

| 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  | 95 % RH MAX.<br>(NO DEW CONDENSATION IS PERMITTED) |
|   | CURRENT                     | 0.3 A   |             |   |  |
| SPECIFICATIONS  |                             |   |             |   |  |
| ITEM  |                             | TEST METHOD   |             | REQUIREMENTS  | QT AT  |
| CONSTRUCTION  |                             |   |             |   |  |
| GENERAL EXAMINATION   |                             | VISUALLY AND BY MEASURING INSTRUMENT.   |             | ACCORDING TO DRAWING.   | ×  |
| MARKING   |                             | CONFIRMED VISUALLY.   |             |   | ×  |
| ELECTRIC CHARACTERISTICS  |                             |   |             |   |  |
| CONTACT RESISTANCE  |                             | 100 mA (DC OR 1000 Hz).   |             | 70 mΩ MAX.  | ×  |
| INSULATION RESISTANCES  |                             | 100 V DC  |             | 100 MΩ MIN.   | ×  |
| VOLTAGE PROOF   |                             | 150 V AC FOR 1 min.   |             | NO FLASHOVER OR BREAKDOWN.  | ×  |
| MECHANICAL CHARACTERISTICS  |                             |   |             |   |  |
| INSERTION AND WITHDRAWAL FORCE  |                             | MEASURED BY APPLICABLE CONNECTOR.   |             | INSERTION FORCE: 54 N MAX.<br>WITHDRAWAL FORCE: 3.6 N MIN.                                  | ×  |
| MECHANICAL OPERATION  |                             | 50 TIMES INSERTIONS AND EXTRACTIONS.  |             | ① CONTACT RESISTANCE: 80 mΩ MAX.<br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.              | ×  |
| 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 MIN.<br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.    | ×  |
| SHOCK   |                             | 490 m/s <sup>2</sup> , DURATION OF PULSE 11 ms<br>AT 3 TIMES FOR 3 DIRECTIONS.                            |             |   | ×  |
| ENVIRONMENTAL CHARACTERISTICS   |                             |   |             |   |  |
| DAMP HEAT (STEADY STATE)  |                             | EXPOSED AT 40 ± 2 °C, 90 ~ 95 %, 96 h.  |             | ① CONTACT RESISTANCE: 80 mΩ MAX.<br>② INSULATION RESISTANCE: 100 MΩ MIN.                    | ×  |
| 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.  | ×  |
| DRY HEAT  |                             | EXPOSED AT 85 °C, 96 h.   |             | ① CONTACT RESISTANCE: 80 mΩ MAX.  | ×  |
| COLD  |                             | EXPOSED AT -55 °C, 96 h.  |             | ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.  | ×  |
| CORROSION SALT MIST   |                             | EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h.   |             | NO HEAVY CORROSION.   | ×  |
| SULPHUR DIOXIDE   |                             | EXPOSED IN 10 PPM FOR 96 h.<br>(TEST STANDARD: JIS C 0090)  |             | ① CONTACT RESISTANCE: 80 mΩ MAX.<br>② NO HEAVY CORROSION.                                   | ×  |
| 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.                              | ×  |
| SOLDERABILITY   |                             | SOLDERED AT SOLDER TEMPERATURE, 240 ± 3 °C,<br>FOR IMMERSION DURATION, 3 s.                               |             | A NEW UNIFORM COATING OF SOLDER SHALL OVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMersed. | ×  |
|   |                             |   |             |   |  |
| COUNT   | DESCRIPTION OF REVISIONS    |   | DESIGNED    | CHECKED   | DATE   |
| ①   |                             |   |             |   |  |
| 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   | 06.10.11   |
|   |                             |   | CHECKED     | HS. OZAWA   | 06.10.11   |
|   |                             |   | DESIGNED    | KY. NAKAMURA  | 06.10.11   |
|   |                             |   | DRAWN       | AK. SUZUKAWA  | 06.10.11   |
| Unless otherwise specified, refer to JIS C 5402.  |                             |   |             |   |  |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test  |                             |   | DRAWING NO. |   | ELC4-152597-25                                     |
| HRS   |                             | SPECIFICATION SHEET   |             | PART NO. FX11A-60P/6-SV (71)  |  |
|   |                             | HIROSE ELECTRIC CO., LTD.   |             | CODE NO. CL573-0502-0-71  |  |
|   |                             |   |             | ①   | 1/1  |