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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><br>(NO DEW CONDENSATION IS PERMITTED) |                |
|   | CURRENT   | 0.3 A   |                           |  |                |
| SPECIFICATIONS  |   |   |                           |  |                |
| ITEM  | TEST METHOD   | REQUIREMENTS  | QT                        | AT   |                |
| <b>CONSTRUCTION</b>   |   |   |                           |  |                |
| GENERAL EXAMINATION   | VISUALLY AND BY MEASURING INSTRUMENT.   | ACCORDING TO DRAWING.   | ×                         | ×  |                |
| MARKING   | CONFIRMED VISUALLY.   |   | ×                         | ×  |                |
| <b>ELECTRIC CHARACTERISTICS</b>   |   |   |                           |  |                |
| 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.  | ×                         | ×  |                |
| <b>MECHANICAL CHARACTERISTICS</b>   |   |   |                           |  |                |
| INSERTION AND WITHDRAWAL FORCE  | MEASURED BY APPLICABLE CONNECTOR.   | INSERTION FORCE: 90 N MAX.<br>WITHDRAWAL FORCE: 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.                            |   | ×                         | -  |                |
| <b>ENVIRONMENTAL CHARACTERISTICS</b>  |   |   |                           |  |                |
| 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 MELTING OF RESIN WHICH AFFECTS THE PERFORMANCE OF COMPONENT.                             | ×                         | -  |                |
| SOLDERABILITY   | SOLDERED AT SOLDER TEMPERATURE,<br>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           |
|   |   |   |                           |  |                |
| 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   | 06.05.13       |
|   |   |   | CHECKED                   | HS.OZAWA   | 06.05.13       |
|   |   |   | DESIGNED                  | KY.NAKAMURA  | 06.05.13       |
| Unless otherwise specified, refer to JIS C 5402.  |   |   | DRAWN                     | SY.KAMIGA  | 06.05.12       |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test  |   |   | DRAWING NO.               |  | ELC4-152603-25 |
| <b>HRS</b>  | SPECIFICATION SHEET   |   | PART NO.                  | FX11B-100P/10-SV (71)                                  |                |
|   | HIROSE ELECTRIC CO., LTD.   |   | CODE NO.                  | CL573-0514-9-71  | △ 1/1          |