



| APPLICABLE STANDARD | | | | | | |
|--|-----------------------------|--|---------------------------|---|----------------|-----|
| RATING | OPERATING TEMPERATURE RANGE | -35°C TO + 85°C (NOTE 1) | STORAGE TEMPERATURE RANGE | -10°C TO + 60°C (NOTE3) | | |
| | OPERATING HUMIDITY RANGE | 20 % TO 80 % (NOTE2) | STORAGE HUMIDITY RANGE | 40 % TO 70 % (NOTE3) | | |
| | VOLTAGE | AC/DC 100V | APPLICABLE CONNECTOR | DF50#-50DS-1C | | |
| | CURRENT | AWG 28 : 1.0 A AWG 30 : 0.9 A AWG 32 : 0.7 A | APPLICABLE CONTACT | DF50-2830SCFA | | |
| SPECIFICATIONS | | | | | | |
| ITEM | | TEST METHOD | | REQUIREMENTS | QT | AT |
| CONSTRUCTION | | | | | | |
| GENERAL EXAMINATION | | VISUALLY AND BY MEASURING INSTRUMENT. | | ACCORDING TO DRAWING. | X | X |
| MARKING | | CONFIRMED VISUALLY. | | | X | X |
| ELECTRIC CHARACTERISTICS | | | | | | |
| CONTACT RESISTANCE | | AC 20mV MAX 1mA (DC OR 1000 Hz). | | 30mΩ MAX. | X | — |
| INSULATION RESISTANCE | | 100V DC. | | 500MΩ MIN. | X | — |
| VOLTAGE PROOF | | 300V AC FOR 1 min. | | NO FLASHOVER OR BREAKDOWN. | X | — |
| MECHANICAL CHARACTERISTICS | | | | | | |
| INSERTION FORCE WITHDRAWAL FORCE | | TESTING BY APPLICABLE CONNECTOR | | INSERTION FORCE: 60.0 N MAX. WITHDRAWAL FORCE: 6.6 N MIN. | X | — |
| MECHANICAL OPERATION | | 30TIMES INSERTIONS AND EXTRACTIONS. | | ① CONTACT RESISTANCE: 50mΩ MAX. ② NO DAMAGE, CRACK OR LOOSENESS OF PARTS. | X | — |
| VIBRATION | | FREQUENCY 10 TO 55 Hz, SINGLE AMPLITUDE 0.75 mm, AT 10 CYCLE FOR EACH, FOR 3 DIRECTIONS. | | ① NO ELECTRICAL DISCONTINUITY OF 1μs. ② NO DAMAGE, CRACK OR LOOSENESS OF PARTS. | X | — |
| SHOCK | | 490 m/s ² DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS. | | | | |
| ENVIRONMENTAL CHARACTERISTICS | | | | | | |
| DAMP HEAT (STEADY STATE) | | EXPOSED AT 40 ± 2 °C, 90 TO 95 %, 96 h. | | ① CONTACT RESISTANCE: 50mΩ MAX. ② INSULATION RESISTANCE: 100MΩ MIN. ③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS. | X | — |
| RAPID CHANGE OF TEMPERATURE | | TEMPERATURE -55→+85°C TIME 30→ 30min. UNDER 5 CYCLES. THE TRANSFERRING TIME OF THE TANK IS 2~3 min. | | ① CONTACT RESISTANCE: 50mΩ MAX. ② INSULATION RESISTANCE: 500MΩ MIN. ③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS. | X | — |
| | | | | | | |
| | COUNT | DESCRIPTION OF REVISIONS | DESIGNED | CHECKED | DATE | |
| ▲ | | | | | | |
| | | | APPROVED | KI. AKIYAMA | 12. 05. 31 | |
| | | | CHECKED | HK. UMEHARA | 12. 05. 31 | |
| | | | DESIGNED | TT. OHSAKO | 12. 05. 30 | |
| | | | DRAWN | TT. OHSAKO | 12. 05. 30 | |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test | | | DRAWING NO. | | ELC4-330237-02 | |
| HRS | SPECIFICATION SHEET | | PART NO. | DF50-50DP-1V (52) | | |
| | HIROSE ELECTRIC CO., LTD. | | CODE NO. | CL665-0011-1-52 | ▲ | 1/2 |

| SPECIFICATIONS | | | | | |
|--|---|--|----------|-------------------|---|
| ITEM | TEST METHOD | REQUIREMENTS | QT | AT | |
| SOLDERABILITY | SOLDERED AT SOLDER TEMPERATURE, 245°C FOR INSERTION DURATION, 5 sec. | SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMERSED. | X | — | |
| RESISTANCE TO SOLDERING HEAT | 1) REFLOW SOLDERING «REFLOW AREA» MAX250°C WITHIN 10 sec MIN 220°C WITHIN 60 sec «PREHEATING AREA» 150~180°C 90~120s 2) MANUAL SOLDERING SOLDERING IPON TEMPERRATURE 350±10°C SOLDERING TIME 3~4s. NO STRENGTH ON CONTACT. | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS. | X | — | |
| | | | | | |
| REMARKS NOTE 1: INCLUDING THE TEMPERATURE RISE BY CURRENT. NOTE 2: NON-CONDENSING NOTE 3: APPLY TO THE CONDITION OF LONG TERM STORAGE FOR UNUSED PRODUCTS BEFORE PCB ON BOARD. AFTER PCB BOARD,OPERATING TEMPERATURE AND HUMIDITY RANGE IS APPLIED FOR INTERIM STORAGE DURING TRANSPORTATION | | | | | |
| Unless otherwise specified , refer to JIS C 5402. | | | | | |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test | | DRAWING NO. | | ELC4-330237-02 | |
|  | SPECIFICATION SHEET | | PART NO. | DF50-50DP-1V (52) | |
| | HIROSE ELECTRIC CO., LTD. | | CODE NO | CL665-0011-1-52 |  2/2 |