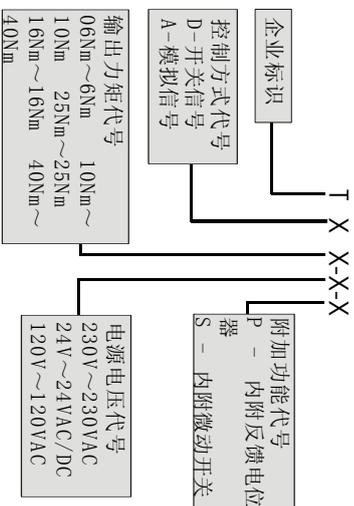


TA/D 系列智能电子式执行机构 使用说明

1. 概述

TA/D 系列智能电子式角行程执行机构，体积小、外形美观、制作精良、安装方便，具有全行程保护功能，旋转角度任意可调。被广泛应用于温度、压力、流量等自动控制系统中，特别适用于暖通空调系统中对风阀、旋流风口、球形喷口、防火排烟阀进行操作。

2. 型号含义

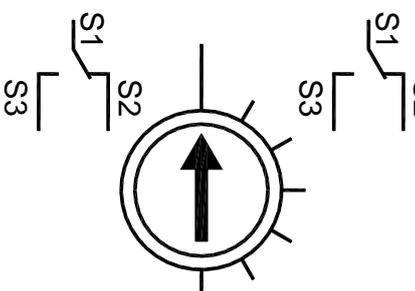


4. 技术参数

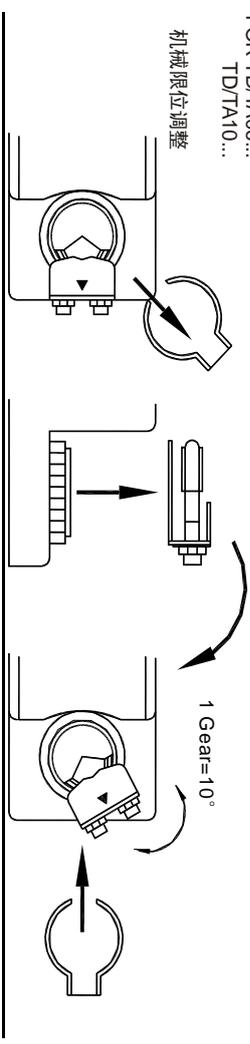
| | |
|------------------|---------------------------|
| 型号 | 04、06、10、16、25、40、... |
| 输出力矩 | 4、6Nm、10Nm、16Nm、25Nm、40Nm |
| 电源 | 230VAC、24VAC/DC、120VAC |
| 运行时间 | 30S...150S |
| 运行功耗 | 5VA ... 8VA |
| 保持功耗 | 1VA...2.5VA |
| 输出角度 | 90° (93° Max) |
| TD... 控制信号 | 2 线与 1 线开关控制 |
| TD... P 反馈信号 | 10K Ω 电位器 |
| TA... 控制信号 1 | 0(2)~10VDC (100K Ω 输入阻抗) |
| TA... 控制信号 2 | 0(4)~20mADC (500 Ω 输入阻抗) |
| TA... 反馈信号 | 0(2)~10VDC |
| TD... S 内附微动开关容量 | 3A@250VAC |
| 防护等级 | IP54 |
| 使用环境 | -10℃~+55℃ 0%~90% RH |
| 最大噪音 | 40dB (A) |
| 净重 | 0.6Kg...2Kg |

5. 输出角度调整

内部微动开关调整 (仅对 TD/TA... S 型)
旋松微动开关压紧螺钉

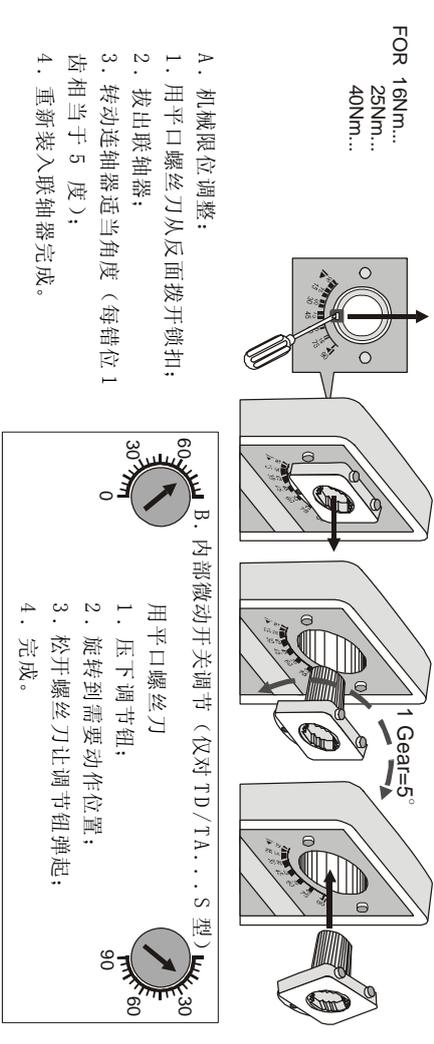


FOR TD/TA06...
TD/TA10...



机械限位调整

FOR 16Nm...
25Nm...
40Nm...



A. 机械限位调整:

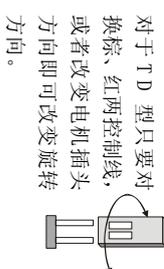
1. 用平口螺丝刀从反面拨开锁扣;
2. 拔出联轴器;
3. 转动联轴器适当角度 (每错位 1 齿相当于 5 度);
4. 重新装入联轴器完成。

B. 内部微动开关调节 (仅对 TD/TA... S 型)

1. 压下调节钮;
2. 旋转到需要动作位置;
3. 松开螺丝刀让调节钮弹起;
4. 完成。

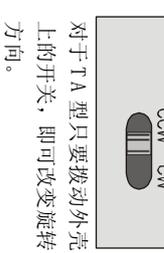
6. 改变运转方向

FOR TD/TA06... T D 系列:
TD/TA10...



对于 TD 型只要对换棕、红两控制线，或者改变电机插头方向即可改变旋转方向。

T A 系列:



对于 TA 型只要拨动外壳上的开关，即可改变旋转方向。

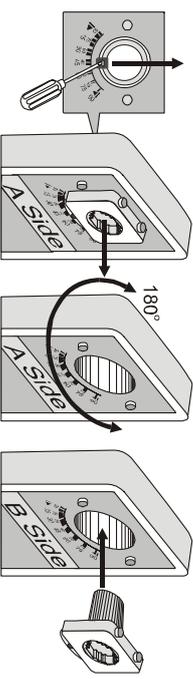
对于 TA 型，如需要改变输入/输出控制信号值，可打开外壳，找到印刷线路板上 JP 插口，将插口跳接即可改变信号值。

| | |
|-----|----------|
| OFF | 0V~10V |
| 0mA | 0mA~20mA |
| 2V | 2V~10V |
| ON | 4mA~20mA |

FOR TD/TA16...
TD/TA25...
TD/TA40...

按下面步骤进行方向设定:

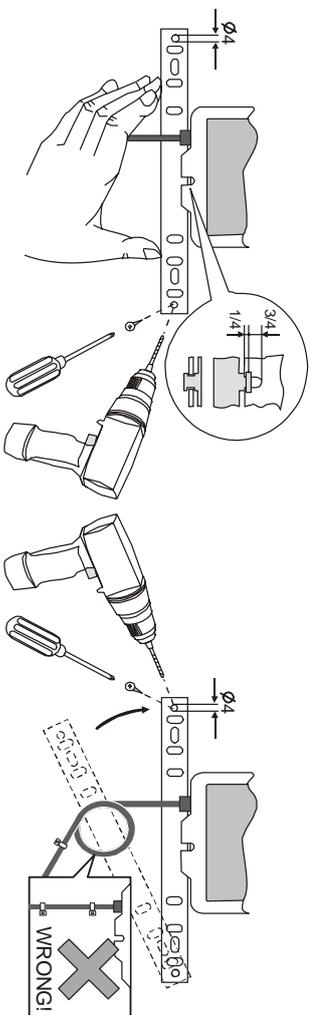
1. 用平口螺丝刀从反面拨开锁扣;
 2. 拔出联轴器;
 3. 反转执行器，重新装入联轴器完成。
- 对于 TD 型，也可采用对换棕红两控制线的方法来改变旋转方向。



3. 注意事项

- (1). 安装和调试必须由专业人员进行;
- (2). 电气接线时，务必切断电源;
- (3). 必须检查确认电压等级相符且接线无误后方可通电，错误的接线可能会损坏本装置、其他设备，甚至危及安全;
- (4). 每台执行机构在出厂时均已得到调整，请不要随意改变电气参数与机械结构;
- (5). 请将执行机构放置于原包装盒内保存，并储存于通风、干燥环境中。
- (6). 请将本说明书与执行机构一同存放或归档保存，以便于安装时参考。

7. 安装

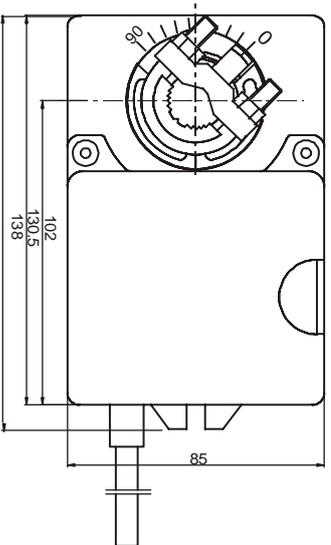
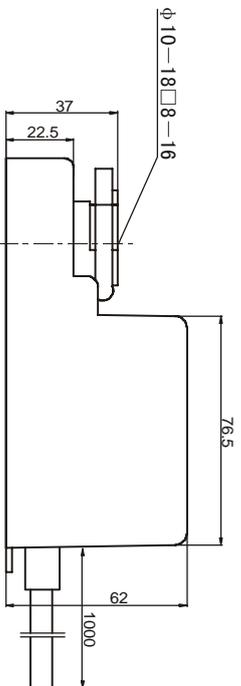
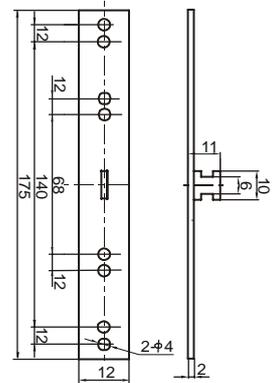


电动执行机构安装时，适应的安装轴为 $\Phi 10 \sim \Phi 18$ 或 $\Phi 10 \sim \Phi 16$ ，长度应 ≥ 20 mm。安装步骤：

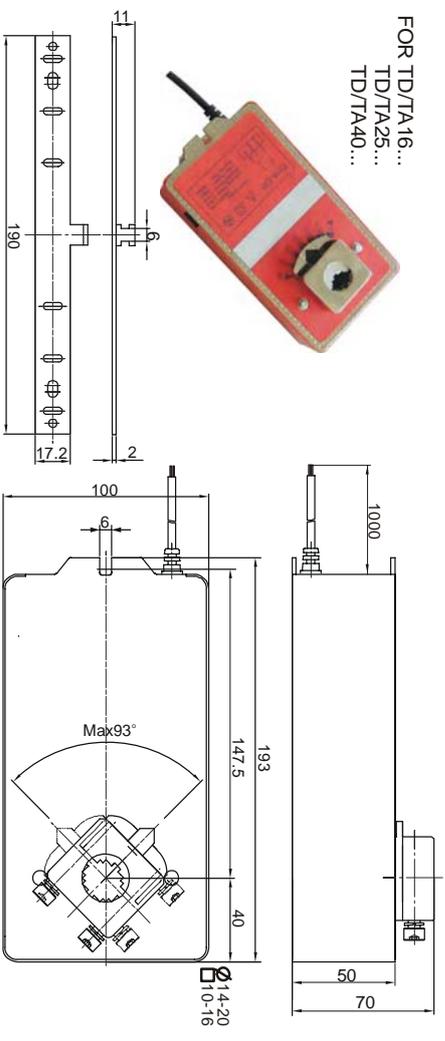
1. 将阀门置于安全位，将执行机构也旋转至对应的安全位（按住卸载按钮，手动旋转联轴器）。
2. 将执行机构联轴器内孔对准阀主轴，调整好位置，用扳手套紧2只联轴器螺母。
3. 根据执行机构的位置和高度，将安装支架弯成适宜的形状，用螺钉固定（为消除联轴器偏心，固定支架勾住执行机构应保留间隙）。
4. 按住卸载按钮，手动旋转阀门由全关至全开位，应灵活，无受力不均匀现象。
5. 按产品外壳上的电器接线图正确接线，电源电压应符合，电源线、信号线不得接错。

8. 安装尺寸(1) 及电气接线

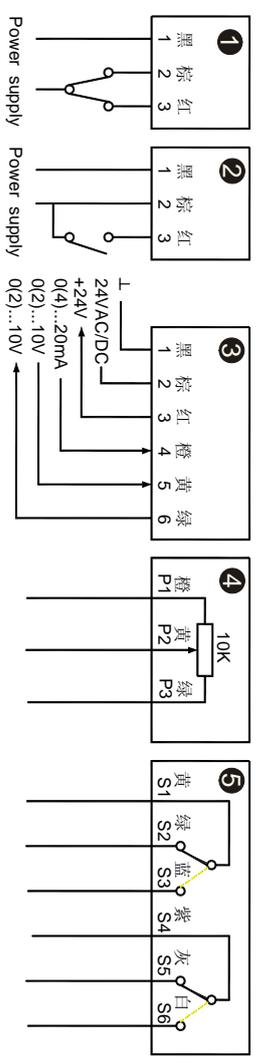
FOR TD/TA06...
TD/TA10...



FOR TD/TA16...
TD/TA25...
TD/TA40...



10. 电气接线



TD/TA16/25/40 接线图

| TD/TA16/25/40 接线图 | 电源 |
|-------------------|--------------|
| TD...-24 | ① 24VAC/DC |
| TD...-230 | ① 230VAC |
| TD...120 | ① 120VAC |
| TA...-24 | ③ 24VAC/DC |
| TD...-24P | ①+④ 24VAC/DC |
| TD...-24S | ①+⑤ 24VAC/DC |
| TA...-24S | ③+⑤ 24VAC/DC |

TD/TA06/10 接线图

| TD/TA06/10 接线图 | 电源 |
|----------------|--------------|
| TD...-24 | ① 24VAC/DC |
| TD...-230 | ① 230VAC |
| TD...120 | ① 120VAC |
| TD...-230-1 | ② 230VAC |
| TD...-120-1 | ② 120VAC |
| TD...-24P | ①+④ 24VAC/DC |
| TD...-24S | ①+⑤ 24VAC/DC |
| TD...-24 | ③ 24VAC/DC |

11. 特别说明

由于产品不断改进，本说明书电气连接图仅供参考，详细的电气接线图印于产品本身。

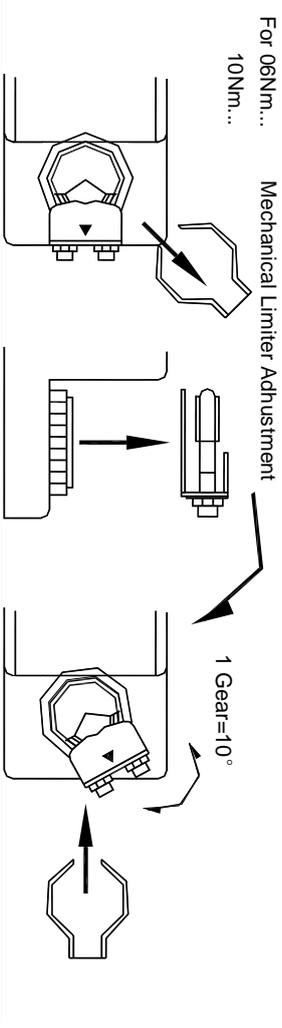
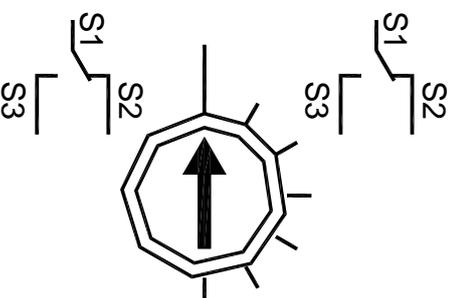
TA-D SERIES ROTARY-TYPE ACTUATOR INSTRUCTION MANUAL

3. Specifications

| | | | | | |
|-----------------------|----------------------------|----------|--------|-------|--------|
| Model | 04D6... | 10... | 16... | 25... | 40... |
| Output torque | 4/6Nm | 10Nm | 16Nm | 25Nm | 40Nm |
| Power supply | ...230 | ... | ...24 | ... | ...120 |
| Running time | 230VAC | 24VAC/DC | 120VAC | | |
| Running power | 30S...150S | | | | |
| Standstill power | 5VA...8VA | | | | |
| Output angle | 90° (93° Max) | | | | |
| TD/C control signal | 2 & 3point compatible | | | | |
| TD/P Feedback signal | 10K Ω Potentiometer | | | | |
| TA/Control signal | 0(2)-10VDC(100K Ω) | | | | |
| TA/Feedback signal | 0(4)-20mADC(500 Ω) | | | | |
| TD/S Auxiliary switch | 0(2)-10VDC | | | | |
| | 3A & 250VAC | | | | |
| Protection | IP54 | | | | |
| Ambient conditions | -10°C~+55°C | C | 90% RH | | |
| Noise max | 40dB(A) | | | | |
| Weight | 0.6kg...2kg | | | | |

4.Limits for rotation

Built-in Microswitch Adjustment (For TA-D...S)
Loosen the screw of the microswitch.



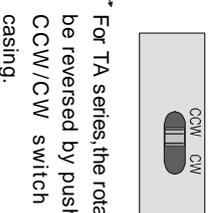
FOR 16Nm...25Nm...40Nm...

- A. Mechanical Limiter Adjustment**
1. Used a screw-driver to put aside the spring flap.
 2. Take off the spindle connector.
 3. Rotate the spindle connector to the suitable position (one tooth is equivalent to 5 degrees).
 4. Put back the spindle connector.



5.Change direction

For TD series,the direction of rotation can be reversed by inter-changing the brown and red wires, OR by changing the motor plug direction.

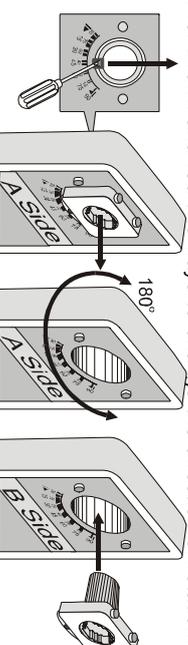


For TA series,to change the input/output signal valve,open the casing and find the JP plug on the circuit board.The control signal valve can be changed by connecting the plug.

| | |
|-----|----------|
| OFF | 0V~10V |
| 0N | 0mA~20mA |
| | 2V~10V |
| | 4mA~20mA |

For 16mm...25mm...40mm... By following these steps direction set:

1. Used a screw-driver to put aside the spring flap.
2. Take off the spindle connector.
3. Reversal actuator, Reload coupling completed. The TA-D - also available on the Line of Control for Brown and red two ways to change the direction of rotation.



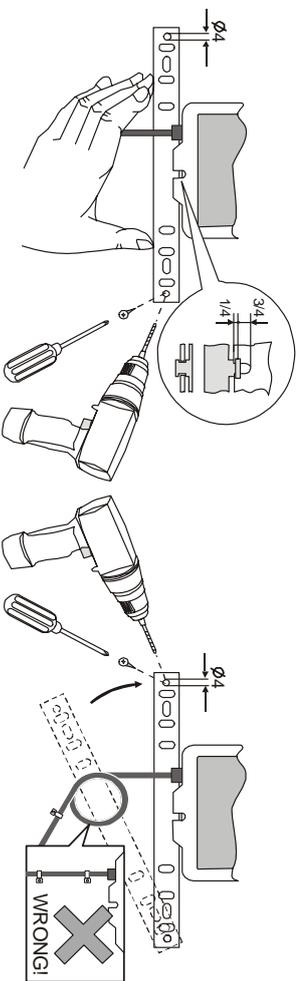
1.Application

TA-D Series Intelligent Electronic Kok Itinerary implementing products, small size, pleasing in appearance, well-produced, easy installation, with the whole trip protection, arbitrary rotation angle adjustable. Been widely used in temperature, pressure, flow, and other automatic control system, in particular apply to HVAC systems on the air valve, swirl tyere, spherical vents, fire exhaust valve operation.

2.Note

- (1). Installation and debugging to be carried out by professionals;
- (2). Electrical wiring, must power off;
- (3). Inspection of the voltage levels must be consistent and accurate before the electricity wiring, the wiring error would damage the device, other equipment, and even endanger the security;
- (4). Each actuator in the factory have been adjusted, please do not randomly change the electrical parameters and the mechanical structure;
- (5). Request actuator placed in the original packaging and containing preserved, and stored in ventilated, dry environment .
- (6). Request that this statement and the implementing actuator to preserve stored or archived to facilitate the installation of reference.

6. Installation



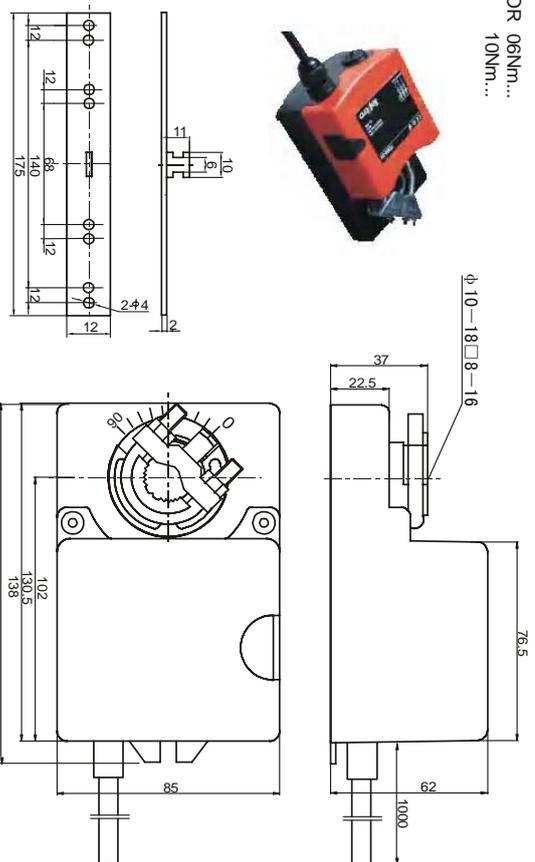
The actuator is suitable for circular spindle of $\phi 10 \sim \phi 18$ mm, or square spindle of $\phi 8 \sim \phi 16$ mm, length ≥ 20 mm.

Procedure:

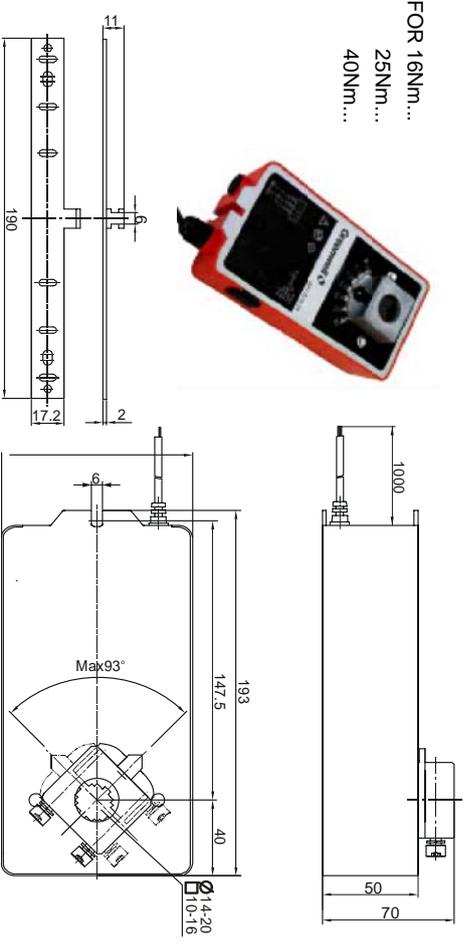
1. Set the damper at fully close position, Turn the actuator to the corresponding fully close position (press down the off-load push-button, turn the spindle connector manually).
2. Place the drive socket of the spindle connector onto the spindle of damper. Set the proper position, then tighten the 2 nuts of the spindle connector.
3. Bend the mounting bracket to the suitable shape and fix its position with screws. (Leave some space between the actuator and the bracket so as to eliminate eccentric phenomenon)
4. Press the off-load pushbutton, manually turn the damper from fully close to fully open position freely and evenly.
5. Connect the wires according to the wiring diagrams on the casing. Make sure the lead wires, and signal wires are connected correctly.

7. Dimensions

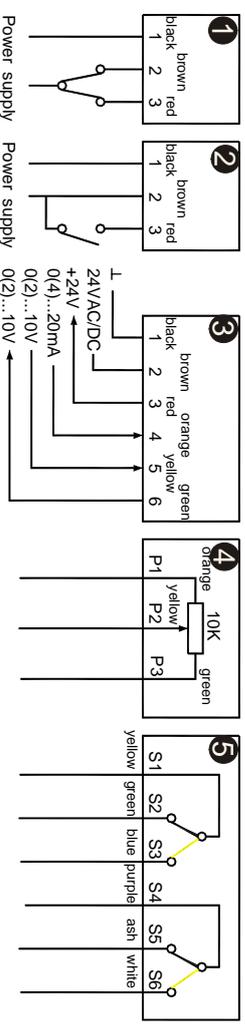
FOR 06Nm...
10Nm...



FOR 16Nm...
25Nm...
40Nm...



8. Wiring diagrams



| 16/25/40W ring diagrams | | Power supply |
|-------------------------|-----|--------------|
| TD...-24 | ① | 24VAC/DC |
| TD...-230 | ① | 230VAC |
| TD...120 | ① | 120VAC |
| TA...-24 | ③ | 24VAC/DC |
| TD...-24P | ①+④ | 24VAC/DC |
| TD...-24S | ①+⑤ | 24VAC/DC |
| TA...-24S | ③+⑤ | 24VAC/DC |
| 06/10W ring diagrams | | Power supply |
| TD...-24 | ① | 24VAC/DC |
| TD...-230 | ① | 230VAC |
| TD...120 | ① | 120VAC |
| TD...-230-1 | ② | 230VAC |
| TD...-120-1 | ② | 120VAC |
| TD...-24P | ①+④ | 24VAC/DC |
| TD...-24S | ①+⑤ | 24VAC/DC |
| TD...-24 | ③ | 24VAC/DC |

9. Special Note

As the products are improved constantly, the manual electrical connection diagram for reference only, detailed electrical wiring diagram was printed on the product.