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| COUNT  | DESCRIPTION OF REVISIONS     | BY  | CHKD | DATE                                    | COUNT   | DESCRIPTION OF REVISIONS    | BY                          | CHKD     | DATE |
|--|------------------------------|---|------|---|---|-----------------------------|-----------------------------|----------|------|
|  |                              |   |      |   |   |                             |                             |          |      |
| APPLICABLE STANDARD  |                              |   |      |   |   |                             |                             |          |      |
| RATING   | OPERATING TEMPERATURES RANGE | -30°C TO 105°C (NOTE1)  |      |   | STORAGE TEMPERATURE RANGE   | -40°C TO +105°C             |                             |          |      |
|  | VOLTAGE                      | 250 V AC  |      |   | CURRENT   | 3 A                         |                             |          |      |
| <b>SPECIFICATIONS</b>  |                              |   |      |   |   |                             |                             |          |      |
| ITEM   |                              | TEST METHOD   |      |   | REQUIREMENTS  |                             |                             | QT       | AT   |
| <b>CONSTRUCTION</b>  |                              |   |      |   |   |                             |                             |          |      |
| GENERAL EXAMINATION  |                              | VISUALLY AND BY MEASURING INSTRUMENT.   |      |   | ACCORDING TO DRAWING.   |                             |                             | ○        | ○    |
| MARKING  |                              | CONFIRMED VISUALLY.   |      |   |   |                             |                             | ○        | ○    |
| <b>ELECTRICAL CHARACTERISTICS</b>                              |                              |   |      |   |   |                             |                             |          |      |
| CONTACT RESISTANCE   |                              | 1 A DC.   |      |   | 30 mΩ MAX.  |                             |                             | ○        | —    |
| CONTACT RASISTANCE   |                              | 20 mV AC MAX, 0.1 mA (DC OR 1000 Hz)  |      |   | 30 mΩ MAX.  |                             |                             | ○        | —    |
| MILLIVOLT LEVEL METHOD   |                              |   |      |   |   |                             |                             | ○        | —    |
| INSULATION RESISTANCE  |                              | 500 V DC  |      |   | 100 MΩ MIN.   |                             |                             | ○        | —    |
| VOLTAGE PROOF  |                              | 650 V AC FOR 1 MIN  |      |   | NO FLASHOVER OR BREAKDOWN.  |                             |                             | ○        | —    |
| <b>MECHANICAL CHARACTERISTICS</b>                              |                              |   |      |   |   |                             |                             |          |      |
| CONTACT INSERTION AND EXTRACTION FORCES                        |                              | _____ BY STEEL GAUGE.   |      |   | INSERTION FORCE _____ N MAX.<br>EXTRACTION FORCE _____ N MIN.   |                             |                             | —        | —    |
| MECHANICAL OPERATION   |                              | 30 TIMES INSERTIONS AND EXTRACTIONS.  |      |   | ① CONTACT RESISTANCE: 60 mΩ MAX.<br>② NO DAMAGE. CRACK AND LOOSENESS OF PARTS.  |                             |                             | ○        | —    |
| VIBRATION  |                              | FREQUENCY 20 TO 200 Hz,<br>43.1 m/S <sup>2</sup> AT 3 h<br>FOR 3 DIRECTIONS.                  |      |   | ① NO ELECTRICAL DISCONTINUITY OF 10 μs.<br>② CONTACT RESISTANCE: 60 mΩ MAX.<br>③ NO DAMAGE. CRACK AND LOOSENESS OF PARTS. |                             |                             | ○        | —    |
| SHOCK  |                              | FREQUENCY 20 TO 50 Hz,<br>66.6 m/S <sup>2</sup> AT 1 h  |      |   | ① NO ELECTRICAL DISCONTINUITY OF 10 μs.<br>② CONTACT RESISTANCE: 60 mΩ MAX.<br>③ NO DAMAGE. CRACK AND LOOSENESS OF PARTS. |                             |                             | —        | —    |
| LOCK STRENGTH  |                              | APPLYING A PULL FORCE THE MATING AXIALLY AT 98 N MAX.   |      |   | ① DURING APPLYING, MATING COMPLETELY.<br>② AFTER APPLYING, NO DEFECT OF MATING PARTS.                                     |                             |                             | ○        | —    |
| <b>ENVIRONMENTAL CHARACTERISTICS</b>                           |                              |   |      |   |   |                             |                             |          |      |
| DAMP HEAT (STEADY STATE)                                       |                              | EXPOSED AT 60 °C, 90 TO 95 %, 500 h.  |      |   | ① CONTACT RESISTANCE: 60 mΩ MAX.<br>② INSULATION RESISTANCE: 100MΩ MIN.<br>③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.     |                             |                             | ○        | —    |
| RAPID CHANGE OF TEMPERATURE                                    |                              | TEMPERATURE -40 → 5 TO 35 → 85 → 5 TO 35 °C<br>TIME 30 → 5 → 30 → 5 MIN<br>UNDER 1000 CYCLES. |      |   | ① CONTACT RESISTANCE: 60 mΩ MAX.<br>② INSULATION RESISTANCE: 100MΩ MIN.<br>③ NO DAMAGE, CRACK AND LOOSENESS OF PART.      |                             |                             | ○        | —    |
| DRY HEAT   |                              | EXPOSED AT 105 °C, 300 h.   |      |   | ① CONTACT RESISTANCE: 60 mΩ MAX.<br>② NO HEAVY CORROSION.   |                             |                             | ○        | —    |
| COLD   |                              | EXPOSED AT -65 °C, 120 h.   |      |   | ① CONTACT RESISTANCE: 60 mΩ MAX.<br>② NO HEAVY CORROSION.   |                             |                             | ○        | —    |
| CORROSION, SALT MIST   |                              | EXPOSED IN 5% SALT WATER SPRAY FOR 96 h.  |      |   | ① CONTACT RESISTANCE: 60 mΩ MAX.<br>② NO HEAVY CORROSION.   |                             |                             | ○        | —    |
| RESISTANCE TO HSO <sup>3</sup> GAS                             |                              | EXPOSED IN 500 PPM FOR 8 h.   |      |   | ① CONTACT RESISTANCE: 60 mΩ MAX.<br>② NO HEAVY CORROSION.   |                             |                             | ○        | —    |
| RESISTANCE TO SOLDERING HEAT                                   |                              | SOLDER TEMPERATURE, 260 °C FOR IMMERSION, DURATION, 10 s.                                     |      |   | NO DEFORMATION IN CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.   |                             |                             | —        | —    |
| SOLDERABILITY  |                              | SOLDERED AT SOLDER TEMPERATURE, 230 °C FOR IMMERSION DURATION, 3 S                            |      |   | A NEW UNIFORM COATING OF SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMersed.                              |                             |                             | —        | —    |
| REMARKS  |                              |   |      | DRAWN                                   | DESIGNED  | CHECKED                     | APPROVD                     | RELEASED |      |
| NOTE1 INCLUDE THE TEMPERATURE RISING BY CURRENT.               |                              |   |      | <i>M. Nam-<br/>Nagashi<br/>07.11.04</i> | <i>M. Nam-<br/>Nagashi<br/>07.11.04</i>   | <i>K. Kato<br/>07.11.06</i> | <i>K. Kato<br/>07.11.06</i> |          |      |
| Note QT:Qualification Test AT:Assurance Test ○:Applicable Test |                              |   |      |   |   |                             |                             |          |      |
| <b>HRS</b> HIROSE ELECTRIC CO., LTD.                           |                              |   |      | SPECIFICATION SHEET                     |   |                             | PART NO.<br>GT17-2022PCF    |          |      |
| CODE NO. (OLD)   |                              | DRAWING NO.<br>ELC4-166276  |      |   | CODE NO.<br>CL767-0082-0  |                             | 1                           |          |      |

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