



| COUNT                                                                     | DESCRIPTION OF REVISIONS    | BY                                                                                            | CHKD | DATE                | COUNT                                                                                                                                                                            | DESCRIPTION OF REVISIONS | BY                | CHKD     | DATE |
|---------------------------------------------------------------------------|-----------------------------|-----------------------------------------------------------------------------------------------|------|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-------------------|----------|------|
| APPLICATION STANDARD                                                      |                             |                                                                                               |      |                     |                                                                                                                                                                                  |                          |                   |          |      |
| RATING                                                                    | OPERATING TEMPERATURE RANGE | -55 °C TO +85 °C                                                                              |      |                     | STORAGE TEMPERATURE RANGE                                                                                                                                                        |                          | --- °C TO --- °C  |          |      |
|                                                                           | VOLTAGE                     | 200V AC                                                                                       |      |                     | OPERATING HUMIDITY RANGE                                                                                                                                                         |                          | --- % TO --- %    |          |      |
|                                                                           | CURRENT                     | 2 A                                                                                           |      |                     | APPLICABLE CABLE                                                                                                                                                                 |                          | _____             |          |      |
| SPECIFICATIONS                                                            |                             |                                                                                               |      |                     |                                                                                                                                                                                  |                          |                   |          |      |
| ITEM                                                                      |                             | TEST METHOD                                                                                   |      |                     | REQUIREMENT                                                                                                                                                                      |                          |                   | QT       | AT   |
| CONSTRUCTION                                                              |                             |                                                                                               |      |                     |                                                                                                                                                                                  |                          |                   |          |      |
| GENERAL EXAMINATION                                                       |                             | VISUALLY AND BY MEASURING INSTRUMENT.                                                         |      |                     | ACCORDING TO DRAWING                                                                                                                                                             |                          |                   | ○        | ○    |
| MARKING                                                                   |                             | CONFIRMED VISUALLY                                                                            |      |                     |                                                                                                                                                                                  |                          |                   | ○        | ○    |
| ELECTRICAL CHARACTERISTICS                                                |                             |                                                                                               |      |                     |                                                                                                                                                                                  |                          |                   |          |      |
| CONTACT RESISTANCE                                                        |                             | 100 mA (DC OR 1000 Hz)                                                                        |      |                     | 30 mΩ MAX.                                                                                                                                                                       |                          |                   | ※        | ○    |
| CONTACT RESISTANCE MILLIVOLT LEVEL METHOD                                 |                             | mV MAX, mA (DC OR Hz)                                                                         |      |                     | mΩ MAX.                                                                                                                                                                          |                          |                   |          | —    |
| INSULATION RESISTANCE                                                     |                             | 500 V DC                                                                                      |      |                     | 1000 MΩ MIN.                                                                                                                                                                     |                          |                   | ○        | —    |
| VOLTAGE PROOF                                                             |                             | 650 V AC FOR 1 min.                                                                           |      |                     | NO FLASHOVER OR BREAKDOWN                                                                                                                                                        |                          |                   | ○        | —    |
| MECHANICAL CHARACTERISTICS                                                |                             |                                                                                               |      |                     |                                                                                                                                                                                  |                          |                   |          |      |
| CONTACT INSERTION AND EXTRACTION FORCES                                   |                             | BY STEEL GAUGE.                                                                               |      |                     | INSERTION FORCE: N MAX.<br>EXTRACTION FORCE: N MIN.                                                                                                                              |                          |                   | —        | —    |
| INSERTION AND WITHDRAWAL FORCES                                           |                             | MEASURED BY APPLICABLE CONNECTOR.                                                             |      |                     | INSERTION FORCE: 7.84 N MAX.<br>WITHDRAWAL FORCE: 0.49 N MIN.                                                                                                                    |                          |                   | ○        | —    |
| MECHANICAL OPERATION                                                      |                             | 100 TIMES INSERTION AND EXTRACTIONS.                                                          |      |                     | 1) CONTACT RESISTANCE: 40 mΩ MAX. ※<br>2) NO DAMAGE, CRACK AND LOOSENESS OF PART.                                                                                                |                          |                   | ○        | —    |
| VIBRATION                                                                 |                             | FREQUENCY: 10 TO 55 Hz,<br>AMPLITUDE: 1.52 mm, - m/s <sup>2</sup><br>AT 2 h FOR 3 DIRECTIONS. |      |                     | 1) NO ELECTRICAL DISCONTINUITY OF 1 μs<br>2) CONTACT RESISTANCE: — mΩ MAX.<br>3) NO DAMAGE, CRACK AND LOOSENESS OF PART.                                                         |                          |                   | ○        | —    |
| SHOCK                                                                     |                             | 490 m/s <sup>2</sup> DURATION OF PULSE 11 ms<br>AT 3 TIMES FOR 3 DIRECTIONS.                  |      |                     |                                                                                                                                                                                  |                          |                   | ○        | —    |
| ENVIRONMENTAL CHARACTERISTICS                                             |                             |                                                                                               |      |                     |                                                                                                                                                                                  |                          |                   |          |      |
| DAMP HEAT (STEADY STATE)                                                  |                             | EXPOSED AT 40±2 °C, 90~95 %, 96 h.                                                            |      |                     | 1) CONTACT RESISTANCE: 40 mΩ MAX. ※<br>2) INSULATION RESISTANCE: 1000 MΩ MIN.                                                                                                    |                          |                   | ○        | —    |
| RAPID CHAGE OF TEMPERTURE                                                 |                             | TEMPERTURE -55→+5→+35→+85→+5→+35 °C<br>TIME 30 → 10~15 → 30 → 10~15 min.<br>UNDER 5 CYCLES.   |      |                     | 3) NO DAMAGE, CRACK AND LOOSENESS OF PART.                                                                                                                                       |                          |                   | ○        | —    |
| DAMP HEAT,CYCLIC                                                          |                             | EXPOSED AT TO °C, TO<br>%,TOTAL CYCLES( h).                                                   |      |                     | 1) CONTACT RESISTANCE: mΩ MAX.<br>2) INSULATION RESISTANCE: MΩ MIN.(AT HIGH HUMIDITY)<br>3) INSULATION RESISTANCE: MΩ MIN.(AT DRY)<br>4) NO DAMAGE, CRACK AND LOOSENESS OF PART. |                          |                   | —        | —    |
| DRY HEAT                                                                  |                             | EXPOSED AT °C, h.                                                                             |      |                     | 1) CONTACT RESISTANCE: mΩ MAX.<br>2) NO DAMAGE, CRACK AND LOOSENESS OF PART.                                                                                                     |                          |                   | —        | —    |
| CORROSION SALT MIST                                                       |                             | EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h.                                                     |      |                     | 1) CONTACT RESISTANCE: 40 mΩ MAX. ※<br>2) NO HEAVY CORROSION.                                                                                                                    |                          |                   | ○        | —    |
| HYDROGEN SULPHIDE                                                         |                             | EXPOSED IN 3 PPM FOR 120 h.<br>(TEST STANDARD:JEIDA-38)                                       |      |                     |                                                                                                                                                                                  |                          |                   | ○        | —    |
| SULPHUR DIOXIDE                                                           |                             | EXPOSED IN PPM FOR h.<br>(TEST STANDARD:JEIDA-39)                                             |      |                     |                                                                                                                                                                                  |                          |                   | —        | —    |
| RESISTANCE TO SOLDERING HEAT                                              |                             | SOLDER TEMPERATURE, °C FOR IMMERSION,DURATION, s.(MIL-STD-202)                                |      |                     | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINAL.                                                                                                                   |                          |                   | —        | —    |
| SOLDRABILITY                                                              |                             | SOLDERED AT SOLDER TEMPERATURE, °C FOR IMMERSION DURATION, s.(MIL-STD-202)                    |      |                     | A NEW UNIFORM COATING OF SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMERSED.                                                                                     |                          |                   | —        | —    |
| REMARKS                                                                   |                             |                                                                                               |      | DRAWN               | DESIGNED                                                                                                                                                                         | CHECKED                  | APPROVED          | RELEASED |      |
| CONTACT RESISTANCE WITH ※ MARK IS THE VALUE INCLUDING 2POINTS OF CONTACT. |                             |                                                                                               |      | T. Hirasawa         | T. Hirasawa                                                                                                                                                                      | H. Obarwa                | M. Yamaguchi      |          |      |
| UNLESS OTHERWISE SPECIFIED, REFER TO MIL-STD-1344                         |                             |                                                                                               |      | 97.12.1             | 97.12.1                                                                                                                                                                          | 97.12.01                 | 97.12.04          |          |      |
| NOTE QT: QUALIFICATION TEST AT: ASSURANCE TEST O: APPLICABLE TEST         |                             |                                                                                               |      |                     |                                                                                                                                                                                  |                          |                   |          |      |
| HRS HIROSE ELECTRIC CO.,LTD.                                              |                             |                                                                                               |      | SPECIFICATION SHEET |                                                                                                                                                                                  |                          | PART NO. A3-SP(A) |          |      |
| CODE NO.(OLD)                                                             |                             | DRAWING NO.                                                                                   |      | CODE NO.            |                                                                                                                                                                                  | 1                        |                   |          |      |
| CL                                                                        |                             | ELC4- 020728                                                                                  |      | CL 621 - 0180 - 4   |                                                                                                                                                                                  | 1                        |                   |          |      |