

APPLICABLE STANDARD					
Rating	Operating Temperature Range <sup>(2)</sup>	-40°C to +105°C	Storage Temperature Range	-10°C to +60°C	
	Voltage	AC, DC 1000 V	—	—	
	Current <sup>(1)</sup>	13A(AMBIENT TEMPERATURE 25°C)	Applicable Cable	Φ9.0~9.8	
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 φ1.57±0.003 steel gauge.		Insertion and extraction forces: 0.5 N MIN.	X	—
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 <sup>2</sup> , 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 <sup>(3)</sup> → +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 <sup>(4)</sup>	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 <sup>(4)</sup>	Subjected to a depth of 2 m for 14 days.		No water penetration to the inside of the connector.	X	—
Air Tightness <sup>(4)</sup>	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				
<b>NOTES</b>  (1) The above specifications show the values in assembled condition with applicable crimp contacts. (applicable crimp contact:HR41A-SC-111) (2) Including temperature rise due to current carrying. (3) R/T : Room Temperature. (4) Corrosion salt mist, sealing and airtightness are tested in mated condition with an applicable connector.			APPROVED	TP. KOMATSU	20220301
			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-118320-81-00
	SPECIFICATION SHEET		PART NO.	HR41A-17WBPAB-5SC (81)	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL0141-0210-7-81	 1/1