

| APPLICABLE STANDARD                                                                                                                                                                                                                                                                             |                                                                                                        |                                                                                                            |                                                                                                 |              |                                                                                                        |                                                                                                        |                                                                                           |    |
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| RATING                                                                                                                                                                                                                                                                                          | OPERATING TEMPERATURE RANGE                                                                            | -40°C TO + 85°C (NOTE 1)  |                                                                                                 |              | STORAGE TEMPERATURE RANGE                                                                              | -10°C TO + 60°C                                                                                        |                                                                                           |    |
|                                                                                                                                                                                                                                                                                                 | OPERATING HUMIDITY RANGE                                                                               | 40% TO 80% (NOTE2)        |                                                                                                 |              | STORAGE HUMIDITY RANGE                                                                                 | 40% TO 70% (NOTE3)  |                                                                                           |    |
|                                                                                                                                                                                                                                                                                                 | VOLTAGE                                                                                                | 250V AC                                                                                                    | UL·CSA RATING  | 30V AC       | APPLICABLE CONTACT  | DF11-EP2428PC (F)<br>DF11-EP2428PC (F) A                                                               |                                                                                           |    |
|                                                                                                                                                                                                                                                                                                 | CURRENT                                                                                                | 2 A                                                                                                        |                                                                                                 | 2 A          | APPLICABLE CABLE    | UL1061, 1007<br>AWG24 TO 28                                                                            |                                                                                           |    |
|                                                                                                                                                                                                                                                                                                 | APPLICABLE CONNECTOR  | DF11-*DS-2C                                                                                                |                                                                                                 |              |                                                                                                        |                                                                                                        |                                                                                           |    |
| 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                                                                                                                                                                                                                                                                        |                                                                                                        |                                                                                                            |                                                                                                 |              |                                                                                                        |                                                                                                        |                                                                                           |    |
| INSULATION RESISTANCE                                                                                                                                                                                                                                                                           |                                                                                                        | 500 V DC.                                                                                                  |                                                                                                 |              | 1000 MΩ MIN.                                                                                           |                                                                                                        | X                                                                                         | —  |
| VOLTAGE PROOF                                                                                                                                                                                                                                                                                   |                                                                                                        | 650 V AC FOR 1 min.                                                                                        |                                                                                                 |              | NO FLASHOVER OR BREAKDOWN.                                                                             |                                                                                                        | X                                                                                         | —  |
| MECHANICAL CHARACTERISTICS                                                                                                                                                                                                                                                                      |                                                                                                        |                                                                                                            |                                                                                                 |              |                                                                                                        |                                                                                                        |                                                                                           |    |
| MECHANICAL OPERATION                                                                                                                                                                                           |                                                                                                        | 30 TIMES INSERTIONS AND EXTRACTIONS.                                                                       |                                                                                                 |              | 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.                                 |                                                                                                 |              | 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.                                  |                                                                                                 |              | NO DAMAGE, CRACK OR LOOSENESS OF PARTS.                                                                |                                                                                                        | X                                                                                         | —  |
| ENVIRONMENTAL CHARACTERISTICS                                                                                                                                                                                                                                                                   |                                                                                                        |                                                                                                            |                                                                                                 |              |                                                                                                        |                                                                                                        |                                                                                           |    |
| RAPID CHANGE OF TEMPERATURE                                                                                                                                                                                  |                                                                                                        | TEMPERATURE -55→ 5 TO 35→+85→ 5 TO 35 °C<br>TIME 30→ 5 MAX → 30→ 5 MAX<br>min<br>UNDER 5 CYCLES.           |                                                                                                 |              | ① INSULATION RESISTANCE: 1000MΩ MIN.<br>② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.                      |                                                                                                        | X                                                                                         | —  |
| DAMP HEAT (STEADY STATE)                                                                                                                                                                                                                                                                        |                                                                                                        | EXPOSED AT 40 ± 2 °C, 90 TO 95 %, 96 h.                                                                    |                                                                                                 |              | ① INSULATION RESISTANCE: 1000MΩ MIN.<br>② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.                      |                                                                                                        | X                                                                                         | —  |
| REMARKS                                                                                                                                                                                                                                                                                         |                                                                                                        |                                                                                                            |                                                                                                 |              |                                                                                                        |                                                                                                        |                                                                                           |    |
| NOTE 1: INCLUDING THE TEMPERATURE RISE BY CURRENT.                                                                                                                                                                                                                                              |                                                                                                        |                                                                                                            |                                                                                                 |              |                                                                                                        |                                                                                                        |                                                                                           |    |
| NOTE 2:NO CONDENSING.                                                                                                                                                                                        |                                                                                                        |                                                                                                            |                                                                                                 |              |                                                                                                        |                                                                                                        |                                                                                           |    |
| NOTE 3:APPLY TO THE CONDITION OF LONG TERM STORAGE FOR UNUSED PRODUCTSBEFORE PCB ON BOARD,AFTER PCB BOARD, OPERATING TEMPERATURE AND HUMIDITY RANGE IS APPLIED FOR INTERIM STORAGE DURING TRANSPORTATION.  |                                                                                                        |                                                                                                            |                                                                                                 |              |                                                                                                        |                                                                                                        |                                                                                           |    |
|                                                                                                                                                                                                                                                                                                 |                                                                                                        |                                                                                                            |                                                                                                 |              |                                                                                                        |                                                                                                        |                                                                                           |    |
|                                                                                                                                                                                                                                                                                                 | COUNT                                                                                                  | DESCRIPTION OF REVISIONS                                                                                   |                                                                                                 | DESIGNED     |                                                                                                        | CHECKED                                                                                                | DATE                                                                                      |    |
|                                                                                                                                                                                                              | 13                                                                                                     | 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                                                                                |    |
|                                                                                                                                                                                                                                                                                                 |                                                                                                        |                                                                                                            |                                                                                                 | DESIGNED     | IO. DENPOUYA                                                                                           |                                                                                                        | 05. 01. 05                                                                                |    |
| Unless otherwise specifid , refer to IEC 60512.                                                                                                                                                                                                                                                 |                                                                                                        |                                                                                                            |                                                                                                 | DRAWN        | IO. DENPOUYA                                                                                           |                                                                                                        | 05. 01. 05                                                                                |    |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test                                                                                                                                                                                                                                  |                                                                                                        |                                                                                                            |                                                                                                 | DRAWING NO.  |                                                                                                        | ELC4-081880-01                                                                                         |                                                                                           |    |
|                                                                                                                                                                                                              | SPECIFICATION SHEET                                                                                    |                                                                                                            |                                                                                                 | PART NO.     | DF11-*DEP-2C                                                                                           |                                                                                                        |                                                                                           |    |
|                                                                                                                                                                                                                                                                                                 | HIROSE ELECTRIC CO., LTD.                                                                              |                                                                                                            |                                                                                                 | CODE NO.     | CL543                                                                                                  |                                                                                                        |  1/1 |    |