






| | | | | | |
|---|---|--|---------------|---|---|
| Applicable standard | | | | | |
| Rating | Operating temperature range  | -55 °C to +105°C (Note1) | | Storage temperature range | -10 °C to +60°C (Note3) |
| | Operating humidity range | 20% to 80% (Note2) | | Storage humidity range | 40% to 70% (Note3) |
| | Applicable connector | DF63#-EP-3.96C | | Voltage | AC/DC 630V |
| | Applicable cable | UL1015 AWG 16 to 18 UL1007 AWG 16 to 18 | | Current | AWG 16 : 15A AWG 18 : 13A |
| | Insulation diameter | φ2.1 to φ3.2mm | | | |
| | | Rated Voltage | Rated Current | Overvoltage Category | IP-Degree |
| UL,C-UL | | 600V AC/DC | See above | - | - |
| TÜV | | 300V AC/DC | See above | - | IP00 |
| 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 | | 20mV MAX, 1mA (DC or 1000Hz). | | 10 mΩ MAX. | X - |
| Mechanical characteristics | | | | | |
| Mechanical operation | | 30 times insertion and extraction. | | ①Contact resistance: 20 mΩ MAX. ②No damage, crack or looseness of parts. | X - |
| Vibration | | Frequency 10 to 55 Hz, single amplitude 0.75 mm, at 10 cycles for 3 direction. | | ①No electrical discontinuity of 1 μs. ②No damage, crack or looseness of parts. | X - |
| Shock | | 490 m/s ² duration of pulse 11 ms at 3 times each for 3 both axial directions. | | ①No electrical discontinuity of 1 μs. ②No damage, crack or looseness of parts. | X - |
| Environmental characteristics | | | | | |
| Damp heat (Steady state) | | Exposed at 40 ± 2°C, 90 to 95 %, 96 h. (After leaving the room temperature for 1-2h.) | | ①Contact resistance: 20 mΩ MAX. ②No damage, crack or looseness of parts. | X - |
| Rapid change of temperature | | Temperature -55°C → +85°C Time 30min → 30min Under 5 cycles. (The transferring time of the tank is 2-3 min) (After leaving the room temperature for 1-2h.) | | ①Contact resistance: 20 mΩ MAX. ②No damage, crack or looseness of parts. | X - |
| | | | | | |
| <p>Note 1: Include the temperature rising by current.</p> <p>Note 2: No condensing</p> <p>Note 3: Apply to the condition of long term storage for unused products before PCB on board. After PCB on board, operating temperature and humidity range is applied for interim storage during transportation.</p> | | | | | |
|  | Count | Description of revisions | Designed | Checked | Date |
|  | 1 | DIS-H-00002332 | MI. SAKIMURA | TS. FUKUSHIMA | 16. 11. 29 |
| Remarks | | | | Approved | 15. 10. 29 |
| | | | | Checked | 15. 10. 29 |
| | | | | Designed | 15. 10. 29 |
| | | | | Drawn | 15. 10. 28 |
| Unless otherwise specified, refer to IEC 60512. | | | | | |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test | | | Drawing No. | | ELC-361982-00-00 |
|  | Specification sheet | | Part No. | DF63-1618PC | |
| | HIROSE ELECTRIC CO., LTD. | | Code No. | CL680-0536-8-00 |  1/1 |