

|                                                                                                                                                                                     |                                                                                                         |                                |                                                                                              |                                |                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------|--------------------------------|----------------|
| 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.                   |                |
|                                                                                                                                                                                     | CURRENT                                                                                                 | 0.3 A                          | (NO DEW CONDENSATION IS PERMITTED)                                                           |                                |                |
| 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 RESISTANCES                                                                                                                                                              | 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: 72 N MAX.<br>WITHDRAWAL FORCE: 4.8 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 MIN.<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, 96 h.                                                                                 |                                | ① CONTACT RESISTANCE: 70 mΩ MAX.                                                             | x                              | —              |
| COLD                                                                                                                                                                                | EXPOSED AT -55 °C, 96 h.                                                                                |                                | ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.                                                   | x                              | —              |
| CORROSION SALT MIST                                                                                                                                                                 | EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h.                                                               |                                | NO HEAVY CORROSION.                                                                          | x                              | —              |
| 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.                                    | 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 MELTING OF RESIN WHICH AFFECTS THE PERFORMANCE OF COMPONENT.                              | x                              | —              |
| SOLDERABILITY                                                                                                                                                                       | SOLDERED AT SOLDER TEMPERATURE, 240±3°C, 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           |
| 0                                                                                                                                                                                   |                                                                                                         |                                |                                                                                              |                                |                |
| 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                      | 09.06.30       |
|                                                                                                                                                                                     |                                                                                                         |                                | CHECKED                                                                                      | HT. YAMAGUCHI                  | 09.06.30       |
|                                                                                                                                                                                     |                                                                                                         |                                | DESIGNED                                                                                     | YN. TAKANO                     | 09.06.30       |
| Unless otherwise specified, refer to JIS C 5402.                                                                                                                                    |                                                                                                         |                                | DRAWN                                                                                        | HK. SUNADORI                   | 09.06.29       |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test                                                                                                                      |                                                                                                         |                                | DRAWING NO.                                                                                  |                                | ELC4-152113-22 |
| HRS                                                                                                                                                                                 | SPECIFICATION SHEET                                                                                     |                                | PART NO.                                                                                     | FX11LB-80S/8-SV (92)           |                |
|                                                                                                                                                                                     | HIROSE ELECTRIC CO., LTD.                                                                               |                                | CODE NO.                                                                                     | CL573-0113-8-92                | △ 1/1          |