

| 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                     | 125 V AC  | OPERATING HUMIDITY RANGE   | 40 % TO 80 %                   |            |
|   | CURRENT                     | 0.5 A   | STRAGE HUMIDITY RANGE  | 40 % TO 70 % <sup>(2)</sup>    |            |
| 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 1000 Hz).   | 45 mΩ MAX .  | x                              | —          |
| CONTACT RESISTANCE  |                             | 20 mV MAX, 1 mA(DC OR 1000Hz)   | 55 mΩ MAX .  | x                              | —          |
| MILLIVOLT LEVEL METHOD  |                             |   |  |                                |            |
| INSULATION RESISTANCE   |                             | 250 V DC  | 100 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: 53.0 N MAX.<br>WITHDRAWAL FORCE: 5.9 N MIN.                                 | x                              | —          |
| MECHANICAL OPERATION  |                             | 500 TIMES INSERTIONS AND EXTRACTIONS.   | ① CONTACT RESISTANCE: 55 mΩ MAX.<br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.               | x                              | —          |
| VIBRATION   |                             | FREQUENCY 10 TO 55 Hz,<br>AMPLITUDE : 1.52 mm,<br>AT 2 h 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: 55 mΩ MAX.<br>② INSULATION RESISTANCE:100 MΩ MIN.                      | x                              | —          |
| RAPID CHANGE OF TEMPERATURE   |                             | TEMPERATURE-55→+15~+35→+85→+15~+35°C<br>TIME 30 → 10~15 → 30 → 10~15 min.<br>UNDER 5 CYCLES.              | ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.   | x                              | —          |
| CORROSION SALT MIST   |                             | EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h.   | ① CONTACT RESISTANCE: 55 mΩ MAX.<br>② NO HEAVY CORROSION.                                    | x                              | —          |
| HYDROGEN SULPHIDE   |                             | EXPOSED IN 3 PPM FOR 96 h.<br>(TEST STANDARD: JEIDA 38)   |  | x                              | —          |
| RESISTANCE TO SOLDERING HEAT  |                             | 1) REFLOW SOLDERING : 250 °C MAX,<br>: 220 °C MIN,<br>FOR 60 s<br>2) SOLDERING IRONS : 360 °C,<br>FOR 5 s | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.                              | x                              | —          |
| SOLDERABILITY   |                             | SOLDERED AT SOLDER TEMPERATURE, 240±3°C,<br>FOR IMMERSION DURATION, 2s.                                   | 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       |
| △   |                             |   |  |                                |            |
| REMARK <sup>(1)</sup> TEMPERATURE RISE INCLUDED WHEN ENERGIZED.<br><sup>(2)</sup> THIS STORAGE INDICATES A LONG-TERM STORAGE STATE FOR THE UNUSED PRODUCT BEFORE THE BOARD MOUNTED. |                             |   | APPROVED   | HS. OKAWA                      | 07. 10. 19 |
|   |                             |   | CHECKED  | HS. OZAWA                      | 07. 10. 19 |
|   |                             |   | DESIGNED   | SY. KAMIGA                     | 07. 10. 19 |
|   |                             |   | DRAWN  | HK. SUNADORI                   | 07. 10. 19 |
| Unless otherwise specified, refer to MIL-STD-1344.  |                             |   |  |                                |            |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test  |                             |   | DRAWING NO.  | ELC4-082419-21                 |            |
| HRS   | SPECIFICATION SHEET         |   | PART NO.   | FX2-60S-1. 27SVL (71)          |            |
|   | HIROSE ELECTRIC CO., LTD.   |   | CODE NO.   | CL572-2155-2-71                | △ 1/1      |