

| 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) |            |
| <b>SPECIFICATIONS</b>                |  |  |                           |  |            |
| ITEM                                 | TEST METHOD  | REQUIREMENTS   | QT                        | AT                                       |            |
| <b>CONSTRUCTION</b>                  |  |  |                           |  |            |
| GENERAL EXAMINATION                  | VISUALLY AND BY MEASURING INSTRUMENT.  | ACCORDING TO DRAWING.  | x                         | x  |            |
| MARKING                              | CONFIRMED VISUALLY.  |  | x                         | x  |            |
| <b>ELECTRIC CHARACTERISTICS</b>      |  |  |                           |  |            |
| 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                         | —  |            |
| <b>MECHANICAL CHARACTERISTICS</b>    |  |  |                           |  |            |
| INSERTION AND WITHDRAWAL FORCES      | MEASURED BY APPLICABLE CONNECTOR.  | INSERTION FORCE: 30 N MAX.<br>WITHDRAWAL FORCE: 3 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                         | —  |            |
| <b>ENVIRONMENTAL CHARACTERISTICS</b> |  |  |                           |  |            |
| 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                              | ① INCLUDE TEMPERATURE RISE CAUSED BY CURRENT-CARRYING.<br>② "STORAGE" MEANS A LONG-TERM STORAGE STATE FOR THE UNUSED PRODUCT BEFORE ASSEMBLY TO PCB.<br>③ THE RATED CURRENT APPLIES TO PER CONTACT.<br>APPLY 0.4A WHEN ALL THE CONTACTS ARE USED FOR CURRENT CARRYING.<br>Unless otherwise specified, refer to JIS-C-5402. |  | APPROVED                  | HS. OKAWA                                | 14. 07. 16 |
|                                      |  |  | CHECKED                   | HT. YAMAGUCHI                            | 14. 07. 15 |
|                                      |  |  | DESIGNED                  | TH. SANO                                 | 14. 07. 15 |
|                                      |  |  | DRAWN                     | TH. SANO                                 | 14. 07. 15 |
| Note                                 | QT:Qualification Test AT:Assurance Test X:Applicable Test  | DRAWING NO.  | ELC4-349387-00            |  |            |
| <b>HRS</b>                           | SPECIFICATION SHEET  |  | PART NO.                  | FX18-40S-0. 8SV10                        |            |
|                                      | HIROSE ELECTRIC CO., LTD.  |  | CODE NO.                  | CL579-0055-1-00                          | △ 1/1      |