


NUMBER GS-20-0435	TYPE <b>Application Specification</b>		
TITLE Pwrblade+™ I/O Cable Kit		PAGE 1 of 6	REVISION A
		AUTHORIZED BY Rainbow Zhan	DATE 2015-12-30
		CLASSIFICATION <b>UNRESTRICTED</b>	

## 1.0 OBJECTIVE

This specification provides information and requirements regarding customer application of Powerblade+™ I/O cable kits. 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, FCI cannot guarantee results.

## 2.0 SCOPE

This specification provides information and requirements regarding customer application of Powerblade+™ I/O cable. The product possibilities for configuration including:

- Panel mount(PMT) receptacle
- Panel mount (PMT) plug
- Slide to lock(STL) receptacle
- Slide to lock(STL) plug
- Squeeze to release(STR) receptacle
- Squeeze to release(STR) plug

## 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


- FCI PRODUCT SPECIFICATION GS-12-1267
- FCI PRODUCT DRAWINGS
- APPLICATION MANUALS/INSTRUCTION SHEETS (IF NOT INCLUDED IN THIS DOCUMENT)

Product drawings and **FCI's GS-12-1267** Product Specification are available at [www.fci.com](http://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 FCI product drawings for appropriate details.

## 5.0 APPLICATION REQUIREMENTS (SEE TA-682)

## 6.0 APPLICATION TOOLING

Contact crimping need crimping machine and Slide type applicator, these types can refer as bellow table

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Tool PN	Tool Description	Connector PN	Tooling supplier contact information
C1-3.0A	Terminal crimping machine manufactured by Chun Lun	All powerblade+ cable power and signal contacts	Address :NO38 Yong Ran Road ZhangPu Town Kun Shan City JiangSu Province <a href="tel:86-0512-5729-2200">TEL:86-0512-5729-2200</a> FAX: 86-0512-5729-3685 Website: www-ks-chulun.com
CLM-2S	Slide type applicator manufactured by Chun Lun	All powerblade+ cable power and signal contacts	



Crimping machine C1-3.0A



Slide type applicator CLM-2S


## 7.0 TERMINAL CRIMP APPLICATION DATA

### 7.1 HIGH POWER CRIMP APPLICATION DATA

Wire Size (AWG)	Con. Crimp Height (mm)	Insulation Dia. (REF)	Pull Force Minimum (N)
6	4.2±0.05	7.4	350
8	3.7±0.05	6.9	350
10	3.0±0.05	4.9	290

### 7.2 LOW POWER CRIMP APPLICATION DATA

Wire Size (AWG)	Con. Crimp Height (mm)	Insulation Dia. (REF)	Pull Force Minimum (N)
12	2.50±0.03	4.4	240
14	2.06±0.03	4.4	180
16	1.89±0.03	4.1	120

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## 8.0 APPLICATION PROCEDURE

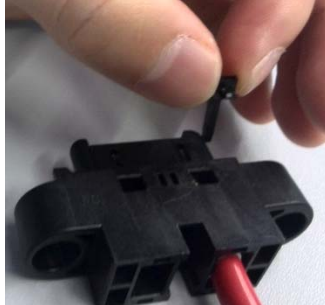
### 8.1. ASSEMBLY THE CABLE CONNECTOR

#### 8.1.1 Receptacle high power crimping contact assembly

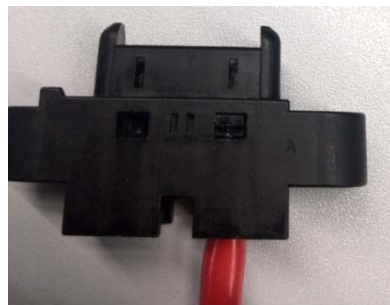
- Insert the crimped high power contact into the power contact hole of housing in the right direction(see photo 8.2.1), refer to the cable assembly drawing to determine the power contact
- Insert the second lock into the housing in the right direction (see photo 8.2.2)
- The contact has locked into the housing (see photo 8.2.3)



8.2.1 .



8.2.2



8.2.3

#### 8.1.2 Receptacle Signal Crimping contact assembly


- Insert the crimped signal contact into the signal hole of housing in the right direction
- The housing has lock structure and signal contact will be locked in housing after inserted(see photo 8.2.4)

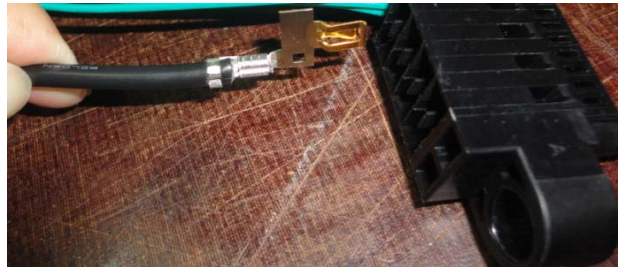


8.2.4

#### 8.1.3 Receptacle Low power contact assembly

- Insert the low power crimped contact into low power hole of housing in the right direction(see photo 8.2.5)
- The housing has locked structure the contact will locked in the housing after inserted

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8.2.5

#### 8.1.4 Latch Assembly

For the STR structure, we need assembly the latch on the housing

- Insert the latch into the housing with the right direction (see photo 8.2.6)
- The latch is locked in the housing (see photo 8.2.7)



8.2.6



8.2.7

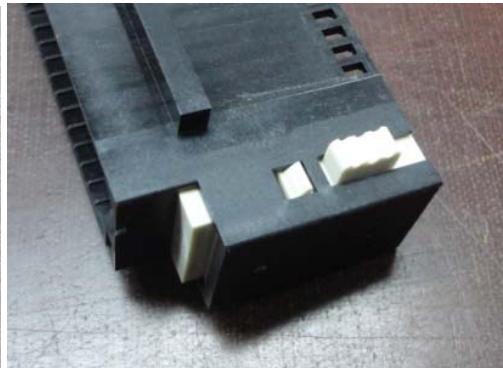
#### 8.1.5 The Slide Block Assembly

For the STL structure, we need assembly the slide block to lock the housing on the panel


- Insert the Slide Block into the housing in the right direction( see photo 8.2.8)
- The slide lock is locked in the housing (see photo 8.2.9)



8.2.8



8.2.9

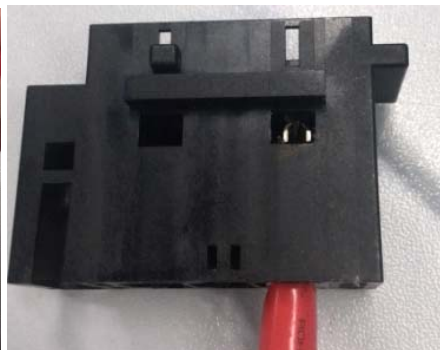
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### 8.1.6 Plug power crimped contact assembly

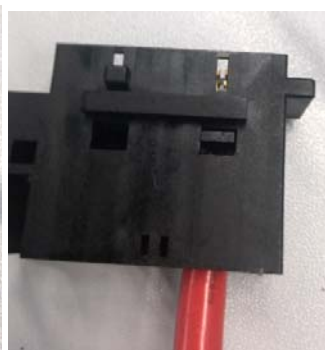
- Insert the crimped high power contact into the power contact hole of housing(see photo 8.3.1), refer to the cable assembly drawing to determine the power contact
- Insert the second lock into the housing in the right direction (see photo 8.3.2)
- The contact has locked into the housing (see photo 8.3.3)



8.3.1



8.3.2



8.3.3

### 8.1.7 Plug Signal Crimped contact assembly

- Insert the crimped signal contact to the IMLA until all the four hole of IMLA has inserted.
- Insert the IMLA to the housing and the IMLA and contact will be lock in the housing



8.3.4



8.3.5




8.3.6

## 9.0 LABELING AND PACKING

Label and pack the cable assembly according the requirement of customer

### NOTE:

If components is been sold separately instead of cable assembly parts from FCI, FCI product spec for cable assembly can be as a reference documents only because the testing and spec is based on using FCI raw cable and FCI cable assembly. If the raw cable and cable assembly is the outside suppliers sourced by customers, customers and customer's cable assembly suppliers should be fully responsible for the cable assembly quality.

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**10.0 RECORD RETENTION**

<b>REV</b>	<b>PAGE</b>	<b>DESCRIPTION</b>	<b>EC #</b>	<b>DATE</b>
A	All	Initial release	-	2015-12-30

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