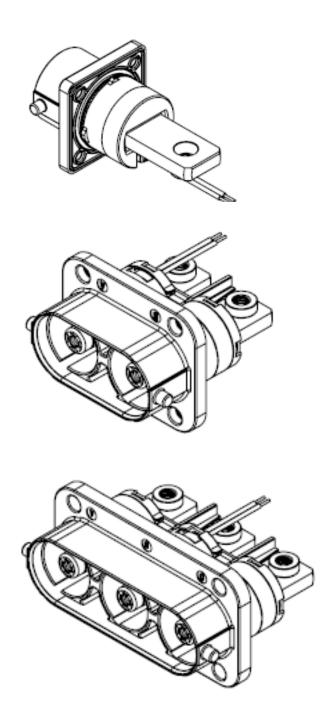




Manual P/N: 8P1119 Rev.05 20210902

PowerLok G2 插座安装说明

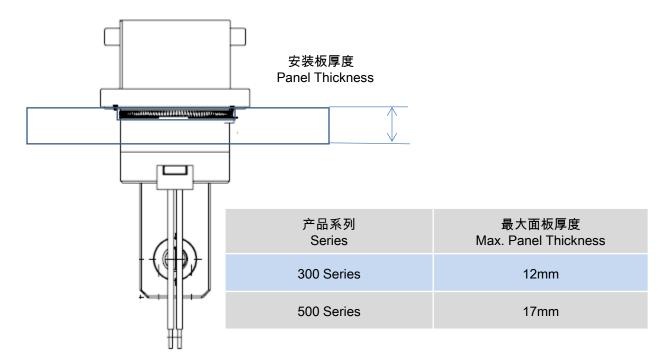
PowerLok Receptacle G2 Installation Instructions



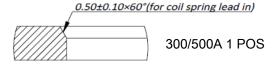
插座安装面板要求

Receptacle Install Panel Requirements

- 1 面板厚度需依照如下表格
- 1 Panel Thickness should According to bellow Table



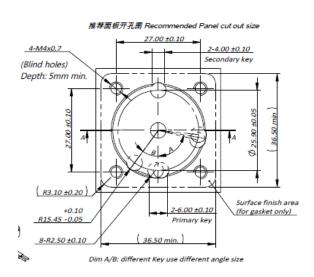
- 2 面板与插座接触区域应符合以下要求:
- 2 The contact area between panel and receptacle shall meet the following requirements:
- 2-1 表面粗糙度应为3.2或更好
- 2-1 Surfaceness should be 3.2 or Better
- 2-2 面板与插座接触区域应该导电
- 2-2 The area where the panel contacts the receptacle shall be electrically conductive.
- 2-3 开孔尺寸及倒角要求见下页
- 2-3 Hole size and chamfer requirements are shown on the next page



C0.3±0.10*60° (For coil spring lead in)
300A
2POS/3POS

插座安装面板要求

Receptacle Install Panel Requirements



3.90 REF 4-812.60 ±0.10

4-812.60 ±0.10

20.00 ±0.10

01.04

20.00 ±0.10

01.04

20.00 ±0.10

01.04

02.05

03.05

04.812.60 ±0.10

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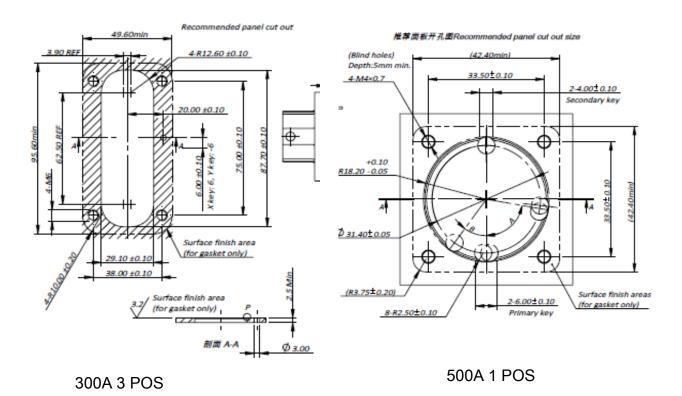
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08.

Recommended panel cut out

300A 1 POS

300A 2 POS



详细尺寸及要求请参照客户图纸要求

Detail dimensions and requirements refer to customer drawing

安装步骤 Installation Steps

1 根据下表一,选择对应安装扭力

Apply proper torque according to table.1 below.

安装扭力参数表 Install Torsion Data

table 1

产品类型	螺丝规格 Screw Standard	装配扭力(N·m) Install Torque
1 POS 300A & 500A	M4	1.6~2.4Nm
2 POS & 3 POS 300A	M6	6.2~7.6Nm
All(screw on terminal)	M6	6.2~7.6N.m
All(screw on terminal)	M8	7.2~8.8Nm
All(screw on terminal)	M10	17.1~20.9Nm

2 选择合适的安装工具. Choose proper install tools.

气(电)动扭力工具

数显手动扭力工具

pneumatic (electric) powered torque tools

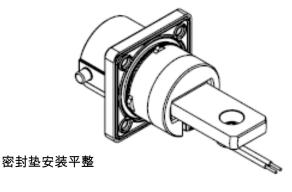
Digital display hand torque tools

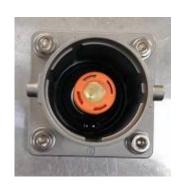




■ 3 将插座装入面板,注意螺旋弹簧完全插入无夹到,

Insert receptacle into panel hole, ensure coil spring fully seat and not be pinched





Gasket be installed evenly

安装步骤 Installation Steps

■ 4 然后将插座用M4或M6螺丝固定在安装面板上,平垫圈尺寸需符合 ISO7092 要求。

Then fix the receptacle on the mounting panel with M4 or M6 screws, and the plain washers size must meet ISO7092 requirements.



Product series 产品系列	螺丝规格 Screw SPEC	平垫圈最大尺寸 Dimensions of plain washers (max mm)
PL300 PL500 1POS	M4	9
PL300 2POS 3POS	M6	12

5 端子上螺丝按以下步骤参照处理

The screw on the terminal shall be handled according to the following steps

5-1 在插座上放入辅助冶具

5-1 Put the auxiliary tool in the receptacle

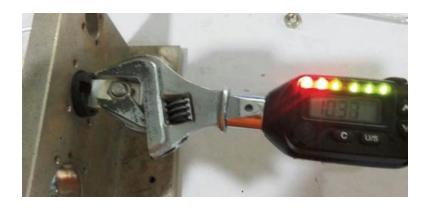




产品系列 Series	冶具编号 Tool number
300 Series	AC-CP001504
500 Series	AC-CP001505

安装步骤 Installation Steps

- 5-2 参照前面步骤选取合适的安装工具并调好扭矩
- 5-2 Refer to the previous steps to select the appropriate installation tools and adjust the torque
- 5-3 锁紧螺丝或螺母,用扳手时直到听到报警号声
- 5-3 Lock the screw or nut, Stop fastening screw until the alarm sound is heard if use a wrench.



- 5-4 取出安装冶具。
- 5-4 taking out the fixture.



6 完成安装后检查胶料无破损,PIN针无弯曲变形

Check product after Complete installation, Any damage on plastic is not allowed, any deformation on Pin is not allowed.



7:在线缆组装好后需要做绝缘电阻和耐压测试,建议客户参考下面的测试参数

Need to do the Insulation Resistance and DWV test after cable assembly. It is recommended that the customer refer to the following test parameters

7-1 绝缘电阻测试

7-1 Insulation Resistance

Positions 位置	Test voltage/time 测试电压/时间	测试时间(推荐) Test Time(recommended)	Insulation resistance 绝缘电阻
Cable(power) to shell 电缆芯线到壳体	1000 VDC	5S	> 500 MΩ
Cable(power) to HVIL 电缆芯线到高压互锁	1000 VDC	58	> 500 MΩ
HVIL to shell 高压互锁到壳体	1000 VDC	1S	> 100 MΩ

7-2 Dielectric Withstand Voltage

7-2 耐压测试

Positions 位置	Test voltage 测试电压	测试时间(推荐) Test Time(recommended)	Leakage Current 漏电流
Cable(power) to shell 电缆芯线到壳体	5000 VDC	10S	< 5mA
Cable(power) to HVIL 电缆芯线到高压互锁	5000 VDC	10S	< 5mA
HVIL to shell 高压互锁到壳体	500 VDC	1S	< 5mA

7-3 测试说明:

警告:建议的电气测试及其参数应根据终端应用要求进行审查,以确保安全性并防止损坏其他部件。提供的参数 是基于PowerLok连接器和其峰值1000VDC额定。提供的测试参数可能超出电缆组件或设备上使用的其他部件/ 材料的限制。

7-3 Test note:

caution: Recommended electrical tests and their parameters should be reviewed against end application requirements to ensure safety and to prevent damage to other components. Parameters provided are based on the PowerLok connectors and their peak 1000VDC rating. Test parameters provided may exceed the limit of other components/materials used on the cable assembly or device.

Amphenol Technical Products International provides the above product specifications for the standard PowerLok series of connectors to assist users in identifying the correct product for the system to which the connectors may be applied. Specifications are subject to change without notice. Contact your nearest Amphenol Corporation Sales Office for the latest specifications. All statements, information and data given herein are believed to be accurate and reliable but are presented without guarantee, warranty, or responsibility of any kind, expressed or implied. Statements of suggestions concerning possible use of our products are made without representation or warranty that any such use is free of patent infringement and are not recommendations to infringe any patent. Specifications are typical and may not apply to all connectors. Note that these specifications are derived from relevant global standards used in the automotive and industrial transportation markets, but they are not a substitute for system level design validation testing, which is the sole responsibility of the system designer and/or end user.

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