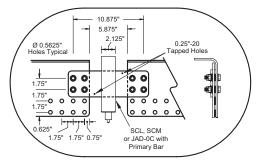
Supplied in 42"W x 42"D Enclosure - See Pages 4 & 5

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



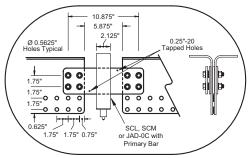
Supplied in 48"W x 48"D Enclosure - See Pages 6 & 7

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



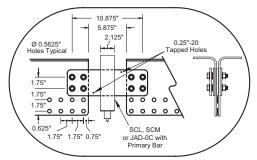
Supplied in 54"W x 54"D Enclosure - See Pages 8 & 9

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



Supplied in 60"W x 60"D Enclosure - See Pages 10 & 11

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



Supplied in 66"W x 66"D Enclosure - See Pages 12 & 13

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



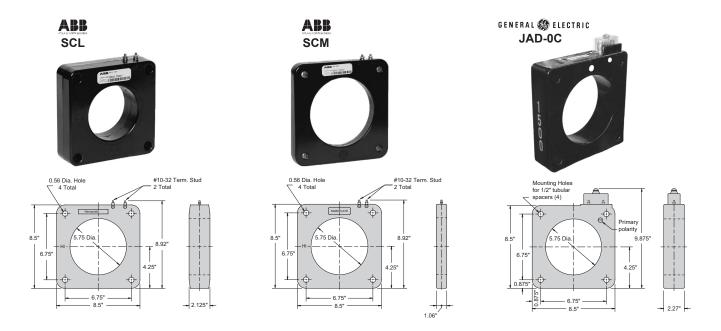
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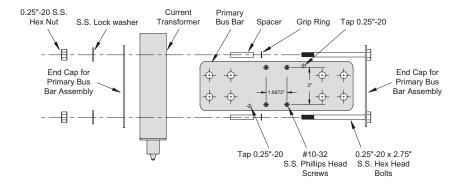
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Current Transformer Information

See Page 15 for Ratios and Catalog Numbers



Removable Primary Bus Bars are supplied with all Bus Enclosures



Removable Primary Bus Bar Assembly for SCL, SCM, and JAD-0C Current Transformers

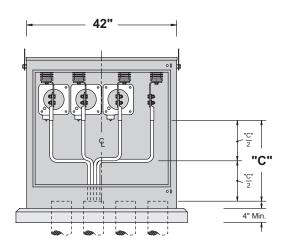


Three-Phase - Pad-Mounted - Outdoor

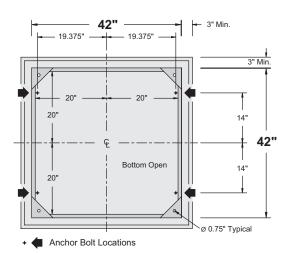
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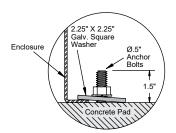
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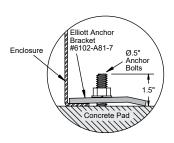
Typical Cable Training Dim. "C" - Measure in the Field



Section BB and Typical Pad Dimensions



Alternate #1



Alternate #2

Catalog Number	Dim. "C"
ESBE-0.6-331-CT-42W42D-36H-D87231	Measure in the Field
ESBE-0.6-331-CT-42W42D-42H-D87231	Measure in the Field
ESBE-0.6-331-CT-42W42D-48H-D87231	Measure in the Field
ESBE-0.6-331-CT-42W42D-54H-D87231	Measure in the Field



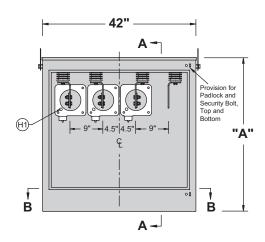
Three-Phase - Pad-Mounted - Outdoor

Bulletin

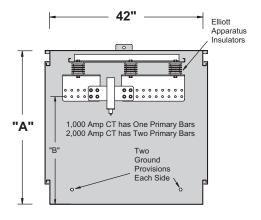
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Page 5

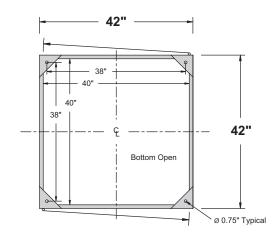
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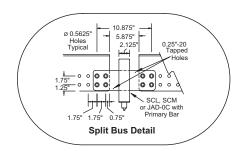
Front View Rear View Opposite Hand Door Removed



Section AA



Section BB



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-CT-42W42D-36H-D87231	36"	23.375"
ESBE-0.6-331-CT-42W42D-42H-D87231	42"	29.375"
ESBE-0.6-331-CT-42W42D-48H-D87231	48"	35.375"
ESBE-0.6-331-CT-42W42D-54H-D87231	54"	41.375"

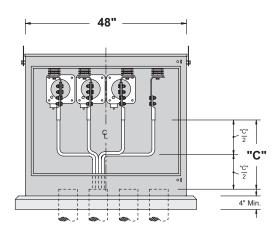


Three-Phase - Pad-Mounted - Outdoor

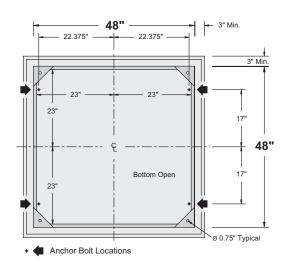
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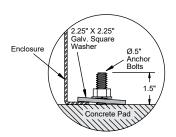
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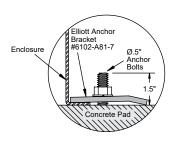
Typical Cable Training Dim. "C" - Measure in the Field



Section BB and Typical Pad Dimensions



Alternate #1



Alternate #2

Catalog Number	Dim. "C"
ESBE-0.6-331-CT-48W48D-36H-D2001048	Measure in the Field
ESBE-0.6-331-CT-48W48D-42H-D2001048	Measure in the Field
ESBE-0.6-331-CT-48W48D-48H-D2001048	Measure in the Field
ESBE-0.6-331-CT-48W48D-54H-D2001048	Measure in the Field

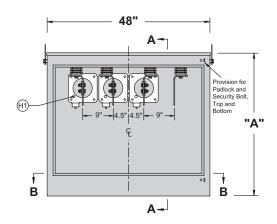


Three-Phase - Pad-Mounted - Outdoor

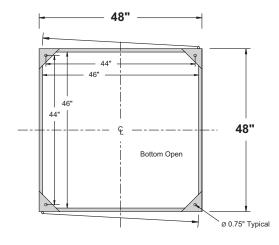
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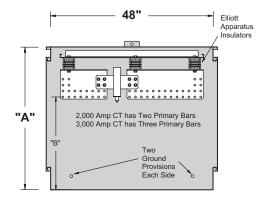
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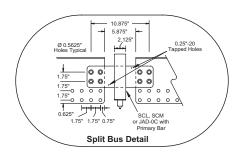
Front View Rear View Opposite Hand Door Removed



Section BB



Section AA



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-CT-48W48D-36H-D2001048	36"	21.375"
ESBE-0.6-331-CT-48W48D-42H-D2001048	42"	27.375"
ESBE-0.6-331-CT-48W48D-48H-D2001048	48"	33.375"
ESBE-0.6-331-CT-48W48D-54H-D2001048	54"	39.375"



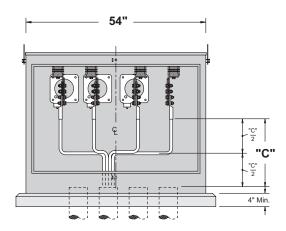
Three-Phase - Pad-Mounted - Outdoor

Bulletin

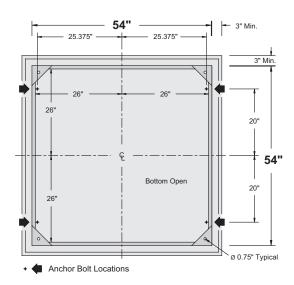
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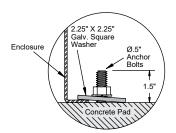
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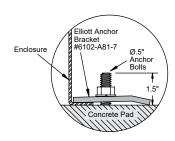
Typical Cable Training Dim. "C" - Measure in the Field



Section BB and Typical Pad Dimensions



Alternate #1



Alternate #2

Catalog Number	Dim. "C"
ESBE-0.6-331-CT-54W54D-36H-D2003218	Measure in the Field
ESBE-0.6-331-CT-54W54D-42H-D2003218	Measure in the Field
ESBE-0.6-331-CT-54W54D-48H-D2003218	Measure in the Field
ESBE-0.6-331-CT-54W54D-54H-D2003218	Measure in the Field



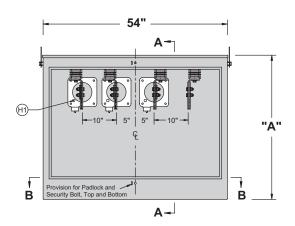
Three-Phase - Pad-Mounted - Outdoor

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> Elliott Apparatus Insulators

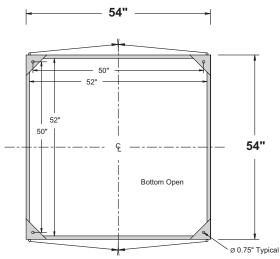


"A" 3,000 Amp CT has Three Primary Bars 4,000 Amp CT has Four Primary Bars "B' Provisions

54"

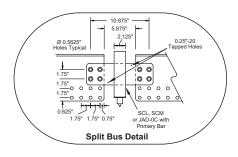
Front View Rear View Opposite Hand

Door Removed



Section BB

Section AA



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-CT-54W54D-36H-D2003218	36"	21.375"
ESBE-0.6-331-CT-54W54D-42H-D2003218	42"	27.375"
ESBE-0.6-331-CT-54W54D-48H-D2003218	48"	33.375"
ESBE-0.6-331-CT-54W54D-54H-D2003218	54"	39.375"

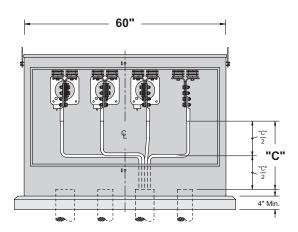


Three-Phase - Pad-Mounted - Outdoor

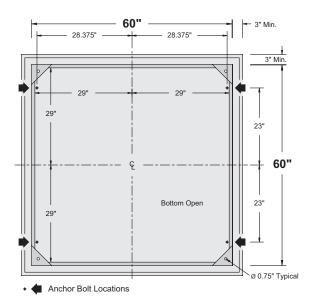
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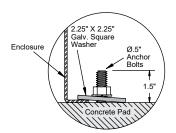
Cable Training and Anchor Bolt Locations



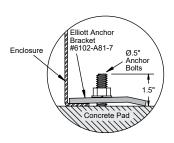
Typical Cable Training Dim. "C" - Measure in the Field



Section BB and Typical Pad Dimensions



Alternate #1



Alternate #2

Catalog Number	Dim. "C"
ESBE-0.6-331-CT-60W60D-36H-D2010148	Measure in the Field
ESBE-0.6-331-CT-60W60D-42H-D2010148	Measure in the Field
ESBE-0.6-331-CT-60W60D-48H-D2010148	Measure in the Field
ESBE-0.6-331-CT-60W60D-54H-D2010148	Measure in the Field

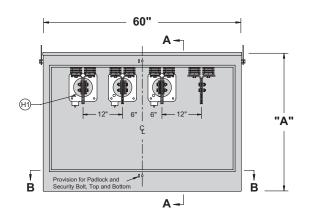


Three-Phase - Pad-Mounted - Outdoor

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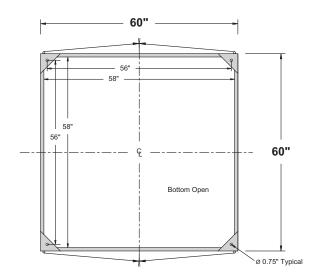
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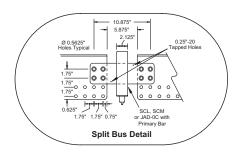
Apparatus Insulators 3,000 Amp CT has Three Primary Bars 4,000 Amp CT has Four Primary Bars Each Side

Front View Rear View Opposite Hand

Door Removed



Section AA



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

Section BB

Catalog Number	Dim. "A"	Dim. "B"
ESBE-0.6-331-CT-60W60D-36H-D2010148	36"	21.375"
ESBE-0.6-331-CT-60W60D-42H-D2010148	42"	27.375"
ESBE-0.6-331-CT-60W60D-48H-D2010148	48"	33.375"
ESBE-0.6-331-CT-60W60D-54H-D2010148	54"	39.375"

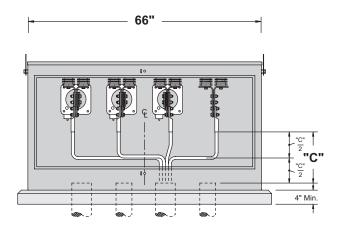


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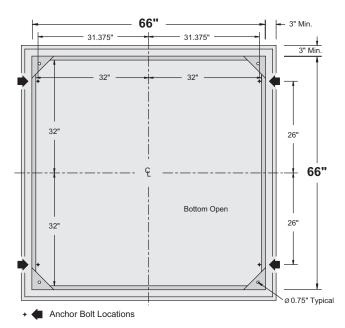
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Cable Training and Anchor Bolt Locations

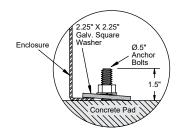


Typical Cable Training

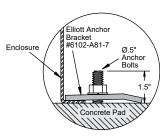
Dim. "C" - Measure in the Field



Section BB and Typical Pad Dimensions



Alternate #1



Alternate #2

Catalog Number	Dim. "C"
ESBE-0.6-331-CT-66W66D-36H-D2011103	Measure in the Field
ESBE-0.6-331-CT-66W66D-42H-D2011103	Measure in the Field
ESBE-0.6-331-CT-66W66D-48H-D2011103	Measure in the Field
ESBE-0.6-331-CT-66W66D-54H-D2011103	Measure in the Field
ESBE-0.6-331-CT-66W66D-60H-D2011103	Measure in the Field

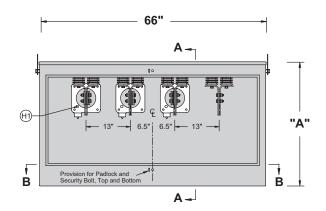


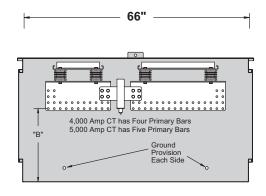
Three-Phase - Pad-Mounted - Outdoor

Bulletin

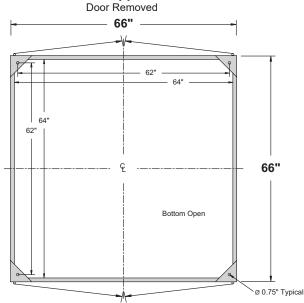
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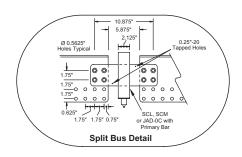




Front View Rear View Opposite Hand



Section AA



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

Section BB

Catalog Number	Dim. "A"	Dim. "B"
ESBE-0.6-331-CT-66W66D-36H-D2011103	36"	21.375"
ESBE-0.6-331-CT-66W66D-42H-D2011103	42"	27.375"
ESBE-0.6-331-CT-66W66D-48H-D2011103	48"	33.375"
ESBE-0.6-331-CT-66W66D-54H-D2011103	54"	39.375"
ESBE-0.6-331-CT-66W66D-60H-D2011103	60"	45.375"



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Typical Specification - Page 1 of 2

General

The secondary bus enclosure with current transformers shall be 600 volt class, suitable for use on systems that do not exceed 600 volts to ground (nor 1000 volts phase-to-phase). Each phase bus shall be designed for and include (or accept) a 600 volt class current transformer (ABB SCL, ABB SCM, GE JAD-0C or equal). The phase bus(es) and the full-size neutral 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 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, cleaning and phosphatizing, two-component rustinhibiting 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

Bus shall be bare copper, with all burrs and sharp corners removed prior to installation. It shall be punched with 0.5625-inch diameter holes on 1.75-inch centers to accommodate both two-hole and four-hole NEMA standard cable-terminal lugs. The bus shall be constructed to allow installation and provide support for 600 volt class current transformers (ABB SCL, ABB SCM, GE JAD-0C or equal) utilizing the correct number of 0.25-inch by 4-inch primary bars with 10.875-inch outboard centerline mounting holes. The current transformers shall be mounted in a manner that will allow installation or field replacement without the removal of cables that may be bolted to the bus. A minimum of two insulators shall be provided for each bus assembly. 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.

Current Transformers

Alternate 1: Current Transformers shall be supplied and installed by the user.

Alternate 2: Current Transformers specified by the user shall be supplied and installed by the manufacturer.

Voltage Transformers

Alternate 1: Voltage Transformers are not required.

Alternate 2: When specified, a mounting plate shall be provided for Voltage Tranformers supplied and installed by the user

Alternate 3: When specified, a mounting plate shall be provided for Voltage Transformers supplied and installed by the manufacturer.

Secondary Wiring

Alternate 1: Secondary wiring shall be supplied and installed by the user.

Alternate 2: Secondary wiring shall be #10 THW/XHHW stranded-copper wire connecting the instrument transformer secondary to the 10-Terminal Test Switch and 13-Terminal Meter Socket installed on the right-hand exterior wall of the Secondary Bus Enclosure (when facing the front door). The secondary wiring shall be color-coded as specified by the user (or the factory color code when the user does not specify a color code).



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Typical Specification - Page 2 of 2

Grounding Provisions

Four high-conductivity bronze eyebolt-type ground lugs, which accept #6 through #2/0 copper conductor, shall be installed on the inside walls of the enclosure (located on each side of each door opening in an accessible position as shown on the drawings).

Accessory Equipment

A corrosion proof nameplate with permanent thermal transfer printing 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, Serial Number, Job 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.
- proposed pad dimensions and location of anchor bolts.

ABB SCL

Primary	Style	Rating	Factor
Amps	Number	30°C	55°C
200	7526A81G01	2.0	1.5
300	7526A81G02	2.0	1.5
400	7526A81G03	2.0	1.5
600	7526A81G04	2.0	1.5
800	7526A81G05	2.0	1.5
1000	7526A81G06	1.5	1.0
1200	7526A81G07	1.5	1.0
1500	7526A81G08	1.33	1.0
2000	7526A81G09	1.33	1.0
2500	7526A81G10	1.33	1.0
3000	7526A81G11	1.33	1.0
4000	7526A81G12	1.33	1.0

ABB SCM

Primary	Style	Rating Factor	
Amps	Number	30°C	55°C
200	7525A36G01	1.33	1.0
300	7525A36G02	1.33	1.0
400	7525A36G03	1.33	1.0
500	7525A36G04	1.33	1.0
600	7525A36G05	1.33	1.0
800	7525A36G06	1.33	1.0
1000	7525A36G07	1.33	1.0
1200	7525A36G08	1.33	1.0
1500	7525A36G09	1.33	1.0
1600	7525A36G10	1.33	1.0
2000	7525A36G11	1.33	1.0
2500	7525A36G12	1.33	1.0
3000	7525A36G13	1.33	1.0
4000	7525A36G14	1.0	0.5

GENERAL & ELECTRIC JAD-0C

Current	Catalog Number	Continuous-
Ratio in	(with Round Window;	thermal-current
Amperes	without	Rating Factor
Pri : Sec	Mounting Base)	30°C Ambient
200:5	750X120240	4.0
300:5	750X120241	4.0
400:5	750X120242	4.0
500:5	750X120243	4.0
600:5	750X120244	3.0
800:5	750X120001	3.0
1000:5	750X120002	2.0
1200:5	750X120003	2.0
1500:5	750X120180	3.0
2000:5	750X120005	2.0
2500:5	750X120006	1.5
3000:5	750X120007	1.5
4000:5	750X120008	1.5



Three-Phase - Pad-Mounted - Outdoor

Bulletin **340-067**

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Information needed to provide a Quotation for a Secondary Bus Enclosure with Current Transformers

Catalog Number:		
Enclosure: Standard 11-gauge Steel 12-gauge Stain	iless Steel	
Hex Head Security Bolts ☐ Penta Head Security Bolts ☐		
Actual Secondary Voltage (Optional):		
Without CTs: With CTs: CT Ratio:5	Without VTs: With VTs: VT Ratio :1	
Preferred Brand of Transformers: ABB ☐ GE ☐ Either ☐ 0	Other	
CT Style/Catalog Number:	VT Style/Catalog Number:	
Your Name, Company Name, Complete Postal Address and E-mail Ad	ldress:	
Name and Complete Shipping Address:	Project Name:	

If you do not find the design

you need

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