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|--|-----------------------------|--|---|--|------------------|---|-----|
| APPLICABLE STANDARD | | | | | | | |
| RATING | OPERATING TEMPERATURE RANGE | -55 °C TO +85 °C ^{(1) (2)} | STORAGE TEMPERATURE RANGE | -10 °C TO +60 °C ⁽³⁾ | | | |
| | OPERATING HUMIDITY RANGE | RH 90 % MAX ^{(2) (4)} | STORAGE HUMIDITY RANGE | RH 70 % MAX ^{(3) (4)} | | | |
| | VOLTAGE | 300 V DC/AC | CURRENT  | 70A (TEMPERATURE RISE 30°C MAX) | | | |
| SPECIFICATIONS | | | | | | | |
| ITEM | | TEST METHOD | | REQUIREMENTS | | QT | AT |
| CONSTRUCTION | | | | | | | |
| GENERAL EXAMINATION | | VISUAL AND WITH MEASURING INSTRUMENT | | ACCORDING TO DRAWING | | x | x |
| MARKING | | CONFIRMED VISUALLY | | | | x | x |
| ELECTRIC CHARACTERISTICS | | | | | | | |
| CONTACT RESISTANCE [EIA-364-23] | | 100 mA AND 20 mV OPEN CIRCUIT MAX. | | 2 mΩ MAX. ⁽⁵⁾ MATED WITH IT-PM-2S-DIR IT-PD-2S-DIR | | x | |
| INSULATION RESISTANCE [EIA-364-21] | | 500 V DC | | 1000 MΩ MIN. | | x | |
| VOLTAGE PROOF [EIA-364-20] | | 1000 V AC FOR 1 MINUTE | | NO FLASHOVER OR BREAKDOWN. | | x | |
| MECHANICAL CHARACTERISTICS | | | | | | | |
| INSERTION AND WITHDRAWAL FORCES [EIA-364-13] | | MEASURED WITH RESPECT TO APPLICABLE CONNECTORS | | INSERTION FORCE: 50 N MAX. WITHDRAWAL FORCE: 3 N MIN. | | x | |
| MECHANICAL OPERATION [EIA-364-09] | | 100 TIMES INSERTION AND EXTRACTION | | ① CONTACT RESISTANCE: 2 mΩ MAX. ⁽⁵⁾ ② NO DAMAGE, CRACK OR LOOSENESS OF PARTS | | x | |
| RANDOM VIBRATION [EIA-364-28] | | FREQUENCY : 50 TO 2000 Hz POWER SPECTRAL DENSITY : 0.1 g ² /Hz FOR 90 MINUTES IN THREE DIRECTIONS * The test sample fixes PCB by spacers other than the connector. | | ① NO ELECTRICAL DISCONTINUITY OF 1 μs OR MORE ② NO DAMAGE, CRACK OR LOOSENESS OF PARTS | | x | |
| SHOCK [EIA-364-27] | | 490 m/s ² , DURATION OF PULSE : 11 ms 18 TIMES TOTAL , 3 EACH DIRECTION , 3 AXIS * The test sample fixes PCB by spacers other than the connector. | | | | x | |
| ENVIRONMENTAL CHARACTERISTICS | | | | | | | |
| THERMAL SHOCK [EIA-364-32] | | TEMPERATURE: -55 → 20 ~ 35 → 85 → 20 ~ 35 °C TIME: 30 → 5 MAX → 30 → 5 MAX min. UNDER 10 CYCLES | | ① CONTACT RESISTANCE : 2 mΩ MAX. ⁽⁵⁾ ② INSULATION RESISTANCE : 100 MΩ MIN. ③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS | | x | |
| CYCLIC TEMPERATURE AND HUMIDITY [EIA-364-31] | | @ 25 °C, 80% RH: 60 MIN DWELL TIME 30 MIN RAMP TIME @ 65 °C, 50% RH: 60 MIN DWELL TIME UNDER 24 CYCLES | | | | | |
| DRY HEAT [EIA-364-17] | | EXPOSED AT 105 °C, 120 hr | | ① CONTACT RESISTANCE : 2 mΩ MAX. ⁽⁵⁾ ② NO DAMAGE, CRACK OR LOOSENESS OF PARTS | | x | |
| MIXED FLOWING GAS [EIA-364-65] | | EXPOSED AT 30 °C, 70% Cl ₂ : 10 ppb, NO ₂ : 200 ppb, H ₂ S : 10 ppb, SO ₂ : 100 ppb UNMATED 7 DAYS, MATED 7 DAYS | | ① CONTACT RESISTANCE : 2 mΩ MAX. ⁽⁵⁾ ② NO HEAVY CORROSION | | x | |
| | | | | | | | |
|  | COUNT | DESCRIPTION OF REVISIONS | | DESIGNED | CHECKED | DATE | |
|  | 1 | DIS-F-00020361 | | TH. SANO | TY. TAKADA | 20240508 | |
| REMARKS | | | | APPROVED | HS. OKAWA | 20111216 | |
| (1) INCLUDE TEMPERATURE RISE CAUSED BY CURRENT-CARRYING. | | | | CHECKED | KI. HIROKAWA | 20111215 | |
| (2) OPERATING TEMPERATURE SHOULD BE -55 TO 55°C WHEN HUMIDITY EXCEEDS 80% RH. | | | | DESIGNED | KN. SHIBUYA | 20111215 | |
| (3) "STORAGE" MEANS A LONG-TERM STORAGE STATE FOR THE UNUSED PRODUCT BEFORE ASSEMBLY TO PCB. | | | | DRAWN | KN. SHIBUYA | 20111215 | |
| (4) NO DEW CONDENSATION IS PERMITTED. | | | | | | | |
| (5) THE VALUE OF CONTACT RESISTANCE INCLUDES 2 CONTACT POINTS AND THE BULK RESISTANCE. | | | | | | | |
| Note; QT:Qualification Test AT:Assurance Test X:Applicable Test | | | | DRAWING NO. | | ELC4-339735-00 | |
|  | SPECIFICATION SHEET | | | PART NO. | IT-P-2P-35H | | |
| | HIROSE ELECTRIC CO., LTD. | | | CODE NO. | CL0636-0602-2-00 |  | 1/1 |