| | COUNT | DESCRIPTION OF REVISIONS | BY | CHKD | DATE | | COUNT | DESCRIPTION OF REVISIONS | BY | CHKD | DATE |
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## APPLICABLE STANDARD

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|---|---|---|---|---|
| RATING | OPERATING TEMPERATURES RANGE | −30℃ TO 105℃ (NOTE1) | STORAGE TEMPERATURE RANGE | −40℃ TO +105℃ |
| | VOLTAGE | 250 V AC | CURRENT | 3 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. | SIGNAL:30 mΩ MAX, SHIELD:60mΩ MAX | ○ | — |
| CONTACT RASISTANCE MILLIVOLT LEVEL METHOD | 20 mV AC MAX, 0.1 mA(DC OR 1000 Hz) | SIGNAL:30 mΩ MAX, SHIELD:60mΩ MAX | ○ | — |
| INSULATION RESISTANCE | 500 V DC | 1000 MΩ MIN. | ○ | — |
| VOLTAGE PROOF | 650 V AC FOR 1 MIN | NO FLASHOVER OR BREAKDOWN. | ○ | — |
| **MECHANICAL CHARACTERISTICS** | | | | |
| CONTACT INSERTION AND EXTRACTION FORCES | 8.3×9.0 BY STEEL GAUGE. | INSERTION FORCE 6.5 N MAX.<br>EXTRACTION FORCE 0.1～6.5 N MIN. | ○<br>○ | —<br>— |
| MECHANICAL OPERATION | 30 TIMES INSERTIONS AND EXTRACTIONS. | ① CONTACT RESISTANCE:<br>SIGNAL:30 mΩ MAX, SHIELD:60mΩ MAX<br>② NO DAMAGE. CRACK AND LOOSENESS OF | ○<br>○ | —<br>— |
| VIBRATION | FREQUENCY 20 TO 200 Hz,<br>43.1 m/S$^2$ AT 3 h<br>FOR 3 DIRECTIONS. | ① NO ELECTRICAL DISCONTINUITY OF 10 μs.<br>② CONTACT RESISTANCE:<br>SIGNAL:30 mΩ MAX, SHIELD:60mΩ MAX<br>③ NO DAMAGE. CRACK AND LOOSENESS OF PARTS. | ○<br>○<br>○ | —<br>—<br>— |
| 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:<br>SIGNAL:30 mΩ MAX, SHIELD:60mΩ MAX<br>③ NO DAMAGE. CRACK AND LOOSENESS OF PARTS. | ○<br>○<br>○ | —<br>—<br>— |
| 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. | ○<br>○ | —<br>— |
| **ENVIRONMENTAL CHARACTERISTICS** | | | | |
| DAMP HEAT (STEADY STATE) | EXPOSED AT 60 ℃, 90 TO 95 %, 500 h. | ① CONTACT RESISTANCE:<br>SIGNAL:60 mΩ MAX, SHIELD:120mΩ MAX<br>② INSULATION RESISTANCE:100MΩ MIN.<br>③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | ○<br>○<br>○ | —<br>—<br>— |
| RAPID CHANGE OF TEMPERATURE | TEMPERATURE −40 → 5 TO 35 → 85 → 5 TO 35 ℃<br>TIME 30 → 5 → 30 → 5 MIN<br>UNDER 1000 CYCLES. | ① CONTACT RESISTANCE:<br>SIGNAL:60 mΩ MAX, SHIELD:120mΩ MAX<br>② INSULATION RESISTANCE:100MΩ MIN.<br>③ NO DAMAGE, CRACK AND LOOSENESS OF PART. | ○<br>○<br>○ | —<br>—<br>— |
| DRY HEAT | EXPOSED AT 105 ℃, 300 h. | ① CONTACT RESISTANCE:<br>SIGNAL:60 mΩ MAX, SHIELD:120mΩ MAX<br>② NO HEAVY CORROSION. | ○<br>○ | —<br>— |
| COLD | EXPOSED AT −55 ℃, 120 h. | ① CONTACT RESISTANCE:<br>SIGNAL:60 mΩ MAX, SHIELD:120mΩ MAX<br>② NO HEAVY CORROSION. | ○<br>○ | —<br>— |
| CORROSION, SALT MIST | EXPOSED IN 5% SALT WATER SPRAY FOR 96 h. | ① CONTACT RESISTANCE:<br>SIGNAL:60 mΩ MAX, SHIELD:120mΩ MAX<br>② NO HEAVY CORROSION. | ○<br>○ | —<br>— |
| RESISTANCE TO HSO$^3$ GAS | EXPOSED IN 500 PPM FOR 8 h. | ① CONTACT RESISTANCE:<br>SIGNAL:60 mΩ MAX, SHIELD:120mΩ MAX<br>② NO HEAVY CORROSION. | ○<br>○ | —<br>— |
| RESISTANCE TO SOLDERING HEAT | SOLDER TEMPERATURE, 260 ℃ FOR IMMERSION, DURATION, 10 s. | NO DEFORMATION IN CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS. | ○ | — |
| SOLDERABILITY | SOLDERED AT SOLDER TEMPERATURE, 230 ℃ FOR IMMERSION DURATION, 3 s. | A NEW UNIFORM COATING OF SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMERSED. | ○ | — |

REMARKS

NOTE1 INCLUDE THE TEMPERATURE RISING BY CURRENT.
NOTE2 APPLICABLE BOARD:1.6±0.2.
NOTE3 OVER 500 CYCLES:120mΩ MAX. (OUTER CONTACT ONLY)

| DRAWN | DESIGNED | CHECKED | APPROVD | RELEASED |
|---|---|---|---|---|
| S. KURIYA<br>06.4.14 | T. SHISHI<br>KURA<br>99.6.17 | K. Sato<br>'06,4,18 | K. Sato<br>'06,4,18 | |

TO

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

| | | |
|---|---|---|
| HRS HIROSE ELECTRIC CO., LTD. | SPECIFICATION SHEET | PART NO. GT17VB−6DP−DS (70) |
| CODE NO. (OLD) ——— | DRAWING NO. ELC4−165530−01 | CODE NO. CL767−0032−2−70 1/1 |