

NUMBER GS-20-0446	TYPE General Application Specification	Amphenol ICC	
TITLE Application Guide for BarKlip vertical connector		PAGE 1 of 5	REVISION A
		AUTHORIZED BY Feng Zheng	DATE 2019-05-30
CLASSIFICATION UNRESTRICTED			

1.0 OBJECTIVE

This specification provides information and requirements regarding customer application of Barklip vertical connector . 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 Barklip vertical connector. 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.

4.0 DRAWINGS AND APPLICABLE DOCUMENTS

- AFCI PRODUCT SPECIFICATION: GS-12-1319
- AFCI PRODUCT DRAWINGS: 10129416 / 10134620
- APPLICATION MANUALS/INSTRUCTION SHEETS (IF NOT INCLUDED IN THIS DOCUMENT)

Product drawings and **AFCI's GS-12-1319** Product Specification are available at www.fci.com 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)

The Bus bar Power Conductors shall comply with the following requirements:

Recommended material: Copper, solid blade

Material Thickness: 2.0±0.1 mm; 3.0±0.1 mm; 4.0±0.1 mm

Surface roughness in contact area: Ra 1.6 µm maximum

Plating in contact area: 3 µm min Silver over 1.27 µm min Nickel

Mating edges: 0.5 mm minimum, rounded or chamfered

5.2 General application

Blind mate: Connector can handle adverse tolerances and allow reliable mating to misaligned Bus bar.

Bus bar misalignment: ± 0.55 mm Max.

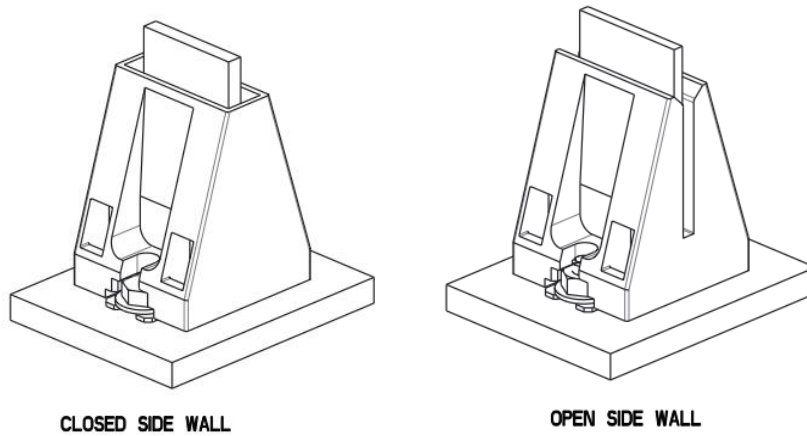
Mates directly to a single pole power Bus Bar

Ideal for high current Bus Bar power supply/distribution applications

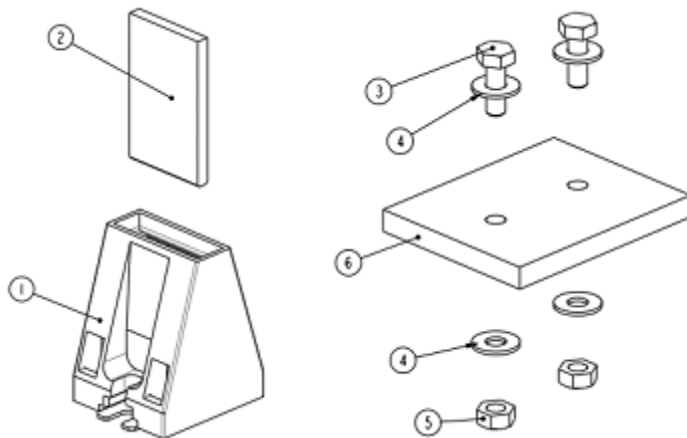
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5.3 Connector assembled part

The assembled picture of 10129416 and 10134620 are shown in following:



The detail assembled component of 10129416 and 10134620 are shown in following:

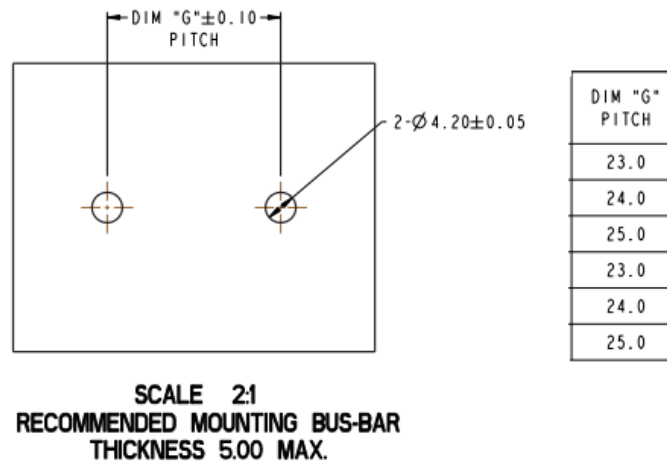


S.NO	DESCRIPTION	QTY
1	Product	1
2	MATING BUS-BAR	1
3	M4 SCREW	2
4	M4 WASHER	4
5	M4 NUT	2
6	MOUNTING BUS-BAR	1

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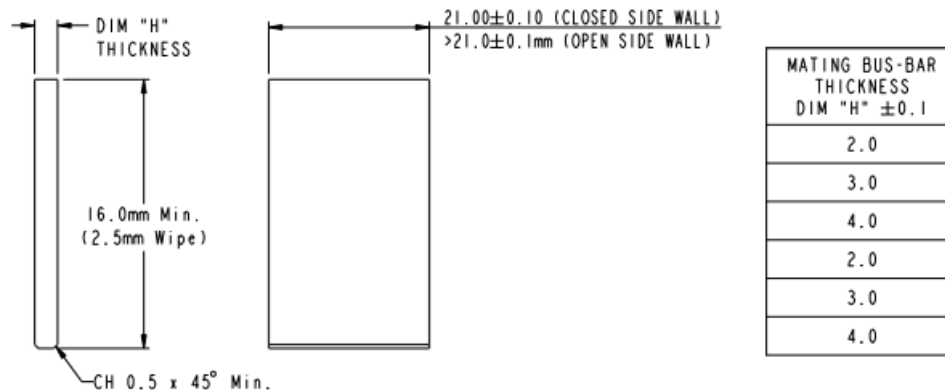
5.4 Connector mounting Bus bar

Recommended mounting Bus bar is shown in following:



5.5 Connector mating Bus bar

Recommended mating Bus bar is shown in following:



5.6 Connector fixing part

a. Screw

Recommended screw is shown in following:

10129416 and 10134620: Standard M4 screw

b. Washer

Recommended washer is shown in following:

10129416 and 10134620: Standard M4 washer

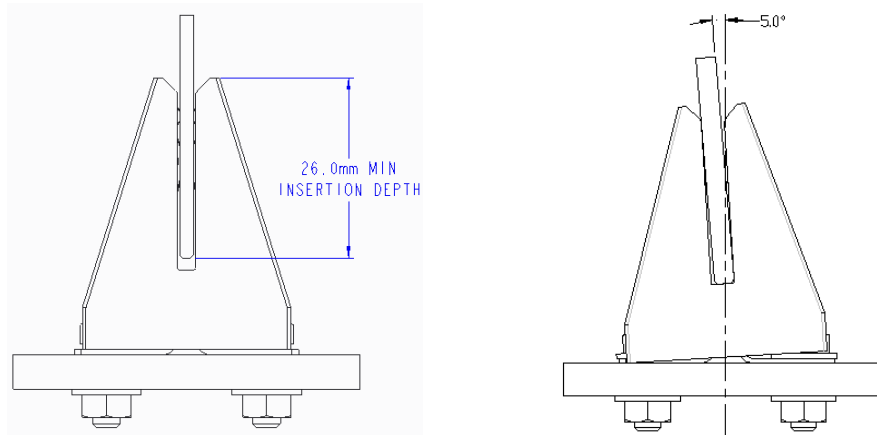
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c. Nut

Recommended nut is shown in following:
10129416 and 10134620: Standard M4 nut

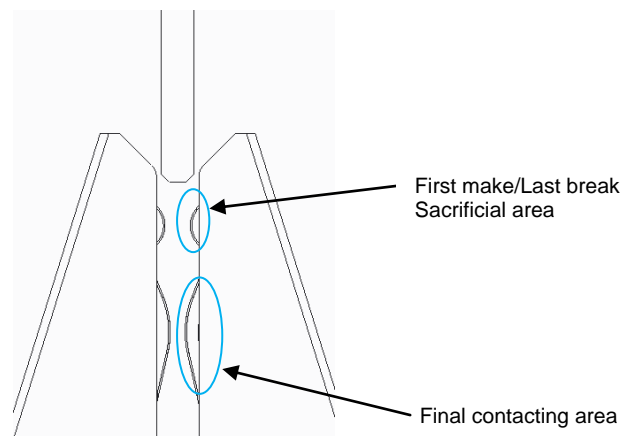
5.7 Connector mating


The connector shall preferably fully mate the Bus Bar until it bottoms in housing.
The minimum required mating depth to be 26.0mm to ensure a reliable connection.
The allowable mating angle is 5° Max.



6.0 Explanation of uncommon or unusual characteristics

Spark spots at the contact entrance are not detrimental. This sacrificial area is designed as “first make / last break” –point, in order to prevent spark spots damage on the final contacting areas (situated deeper in the connector).



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7.0 RECORD RETENTION

<u>REV</u>	<u>PAGE</u>	<u>DESCRIPTION</u>	<u>EC#</u>	<u>DATE</u>
A	All	Release Application Specification	NA	2019-05-30