

| 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                     | 50 V AC   | OPERATING HUMIDITY RANGE  | RELATIVE HUMIDITY 95 % RH MAX. <sup>(3)</sup>  |                |
|   | CURRENT                     | 0.3 A   | STORAGE HUMIDITY RANGE    | 40 °C TO 70 °C <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).   |                           | 60 mΩ MAX.   | x —            |
| INSULATION RESISTANCE   |                             | 100 V DC  |                           | 100 MΩ MIN.  | x —            |
| VOLTAGE PROOF   |                             | 150 V AC FOR 1 min.   |                           | NO FLASHOVER OR BREAKDOWN.   | x x            |
| MECHANICAL CHARACTERISTICS  |                             |   |                           |  |                |
| INSERTION AND WITHDRAWAL FORCE  |                             | MEASURED BY APPLICABLE CONNECTOR.   |                           | INSERTION FORCE: 84 N MAX.<br>WITHDRAWAL FORCE: 9.1 N MIN.                                   | x —            |
| MECHANICAL OPERATION  |                             | 50 TIMES INSERTIONS AND EXTRACTIONS.  |                           | ① CONTACT RESISTANCE: 70 mΩ MAX.<br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.               | x —            |
| VIBRATION   |                             | FREQUENCY 10 TO 55 Hz,<br>SINGLE AMPLITUDE : 0.75 mm,<br>AT 10 CYCLES 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: 70 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 → 2 ~ 3 → 30 → 2 ~ 3 min.<br>UNDER 5 CYCLES.              |                           | ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.   | x —            |
| DRY HEAT  |                             | EXPOSED AT 85 °C, 96h.  |                           | ① CONTACT RESISTANCE: 70 mΩ MAX.   | x —            |
| COLD  |                             | EXPOSED AT -55 °C, 96h.   |                           | ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.   | x —            |
| CORROSION SALT MIST   |                             | EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h.   |                           | ① CONTACT RESISTANCE: 70 mΩ MAX.<br>② NO HEAVY CORROSION.                                    | x —            |
| SULPHUR DIOXIDE   |                             | EXPOSED IN 10 PPM FOR 96 h.<br>(TEST STANDARD: JIS C 0090)  |                           |  | 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 TERMINAL.                               | x —            |
| SOLDERABILITY   |                             | SOLDERED AT SOLDER TEMPERATURE, 240°C,<br>FOR IMMERSION DURATION, 3 s.                                    |                           | 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.<br><sup>(3)</sup> NO DEW CONDENSATION IS PERMITTED. |                             |   | APPROVED                  | HS. OKAWA  | 06.12.04       |
|   |                             |   | CHECKED                   | HS. OZAWA  | 06.12.04       |
|   |                             |   | DESIGNED                  | KY. NAKAMURA   | 06.12.01       |
| Unless otherwise specified, refer to JIS C 5402.  |                             |   | DRAWN                     | AK. SUZUKAWA   | 06.12.01       |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test  |                             |   | DRAWING NO.               |  | ELC4-151979-25 |
| HRS   | SPECIFICATION SHEET         |   | PART NO.                  | FX10A-140S/14-SV (71)  |                |
|   | HIROSE ELECTRIC CO., LTD.   |   | CODE NO.                  | CL570-0204-2-71  | △ 1/1          |