

| APPLICABLE STANDARD                                                                                                                                                                                                                                     |                             |                                                                                                                                                              |                           |                                                                                                                            |                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|----------------------------------------------------------------------------------------------------------------------------|-------------------|
| Rating                                                                                                                                                                                                                                                  | Operating Temperature Range | -55 °C to +85 °C <sup>(1)</sup>                                                                                                                              | Storage Temperature Range | -10 °C to +60 °C <sup>(2)</sup>                                                                                            |                   |
|                                                                                                                                                                                                                                                         | Operating Humidity Range    | Relative humidity 85 % max (Not dewed)                                                                                                                       | Storage Humidity Range    | Relative humidity 85 % max (Not dewed)                                                                                     |                   |
|                                                                                                                                                                                                                                                         | Voltage                     | 200 V AC                                                                                                                                                     | Applicable Cable          | —                                                                                                                          |                   |
|                                                                                                                                                                                                                                                         | Current                     | 1 A                                                                                                                                                          | Insulation                | —                                                                                                                          |                   |
| SPECIFICATIONS                                                                                                                                                                                                                                          |                             |                                                                                                                                                              |                           |                                                                                                                            |                   |
| ITEM                                                                                                                                                                                                                                                    |                             | TEST METHOD                                                                                                                                                  |                           | REQUIREMENTS                                                                                                               |                   |
| QT                                                                                                                                                                                                                                                      |                             | AT                                                                                                                                                           |                           |                                                                                                                            |                   |
| CONSTRUCTION                                                                                                                                                                                                                                            |                             |                                                                                                                                                              |                           |                                                                                                                            |                   |
| General Examination                                                                                                                                                                                                                                     |                             | Visually and by measuring instrument.                                                                                                                        |                           | According to drawing.                                                                                                      |                   |
| Marking                                                                                                                                                                                                                                                 |                             | Confirmed visually.                                                                                                                                          |                           |                                                                                                                            |                   |
| ELECTRIC CHARACTERISTICS                                                                                                                                                                                                                                |                             |                                                                                                                                                              |                           |                                                                                                                            |                   |
| Contact Resistance                                                                                                                                                                                                                                      |                             | 100 mA (DC or 1000 Hz).                                                                                                                                      |                           | 15 mΩ MAX .                                                                                                                |                   |
| Insulation Resistance                                                                                                                                                                                                                                   |                             | 500 V DC.                                                                                                                                                    |                           | 1000 MΩ MIN.                                                                                                               |                   |
| Voltage Proof                                                                                                                                                                                                                                           |                             | 650 V AC for 1 min.                                                                                                                                          |                           | No flashover or breakdown.                                                                                                 |                   |
| MECHANICAL CHARACTERISTICS                                                                                                                                                                                                                              |                             |                                                                                                                                                              |                           |                                                                                                                            |                   |
| Mechanical Operation                                                                                                                                                                                                                                    |                             | 100 times insertions and extractions.                                                                                                                        |                           | 1) Contact Resistance: 20 mΩ MAX.<br>2) No damage, crack and looseness of parts.                                           |                   |
| Vibration                                                                                                                                                                                                                                               |                             | Frequency 10 to 55 Hz,<br>single amplitude : 0.75 mm,<br>2 h in 3 directions.                                                                                |                           | 1) No electrical discontinuity of 1 μs.<br>2) No damage, crack and looseness of parts.                                     |                   |
| Shock                                                                                                                                                                                                                                                   |                             | 490 m/s <sup>2</sup> , duration of pulse 11 ms<br>at 3 times for 3 both axial directions.                                                                    |                           |                                                                                                                            |                   |
| ENVIRONMENTAL CHARACTERISTICS                                                                                                                                                                                                                           |                             |                                                                                                                                                              |                           |                                                                                                                            |                   |
| Damp Heat (Steady state)                                                                                                                                                                                                                                |                             | Exposed at 40 ± 2 °C, 90 to 95 %, 96 h.                                                                                                                      |                           | 1) Contact Resistance: 20 mΩ MAX.<br>2) Insulation Resistance: 1000 MΩ MIN.<br>3) No damage, crack and looseness of parts. |                   |
| Rapid Change of Temperature                                                                                                                                                                                                                             |                             | Temperature<br>-55 → +5 to +35 → +85 → +5 to +35 °C<br>Time<br>30 → 10 to 15 → 30 → 10 to 15 min.<br>Under 5 cycles.                                         |                           |                                                                                                                            |                   |
| Corrosion Salt Mist                                                                                                                                                                                                                                     |                             | Exposed in 5 % salt water spray for 48 h.                                                                                                                    |                           | 1) Contact Resistance: 20 mΩ MAX.<br>2) No heavy corrosion.                                                                |                   |
| Sulphur Dioxide                                                                                                                                                                                                                                         |                             | Exposed in 10 PPM for 96 h.<br>(Test standard: JEIDA 39)                                                                                                     |                           |                                                                                                                            |                   |
| Resistance to Soldering Heat                                                                                                                                                                                                                            |                             | Solder bath : solder temperature,<br>260 ± 5 °C for immersion,duration, 10 ± 1 s.<br>(JISC5402-12-4, JISC60068-2-20)<br>Soldering irons : 360°C for 5 s MAX. |                           | No deformation of case of excessive<br>looseness of the terminals.                                                         |                   |
| Solderability                                                                                                                                                                                                                                           |                             | Soldered at solder temperature, 245 ± 3 °C,<br>for immersion duration, 3 s.                                                                                  |                           | A new uniform coating of solder shall cover a<br>minimum of 95% of the surface<br>being immersed.                          |                   |
|                                                                                                                                                                                                                                                         |                             |                                                                                                                                                              |                           |                                                                                                                            |                   |
|                                                                                                                                                                                                                                                         | COUNT                       | DESCRIPTION OF REVISIONS                                                                                                                                     | DESIGNED                  | CHECKED                                                                                                                    | DATE              |
|                                                                                                                                                                                                                                                         | 1                           | DIS-F-00004353                                                                                                                                               | HR.NAGAYASU               | HT.YAMAGUCHI                                                                                                               | 20190301          |
| REMARK<br>(1) Temperature rise included when energized.<br>(2) This storage indicates A long—term storage state<br>For the unused product before the board mounted.<br><br>Unless otherwise specified, refer to IEC-60512.<br><br>Clerical corrections. |                             |                                                                                                                                                              | APPROVED                  | NH.NAKATA                                                                                                                  | 20170410          |
|                                                                                                                                                                                                                                                         |                             |                                                                                                                                                              | CHECKED                   | HT.YAMAGUCHI                                                                                                               | 20170410          |
|                                                                                                                                                                                                                                                         |                             |                                                                                                                                                              | DESIGNED                  | HR.NAGAYASU                                                                                                                | 20170410          |
|                                                                                                                                                                                                                                                         |                             |                                                                                                                                                              | DRAWN                     | HR.NAGAYASU                                                                                                                | 20170410          |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test                                                                                                                                                                                          |                             |                                                                                                                                                              | DRAWING NO.               |                                                                                                                            | ELCX-375928-00-00 |
|                                                                                                                                                                                                                                                         | SPECIFICATION SHEET         |                                                                                                                                                              | PART NO.                  | A3B- * PA-2DS(51)                                                                                                          |                   |
|                                                                                                                                                                                                                                                         | HIROSE ELECTRIC CO., LTD.   |                                                                                                                                                              | CODE NO.                  | CL621                                                                                                                      | 1/1               |