

| COUNT   | DESCRIPTION OF REVISIONS    | BY  | CHKD            | DATE                       | COUNT   | DESCRIPTION OF REVISIONS  | BY                  | CHKD                  | DATE |
|---|-----------------------------|---|-----------------|----------------------------|---|---|---------------------|-----------------------|------|
| △   |                             |   |                 |                            | △   |   |                     |                       |      |
| △   |                             |   |                 |                            | △   |   |                     |                       |      |
| <b>APPLICATION STANDARD</b>                                       |                             |   |                 |                            |   |   |                     |                       |      |
| <b>RATING</b>   | OPERATING TEMPERATURE RANGE | -55 °C TO 85 °C   |                 |                            | STORAGE TEMPERATURE RANGE   | -10 °C TO 60 °C   |                     |                       |      |
|   | VOLTAGE                     | AC 50 V   |                 |                            | OPERATING HUMIDITY RANGE  | RELATIVE HUMIDITY: 95 % MAX<br>(NO DEW CONDENSATION IS PERMITTED) |                     |                       |      |
|   | CURRENT                     | 0.3 A   |                 |                            |   |   |                     |                       |      |
| <b>SPECIFICATIONS</b>   |                             |   |                 |                            |   |   |                     |                       |      |
| <b>ITEM</b>   |                             | <b>TEST METHOD</b>  |                 |                            | <b>REQUIREMENT</b>  |   |                     | <b>QT</b>   <b>AT</b> |      |
| <b>CONSTRUCTION</b>   |                             |   |                 |                            |   |   |                     |                       |      |
| GENERAL EXAMINATION   |                             | VISUALLY AND BY MEASURING INSTRUMENT.   |                 |                            | ACCORDING TO DRAWING  |   |                     | X                     | X    |
| MARKING   |                             | CONFIRMED VISUALLY.   |                 |                            |   |   |                     | X                     | X    |
| <b>ELECTRICAL CHARACTERISTICS</b>                                 |                             |   |                 |                            |   |   |                     |                       |      |
| CONTACT RESISTANCE  |                             | 100 mA (DC OR 1000 Hz).   |                 |                            | 70 mΩ MAX.  |   |                     | X                     | 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 FORCES                                   |                             | MEASURED BY APPLICABLE CONNECTOR.   |                 |                            | INSERTION FORCE: 60 N MAX.<br>WITHDRAWAL FORCE: 2.5 N MIN.                              |   |                     | X                     | -    |
| MECHANICAL OPERATION  |                             | 50 TIMES INSERTION AND EXTRACTIONS.   |                 |                            | 1)CONTACT RESISTANCE: 80 mΩ MAX.<br>2) NO DAMAGE. CRACK AND LOOSENESS OF PART.          |   |                     | X                     | -    |
| VIBRATION   |                             | FREQUENCY: 10 TO 55 Hz, SINGLE<br>AMPLITUDE: 0.75 mm, $m/s^2$<br>AT 10 CYCLES FOR 3 DIRECTIONS. |                 |                            | 1)NO ELECTRICAL DISCONTINUITY OF 1 μs MIN.<br>2)NO DAMAGE, CRACK AND LOOSENESS OF PART. |   |                     | X                     | -    |
| SHOCK   |                             | 490 m/s <sup>2</sup> DURATION OF PULSE 11 ms 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: 80 mΩ MAX.<br>2)INSULATION RESISTANCE: 100 MΩ MIN.                |   |                     | X                     | -    |
| RAPID CHAGE OF TEMPERTURE   |                             | TEMPERTURE -55→15~35→ 85→15~35°C<br>TIME 30→ 2~ 3→ 30→ 2~ 3min.<br>UNDER 5 CYCLES.              |                 |                            | 3)NO DAMAGE, CRACK AND LOOSENESS OF PART.   |   |                     | X                     | -    |
| DRY HEAT  |                             | EXPOSED AT 85 °C, 96 h.   |                 |                            | 1)CONTACT RESISTANCE: 80 mΩ MAX.  |   |                     | X                     | -    |
| COLD  |                             | EXPOSED AT -55 °C, 96 h.  |                 |                            | 2)NO DAMAGE, CRACK AND LOOSENESS OF PART.   |   |                     | 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: 80 mΩ MAX.<br>2)NO HEAVY CORROSION.                               |   |                     | X                     | -    |
| RESISTANCE TO SOLDERING HEAT                                      |                             | REFLOW RECOMMENDED TEMPERATURE PROFILE<br><br>TO BE TESTED UNDER THE ABOVE CONDITIONS           |                 |                            | NO MELTING OF RESIN WHICH AFFECTS THE PERFORMANCE OF COMPONENT                          |   |                     | X                     | -    |
| SOLDRABILITY  |                             | SOLDERED AT SOLDER TEMPERATURE, 235 °C FOR IMMERSION DURATION, 2 s.                             |                 |                            | NO PINHOLE OR DEWETTING ON SOLDERED SURFACE.  |   |                     | X                     | -    |
| REMARKS   |                             |   |                 | DRAWN                      | DESIGNED  | CHECKED   | APPROVED            | RELEASED              |      |
|   |                             |   |                 | <i>J. Matukawa</i>         | <i>J. Matukawa</i>  | <i>M. Ishida</i>  | <i>T. Yoshimura</i> |                       |      |
| UNLESS OTERWISE SPECIFIED, REFER TO JIS C 5402.                   |                             |   |                 | 00.01.15                   | 00.01.15  | 00.01.17  | 00.01.17            |                       |      |
| NOTE QT: QUALIFICATION TEST AT: ASSURANCE TEST X: APPLICABLE TEST |                             |   |                 |                            |   |   |                     |                       |      |
| <b>HRS</b> HIROSE ELECTRIC CO.,LTD.                               |                             |   |                 | <b>SPECIFICATION SHEET</b> |   |   | PART NO.            |                       |      |
|   |                             |   |                 | FX11A - 100P - SV          |   |   |                     |                       |      |
| CODE NO.(OLD)   |                             |   | DRAWING NO.     |                            | CODE NO.  |   | 1                   |                       |      |
| CL  |                             |   | ELC4 - 152606 - |                            | CL 573 - 0543 - 7 -   |   | 1                   |                       |      |

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