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In case of consideration for using Automotive equipment / device which demand high reliability, kindly contact our sales window correspondents.

APPLICABLE STANDARD					
Rating	Operating Temperature Range ⁽²⁾	-40°C to +105°C	Storage Temperature Range	-10°C to +60°C	
	Voltage	AC, DC 1000 V	—	—	
	Current ⁽¹⁾	—	Applicable Cable	φ10.7~11.5	
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	Measured at DC 1A.		5 mΩ MAX.	X	X
Insulation Resistance	Measured at 500 V DC.		5000 MΩ MIN.	X	X
Voltage Proof	2200 V AC applied for 1 min.		No flashover or breakdown.	X	X
Impulse Voltage Proof	Subjected to a standard waveform of 15kV in mated condition (1.2/50μs waveform, applied in both positive and negative polarities 3 times each).		No flashover or breakdown.	X	—
MECHANICAL CHARACTERISTICS					
Contact Insertion and Extraction Forces	Measured with a φ ___ steel gauge.		Insertion and extraction forces: — N MIN.	—	—
Mating and Unmating Forces	Measured with an applicable connector.		Mating and unmating forces: 100 N MAX.	X	—
Contact Retention Force	Subjected to a 20N force from the wiring side.		No movement of contact.	X	—
Mechanical Operation	Mated and unmated 500 times.		Contact resistance: 10 mΩ MAX.	X	—
Vibration	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	—
Shock	Acceleration: 490 m/s ² , 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 ⁽³⁾ → +105 → R/T °C Time: 30 → 2 to 3 → 30 → 2 to 3 min for 5 cycles.		1) Insulation resistance: 500 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 48h.		No heavy corrosion which impairs functionality.	X	—
Dry Heat	Subjected to +105°C for 96h.		No damage, cracks or looseness of parts.	X	—
Cold	Subjected to -40°C for 96h.		No damage, cracks or looseness of parts.	X	—
Sealing ⁽⁴⁾	Subjected to a depth of 2 m for 14 days.		No water penetration to the inside of the connector.	X	—
Air Tightness ⁽⁴⁾	17.6kPa applied to the inside of the connector for 0.5min.		No air bubbles from the inside of the connector.	X	—
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
		DIS-A-00065601			
NOTES			APPROVED	TP. KOMATSU	20220301
(1) The above specifications show the values in assembled condition with applicable crimp contacts. (2) Including temperature rise due to current carrying. (3) R/T : Room Temperature. (4) CORROSION SALT MIST, SEALING AND AIRTIGHTNESS SHALL BE TESTED UNDER MATED CONDITION WITH AN APPLICABLE CONNECTOR.			CHECKED	EJ. KUNII	20220301
			DESIGNED	SH. KOYAMA	20220228
			DRAWN	SH. KOYAMA	20220228
			Unless otherwise specified, refer to IEC 60512 (JIS C 5402).		
Note	QT:Qualification Test AT:Assurance Test X:Applicable Test		DRAWING NO.		ELC-118399-81-00
	SPECIFICATION SHEET		PART NO.	HR41A-17WBP-3PC (81)	
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