



| APPLICABLE STANDARD   |                             |   |                           |  |   |          |
|---|-----------------------------|---|---------------------------|--|---|----------|
| Rating  | Operating temperature range | -25 °C to +85 °C  | Storage temperature range | -10 °C to +60 °C   |   |          |
|   | Voltage                     | AC 500 V, DC 700 V  |                           |  |   |          |
|   | Current                     | 10 A  | Applicable cable          | φ5 to φ11.5  |   |          |
| 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        |
| ELECTRICAL CHARACTERISTICS  |                             |   |                           |  |   |          |
| Contact resistance  |                             | Contact measured at DC 1 A.   |                           | 2 mΩ MAX.  | X   | X        |
| Insulation resistance   |                             | 500 V DC.   |                           | 1000 MΩ MIN.   | X   | X        |
| Voltage proof   |                             | 1500 V AC. for 1 min.   |                           | No breakdown.  | X   | X        |
| MECHANICAL CHARACTERISTICS  |                             |   |                           |  |   |          |
| Contact mating and unmating forces  |                             | Measured with — steel pin gage.   |                           | Mating and unmating forces: — N MIN.   | —   | —        |
| Connector mating and unmating forces  |                             | Measured with an applicable connector.<br>Without locking device.   |                           | Mating and unmating forces :40 N MAX.  | X   | —        |
| Mechanical operation  |                             | Mated and unmated 2,000 times.  |                           | Contact resistance: 4 mΩ MAX.  | X   | —        |
| Vibration   |                             | Frequency: 10 → 55 → 10 Hz, single amplitude<br>0.75 mm, 5min/cycle, for 10 cycles in each of three mutually perpendicular directions.      |                           | ①No electrical discontinuity of 10 μs.<br>②No damage, crack or looseness of parts.               | X   | —        |
| Shock   |                             | Acceleration: 490m/s <sup>2</sup> , half sine wave pulses of 11ms.<br>Performed 3 times in each of three mutually perpendicular directions. |                           | ① No electrical discontinuity of 10 μs.<br>② No damage, crack and looseness, of parts.           | X   | —        |
| ENVIRONMENTAL CHARACTERISTICS   |                             |   |                           |  |   |          |
| Damp heat<br>(Steady state)   |                             | Subjected to 40°C, at a humidity of 90 to 95% for 96h.  |                           | ①Insulation resistance:100 MΩ MIN (When dry).<br>②No damage, crack and looseness, of parts.      | X   | —        |
| Rapid change of temperature   |                             | Temperature -55→ R/T <sup>(1)</sup> → +85 → R/T °C<br>Time 30 → 2 to 3 → 30 → 2 to 3 min<br>for 5 cycles.                                   |                           | ① Insulation resistance: 100 MΩ MIN.<br>② No damage, crack and looseness of parts.               | X   | —        |
| Corrosion salt mist   |                             | Subjected to 5% salt spray for 48h.   |                           | No heavy corrosion which impairs functionality.  | X   | —        |
| Heat resistance   |                             | Subjected to +85°C for 96h.   |                           | No damage, crack and looseness of parts.   | X   | —        |
| Cold resistance   |                             | Subjected to -55°C for 96h.   |                           | No damage, crack and looseness of parts.   | X   | —        |
| Resistance to soldering heat  |                             | Soldering iron is placed to the soldering surface for 3s. (Iron tip temperature +380±10°C)  |                           | No deformation or excessive looseness of terminals.  | X   | —        |
| Solder ability  |                             | Soldered at solder temperature, +350±10°C for immersion duration, 3s.   |                           | Soldering surface shall be free from pin-holes, de-wetted and un-wetted areas and other defects. | X   | —        |
|   |                             |   |                           |  |   |          |
|   | COUNT                       | DESCRIPTION OF REVISIONS  | DESIGNED                  | CHECKED  | DATE  |          |
| Q   |                             |   |                           |  |   |          |
| REMARKS<br>Note (1) R/T : Room temperature  |                             |   |                           | APPROVED   | TP.KOMATSU  | 20221019 |
|   |                             |   |                           | CHECKED  | HY.KOBAYASHI  | 20221019 |
|   |                             |   |                           | DESIGNED   | HT.ZENBA  | 20221019 |
|   |                             |   |                           | DRAWN  | KR.SUZUKI   | 20220922 |
| Unless otherwise specified, refer to IEC 60512 (JIS C 5402).                        |                             |   |                           |  |   |          |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test                      |                             |   | DRAWING NO.               |  | ELC-040367-81-00  |          |
|  | SPECIFICATION SHEET         |   | PART NO.                  | RM15QPS-4PA (81)   |   |          |
|   | HIROSE ELECTRIC CO., LTD.   |   | CODE NO.                  | CL0109-0897-4-81   |  | 1/1      |