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| 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><small>(NO DEW CONDENSATION IS PERMITTED)</small> |                |     |
|   | 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).   |                                |  | 60 mΩ MAX.   | ×   |                |     |
| INSULATION RESISTANCE   | 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: 60 N MAX.<br>WITHDRAWAL FORCE: 6.5 N MIN.                           | ×   |                |     |
| MECHANICAL OPERATION  | 50 TIMES INSERTIONS AND EXTRACTATIONS.  |                                |  | ① CONTACT RESISTANCE: 70 mΩ MAX.<br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.       | ×   |                |     |
| VIBRATION   | FREQUENCY 10 TO 55 Hz,<br>SINGLE AMPLITUDE : 0.75 mm,<br>WITH 10 CYCLES IN 3 DIRECTIONS.                  |                                |  | ① NO ELECTRICAL DISCONTINUITY OF 1 μs.<br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | ×   |                |     |
| SHOCK   | 490 m/s <sup>2</sup> , DURATION OF PULSE 11 ms<br>3 TIMES IN 3 DIRECTIONS.                                |                                |  |  | ×   |                |     |
| 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.             | ×   |                |     |
| 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, 96h.  |                                |  | ① CONTACT RESISTANCE: 70 mΩ MAX.   | ×   |                |     |
| COLD  | EXPOSED AT -55 °C, 96h.   |                                |  | 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: 70 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 MELTING OF RESIN WHICH AFFECTS THE PERFORMANCE OF COMPONENT.                      | ×   |                |     |
| SOLDERABILITY   | SOLDERED AT SOLDER TEMPERATURE, 240°C,<br>FOR IMMERSION DURATION, 3 sec.                                  |                                |  | NO PINHOLE OR DEWETTING ON SOLDERED SURFACE.   | ×   |                |     |
|   |   |                                |  |  |   |                |     |
|   | 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   | 05.09.03       |     |
|   |   |                                |  | CHECKED  | HS. OZAWA   | 05.09.02       |     |
|   |   |                                |  | DESIGNED   | TH. NODA  | 05.09.02       |     |
| Unless otherwise specified, refer to JIS C 5402.  |   |                                |  | DRAWN  | TH. NODA  | 05.09.02       |     |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test  |   |                                |  | DRAWING NO.  |   | ELC4-151961-21 |     |
| <b>HRS</b>  | SPECIFICATION SHEET   |                                |  | PART NO.   | FX10A-100P/10-SV1 (91)  |                |     |
|   | HIROSE ELECTRIC CO., LTD.   |                                |  | CODE NO.   | CL570-0102-2-91   | △              | 1/1 |