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| APPLICABLE STANDARD                                                                                                                                                                                        |                                                                                                            |                                                                                                                                                                                                                     |  |                                                                                                                      |                    |                                                                                       |            |
| RATING                                                                                                                                                                                                     | OPERATING TEMPERATURE RANGE                                                                                | -40°C TO + 85°C (NOTE 1)                                                                                                           |  | STORAGE TEMPERATURE RANGE                                                                                            |                    | -10°C TO + 60°C (NOTE 2)                                                              |            |
|                                                                                                                                                                                                            | OPERATING HUMIDITY RANGE  | 40% TO 80% (NOTE 3)                                                                                                                                                                                                 |  | STORAGE HUMIDITY RANGE            |                    | 40% TO 70% (NOTE 2)                                                                   |            |
|                                                                                                                                                                                                            | VOLTAGE                                                                                                    | AC 250V                                                                                                                                                                                                             |  | UL · CSA                                                                                                             | VOLTAGE            | AC 30V                                                                                |            |
|                                                                                                                                                                                                            | CURRENT                                                                                                    | 2A                                                                                                                                                                                                                  |  | RATING                                                                                                               | CURRENT            | 2A                                                                                    |            |
| 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                                                                                                                                                                                         |                                                                                                            | 100mA (DC OR 1000 Hz).                                                                                                                                                                                              |  | 30mΩ MAX.                                                                                                            |                    | X                                                                                     | —          |
| INSULATION RESISTANCE                                                                                                                                                                                      |                                                                                                            | 500V DC.                                                                                                                                                                                                            |  | 1000MΩ MIN.                                                                                                          |                    | X                                                                                     | —          |
| VOLTAGE PROOF                                                                                                                                                                                              |                                                                                                            | 650V AC FOR 1 min.                                                                                                                                                                                                  |  | NO FLASHOVER OR BREAKDOWN.                                                                                           |                    | X                                                                                     | —          |
| MECHANICAL CHARACTERISTICS                                                                                                                                                                                 |                                                                                                            |                                                                                                                                                                                                                     |  |                                                                                                                      |                    |                                                                                       |            |
| MECHANICAL OPERATION                                                                                                                                                                                       |                                                                                                            | 50TIMES INSERTIONS AND EXTRACTIONS.                                                                                                                                                                                 |  | ① CONTACT RESISTANCE: 30mΩ MAX.<br>② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.                                         |                    | X                                                                                     | —          |
| VIBRATION                                                                                                                                                                                                  |                                                                                                            | FREQUENCY 10 TO 55 Hz, SINGLE AMPLITUDE 0.75 mm, AT 2 h, FOR 3 DIRECTIONS.                                                                                                                                          |  | ① NO ELECTRICAL DISCONTINUITY OF 1μs.<br>② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.                                   |                    | X                                                                                     | —          |
| SHOCK                                                                                                                                                                                                      |                                                                                                            | 490 m/s <sup>2</sup> DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS.                                                                                                                                           |  | ① NO ELECTRICAL DISCONTINUITY OF 1μs.<br>② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.                                   |                    | X                                                                                     | —          |
| ENVIRONMENTAL CHARACTERISTICS                                                                                                                                                                              |                                                                                                            |                                                                                                                                                                                                                     |  |                                                                                                                      |                    |                                                                                       |            |
| DAMP HEAT (STEADY STATE)                                                                                                                                                                                   |                                                                                                            | EXPOSED AT 40 ± 2 °C, 90 TO 95 %, 96 h.                                                                                                                                                                             |  | ① CONTACT RESISTANCE: 30mΩ MAX.<br>② INSULATION RESISTANCE: 500MΩ MIN.<br>③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS.  |                    | X                                                                                     | —          |
| RAPID CHANGE OF TEMPERATURE                                                                                                                                                                                |                                                                                                            | TEMPERATURE -55 → 5 TO 35 → +85 → 5 TO 35°C<br>TIME 30 → 5MAX → 30 → 5MAX min<br>UNDER 5 CYCLES.                                                                                                                    |  | ① CONTACT RESISTANCE: 30mΩ MAX.<br>② INSULATION RESISTANCE: 1000MΩ MIN.<br>③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS. |                    | X                                                                                     | —          |
| RESISTANCE TO SOLDERING HEAT                                                                                                                                                                               |                                                                                                            | 1)AUTOMATIC SOLDERING (FLOW)<br>SOLDER TEMPERATURE : 260±3°C FOR IMMERSION,DURATION , 10 sec .<br>2)MANUAL SOLDERING<br>SOLDERING IRON TEMPERATURE : 290±10°C<br>SOLDERING TIME : 3 sec.<br>NO STRENGTH ON CONTACT. |  | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.                                                      |                    | X                                                                                     | —          |
| SOLDERABILITY                                                                                                                                                                                              |                                                                                                            | SOLDERED AT SOLDER TEMPERATURE, 245°C FOR INSERTION DURATION, 10sec.                                                                                                                                                |  | SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMersed.                                                  |                    | X                                                                                     | —          |
|                                                                                                                         | COUNT                                                                                                      | DESCRIPTION OF REVISIONS                                                                                                                                                                                            |  | DESIGNED                                                                                                             | CHECKED            | DATE                                                                                  |            |
|                                                                                                                                                                                                            | 3                                                                                                          | DIS-H-008583                                                                                                                                                                                                        |  | MI. SAKIMURA                                                                                                         | HK. UMEHARA        | 14. 03. 25                                                                            |            |
| REMARKS                                                                                                                                                                                                    |                                                                                                            |                                                                                                                                                                                                                     |  |                                                                                                                      | APPROVED           | KJ. KATAYOSE                                                                          | 05. 01. 05 |
| NOTE 1:INCLUDING THE TEMPERATURE RISE BY CURRENT                                                                                                                                                           |                                                                                                            |                                                                                                                                                                                                                     |  |                                                                                                                      | CHECKED            | TY. OMA                                                                               | 05. 01. 05 |
| NOTE2:APPLY TO THE CONDITION OF LONG TERM STORAGE FOR UNUSED PRODUCTS BEFORE PCB ON BOARD, AFTER PCB BOARD, OPERATING TEMPERATURE AND HUMIDITY RANGE IS APPLIED FOR INTERIM STORAGE DURING TRANSPORTATION. |                                                                                                            |                                                                                                                                                                                                                     |  |                                                                                                                      | DESIGNED           | IO. DENPOUYA                                                                          | 05. 01. 05 |
| NOTE3:NON-CONDENSING.<br>Unless otherwise specified , refer to IEC 60512.                                                                                                                                  |                                                                                                            |                                                                                                                                                                                                                     |  |                                                                                                                      | DRAWN              | IO. DENPOUYA                                                                          | 05. 01. 05 |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test                                                                                                                                             |                                                                                                            |                                                                                                                                                                                                                     |  | DRAWING NO.                                                                                                          |                    | ELC4-162401-02                                                                        |            |
|                                                                                                                         |                                                                                                            | SPECIFICATION SHEET                                                                                                                                                                                                 |  | PART NO.                                                                                                             | DF11-*DS-2DSA (06) |                                                                                       |            |
|                                                                                                                                                                                                            |                                                                                                            | HIROSE ELECTRIC CO., LTD.                                                                                                                                                                                           |  | CODE NO.                                                                                                             | CL543              |  | 1/1        |