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 In case that the application demands a high level of reliability, such as automotive,
 please contact a company representative for further information.

| 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 | 1 A | | | |
| SPECIFICATIONS | | | | | | | | | |
| ITEM | | TEST METHOD | | | REQUIREMENTS | | | QT | AT |
| CONSTRUCTION | | | | | | | | | |
| GENERAL EXAMINATION | | VISUALLY AND BY MEASURING INSTRUMENT. | | | ACCORDING TO DRAWING. | | | ○ | ○ |
| MARKING | | CONFIRMED VISUALLY. | | | | | | ○ | ○ |
| ELECTRICAL CHARACTERISTICS | | | | | | | | | |
| 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. | | | ○ | - |
| MECHANICAL CHARACTERISTICS | | | | | | | | | |
| CONTACT INSERTION AND EXTRACTION FORCES | | BY STEEL GAUGE. | | | INSERTION FORCE — N MAX. EXTRACTION FORCE — N MIN. | | | - | - |
| MECHANICAL OPERATION | | 30 TIMES INSERTIONS AND EXTRACTIONS. | | | ① CONTACT RESISTANCE:60 mΩ MAX. ② NO DAMAGE. CRACK AND LOOSENESS OF PARTS. | | | ○ | - |
| VIBRATION | | FREQUENCY 20 TO 200 Hz, AMPLITUDE - mm, 43.1 m/S ² AT 3 h FOR 3 DIRECTIONS. | | | ① NO ELECTRICAL DISCONTINUITY OF 10 μ s. ② CONTACT RESISTANCE:60 mΩ MAX. ③ NO DAMAGE. CRACK AND LOOSENESS OF PARTS. | | | - | - |
| SHOCK | | FREQUENCY 20 TO 50 Hz, 66.6 m/S ² AT 1 h | | | ① NO ELECTRICAL DISCONTINUITY OF10 μ s. ② CONTACT RESISTANCE:60 mΩ MAX. ③ NO DAMAGE. CRACK AND LOOSENESS OF PARTS. | | | - | - |
| LOCK STRENGTH | | APPLYING A PULL FORCE THE MATING AXIALLY AT 98N MAX. | | | ① DURING APPLYING, MATING COMPLETELY. ② AFTER APPLYING, NO DEFECT OF MATING PARTS. | | | ○ | - |
| ENVIRONMENTAL CHARACTERISTICS | | | | | | | | | |
| DAMP HEAT (STEADY STATE) | | EXPOSED AT 60 °C, 90 TO 95 %, 500 h. | | | ① CONTACT RESISTANCE:60 mΩ MAX. ② INSULATION RESISTANCE:100MΩ MIN. ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | | | - | - |
| RAPID CHANGE OF TEMPERATURE | | TEMPERATURE -40 → 5 TO 35 → 85 → 5 TO 35 °C TIME 30 → 5 → 30 → 5 MIN UNDER 1000 CYCLES. | | | ① CONTACT RESISTANCE:60 mΩ MAX. ② INSULATION RESISTANCE:100MΩ MIN. ③ NO DAMAGE, CRACK AND LOOSENESS OF PART. | | | - | - |
| DRY HEAT | | EXPOSED AT 105 °C, 300 h. | | | ① CONTACT RESISTANCE:60 mΩ MAX. ② NO HEAVY CORROSION. | | | - | - |
| COLD | | EXPOSED AT -55 °C, 120 h. | | | ① CONTACT RESISTANCE:60 mΩ MAX. ② NO HEAVY CORROSION. | | | - | - |
| CORROSION, SALT MIST | | EXPOSED IN 5% SALT WATER SPRAY FOR 96 h. | | | ① CONTACT RESISTANCE:60 mΩ MAX. ② NO HEAVY CORROSION. | | | - | - |
| RESISTANCE TO HSO ³ GAS | | EXPOSED IN 500 PPM FOR 8 h. | | | ① CONTACT RESISTANCE:60 mΩ MAX. 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. | | | - | - |
| RESISTANCE TO WATER | | ① EXPOSED TO 80°C ENVIROMENT FOR 1h, ② IMMERSed IN THE WATER TO THE DEPTH 100mm FOR 0.5h, ③ LEFT IN THE AMBIENT TEMPERATURE FOR 2h, STEPS ② AND ③ ARE 1 CYCLE, 10CYCLES PERFORMED. | | | NO WATER PENETRATION PERMITTED. | | | ○ | - |
| REMARKS | | | | DRAWN | DESIGNED | CHECKED | APPROVD | RELEASED | |
| NOTE1 INCLUDE THE TEMPERATURE RISING BY CURRENT. | | | | S. KURIYA '02.10.10 | S. KURIYA '02.10.10 | <i>M. Abada</i> '02.10.18 | <i>K. Sato</i> '02.10.18 | | |
| Note QT:Qualification Test AT:Assurance Test ○:Applicable Test | | | | | | | | | |
| HRS | | HIROSE ELECTRIC CO., LTD. | | | SPECILICATION SHEET | | | PART NO. GT5W-1PP-HU | |
| CODE NO. (OLD) | | DRAWING NO. | | | CODE NO. | | | 1 | 1 |
| CL | | ELC4-165492 | | | CL755-0070-1 | | | | |

