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|-------------------------------------------------------------------------------------------------------|-----------------------------|-----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------|
| APPLICABLE STANDARD                                                                                   |                             |                                                                                                                 |                                                                                                                                                                      |                         |          |
| RATING                                                                                                | OPERATING TEMPERATURE RANGE | -40°C TO 85°C(NOTE 1)                                                                                           | STORAGE TEMPERATURE RANGE                                                                                                                                            | -10°C TO 60°C           |          |
|                                                                                                       | VOLTAGE                     | 30V AC/DC                                                                                                       | APPLICABLE CONNECTOR                                                                                                                                                 | BM24-20DS/2-0. 35V (51) |          |
|                                                                                                       | CURRENT                     | SIGNAL CONTACT: 0. 25A<br>POWER CONTACT: 5. 0A(NOTE 2)                                                          |                                                                                                                                                                      |                         |          |
| 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,1m A .                                                                                     | Signal contact resistance: 100 mΩ MAX.<br>Power contact resistance: 15 mΩ MAX.                                                                                       | X                       | —        |
| INSULATION RESISTANCE                                                                                 |                             | 100V DC.                                                                                                        | 100MΩ MIN.                                                                                                                                                           | X                       | —        |
| VOLTAGE PROOF                                                                                         |                             | 150V AC FOR 1 min.                                                                                              | NO FLASHOVER OR BREAKDOWN.                                                                                                                                           | X                       | —        |
| MECHANICAL CHARACTERISTICS                                                                            |                             |                                                                                                                 |                                                                                                                                                                      |                         |          |
| MECHANICAL OPERATION                                                                                  |                             | 30TIMES INSERTIONS AND EXTRACTIONS.                                                                             | ① Signal contact resistance: 100 mΩ MAX.<br>Power contact resistance: 15 mΩ MAX.<br>② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.                                        | X                       | —        |
| VIBRATION                                                                                             |                             | FREQUENCY 10 TO 55 TO 10 Hz,APPROX 5min,<br>SINGLE AMPLITUDE 0.75 mm,10CYCLES,<br>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<br>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 Signal contact resistance: 100 mΩ MAX.<br>Power contact resistance: 15 mΩ MAX.<br>② INSULATION RESISTANCE: 100MΩ 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 Signal contact resistance: 100 mΩ MAX.<br>Power contact resistance: 15 mΩ MAX.<br>② INSULATION RESISTANCE: 50MΩ 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 Signal contact resistance: 100 mΩ MAX.<br>Power contact resistance: 15 mΩ MAX.<br>② NO EVIDENCE OF CORROSION WHICH AFFECTS TO OPERATION OF CONNECTOR.              | X                       | —        |
|                                                                                                       |                             |                                                                                                                 |                                                                                                                                                                      |                         |          |
|                                                                                                       | COUNT                       | DESCRIPTION OF REVISIONS                                                                                        | DESIGNED                                                                                                                                                             | CHECKED                 | DATE     |
| △                                                                                                     |                             |                                                                                                                 |                                                                                                                                                                      |                         |          |
| REMARKS                                                                                               |                             |                                                                                                                 | APPROVED                                                                                                                                                             | TY. 001                 | 20230424 |
| NOTE1: INCLUDE THE TEMPERATURE RISING BY CURRENT                                                      |                             |                                                                                                                 | CHECKED                                                                                                                                                              | RT. SHIMIZU             | 20230424 |
| NOTE2: RATED CURRENT FOR POWER CONTACTS IS 4A/PIN IN CASE MAX 0.3A/PIN IS APPLIED TO SIGNAL CONTACTS. |                             |                                                                                                                 | DESIGNED                                                                                                                                                             | PAN YIWEI               | 20230424 |
| Unless otherwise specified, refer to JIS C 5402 and IEC 60512.                                        |                             |                                                                                                                 | DRAWN                                                                                                                                                                | PAN YIWEI               | 20230424 |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test                                        |                             |                                                                                                                 | DRAWING NO.                                                                                                                                                          | ELC-352683-51-03        |          |
| HRS                                                                                                   | SPECIFICATION SHEET         |                                                                                                                 | PART NO.                                                                                                                                                             | BM24-20DP/2-0. 35V (51) |          |
|                                                                                                       | HIROSE ELECTRIC CO., LTD.   |                                                                                                                 | CODE NO.                                                                                                                                                             | CL0677-2003-4-51        | △ 1/1    |