

| COUNT                                                          | DESCRIPTION OF REVISIONS    | BY                                                                                        | CHKD                              | DATE | COUNT                                                                                                                 | DESCRIPTION OF REVISIONS         | BY                                   | CHKD                    | DATE                 |
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| △                                                              |                             |                                                                                           |                                   |      | △                                                                                                                     |                                  |                                      |                         |                      |
| △                                                              |                             |                                                                                           |                                   |      | △                                                                                                                     |                                  |                                      |                         |                      |
| <b>APPLICABLE STANDARD</b>                                     |                             |                                                                                           |                                   |      |                                                                                                                       |                                  |                                      |                         |                      |
| <b>RATING</b>                                                  | OPERATING TEMPERATURE RANGE | -35 °C TO +85 °C(NOTE1)                                                                   |                                   |      | STORAGE TEMPERATURE RANGE                                                                                             | -10 °C TO +60 °C                 |                                      |                         |                      |
|                                                                | VOLTAGE                     | 100 V AC                                                                                  |                                   |      | APPLICABLE CONTACT                                                                                                    | —                                |                                      |                         |                      |
|                                                                | CURRENT                     | AWG40 : 0.3A                                                                              |                                   |      | APPLICABLE CONNECTOR                                                                                                  | DF19*-14P-1H                     |                                      |                         |                      |
|                                                                |                             |                                                                                           |                                   |      | APPLICABLE CABLE                                                                                                      | THIN COAXIAL CABLE               |                                      |                         |                      |
| <b>SPECIFICATIONS</b>                                          |                             |                                                                                           |                                   |      |                                                                                                                       |                                  |                                      |                         |                      |
| <b>ITEM</b>                                                    |                             | <b>TEST METHOD</b>                                                                        |                                   |      | <b>REQUIREMENTS</b>                                                                                                   |                                  |                                      | <b>QT</b>               | <b>AT</b>            |
| <b>CONSTRUCTION</b>                                            |                             |                                                                                           |                                   |      |                                                                                                                       |                                  |                                      |                         |                      |
| GENERAL EXAMINATION                                            |                             | VISUALLY AND BY MEASURING INSTRUMENT.                                                     |                                   |      | ACCORDING TO DRAWING.                                                                                                 |                                  |                                      | ○                       | ○                    |
| MARKING                                                        |                             | CONFIRMED VISUALLY.                                                                       |                                   |      |                                                                                                                       |                                  |                                      | ○                       | ○                    |
| <b>ELECTRICAL CHARACTERISTICS</b>                              |                             |                                                                                           |                                   |      |                                                                                                                       |                                  |                                      |                         |                      |
| CONTACT RESISTANCE                                             |                             | 100 mA (DC OR 1000 Hz).                                                                   |                                   |      | 30 mΩ MAX.                                                                                                            |                                  |                                      | —                       | —                    |
| CONTACT RESISTANCE MILLIVOLT LEVEL METHOD                      |                             | 20 mV MAX, mA(DC OR 1000 Hz).                                                             |                                   |      |                                                                                                                       |                                  |                                      | —                       | —                    |
| INSULATION RESISTANCE                                          |                             | 100 V DC.                                                                                 |                                   |      | 500 MΩ MIN.                                                                                                           |                                  |                                      | —                       | —                    |
| VOLTAGE PROOF                                                  |                             | 300 V AC FOR 1 min.                                                                       |                                   |      | NO FLASHOVER OR BREAKDOWN.                                                                                            |                                  |                                      | ○                       | —                    |
| <b>MECHANICAL CHARACTERISTICS</b>                              |                             |                                                                                           |                                   |      |                                                                                                                       |                                  |                                      |                         |                      |
| CONTACT INSERTION AND EXTRACTION FORCES                        |                             | 0.2 ± 0.005 mm BY STEEL GAUGE.                                                            |                                   |      | INSERTION FORCE : 3.0 N MAX.<br>EXTRACTION FORCE : 0.2 N MIN.                                                         |                                  |                                      | —                       | —                    |
| INSERTION AND WITHDRAWAL FORCES                                |                             | MEASURED BY APPLICABLE CONNECTOR.                                                         |                                   |      | INSERTION FORCE N MAX.<br>EXTRACTION FORCE N MIN.                                                                     |                                  |                                      | —                       | —                    |
| MECHANICAL OPERATION                                           |                             | 30 TIMES INSERTION AND EXTRACTION.                                                        |                                   |      | ① CONTACT RESISTANCE: 30 mΩ MAX.<br>② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.                                         |                                  |                                      | —                       | —                    |
| VIBRATION                                                      |                             | FREQUENCY 10 TO 55 Hz, SINGLE AMPLITUDE 0.75 mm, AT 2 h FOR 3 DIRECTIONS.                 |                                   |      | ① NO ELECTRICAL DISCONTINUITY OF 1 μs.                                                                                |                                  |                                      | —                       | —                    |
| SHOCK                                                          |                             | 490 m/s <sup>2</sup> DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS.                 |                                   |      | ② CONTACT RESISTANCE: - mΩ MAX.<br>③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS.                                          |                                  |                                      | —                       | —                    |
| <b>ENVIRONMENTAL CHARACTERISTICS</b>                           |                             |                                                                                           |                                   |      |                                                                                                                       |                                  |                                      |                         |                      |
| RAPID CHANGE OF TEMPERATURE                                    |                             | TEMPERATURE -55 → 5~35 → +85 → 5~35 °C<br>TIME 30 → 2~3 → 30 → 2~3 min<br>UNDER 5 CYCLES. |                                   |      | ① CONTACT RESISTANCE: 30 mΩ MAX.<br>② INSULATION RESISTANCE: 500 MΩ MIN.<br>③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS. |                                  |                                      | —                       | —                    |
| DAMP HEAT(STEADY STATE)                                        |                             | EXPOSED AT 40 ± 2 °C, 90 ~95 %, 96 h.                                                     |                                   |      |                                                                                                                       |                                  |                                      | —                       | —                    |
| CORROSION, SALT MIST                                           |                             | EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h.                                                 |                                   |      | ① CONTACT RESISTANCE: - mΩ MAX.<br>② NO HEAVY CORROSION.                                                              |                                  |                                      | —                       | —                    |
| HYDROGEN SULPHIDE                                              |                             | EXPOSED IN PPM FOR h.<br>(TEST STANDARD: JEIDA-38)                                        |                                   |      | ① CONTACT RESISTANCE: mΩ MAX.<br>② NO HEAVY CORROSION.                                                                |                                  |                                      | —                       | —                    |
| SULPHUR DIOXIDE                                                |                             | EXPOSED IN 10 PPM FOR 96 h.<br>(TEST STANDARD: JEIDA-39)                                  |                                   |      | ① CONTACT RESISTANCE: - mΩ MAX.<br>② NO HEAVY CORROSION.                                                              |                                  |                                      | —                       | —                    |
| RESISTANCE TO SOLDERING HEAT                                   |                             | SOLDER TEMPERATURE, 260 °C, FOR IMMERSION DURATION, 10 s.                                 |                                   |      | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.                                                       |                                  |                                      | —                       | —                    |
| SOLDERABILITY                                                  |                             | SOLDERED AT SOLDER TEMPERATURE, 235 °C FOR IMMERSION DURATION, 2 s.                       |                                   |      | SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMersed.                                                   |                                  |                                      | —                       | —                    |
| <b>REMARKS</b>                                                 |                             |                                                                                           |                                   |      |                                                                                                                       |                                  |                                      |                         |                      |
| NOTE 1: INCLUDE THE TEMPERATURE RISING BY CURRENT.             |                             |                                                                                           |                                   |      | DRAWN                                                                                                                 | DESIGNED                         | CHECKED                              | APPROVED                | RELEASED             |
|                                                                |                             |                                                                                           |                                   |      | P.Tashiro<br>'99.4.12                                                                                                 | P.Tashiro<br>'99.4.12            | J. Ona<br>'99.4.12                   | K. Katayama<br>'99.4.12 |                      |
| Unless otherwise specified, refer to MIL-STD-1344.             |                             |                                                                                           |                                   |      |                                                                                                                       |                                  |                                      |                         |                      |
| Note QT:Qualification Test AT:Assurance Test ○:Applicable Test |                             |                                                                                           |                                   |      |                                                                                                                       |                                  |                                      |                         |                      |
| <b>HRS</b> HIROSE ELECTRIC CO., LTD.                           |                             |                                                                                           |                                   |      | <b>SPECIFICATION SHEET</b>                                                                                            |                                  | PART NO.<br><b>DF19G-14S-1SD-GND</b> |                         |                      |
| CODE NO.(OLD)<br><b>CL</b>                                     |                             |                                                                                           | DRAWING NO.<br><b>ELC4-162938</b> |      |                                                                                                                       | PART NO.<br><b>CL 685-0028-9</b> |                                      |                         | <b>1</b><br><b>1</b> |