

| 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> |          |
|   | VOLTAGE   | 200 V AC   | OPERATING HUMIDITY RANGE  | 40 % TO 80 %                   |          |
|   | CURRENT   | 3 A  | STORAGE HUMIDITY RANGE    | 40 % TO 70 % <sup>(2)</sup>    |          |
| SPECIFICATIONS  |   |  |                           |                                |          |
| ITEM  | TEST METHOD   | REQUIREMENTS   | QT                        | AT                             |          |
| <b>CONSTRUCTION</b>   |   |  |                           |                                |          |
| GENERAL EXAMINATION   | VISUALLY AND BY MEASURING INSTRUMENT.   | ACCORDING TO DRAWING.  | ×                         | ×                              |          |
| MARKING   | CONFIRMED VISUALLY.   |  | ×                         | ×                              |          |
| <b>ELECTRIC CHARACTERISTICS</b>   |   |  |                           |                                |          |
| 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.   | ×                         | -                              |          |
| <b>MECHANICAL CHARACTERISTICS</b>   |   |  |                           |                                |          |
| MECHANICAL OPERATION  | 500 TIMES INSERTIONS AND EXTRACTIONS.   | ① CONTACT RESISTANCE: 15 mΩ MAX.<br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.               | ×                         | -                              |          |
| VIBRATION   | FREQUENCY 10 TO 55 Hz,<br>AMPLITUDE : 1.5mm,<br>AT 2 h FOR 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 DIRECTIONS.                                      |  | ×                         | -                              |          |
| <b>ENVIRONMENTAL CHARACTERISTICS</b>  |   |  |                           |                                |          |
| DAMP HEAT (STEADY STATE)  | EXPOSED AT 40±2 °C, 90 ~ 95 %, 96 h.  | ① CONTACT RESISTANCE: 15 mΩ MAX.<br>② INSULATION RESISTANCE: 1000 MΩ MIN.                    | ×                         | -                              |          |
| RAPID CHANGE OF TEMPERATURE   | TEMPERATURE-65→+15~+35→+125→+15+35°C<br>TIME 30 → 10~15 → 30 → 10~15 min<br>UNDER 5 CYCLES.                         | ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.   | ×                         | -                              |          |
| CORROSION SALT MIST   | EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h.   | ① CONTACT RESISTANCE: 15 mΩ MAX.<br>② NO HEAVY CORROSION.                                    | ×                         | -                              |          |
| HYDROGEN SULPHIDE   | EXPOSED IN 3 PPM FOR 96 h.<br>(TEST STANDARD: JEIDA 38)   |  | ×                         | -                              |          |
| RESISTANCE TO SOLDERING HEAT  | 1) SOLDER BATH: SOLDER TEMPERATURE, 260±5°C FOR IMMERSION, DURATION, 10±1s.<br>2) SOLDERING IRONS : 350 °C, FOR 3 s | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.                              | ×                         | -                              |          |
| SOLDERABILITY   | SOLDERED AT SOLDER TEMPERATURE, 245±3°C, FOR IMMERSION DURATION, 2 s.   | A NEW UNIFORM COATING OF SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMersed. | ×                         | -                              |          |
|   |   |  |                           |                                |          |
| COUNT   |   | DESCRIPTION OF REVISIONS   | DESIGNED                  | CHECKED                        | DATE     |
| △   |   |  |                           |                                |          |
| REMARK <sup>(1)</sup> TEMPERATURE RISE INCLUDED WHEN ENERGIZED.<br><sup>(2)</sup> THIS STORAGE INDICATES A LONG-TERM STORAGE STATE FOR THE UNUSED PRODUCT BEFORE THE BOARD MOUNTED. |   |  | APPROVED                  | HS. OKAWA                      | 06.04.12 |
|   |   |  | CHECKED                   | HS. OZAWA                      | 06.04.12 |
|   |   |  | DESIGNED                  | KY. NAKAMURA                   | 06.04.11 |
| Unless otherwise specified, refer to MIL-STD-202.   |   |  | DRAWN                     | AK. SUZUKAWA                   | 06.04.11 |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test  |   | DRAWING NO.  | ELC4-084168-21            |                                |          |
| <b>HRS</b>  | SPECIFICATION SHEET   |  | PART NO.                  | A2-*PA-2. 54DS (71)            |          |
|   | HIROSE ELECTRIC CO., LTD.   |  | CODE NO.                  | CL620                          | △ 1/1    |