| | | RD | TUV approved (J503853 | | | | | | |
|--|---|--|---|--|--|---|--|--|----------------------------|
| | Operating Temperature | | -40 °C to +105 °C (5) Range Power Contact : AC/DC 1500 V | | Storage Temperature Range | | -10°C to +60°C | | |
| D-+! | Temperature Range | | | | | | | _ | |
| Rating | Voltage | | Signal Contact : AC/DC | 250 V | | | 100 | | |
| | Current | | Power Contact : 200 A (3) Signal Contact : 1 A | | Applica | Applicable Cable 100 mm ² min (AWG#4/0 mi | | ` | |
| | | l | 5 | | | | (AWG#4/011111) |) | |
| | | | | | | | | | |
| | TEM | TEST METHOD | | | REQUIREMENTS | | QT | A٦ | |
| CONSTRU | | <u> </u> | | | | | | 1.11 | |
| General Exam | nination | Examined visually and with a measuring instrument. | | | Accord | ling to the drawing | g. | Х | Х |
| Marking | | Confirmed | , , | | | | | Х | Х |
| ELECTRIC | CAL CHARAC | TERISTIC | CS | | | | | Х | |
| Contact Resis | stance(2) | Measured a | Measured at DC 1A.(Power contact) | | | 0.5 mΩ MAX. | | | X |
| | • . | Measured at DC 1A.(Signal contact include GT8E-2S-2C) | | | - | 90 mΩ MAX. | | | X |
| Insulation Res Voltage Proof | | Measured at 500 V DC. 4500 V AC applied for 1 min. (Power contact) | | | | 5000 MΩ MIN. No breakdown. | | | X |
| | | 750 V AC applied for 1 min. (Signal contact) | | | | | | | X |
| | CAL CHARA | | | | | | | Х | |
| | | | | | Mating | and unmating for | | Х | I _ |
| Mating and Unmating Forces | | Measured with an applicable connector. | | | | Mating and unmating forces: 100 N MAX. (Between EM30MSD-A Plug and Receptacle) | | | 1 |
| | | Without locking device. | | | | Contact resistance: $0.75 \text{ m}\Omega \text{ MAX}$. (Power contact) | | | <u> </u> |
| | | Mated and unmated 200 times. | | | | Contact resistance: $0.75 \text{ m}\Omega$ MAX. (Power contact) Contact resistance: $150 \text{ m}\Omega$ MAX. | | | |
| Mechanical Operation | | (Between EM30MSD-A Plug and Receptacle) | | | | (Signal contact inclede GT8E-2S-2C) | | | 1 |
| | | Mated and unmated 30 times. | | | , , | Contact resistance : 150 mΩ MAX | | | 1 – |
| | | (Between EM30MSD-A Receptacle and GT8E-2S-2C) | | | (Signal | (Signal contact inclede GT8E-2S-2C) | | | |
| Vibration 1 | | Frequency: 10 Hz to 55 to 10 Hz every cycle (5 min per cycle) | | | ycle) 1) No | electrical discontir | nuity of more than 10 μ s. | | |
| | | Single amplitude: 0.75 mm | | | 2) No | damage, cracks o | r looseness of parts. | Х | _ |
| | | | over 10 cycles in each of three | mutually | | | | | |
| Viberations O (| | perpendicular directions. | | | | | <u>'i (ii io</u> | _ | |
| Vibration 2 ((ISO16750-3 / J | · / | Frequency : 10 TO 2000 (Hz), | | | |) No electrical discontinuity of more than 10 μs. | | | _ |
| | | Acceleration spectrum density : 57.9 m/s ² , At 8 h, for 3 directions. | | | 2) NO | damage, cracks o | r looseness of parts. | | |
| Shock | | Acceleration: 490 m/s ² , Half sine wave pulses of 11 ms. | | | 1) No | electrical discontir | nuity of more than 10 µs. | | |
| | | | Performed 3 times in each of three mutually perpendicular | | | 2) No damage, cracks or looseness of parts. | | | - |
| | | directions. | | | | | | | |
| ENVIRON | MENTAL CH | ARACTEF | RISTICS | | | | | | |
| Rapid Change | e of Temperature | Temperatu | $\text{ re: -40 } \rightarrow \text{ R/T}^{(1)} \rightarrow \text{ +125} \rightarrow \text{ R}$ | /T °C | 1) Insu | lation resistance: | 5000 MΩ MIN. | Х | - |
| | | Time: 30 - | \rightarrow 2 to 3 \rightarrow 30 \rightarrow 2 to 3 min | | 2) No | 2) No damage, cracks or looseness of parts. | | | |
| | | for 5 cycles | δ. | | | | | | |
| | Damp Heat, Steady State | | to a temperature of +40°C, at a | humidity of 90 | .0 | 1) Insulation resistance: 50 M Ω MIN. | | | - |
| Damp Heat, S | | | 95% for 96 hours. | | | (At high humidity) | | | |
| Damp Heat, S | , | 95% for 96 | hours. | | 2) Inc. | 2) Insulation resistance: 500 M Ω MIN. (When dry) | | | |
| Damp Heat, S | , | 95% for 96 | hours. | | ŕ | | | | |
| | | | | | 3) No | damage, cracks o | r looseness of parts. | x | _ |
| Corrosion Salt | | Subjected 1 | to 5% salt spray for 48 hours. | | 3) No No hea | damage, cracks o avy corrosion whic | r looseness of parts. ch impairs functionality. | x | - |
| | | Subjected t | to 5% salt spray for 48 hours. to a depth of 2 m for 14 days. | | 3) No No hea | damage, cracks o | r looseness of parts. ch impairs functionality. | | |
| Corrosion Salt Sealing(4) | t Mist(4) | Subjected t Subjected t (IPX8 Wate | to 5% salt spray for 48 hours. to a depth of 2 m for 14 days. erproof)(JIS C 0920:2003) | de of the mate | 3) No No hea No wa | damage, cracks o avy corrosion whic ter penetration int | r looseness of parts. ch impairs functionality. o the connector. | | |
| Corrosion Salt Sealing(4) | t Mist(4) | Subjected 1 Subjected 1 (IPX8 Wate 17.6 kPa of | to 5% salt spray for 48 hours. to a depth of 2 m for 14 days. erproof)(JIS C 0920:2003) f air pressure applied to the insi | de of the mater | 3) No No hea No wa d No air | damage, cracks o avy corrosion whic ter penetration int bubbles emitted f | r looseness of parts. ch impairs functionality. | | |
| Corrosion Salt | t Mist(4) | Subjected 1 Subjected 1 (IPX8 Wate 17.6 kPa of | to 5% salt spray for 48 hours. to a depth of 2 m for 14 days. erproof)(JIS C 0920:2003) | de of the mater | 3) No No hea No wa | damage, cracks o avy corrosion whic ter penetration int bubbles emitted f | r looseness of parts. ch impairs functionality. o the connector. | x | - |
| Corrosion Salt Sealing(4) | t Mist(4) (4) | Subjected f Subjected f (IPX8 Wate 17.6 kPa of connector f | to 5% salt spray for 48 hours. to a depth of 2 m for 14 days. erproof)(JIS C 0920:2003) f air pressure applied to the insi | 1 | 3) No No hea No wa d No air | damage, cracks o avy corrosion whic ter penetration int bubbles emitted f | r looseness of parts. ch impairs functionality. o the connector. | x | - |
| Corrosion Salt Sealing(4) Air Tightness(| t Mist(4) (4) | Subjected f Subjected f (IPX8 Wate 17.6 kPa o connector f | to 5% salt spray for 48 hours. to a depth of 2 m for 14 days. erproof)(JIS C 0920:2003) f air pressure applied to the insi for 30 seconds. | 1 | 3) No No hei No wa d No air conne | damage, cracks o avy corrosion whic ter penetration int bubbles emitted f | r looseness of parts. ch impairs functionality. o the connector. rom the inside of the | x | _ |
| Corrosion Salt Sealing(4) Air Tightness(COUN | t Mist(4) (4) | Subjected f Subjected f (IPX8 Wate 17.6 kPa o connector f | to 5% salt spray for 48 hours. to a depth of 2 m for 14 days. erproof)(JIS C 0920:2003) f air pressure applied to the insi for 30 seconds. | 1 | 3) No No hei No wa d No air conne | damage, cracks o avy corrosion which ter penetration int bubbles emitted f ctor. | r looseness of parts. ch impairs functionality. o the connector. rom the inside of the CHECKED | X X DA | - .TE |
| Corrosion Salt Sealing(4) Air Tightness(COUN COUN REMARK | t Mist(4) (4) NT DE | Subjected f Subjected f (IPX8 Wate 17.6 kPa o connector f ESCRIPTIC DIS-A | to 5% salt spray for 48 hours. to a depth of 2 m for 14 days. erproof)(JIS C 0920:2003) f air pressure applied to the insi for 30 seconds. | 1 | 3) No No hei No wa d No air conne | damage, cracks o avy corrosion whic ter penetration int bubbles emitted f | r looseness of parts. ch impairs functionality. o the connector. rom the inside of the | x | - .TE |
| Corrosion Salt Sealing(4) Air Tightness(COUN A REMARK Notes (1) R/T | t Mist(4) (4) (4) IT DI EXPLOSE Second Temperative | Subjected f Subjected f (IPX8 Wate 17.6 kPa of connector f ESCRIPTIC DIS-A | to 5% salt spray for 48 hours. to a depth of 2 m for 14 days. erproof)(JIS C 0920:2003) f air pressure applied to the insi for 30 seconds. DN OF REVISIONS A-00071617 | DI | 3) No No hei No wa d No air conne | damage, cracks o avy corrosion which ter penetration int bubbles emitted f ctor. | r looseness of parts. ch impairs functionality. o the connector. rom the inside of the CHECKED | X X DA | |
| Corrosion Salt Sealing(4) Air Tightness(COUN A REMARK Notes (1) R/T (2) Mea | t Mist(4) (4) JT Df : Room Tempera asured contact re | Subjected f Subjected f (IPX8 Wate 17.6 kPa o connector f ESCRIPTIC DIS-A | to 5% salt spray for 48 hours. to a depth of 2 m for 14 days. erproof)(JIS C 0920:2003) f air pressure applied to the insi for 30 seconds. DN OF REVISIONS A-00071617 he points shown in Fig.1 on the | DI | 3) No No hei No wa d No air conne | damage, cracks o avy corrosion which ter penetration int bubbles emitted f ctor. | r looseness of parts. ch impairs functionality. o the connector. rom the inside of the CHECKED TP. KOMATSU | X X DA 2022 | |
| Corrosion Salt Sealing(4) Air Tightness(COUN AIR COUN COUN COUN COUN COUN COUN COUN COUN | t Mist(4) 4) T Df : Room Tempera asured contact re aying curve show | Subjected f Subjected f (IPX8 Wate 17.6 kPa of connector f ESCRIPTIC DIS-A ature sistance at th n in Fig.2 on | to 5% salt spray for 48 hours. to a depth of 2 m for 14 days. erproof)(JIS C 0920:2003) f air pressure applied to the insi for 30 seconds. DN OF REVISIONS A-00071617 he points shown in Fig.1 on the the next page. | DI | 3) No No hea No wa d No air conne ESIGNED | damage, cracks o avy corrosion which ter penetration int bubbles emitted f ctor. | r looseness of parts. ch impairs functionality. o the connector. rom the inside of the CHECKED TP. KOMATSU | X X DA 2022 | TE 0808 |
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