APPLICABLE STANDARD		TÜV approved (J50385364). UL approved (E474564).		
Rating	Operating Temperature Range	-40 °C to +105 °C (5)	Storage Temperature Range	-10°C to +60°C
	Voltage	Power Contact : AC/DC 1500 V Signal Contact : AC/DC 250 V	———	———
	Current	Power Contact : 200 A (3) Signal Contact : 1 A	Applicable Cable	100 mm² min (AWG#4/0 min)

SPECIFICATIONS

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
CONSTRUCTION				
General Examination	Examined visually and with a measuring instrument.	According to the drawing.	X	X
Marking	Confirmed visually.		X	X
ELECTRICAL CHARACTERISTICS				
Contact Resistance(2)	Measured at DC 1A.(Power contact)	0.5 mΩ MAX.	X	X
	Measured at DC 1A.(Signal contact include GT8E-2S-2C)	90 mΩ MAX.	X	X
Insulation Resistance	Measured at 500 V DC.	5000 MΩ MIN.	X	X
Voltage Proof	4500 V AC applied for 1 min. (Power contact)	No breakdown.	X	X
	750 V AC applied for 1 min. (Signal contact)		X	X
MECHANICAL CHARACTERISTICS				
Mating and Unmating Forces	Measured with an applicable connector. Without locking device.	Mating and unmating forces: 100 N MAX. (Between EM30MSD-A Plug and Receptacle)	X	—
Mechanical Operation	Mated and unmated 200 times. (Between EM30MSD-A Plug and Receptacle)	Contact resistance: 0.75 mΩ MAX. (Power contact) Contact resistance: 150 mΩ MAX. (Signal contact inclede GT8E-2S-2C)	X	—
	Mated and unmated 30 times. (Between EM30MSD-A Receptacle and GT8E-2S-2C)	Contact resistance : 150 mΩ MAX (Signal contact inclede GT8E-2S-2C)	X	—
Vibration 1	Frequency: 10 Hz to 55 to 10 Hz every cycle (5 min per cycle) Single amplitude: 0.75 mm Performed over 10 cycles in each of three mutually perpendicular directions.	1) No electrical discontinuity of more than 10 μs. 2) No damage, cracks or looseness of parts.	X	—
Vibration 2 (Random) (ISO16750-3 / JASO D 014-3)	Frequency : 10 TO 2000 (Hz), Acceleration spectrum density : 57.9 m/s², At 8 h, for 3 directions.	1) No electrical discontinuity of more than 10 μs. 2) No damage, cracks or looseness of parts.	X	—
Shock	Acceleration: 490 m/s², Half sine wave pulses of 11 ms. Performed 3 times in each of three mutually perpendicular directions.	1) No electrical discontinuity of more than 10 μs. 2) No damage, cracks or looseness of parts.	X	—
ENVIRONMENTAL CHARACTERISTICS				
Rapid Change of Temperature	Temperature: -40 → R/T(1) → +125 → R/T °C Time: 30 → 2 to 3 → 30 → 2 to 3 min for 5 cycles.	1) Insulation resistance: 5000 MΩ MIN. 2) No damage, cracks or looseness of parts.	X	—
Damp Heat, Steady State	Subjected to a temperature of +40°C, at a humidity of 90 to 95% for 96 hours.	1) Insulation resistance: 50 MΩ MIN. (At high humidity) 2) Insulation resistance: 500 MΩ MIN. (When dry) 3) No damage, cracks or looseness of parts.	X	—
Corrosion Salt Mist(4)	Subjected to 5% salt spray for 48 hours.	No heavy corrosion which impairs functionality.	X	—
Sealing(4)	Subjected to a depth of 2 m for 14 days. (IPX8 Waterproof)(JIS C 0920:2003)	No water penetration into the connector.	X	—
Air Tightness(4)	17.6 kPa of air pressure applied to the inside of the mated connector for 30 seconds.	No air bubbles emitted from the inside of the connector.	X	—

	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
⚠1		DIS-A-00071617			

REMARK

Notes (1) R/T : Room Temperature
(2) Measured contact resistance at the points shown in Fig.1 on the next page.
(3) Delaying curve shown in Fig.2 on the next page.
(4) Corrosion salt mist, Sealing and Air tightness shall be tested under mated condition with an applicable connector.
(5) Operating temperturte range includes the temperature rise by current carrying.

Unless otherwise specified, refer to IEC 60512 (JIS C 5402).

APPROVED	TP.KOMATSU	20220808
CHECKED	HY.KOBAYASHI	20220808
DESIGNED	TY.SUZUKI	20220805
DRAWN	TY.SUZUKI	20220805

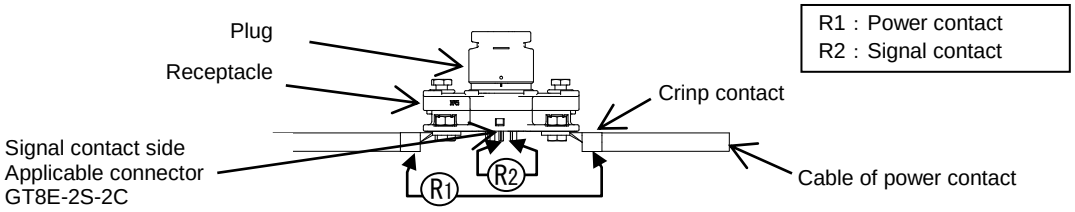
Note QT:Qualification Test AT:Assurance Test X:Applicable Test

DRAWING NO. ELC-119542-06-00

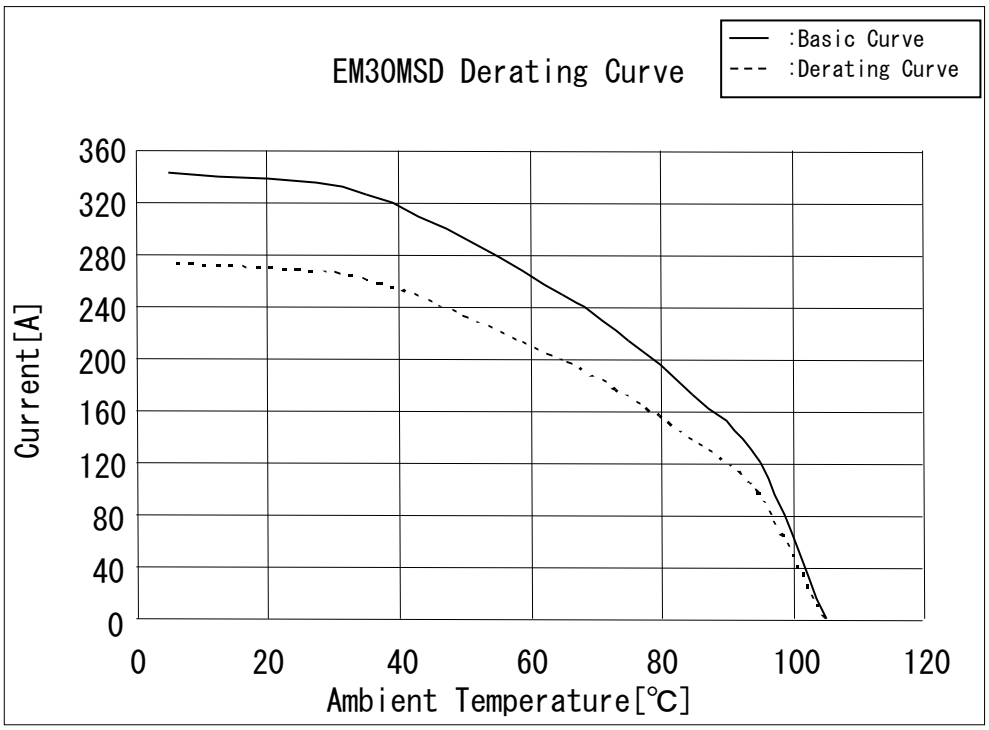
HRS	SPECIFICATION SHEET	PART NO.	EM30MSD-A(06)	
	HIROSE ELECTRIC CO., LTD.	CODE NO.	CL0138-0206-0-06 ⚠1	1/2

FORM HD0011-2-1

FIG.1 Measuring point of contact resistance



[Reference]



Measurement method:
Mated plug and receptacle with 100 mm² cable.

Note:
Derating curve could vary depending on cable type and each measurement even under the same conditions.
Therefore, above data are guidelines and not connector specifications.