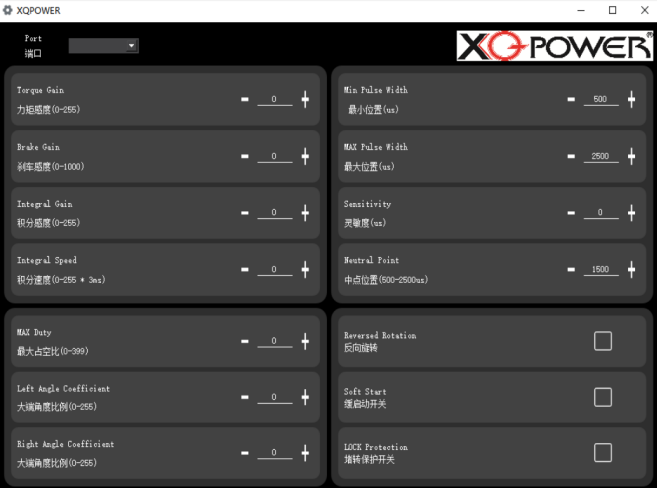


|                                      |  |                         |              |                                                     |  |                               |           |                               |                    |                 |  |  |  |
|--------------------------------------|--|-------------------------|--------------|-----------------------------------------------------|--|-------------------------------|-----------|-------------------------------|--------------------|-----------------|--|--|--|
| Shenzhen XQPOWER Technology Co., LTD |  |                         |              |                                                     |  | DOCUMENT NO                   |           | N/D.20200521.4.2              |                    |                 |  |  |  |
|                                      |  |                         |              |                                                     |  | VER                           |           | X8_8045.01                    |                    |                 |  |  |  |
|                                      |  |                         |              |                                                     |  | Page.                         |           | P.1                           |                    |                 |  |  |  |
|                                      |  |                         |              |                                                     |  | Prepare Date                  |           | 20200505                      |                    |                 |  |  |  |
| GSN                                  |  | XQ-8S                   | Product Name | XQ-POWER 8.4V45kg-cm<br>Hight Voltage Digital Servo |  | Model                         | XQ-S8045D | Material                      | CNC all-metal case |                 |  |  |  |
| Process flow                         |  |                         |              |                                                     |  | CNC / industry testing torque |           |                               |                    |                 |  |  |  |
| SIZE OF THE DRAWINGS                 |  |                         |              |                                                     |  | Control Specifications        |           |                               |                    |                 |  |  |  |
|                                      |  |                         |              |                                                     |  | NO.                           |           | Standard Test Environment     |                    |                 |  |  |  |
|                                      |  |                         |              |                                                     |  | 1-1                           |           | Temperature range             |                    | 25°C±5°C        |  |  |  |
|                                      |  |                         |              |                                                     |  | 1-2                           |           | Humidity range                |                    | 65%±10%         |  |  |  |
|                                      |  |                         |              |                                                     |  | NO.                           |           | Apply Environmental Condition |                    |                 |  |  |  |
|                                      |  |                         |              |                                                     |  | 2-1                           |           | Storage Temperature Range     |                    | -20°C ~ 70°C    |  |  |  |
|                                      |  |                         |              |                                                     |  | 2-2                           |           | Operating Temperature Range   |                    | -15°C ~ 65°C    |  |  |  |
|                                      |  |                         |              |                                                     |  | NO.                           |           | Mechanical Specification      |                    |                 |  |  |  |
|                                      |  |                         |              |                                                     |  | 3-1                           |           | Servo Dimensions              |                    | 20*40*38.4 mm   |  |  |  |
|                                      |  |                         |              |                                                     |  | 3-2                           |           | Servo Weight                  |                    | 73g             |  |  |  |
|                                      |  |                         |              |                                                     |  | 3-3                           |           | Servo Gear                    |                    | Stainless Steel |  |  |  |
|                                      |  |                         |              |                                                     |  | 3-4                           |           | Angle of limit                |                    | 210°            |  |  |  |
|                                      |  |                         |              |                                                     |  | 3-5                           |           | Servo Bearing                 |                    | 2 Ball bearings |  |  |  |
|                                      |  |                         |              |                                                     |  | 3-6                           |           | Output force shaft            |                    | 25T-φ5.94mm     |  |  |  |
|                                      |  |                         |              |                                                     |  | 3-7                           |           | Servo arm                     |                    | Plastic, POM    |  |  |  |
|                                      |  |                         |              |                                                     |  | 3-8                           |           | Case Material                 |                    | Aluminium CNC   |  |  |  |
|                                      |  |                         |              |                                                     |  | 3-9                           |           | Servo line                    |                    | 300mm           |  |  |  |
| 3-10                                 |  | Built-in motor          |              | Coreless motor                                      |  |                               |           |                               |                    |                 |  |  |  |
| 3-11                                 |  | Splash water resistance |              | Yes                                                 |  |                               |           |                               |                    |                 |  |  |  |
| The Drawings                         |  |                         |              |                                                     |  | Electrical Specification      |           |                               |                    |                 |  |  |  |
|                                      |  |                         |              |                                                     |  | NO.                           |           | Test Operating Voltage Range  |                    |                 |  |  |  |
|                                      |  |                         |              |                                                     |  | 4-1                           |           | Work Voltage                  |                    | 6.0 V           |  |  |  |
|                                      |  |                         |              |                                                     |  | 4-2                           |           | No load speed                 |                    | 0.144 sec/60°   |  |  |  |
|                                      |  |                         |              |                                                     |  | 4-3                           |           | Runnig current (no load)      |                    | 320 mA          |  |  |  |
|                                      |  |                         |              |                                                     |  | 4-4                           |           | Peak stall torque             |                    | 37 kg.cm        |  |  |  |
|                                      |  |                         |              |                                                     |  | 4-5                           |           | Stall current                 |                    | 3.7 A           |  |  |  |
|                                      |  |                         |              |                                                     |  |                               |           | Work Voltage                  |                    | 7.4 V           |  |  |  |
|                                      |  |                         |              |                                                     |  | 4-6                           |           | No load speed                 |                    | 0.122 sec/60°   |  |  |  |
|                                      |  |                         |              |                                                     |  | 4-7                           |           | Runnig current (no load)      |                    | 370 mA          |  |  |  |
|                                      |  |                         |              |                                                     |  | 4-8                           |           | Peak stall torque             |                    | 43 kg.cm        |  |  |  |
|                                      |  |                         |              |                                                     |  | 4-9                           |           | Stall current                 |                    | 4.5 A           |  |  |  |
|                                      |  |                         |              |                                                     |  |                               |           | Work Voltage                  |                    | 8.4 V           |  |  |  |
|                                      |  |                         |              |                                                     |  | 4-10                          |           | No load speed                 |                    | 0.106 sec/60°   |  |  |  |
|                                      |  |                         |              |                                                     |  | 4-11                          |           | Runnig current (no load)      |                    | 440 mA          |  |  |  |
|                                      |  |                         |              |                                                     |  | 4-12                          |           | Peak stall torque             |                    | 48 kg.cm        |  |  |  |
|                                      |  |                         |              |                                                     |  | 4-13                          |           | Stall current                 |                    | 5.2 A           |  |  |  |
|                                      |  | Make table              |              | CHECK                                               |  | APPROVE                       |           |                               |                    |                 |  |  |  |
|                                      |  | MR.ZHONG                |              | MR.LIU                                              |  | Manager.ZHOU                  |           |                               |                    |                 |  |  |  |

|                                                                                                                   |                                 |        |              |                                                     |                                                                                                                   |                          |                           |                  |                    |     |
|-------------------------------------------------------------------------------------------------------------------|---------------------------------|--------|--------------|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|--------------------------|---------------------------|------------------|--------------------|-----|
| Shenzhen XQPOWER Technology Co., LTD                                                                              |                                 |        |              |                                                     |                                                                                                                   | DOCUMENT NO              |                           | N/D.20200521.4.2 |                    |     |
|                                                                                                                   |                                 |        |              |                                                     |                                                                                                                   | VER                      |                           | X8_8045.01       |                    |     |
|                                                                                                                   |                                 |        |              |                                                     |                                                                                                                   | Page.                    |                           | P.2              |                    |     |
|                                                                                                                   |                                 |        |              |                                                     |                                                                                                                   | Prepare Date             |                           | 20200505         |                    |     |
| GSN                                                                                                               |                                 | XQ-8S  | Product Name | XQ-POWER 8.4V45kg-cm<br>Hight Voltage Digital Servo |                                                                                                                   | Model                    | XQ-S8045D                 | Material         | CNC all-metal case |     |
| Control Specification                                                                                             |                                 |        |              |                                                     |                                                                                                                   |                          |                           |                  |                    |     |
| Test display diagram                                                                                              |                                 |        |              |                                                     | EMPHASIS                                                                                                          |                          |                           |                  |                    |     |
| <div>Photos1</div> <div></div> |                                 |        |              |                                                     | NO.                                                                                                               | Item                     | Specification             |                  |                    |     |
|                                                                                                                   |                                 |        |              |                                                     | 5-1                                                                                                               | Command signal           | PWM 50-333Hz              |                  |                    |     |
|                                                                                                                   |                                 |        |              |                                                     | 5-2                                                                                                               | Amplifier type           | Digital Controller        |                  |                    |     |
|                                                                                                                   |                                 |        |              |                                                     | 5-3                                                                                                               | Pulse width range        | 800～2200 μsec             |                  |                    |     |
|                                                                                                                   |                                 |        |              |                                                     | 5-4                                                                                                               | Neutral position         | 1500 μsec                 |                  |                    |     |
|                                                                                                                   |                                 |        |              |                                                     | 5-5                                                                                                               | Running degree           | 360° (when1000~2000 μse   |                  |                    |     |
|                                                                                                                   |                                 |        |              |                                                     | 5-6                                                                                                               | Dead band width          | 1 μsec                    |                  |                    |     |
|                                                                                                                   |                                 |        |              |                                                     | 5-7                                                                                                               | Rotating direction       | CCW(when 1000 ~2000 μsec) |                  |                    |     |
|                                                                                                                   |                                 |        |              |                                                     | Appearance inspection                                                                                             |                          |                           |                  |                    |     |
|                                                                                                                   |                                 |        |              |                                                     | NO.                                                                                                               | QC details               |                           |                  |                    |     |
|                                                                                                                   |                                 |        |              |                                                     | 5-7                                                                                                               | Material qualified       |                           |                  |                    |     |
|                                                                                                                   |                                 |        |              |                                                     | 5-8                                                                                                               | Gear structure qualified |                           |                  |                    |     |
|                                                                                                                   |                                 |        |              |                                                     | 5-9                                                                                                               | Function qualified       |                           |                  |                    |     |
|                                                                                                                   |                                 |        |              |                                                     | 5-10                                                                                                              | Use data qualified       |                           |                  |                    |     |
|                                                                                                                   |                                 |        |              |                                                     | 5-11                                                                                                              | Pass the test            |                           |                  |                    |     |
|                                                                                                                   |                                 |        |              |                                                     | AQL                                                                                                               |                          |                           |                  |                    |     |
|                                                                                                                   |                                 |        |              |                                                     | Accessories                                                                                                       |                          |                           |                  |                    |     |
|                                                                                                                   |                                 |        |              |                                                     | <div>Photos1</div> <div></div> |                          |                           |                  |                    | NO. |
| 6-1                                                                                                               |                                 |        |              |                                                     |                                                                                                                   |                          |                           |                  |                    |     |
| 6-2                                                                                                               |                                 |        |              |                                                     |                                                                                                                   |                          |                           |                  |                    |     |
| 6-3                                                                                                               |                                 |        |              |                                                     |                                                                                                                   |                          |                           |                  |                    |     |
| 6-4                                                                                                               |                                 |        |              |                                                     |                                                                                                                   |                          |                           |                  |                    |     |
| Other Accessories                                                                                                 |                                 |        |              |                                                     |                                                                                                                   |                          |                           |                  |                    |     |
| 7-1                                                                                                               | Plastic arm bag                 |        |              |                                                     |                                                                                                                   |                          |                           |                  |                    |     |
| 7-2                                                                                                               | Screw                           |        |              |                                                     |                                                                                                                   |                          |                           |                  |                    |     |
| 7-3                                                                                                               | Metal arm (additional purchase) |        |              |                                                     |                                                                                                                   |                          |                           |                  |                    |     |
| <div></div>                   |                                 |        |              |                                                     |                                                                                                                   |                          |                           |                  |                    |     |
| Reference opinions of all departments: Agree                                                                      |                                 |        |              |                                                     |                                                                                                                   |                          |                           |                  |                    |     |
| Make table                                                                                                        |                                 | CHECK  |              | APPROVE                                             |                                                                                                                   |                          |                           |                  |                    |     |
| MR.ZHONG                                                                                                          |                                 | MR.LIU |              | Manager.ZHOU                                        |                                                                                                                   |                          |                           |                  |                    |     |