

| APPLICABLE STANDARD                                                                                                                                                                                                                                                                                        |                             |                                                                                                                                |             |                                                                                                                                |                                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------|-------------|--------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| RATING                                                                                                                                                                                                                                                                                                     | OPERATING TEMPERATURE RANGE | -55 °C TO 85 °C <sup>(1)</sup>                                                                                                 |             | STORAGE TEMPERATURE RANGE                                                                                                      | -10 °C TO 60 °C <sup>(2)</sup>           |
|                                                                                                                                                                                                                                                                                                            | VOLTAGE                     | 100 V AC                                                                                                                       |             | STORAGE HUMIDITY RANGE                                                                                                         | 40 % TO 70 % <sup>(2)</sup>              |
|                                                                                                                                                                                                                                                                                                            | CURRENT                     | 0.5 A (SIGNAL CONTACT) <sup>(3)</sup><br>3 A (MF CONTACT)                                                                      |             | OPERATING HUMIDITY RANGE                                                                                                       | RELATIVE HUMIDITY 85% max<br>(NOT DEWED) |
| SPECIFICATIONS                                                                                                                                                                                                                                                                                             |                             |                                                                                                                                |             |                                                                                                                                |                                          |
| ITEM                                                                                                                                                                                                                                                                                                       |                             | TEST METHOD                                                                                                                    |             | REQUIREMENTS                                                                                                                   | QT AT                                    |
| CONSTRUCTION                                                                                                                                                                                                                                                                                               |                             |                                                                                                                                |             |                                                                                                                                |                                          |
| GENERAL EXAMINATION                                                                                                                                                                                                                                                                                        |                             | VISUALLY AND BY MEASURING INSTRUMENT.                                                                                          |             | ACCORDING TO DRAWING.                                                                                                          | x x                                      |
| MARKING                                                                                                                                                                                                                                                                                                    |                             | CONFIRMED VISUALLY.                                                                                                            |             |                                                                                                                                | x x                                      |
| ELECTRIC CHARACTERISTICS                                                                                                                                                                                                                                                                                   |                             |                                                                                                                                |             |                                                                                                                                |                                          |
| CONTACT RESISTANCE                                                                                                                                                                                                                                                                                         |                             | 100 mA(DC OR 1000Hz)                                                                                                           |             | SIGNAL CONTACT : 90 mΩ MAX.<br>MF CONTACT : 30 mΩ MAX.                                                                         | x —                                      |
| INSULATION RESISTANCE                                                                                                                                                                                                                                                                                      |                             | 250 V DC.                                                                                                                      |             | 1000 MΩ MIN.                                                                                                                   | x —                                      |
| VOLTAGE PROOF                                                                                                                                                                                                                                                                                              |                             | 300 V AC FOR 1 min.                                                                                                            |             | NO FLASHOVER OR BREAKDOWN.                                                                                                     | x —                                      |
| MECHANICAL CHARACTERISTICS                                                                                                                                                                                                                                                                                 |                             |                                                                                                                                |             |                                                                                                                                |                                          |
| INSERTION AND WITHDRAWAL FORCES                                                                                                                                                                                                                                                                            |                             | MEASURED BY APPLICABLE CONNECTOR.                                                                                              |             | INSERTION FORCE: 40 N MAX.<br>WITHDRAWAL FORCE: 4 N MIN.                                                                       | x —                                      |
| MECHANICAL OPERATION                                                                                                                                                                                                                                                                                       |                             | 500 TIMES INSERTIONS AND EXTRACTIONS.                                                                                          |             | ① CONTACT RESISTANCE:<br>SIGNAL CONTACT : 100 mΩ MAX.<br>MF CONTACT : 40 mΩ MAX.<br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | x —                                      |
| VIBRATION                                                                                                                                                                                                                                                                                                  |                             | FREQUENCY 10 TO 55 TO 10Hz, APPROX 5min<br>SINGLE AMPLITUDE : 0.75 mm, 10 CYCLES<br>FOR 3 DIRECTIONS.                          |             | ① NO ELECTRICAL DISCONTINUITY OF 1 μs.<br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.                                           | x —                                      |
| SHOCK                                                                                                                                                                                                                                                                                                      |                             | 490 m/s <sup>2</sup> , DURATION OF PULSE 11 ms<br>AT 3 TIMES FOR 3 DIRECTIONS.                                                 |             |                                                                                                                                | x —                                      |
| ENVIRONMENTAL CHARACTERISTICS                                                                                                                                                                                                                                                                              |                             |                                                                                                                                |             |                                                                                                                                |                                          |
| DAMP HEAT (STEADY STATE)                                                                                                                                                                                                                                                                                   |                             | EXPOSED AT 40±2 °C, 90 ~ 95 %, 96 h.                                                                                           |             | ① CONTACT RESISTANCE:<br>SIGNAL CONTACT : 100 mΩ MAX.<br>MF CONTACT : 40 mΩ MAX.                                               | x —                                      |
| RAPID CHANGE OF TEMPERATURE                                                                                                                                                                                                                                                                                |                             | TEMPERATURE -55 → +85 °C<br>TIME 30 → 30 min.<br>UNDER 5 CYCLES.<br>(RELOCATION TIME TO CHAMBER: WITHIN 2~3 MIN)               |             | ② INSULATION RESISTANCE : 1000 MΩ MIN.<br>③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.                                           | x —                                      |
| SULFUR DIOXIDE                                                                                                                                                                                                                                                                                             |                             | EXPOSED AT 25±2°C, 75±5%RH, 25 PPM FOR 96 h.<br>(TEST STANDARD: JIS C 60068)                                                   |             | NO HEAVY CORROSION.                                                                                                            | x —                                      |
| RESISTANCE TO SOLDERING HEAT                                                                                                                                                                                                                                                                               |                             | 1) REFLOW SOLDERING :<br>PEAK TMP : 260°C MAX<br>REFLOW TMP: 220°C MIN FOR 60sec<br>2) SOLDERING IRONS : 360°C MAX. FOR 5 sec. |             | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINAL.                                                                 | x —                                      |
| SOLDERABILITY                                                                                                                                                                                                                                                                                              |                             | SOLDERED AT SOLDER TEMPERATURE 240±3°C FOR IMMERSION DURATION, 3 sec.                                                          |             | A NEW UNIFORM COATING OF SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMERSED.                                   | x —                                      |
|                                                                                                                                                                                                                                                                                                            |                             |                                                                                                                                |             |                                                                                                                                |                                          |
|                                                                                                                                                                                                                                                                                                            | COUNT                       | DESCRIPTION OF REVISIONS                                                                                                       | DESIGNED    | CHECKED                                                                                                                        | DATE                                     |
| △                                                                                                                                                                                                                                                                                                          |                             |                                                                                                                                |             |                                                                                                                                |                                          |
| REMARKS <sup>(1)</sup> INCLUDE TEMPERATURE RISE CAUSED BY CURRENT-CARRYING.<br><sup>(2)</sup> "STORAGE" MEANS A LONG-TERM STORAGE STATE FOR THE UNUSED PRODUCT BEFORE ASSEMBLY TO PCB.<br><sup>(3)</sup> THE RATED CURRENT APPLIES TO PER CONTACT.<br><br>Unless otherwise specified, refer to JIS-C-5402. |                             |                                                                                                                                | APPROVED    | HS. OKAWA                                                                                                                      | 11. 08. 30                               |
|                                                                                                                                                                                                                                                                                                            |                             |                                                                                                                                | CHECKED     | KI. HIROKAWA                                                                                                                   | 11. 08. 30                               |
|                                                                                                                                                                                                                                                                                                            |                             |                                                                                                                                | DESIGNED    | TH. SANO                                                                                                                       | 11. 08. 30                               |
|                                                                                                                                                                                                                                                                                                            |                             |                                                                                                                                | DRAWN       | TH. SANO                                                                                                                       | 11. 08. 30                               |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test                                                                                                                                                                                                                                             |                             |                                                                                                                                | DRAWING NO. |                                                                                                                                | ELC4-334383-00                           |
| HRS                                                                                                                                                                                                                                                                                                        | SPECIFICATION SHEET         |                                                                                                                                | PART NO.    | FX18-60P-0.8SV10                                                                                                               |                                          |
|                                                                                                                                                                                                                                                                                                            | HIROSE ELECTRIC CO., LTD.   |                                                                                                                                | CODE NO.    | CL579-0023-5-00                                                                                                                | △ 1/1                                    |