

|   |                             |  |                           |  |                  |
|---|-----------------------------|--|---------------------------|--|------------------|
| APPLICABLE STANDARD   |                             |  |                           |  |                  |
| RATING  | OPERATING TEMPERATURE RANGE | -55 °C TO 85 °C  | STORAGE TEMPERATURE RANGE | -10 °C TO 60 °C <sup>(1)</sup>   |                  |
|   | VOLTAGE                     | 50 V AC  | OPERATING HUMIDITY RANGE  | RELATIVE HUMIDITY 95 % RH MAX. <sup>(2)</sup>  |                  |
|   | CURRENT                     | 0.3 A  | STORAGE HUMIDITY RANGE    | 40 % TO 70 % <sup>(1)</sup>  |                  |
| SPECIFICATIONS  |                             |  |                           |  |                  |
| ITEM  |                             | TEST METHOD  |                           | REQUIREMENTS   | QT AT            |
| CONSTRUCTION  |                             |  |                           |  |                  |
| GENERAL EXAMINATION   |                             | VISUAL AND WITH MEASURING INSTRUMENT.  |                           | ACCORDING TO DRAWING.  | x x              |
| MARKING   |                             | CONFIRM VISUALLY.  |                           |  | x x              |
| ELECTRIC CHARACTERISTICS  |                             |  |                           |  |                  |
| CONTACT RESISTANCE<br>[EIA-364-23]  |                             | 100 mA and 20 mv OPEN CIRCUIT MAX.   |                           | 8mm height : 80 mΩ MAX.<br>9mm height : 85 mΩ MAX.<br>10mm height : 90 mΩ MAX.               | x —              |
| INSULATION RESISTANCE<br>[EIA-364-21]   |                             | 100 V DC.  |                           | 100 MΩ MIN.  | x —              |
| VOLTAGE PROOF<br>[EIA-364-20]   |                             | 150 V AC FOR 1 MINUTE.   |                           | NO FLASHOVER OR BREAKDOWN.   | x —              |
| MECHANICAL CHARACTERISTICS  |                             |  |                           |  |                  |
| INSERTION AND WITHDRAWAL FORCES<br>[EIA-364-13]   |                             | MEASURED BY APPLICABLE CONNECTORS.   |                           | INSERTION FORCE: 100.8 N MAX.<br>WITHDRAWAL FORCE: 4.2 N MIN.                                | x —              |
| MECHANICAL OPERATION<br>[EIA-364-09]  |                             | 50 TIMES INSERTIONS AND EXTRACTION.  |                           | ① CONTACT RESISTANCE CHANGE:<br>20 mΩ OR LESS<br>② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.  | x —              |
| RANDOM VIBRATION<br>[EIA-364-28]  |                             | FREQUENCY: 20 TO 500 Hz<br>POWER SPECTRAL DENSITY: 0.02 G <sup>2</sup> /Hz<br>OVERALL rms G: 3.1 Grms<br>FOR 15 MINUTES IN THREE DIRECTIONS.                           |                           | 1) NO ELECTRICAL DISCONTINUITY OF 1μs OR MORE.<br>2) NO DAMAGE, CRACK OR LOOSENESS OF PARTS. | x —              |
| SHOCK<br>[EIA-364-27]   |                             | 490 m/s <sup>2</sup> , DURATION OF PULSE: 11 ms<br>3 EACH DIRECTION, 3 AXIS.   |                           |  | x —              |
| ENVIRONMENTAL CHARACTERISTICS   |                             |  |                           |  |                  |
| THERMAL SHOCK<br>[EIA-364-32]   |                             | TEMPERATURE: -55 → 15 ~ 35 → 85 → 15 ~ 35 °C<br>TIME: 30 → 5 → 30 → 5 min.<br>UNDER 10 CYCLES  |                           | 1) CONTACT RESISTANCE CHANGE:<br>20 mΩ OR LESS<br>2) NO DAMAGE, CRACK OR LOOSENESS OF PARTS. | x —              |
| CYCLIC TEMPERATURE AND HUMIDITY<br>[EIA-364-31]   |                             | @ 25 °C, 80% RH: 60 MIN DWELL TIME<br>30 MIN RAMP TIME<br>@ 65 °C, 50% RH: 60 MIN DWELL TIME<br>UNDER 24 CYCLES.   |                           |  | x —              |
| DRY HEAT<br>[EIA-364-17]  |                             | EXPOSED AT 105 °C, 1000 hr.  |                           |  | x —              |
| MIXED FLOWING GAS<br>[EIA-364-65]   |                             | EXPOSED AT 30 °C, 70%<br>Cl <sub>2</sub> : 10 ppb, NO <sub>2</sub> : 200 ppb, H <sub>2</sub> S : 10 ppb,<br>SO <sub>2</sub> : 100 ppb<br>UNMATED 7 DAYS, MATED 7 DAYS. |                           | 1) CONTACT RESISTANCE CHANGE:<br>20 mΩ OR LESS<br>2) NO HEAVY CORROSION.                     | x —              |
|   |                             |  |                           |  |                  |
| COUNT   | DESCRIPTION OF REVISIONS    |  | DESIGNED                  | CHECKED  | DATE             |
| △   |                             |  |                           |  |                  |
| REMARK <sup>(1)</sup> THIS STORAGE INDICATES A LONG-TERM STORAGE STATE FOR THE UNUSED PRODUCT BEFORE THE BOARD MOUNTED.<br><sup>(2)</sup> NO DEW CONDENSATION IS PERMITTED. |                             |  | APPROVED                  | TM. MATSUO   | 17. 07. 26       |
|   |                             |  | CHECKED                   | TM. MATSUO   | 17. 07. 26       |
|   |                             |  | DESIGNED                  | AS. MATSUZAWA  | 17. 07. 26       |
|   |                             |  | DRAWN                     | XINGYU CHENG   | 17. 07. 26       |
| Note QT: Qualification Test AT: Assurance Test X: Applicable Test   |                             |  | DRAWING NO.               |  | ELC-352036-03-00 |
| HRS   | SPECIFICATION SHEET         |  | PART NO.                  | FX10-168IP-40D-8H (03)   |                  |
|   | HIROSE ELECTRIC CO., LTD.   |  | CODE NO.                  | CL608-0001-3-03  | △ 1/1            |