

| COUNT   | DESCRIPTION OF REVISIONS    | BY   | CHKD | DATE                             | COUNT   | DESCRIPTION OF REVISIONS  | BY | CHKD                                      | DATE |              |  |          |  |
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| △   |                             |  |      |                                  | △   |   |    |   |      |              |  |          |  |
| <b>APPLICATION STANDARD</b>                                       |                             |  |      |                                  |   |   |    |   |      |              |  |          |  |
| RATING  | 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 (NO DEW CONDENSATION IS PERMITTED) |    |   |      |              |  |          |  |
|   | CURRENT                     | 0.3 A  |      |                                  |   |   |    |   |      |              |  |          |  |
| <b>SPECIFICATIONS</b>   |                             |  |      |                                  |   |   |    |   |      |              |  |          |  |
| ITEM  |                             | TEST METHOD  |      |                                  | REQUIREMENT   |   |    | QT  | AT   |              |  |          |  |
| <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 <sup>2</sup><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~ 3 min.<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>25°C (60 S) 150°C 160°C (30 S) 160°C (20~30 S) 240°C 5 S MAX 200°C |      |                                  | 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 |  |
|   |                             |  |      | <br>00.01.15                     |   | <br>00.01.15  |    | <br>00.01.17                              |      | <br>00.01.17 |  |          |  |
| UNLESS OTERWISE SPECIFIED ,REFER TO JIS C 5402.                   |                             |  |      |                                  |   |   |    |   |      |              |  |          |  |
| NOTE QT: QUALIFICATION TEST AT: ASSURANCE TEST X: APPLICABLE TEST |                             |  |      |                                  |   |   |    |   |      |              |  |          |  |
| <b>HS</b> HIROSE ELECTRIC CO. LTD.                                |                             |  |      | <b>SPECIFICATION SHEET</b>       |   |   |    | PART NO. <b>FX11B - 100P - SV0.5 (21)</b> |      |              |  |          |  |
| CODE NO.(OLD)<br>CL   |                             |  |      | DRAWING NO<br>ELC4 - 152628 - 01 |   |   |    | CODE NO.<br>CL 573 - 0653 - 5 - 21        |      |              |  | 1<br>1   |  |