



| 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. Obara                 | 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                        |                   |          |      |