



# 产 品 规 格 书

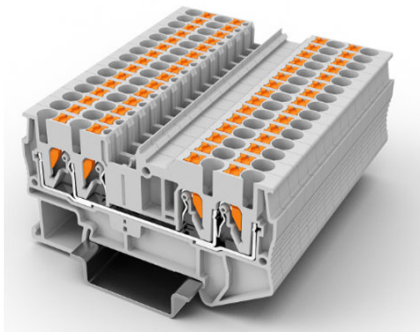
## SPECIFICATION FOR APPROVAL

|                               |                              |
|-------------------------------|------------------------------|
| 产 品 名 称 :                     | 导轨式接线端子                      |
| Product name                  | Rail-type<br>Terminal Blocks |
| 产 品 型 号 :<br>Part NO.         | UPT-2.5/2-2                  |
| 客户产品型号 :<br>Customer part NO. | ---                          |
| 批 准 日 期 :<br>Approval date    | 2023/1/3                     |

| I . 制造方审批/Manufacturer's Approval |               |                         |                |                       |
|-----------------------------------|---------------|-------------------------|----------------|-----------------------|
| 设计<br>designed by                 |               | 审核<br>Audit by          |                | 批准<br>Approved by     |
| 张群燕                               |               | youndy                  |                | 杨勇                    |
| II . 客户审批/Customer Approval       |               |                         |                |                       |
| 质量工程师/Quality Engineer            |               | 审核/Audit by             |                | 批准/Approved by        |
|                                   |               |                         |                |                       |
| III. 修订履历/Revision Notes          |               |                         |                |                       |
| 序号<br>No.                         | 版本<br>Version | 修订内容<br>Revise contents | 修订者<br>Reviser | 修订日期<br>Revision date |
| 1                                 | A             | INITIAL RELEASE         | 张群燕            | 2023/1/3              |
| 2                                 |               |                         |                |                       |
| 3                                 |               |                         |                |                       |
| 4                                 |               |                         |                |                       |
| 5                                 |               |                         |                |                       |
| 6                                 |               |                         |                |                       |

IV.产品简述及型号说明/Product description and Naming System:

1.产品简述/Product description



● 直插式连接技术,无需工具即可直接将刚性导线和带冷压头的导线连接至接线点。  
Push-in connection technology was developed for direct conductor connection. Rigid conductors and conductors with ferrules can be directly contacted in the conductor connection point without using any tools.

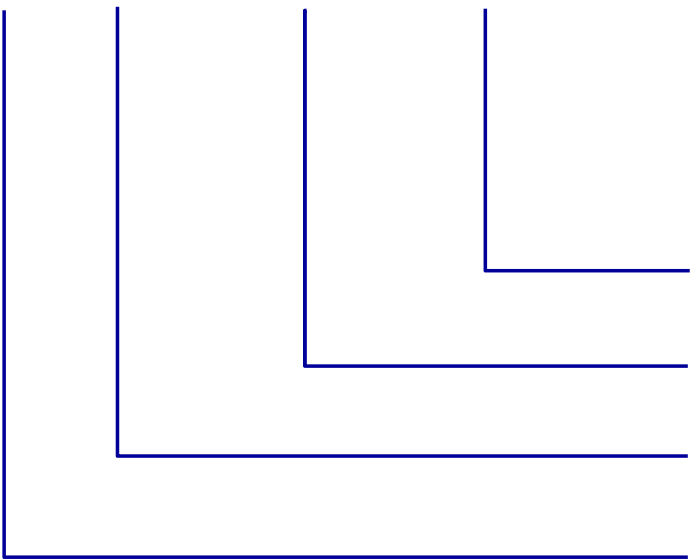
● 插入力小，省心省力  
Convenient plugging with lower insertion force

● 弹簧结构，导线拔出力大  
High conductor pull-out forces due to the spring design  
● 无需专用工具，即可轻松释放导线  
The conductor can be easily released without special tools



2. 命名规则/Naming System:

UPT - 2.5 / 2-2 - GY

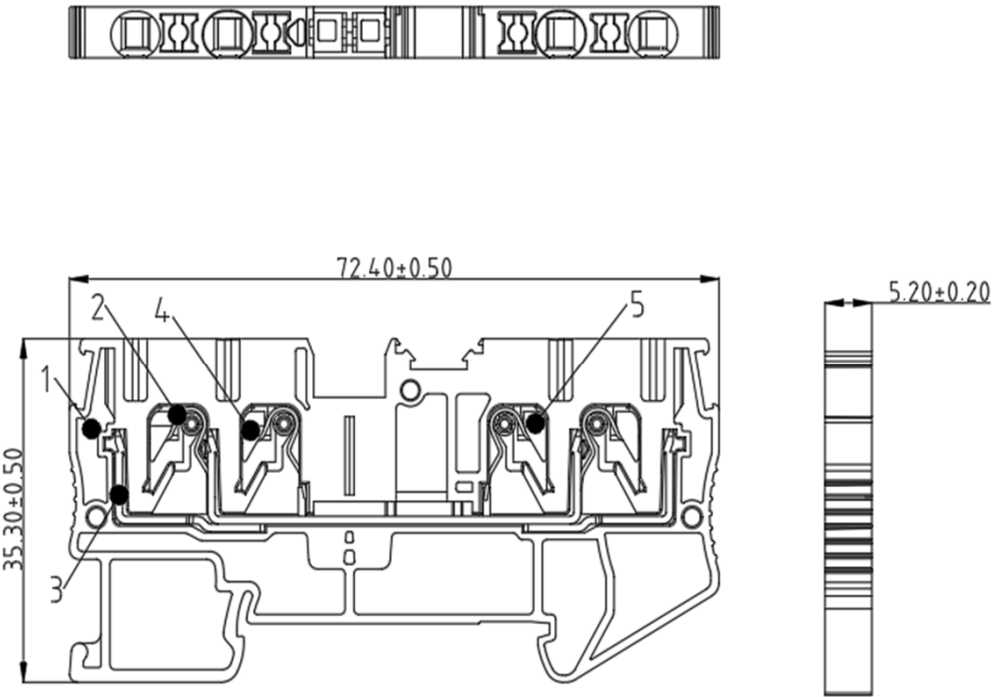


外壳颜色：灰色  
Housing color:Gray  
同一层2进2出  
Two in, two out on the same level  
额定横截面  
Nominal cross section  
系列  
Series

| V. 技术参数/Technical Specification |                                                                                                                                         |                                                                       |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| 序号<br>No.                       | 项目<br>Item                                                                                                                              | 数据<br>Data                                                            |
| 1                               | 连接符合标准/Connection in acc. with standard                                                                                                 | IEC 60947-7-1, IEC 60998, IEC 60947-1, UL1059, GB 14048.1, GB 14048.7 |
| 2                               | 产品类型/Product type                                                                                                                       | 多导线端子/Multi wire terminal                                             |
| 3                               | 应用领域/Area of application:                                                                                                               | 铁路工业/Railway industry                                                 |
|                                 |                                                                                                                                         | 机械工程/Machine building                                                 |
|                                 |                                                                                                                                         | 工厂工程/Plant engineering                                                |
|                                 |                                                                                                                                         | 过程工业/Process industry                                                 |
| 4                               | 外形尺寸/Boundary dimension (L*W*H) 【mm】                                                                                                    | 72.4*5.2*35.3                                                         |
| 5                               | 接线方式/ Connection method                                                                                                                 | 直插式连接/Plug-in connection                                              |
| 6                               | 连接方向/Direction of Conductor connection                                                                                                  | 顶部连接/Top connection                                                   |
| 7                               | 连接量/connections                                                                                                                         | 4                                                                     |
| 8                               | 层数/Number of rows                                                                                                                       | 1                                                                     |
| 9                               | 每层连接数量/Number of connections                                                                                                            | 4                                                                     |
| 10                              | 额定横截面/Nominal cross section 【mm <sup>2</sup> 】                                                                                          | 2.5                                                                   |
| 11                              | 额定电压Nominal voltage IEC/UL 【V】                                                                                                          | 800/600                                                               |
| 12                              | 额定电流/Nominal current IEC/UL 【A】                                                                                                         | 24/20                                                                 |
|                                 | 最大负载电流/Maximum load current 【A】                                                                                                         | 28                                                                    |
| 13                              | 螺钉规格/Screw type                                                                                                                         | --                                                                    |
| 14                              | 紧固扭矩/Torque 【Nm】                                                                                                                        | --                                                                    |
| 15                              | 剥线长度/Stripping length 【mm】                                                                                                              | 8-10                                                                  |
| 16                              | 接线范围/Connection range 【mm <sup>2</sup> 】                                                                                                | --                                                                    |
|                                 | 1) IEC: 刚性导线/Solid 【mm <sup>2</sup> 】                                                                                                   | 0.2-4                                                                 |
|                                 | 柔性导线/Flexible 【mm <sup>2</sup> 】                                                                                                        | 0.2-4                                                                 |
|                                 | 2) UL: 刚性导线/Solid 【AWG】                                                                                                                 | 26-12                                                                 |
|                                 | 柔性导线/Flexible 【AWG】                                                                                                                     | 26-12                                                                 |
|                                 | 3) 柔性导线横截面（套管，不带塑料绝缘管）/<br>Conductor cross section flexible, with ferrule without plastic sleeve 【mm <sup>2</sup> 】                     | 0.14-2.5                                                              |
|                                 | 4) 柔性导线横截面（带塑料绝缘管的套管）/<br>Conductor cross section flexible, with ferrule with plastic sleeve 【mm <sup>2</sup> 】                         | 0.14-2.5                                                              |
|                                 | 5) 2根具有相同横截面的导线，柔性，带TWIN套管及塑料套管/2 Conductors with same cross section, flexible, with TWIN ferrule and plastic sleeve 【mm <sup>2</sup> 】 | 0.5                                                                   |

|    |                                                                                                                     |                                                                                                                  |
|----|---------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| 17 | 直接插拔式连接横截面/Connection cross sections directly pluggable:                                                            | --                                                                                                               |
|    | 1) 硬导线横截面/Conductor cross section solid                                                                             | 0.34-4                                                                                                           |
|    | 2) 柔性导线横截面 (套管, 不带塑料绝缘管) / Conductor cross section flexible, with ferrule without plastic sleeve 【mm <sup>2</sup> 】 | 0.5-2.5                                                                                                          |
|    | 3) 柔性导线横截面 (带塑料绝缘管的套管) / Conductor cross section flexible, with ferrule with plastic sleeve 【mm <sup>2</sup> 】      | 0.34-2.5                                                                                                         |
| 18 | 额定浪涌电压/Rated surge voltage 【KV】                                                                                     | 8                                                                                                                |
| 19 | 工频耐压/Power frequency withstand voltage 【KV】                                                                         | 2                                                                                                                |
| 20 | 温升测试/ Temperature-rise test 【℃】                                                                                     | Increase in temperature ≤ 45                                                                                     |
| 21 | 接触电阻测试/Contact resistance test 【m Ω】                                                                                | ≤ 20                                                                                                             |
| 22 | 导线拔出测试/Pull out force test of conductor                                                                             | acc. IEC60947-1 : 2020<br>clause 9.2.5.4 and table 5                                                             |
| 23 | 绝缘电阻测试/Insulation resistance test                                                                                   | ≥500MΩ (DC500±50V, Hold for 1 minute)                                                                            |
| 24 | 导线机械插拔/Wire insertion and removal                                                                                   | The 4mm <sup>2</sup> Solid wire can be removed by pressing the button                                            |
| 25 | 阻燃等级/Flammability rating according to UL 94                                                                         | V0                                                                                                               |
| 26 | 环境条件/Ambient conditions:                                                                                            | --                                                                                                               |
|    | 1) 环境温度 (运行) /Operating temperature 【℃】                                                                             | -40℃~+105℃ (Depends on the derating curve)                                                                       |
|    | 2) 环境温度 (存放/运输) / Ambient temperature (storage/transport) 【℃】                                                       | -25℃ - 60℃ (for a short time, not exceeding 24 h, -60℃ to +70℃)                                                  |
|    | 3) 允许湿度 (存放/运输) / Permissible humidity (storage/transport)                                                          | 30 % ... 70 %                                                                                                    |
|    | 4) 海拔/Altitude                                                                                                      | Within 2000m, 40Kpa~80KPa                                                                                        |
|    | 5) 相对湿度/Relative humidity                                                                                           | 5%~95%                                                                                                           |
| 27 | 安装类型/Mounting type:                                                                                                 | NS 35/7,5 or NS 35/15                                                                                            |
| 28 | 过电压类别&污染等级/ Overvoltage category & Degree of pollution:                                                             | III/3                                                                                                            |
| 29 | 产品环保合规性/Environmental Product Compliance:                                                                           | --                                                                                                               |
|    | ● ROHS                                                                                                              | No hazardous substances above threshold values                                                                   |
|    | ● REACH SVHC                                                                                                        | No hazardous substances above threshold values                                                                   |
| 30 | 质保期/Warranty:                                                                                                       | 12 Months                                                                                                        |
| 31 | 注意事项/Notice                                                                                                         | 所有连接导线的总电流不得超过最高负载电流<br>The total current of all connecting conductors shall not exceed the maximum load current |

VI. 图纸/Drawing:



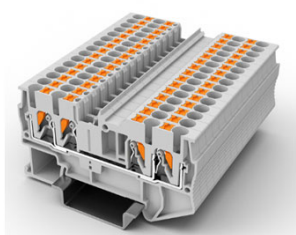
| 外形尺寸公差/External dimensional tolerance |       |         |      |
|---------------------------------------|-------|---------|------|
| >0>6                                  | >6~30 | >30~120 | >120 |
| ±0.25                                 | ±0.4  | ±0.5    | ±0.8 |

| VII. BOM表/BOM TABLE: |                     |                 |                           |                |
|----------------------|---------------------|-----------------|---------------------------|----------------|
| 序号<br>No.            | 零件名称<br>part name   | 材 质<br>Material | 表面处理<br>Surface treatment | 数量<br>Quantity |
| (1)                  | 外壳<br>Housing       | PA66            | N/A                       | 1              |
| (2)                  | 弹簧<br>Spring        | Stainless steel | N/A                       | 4              |
| (3)                  | 导电片<br>conductor    | COPPER          | Sn Plating                | 1              |
| (4)                  | 左按钮<br>Left Button  | PA66            | N/A                       | 2              |
| (5)                  | 右按钮<br>Right Button | PA66            | N/A                       | 2              |
|                      |                     |                 |                           |                |
|                      |                     |                 |                           |                |
|                      |                     |                 |                           |                |
|                      |                     |                 |                           |                |
|                      |                     |                 |                           |                |
|                      |                     |                 |                           |                |

## VIII. 产品认证/Product Certification



## IX. 产品包装/Packaging



产品图片/Product



内盒/inner box



包装完成品/Packaged finished



外箱(封箱前)/Carton(Before sealing)

