

|                                                                |                             |                                                                                                                 |                                                                                                                     |                            |          |
|----------------------------------------------------------------|-----------------------------|-----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|----------------------------|----------|
| APPLICABLE STANDARD                                            |                             |                                                                                                                 |                                                                                                                     |                            |          |
| RATING                                                         | OPERATING TEMPERATURE RANGE | -35°C TO 85°C (NOTE 1)                                                                                          | STORAGE TEMPERATURE RANGE                                                                                           | -10°C TO 60°C              |          |
|                                                                | VOLTAGE                     | 30V AC/DC                                                                                                       | APPLICABLE CONNECTOR                                                                                                | BM20* (0.6) -*DS-0.4V (**) |          |
|                                                                | CURRENT                     | 0.3A                                                                                                            |                                                                                                                     |                            |          |
| 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 AC OR LESS 1kHz,1mA .                                                                                      | 100mΩ MAX.                                                                                                          | X                          | —        |
| INSULATION RESISTANCE                                          |                             | 100V DC.                                                                                                        | 50MΩ MIN.                                                                                                           | X                          | —        |
| VOLTAGE PROOF                                                  |                             | 100V AC FOR 1 min.                                                                                              | NO FLASHOVER OR BREAKDOWN.                                                                                          | X                          | —        |
| MECHANICAL CHARACTERISTICS                                     |                             |                                                                                                                 |                                                                                                                     |                            |          |
| MECHANICAL OPERATION                                           |                             | 10 TIMES INSERTIONS AND EXTRACTIONS.                                                                            | ① CONTACT RESISTANCE: 100mΩ MAX.<br>② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.                                       | X                          | —        |
| VIBRATION                                                      |                             | FREQUENCY 10 TO 55 TO 10 Hz, APPROX 5min, SINGLE AMPLITUDE 0.75 mm, 10 CYCLES, FOR 3 DIRECTIONS.                | ① NO ELECTRICAL DISCONTINUITY OF 1 μs.<br>② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.                                 | X                          | —        |
| SHOCK                                                          |                             | 490 m/s <sup>2</sup> DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS.                                       | ① NO ELECTRICAL DISCONTINUITY OF 1 μs.<br>② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.                                 | X                          | —        |
| ENVIRONMENTAL CHARACTERISTICS                                  |                             |                                                                                                                 |                                                                                                                     |                            |          |
| RAPID CHANGE OF TEMPERATURE                                    |                             | TEMPERATURE -55 → +85°C<br>TIME 30 → 30 min<br>UNDER 5 CYCLES.<br>(RELOCATION TIME TO CHAMBER : WITHIN 2-3 min) | ① CONTACT RESISTANCE: 100mΩ MAX.<br>② INSULATION RESISTANCE: 50MΩ MIN.<br>③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS. | X                          | —        |
| DAMP HEAT (STEADY STATE)                                       |                             | EXPOSED AT 40 ± 2 °C, 90 TO 95 %, 96 h.                                                                         | ① CONTACT RESISTANCE: 100mΩ MAX.<br>② INSULATION RESISTANCE: 25MΩ MIN.<br>③ NO DAMAGE, CRACK OR LOOSENESS OF PARTS. | X                          | —        |
| SULPHUR DIOXIDE                                                |                             | EXPOSED IN 25 PPM FOR 96h, 25°C, 75%.<br>(REFER TO JIS C 60068)                                                 | ① CONTACT RESISTANCE: 100mΩ MAX.<br>② NO EVIDENCE OF CORROSION WHICH AFFECTS TO OPERATION OF CONNECTOR.             | X                          | —        |
|                                                                |                             |                                                                                                                 |                                                                                                                     |                            |          |
|                                                                | COUNT                       | DESCRIPTION OF REVISIONS                                                                                        | DESIGNED                                                                                                            | CHECKED                    | DATE     |
| △                                                              |                             |                                                                                                                 |                                                                                                                     |                            |          |
| REMARKS                                                        |                             |                                                                                                                 | APPROVED                                                                                                            | MO. ISHIDA                 | 15.04.21 |
| NOTE1: INCLUDE THE TEMPERATURE RISING BY CURRENT               |                             |                                                                                                                 | CHECKED                                                                                                             | TS. MIYAZAKI               | 15.04.21 |
|                                                                |                             |                                                                                                                 | DESIGNED                                                                                                            | RT. SHIMIZU                | 15.04.21 |
| Unless otherwise specified, refer to JIS C 5402 and IEC 60512. |                             |                                                                                                                 | DRAWN                                                                                                               | KR. AJITO                  | 15.04.10 |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test |                             |                                                                                                                 | DRAWING NO.                                                                                                         | ELC-351137-53-01           |          |
| HRS                                                            | SPECIFICATION SHEET         |                                                                                                                 | PART NO.                                                                                                            | BM20B (0.6) -*DP-0.4V (53) |          |
|                                                                | HIROSE ELECTRIC CO., LTD.   |                                                                                                                 | CODE NO.                                                                                                            | CL684                      | △ 1/1    |