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#### 1.0 OBJECTIVE

This specification provides information and requirements regarding customer application of BK150. This specification is intended to provide general guidance for application process development. It is recognized that no single application process will work under all customer scenarios and that customers will develop their own application processes to meet their needs. However, if these application processes differ greatly from the one recommended, AICC cannot guarantee results.

#### 2.0 SCOPE

This specification provides information and requirements regarding customer application of BK150. These connectors provide a means of bringing high current from Bus bar conductors to Bus bar.

#### 3.0 GENERAL

This document is meant to be an application guide. If there is a conflict between the product drawings and specifications, the drawings take precedence.



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#### 4.0 DRAWINGS AND APPLICABLE DOCUMENTS

- AFCI PRODUCT SPECIFICATION: GS-12-1717
- AFCI PRODUCT DRAWINGS: 10162876
- APPLICATION MANUALS/INSTRUCTION SHEETS (IF NOT INCLUDED IN THIS DOCUMENT)

Product drawings and **AFCI's GS-12-1717** Product Specification are available at <u>www.fci.com</u> In the event of a conflict between this application specification and the drawing, the drawing will take precedence. Customers are advised to refer to the latest revision level of AFCI product drawings for appropriate details.

#### 5.0 APPLICATION REQUIREMENTS

#### 5.1 Connectors mating part (Bus bar)

Recommended material: Copper, solid blade Material Thickness: 6.0±0.20 mm Surface roughness in contact area: 1.6 µm maximum Plating in contact area: 3 µm min Silver over 1.27 µm min Nickel Bus bar misalignment: ± 2mm Maximum. The Bus bar dimensions as shown in below:



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## 5.2 Wipe distance

The wipe distance is 7.50mm for power Busbar and 9.00mm for return Busbar when the Bus bar is mated to the bottom of BK150 cable connector.



#### 5.3 Gather-ability and Misalignment

When ORv3 Bus bar is mating with BK150, the Gather-ability is +/-4.4mm.



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When ORv3 Bus bar is mated with BK150, the Misalignment is +/-0.25mm.



# 5.4 Connector Panel layouts

Panel cutout for BK150 screw mounted connector:







### Panel cutout for BK150 STL type mounted connector:



Panel Cutout Details for 3.1mm floating in X& 2.1mm floating in Y direction Panel Thickness is 1.32mm max

#### 5.5 Connector Panel Hardware



#### Screw: Recommended screw is shown in following

#### Washer: Recommended washer is shown in following



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# 6.0 Current Rating

6.1 Current rating table: TBD

### 7.0 APPLICATION PROCEDURE

Screw Mount Connector: Mount connector in panel by applying the washer and screw as seen below. Screw torque requirements: MIN = 4.0 in-lbf or 0.45 N-m MAX = 6.00 in-lbf or 0.68 N-m

# BK150 Straight type application procedure:



BK150 STL type application procedure:

Step 1

Step 2

**Assembly View** 



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#### RECORD RETENTION 8.0

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A	All	First version	NA	Oct 17, 2022