

| 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 % TO 70 % <sup>(2)</sup>                   |            |
| SPECIFICATIONS  |   |                                |  |   |            |
| ITEM  | TEST METHOD   |                                | REQUIREMENTS   | QT  | AT         |
| <b>CONSTRUCTION</b>   |   |                                |  |   |            |
| GENERAL EXAMINATION   | VISUALLY AND BY MEASURING INSTRUMENT.   |                                | ACCORDING TO DRAWING.  | x   | x          |
| MARKING   | CONFIRMED VISUALLY.   |                                |  | x   | x          |
| <b>ELECTRIC CHARACTERISTICS</b>   |   |                                |  |   |            |
| 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          |
| <b>MECHANICAL CHARACTERISTICS</b>   |   |                                |  |   |            |
| INSERTION AND WITHDRAWAL FORCE  | MEASURED BY APPLICABLE CONNECTOR.   |                                | INSERTION FORCE: 100.8 N MAX.<br>WITHDRAWAL FORCE: 4.2 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   | —          |
| <b>ENVIRONMENTAL CHARACTERISTICS</b>  |   |                                |  |   |            |
| 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                                     | 09. 04. 14 |
|   |   |                                | CHECKED  | HT. YAMAGUCHI                                 | 09. 04. 14 |
|   |   |                                | DESIGNED   | SY. KAMIGA                                    | 09. 04. 14 |
| Unless otherwise specified, refer to JIS C 5402.  |   |                                | DRAWN  | HK. SUNADORI                                  | 09. 04. 13 |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test  |   |                                | DRAWING NO.  | ELC4-151975-25                                |            |
|   | SPECIFICATION SHEET   |                                | PART NO.   | FX10B-168P-SV1 (71)                           |            |
|   | HIROSE ELECTRIC CO., LTD.   |                                | CODE NO.   | CL570-0154-6-71                               | 1/1        |