| APPLICABLE STANDARD | | | | |
|---|---|---|---|---|
| RATING | OPERATING TEMPERATURE RANGE | -40 °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. | | × | × |
| **ELECTRIC CHARACTERISTICS** | | | | |
| CONTACT RESISTANCE | 1A DC. | 30 mΩ MAX. | × | — |
| CONTACT RESISTANCE MILLIVOLT LEVEL METHOD | 20 mV AC MAX, 0.1 mA(DC OR 1000Hz) | 30 mΩ MAX. | × | — |
| INSULATION RESISTANCE | 500 V DC | 100 MΩ MIN. | × | — |
| VOLTAGE PROOF | 500 V AC FOR 1 min. | NO FLASHOVER OR BREAKDOWN. | × | — |
| **MECHANICAL CHARACTERISTICS** | | | | |
| 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 $m/s^2$ AT 3 h 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 $m/s^2$ 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 98N MAX. | ① DURING APPLYING,MATING COMPLETELY.<br>② AFTER APPLYING,NO DEFECT OF MATING PARTS. | × | — |
| **ENVIRONMENTAL CHARACTERISTICS** | | | | |
| DAMP HEAT (STEADY STATE) | EXPOSED AT 60 °C, 90 ～ 95 %, 500 h. | ① CONTACT RESISTANCE: 60 mΩ MAX.<br>② INSULATION RESISTANCE:100 MΩ MIN.<br>③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | × | — |
| RAPID CHANGE OF TEMPERATURE | TEMPERATURE-40→5 TO 35→ 105→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:100 MΩ MIN.<br>③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | × | — |
| DRY HEAT | EXPOSED AT 105°C, 300 h. | ① CONTACT RESISTANCE: 60 mΩ MAX.<br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | × | — |
| COLD ⚠1 | EXPOSED AT -40°C , 120 h. | ① CONTACT RESISTANCE: 60 mΩ MAX.<br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | × | — |
| RESISTANCE TO $SO_2$ GAS | EXPOSED IN 500 PPM FOR 8h. | ① CONTACT RESISTANCE: 60 mΩ MAX.<br>② NO HEAVY CORROSION. | × | — |
| RESISTANCE TO SOLDERING HEAT | EXPOSE 2 TIMES AT SPECIFIED TEMPERATURE PROFILE. | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS. | × | — |
| SOLDERABILITY | SOLDERED AT SOLDER TEMPERATURE, 245 °C FOR IMMERSION DURATION, 3s. | A NEW UNIFORM COATING OF SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMERSED. | × | — |

| | COUNT | DESCRIPTION OF REVISIONS | DESIGNED | CHECKED | DATE |
|---|---|---|---|---|---|
| ⚠1 | 1 | DIS-T-00011936 | HK. WATANABE | MH. YAMAGUCHI | 20211111 |

REMARK
(NOTE1) INCLUDE THE TEMPERATURE RISING BY CURRENT.
(NOTE2) APPLICABLE BOARD : 0.8 mm
(NOTE3) CONTACT RESISTANCE OF OUTER CONDUCTOR AFTER ENVIRONMENTAL AND DURABILITY TEST SHALL BE 120mΩ MAX.

| | | |
|---|---|---|
| APPROVED | KI. HIROKAWA | 20200406 |
| CHECKED | MO. OKADA | 20200406 |
| DESIGNED | HK. WATANABE | 20200406 |
| DRAWN | YK. MITSUISHI | 20200403 |

Note QT:Qualification Test AT:Assurance Test X:Applicable Test

DRAWING NO. ELC-169969-55-00

HRS

SPECIFICATION SHEET

HIROSE ELECTRIC CO., LTD.

PART NO. GT21T-1P-H(C) (55)

CODE NO. CL0771-0067-6-55 ⚠1 1/1

FORM HD0011-2-1