

|                                                                |                                                  |                                                                                                                 |                                                                                                                     |                            |                        |
|----------------------------------------------------------------|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|----------------------------|------------------------|
| 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*(0.8)-20DS-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                                           |                                                  | 10TIMES 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,10CYCLES, 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 CHANBER : 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                                                        | NOTE1: INCLUDE THE TEMPERATURE RISING BY CURRENT |                                                                                                                 |                                                                                                                     | APPROVED                   | MO. ISHIDA 17.01.19    |
| Unless otherwise specified, refer to JIS C 5402 and IEC 60512. |                                                  |                                                                                                                 |                                                                                                                     | CHECKED                    | TS. MIYAZAKI 17.01.19  |
|                                                                |                                                  |                                                                                                                 |                                                                                                                     | DESIGNED                   | NY. YAMASHIRO 17.01.19 |
|                                                                |                                                  |                                                                                                                 |                                                                                                                     | DRAWN                      | SN. NUMAZAKI 17.01.18  |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test |                                                  |                                                                                                                 | DRAWING NO.                                                                                                         |                            | ELC-332308-53-00       |
| HRS                                                            | SPECIFICATION SHEET                              |                                                                                                                 | PART NO.                                                                                                            | BM20B (0.8)-20DP-0.4V (53) |                        |
|                                                                | HIROSE ELECTRIC CO., LTD.                        |                                                                                                                 | CODE NO.                                                                                                            | CL684-9002-8-53            | △ 1/1                  |