

APPLICABLE STANDARD 		TÜV approved(R50270424), UL approved(E52653)				
Rating	Operating temperature range <sup>(2)</sup>	-40°C to +105°C	Storage temperature range	-10°C to +60°C		
	Voltage 	AC, DC 600 V(UL,TÜV) AC, DC 1000V	—	—		
	Current <sup>(1)</sup> 	20A (UL, TÜV) 24A(Ambient temperature 25°C)	Applicable cable	φ 9.0±0.6		
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. MAX.		Center contact 2 mΩ MAX.	X	X
Insulation Resistance		Measured at 500 V DC.		5000 MΩ MIN.	X	X
Voltage Proof		4260 V AC applied for 1 min.		No flashover or breakdown.	X	X
Impulse voltage proof		Apply 15kV standard waveform (1.2/50μs voltage waveform. positive/negative polarities,3 times each) between each contact in mated condition.		No flashover or breakdown.	X	—
MECHANICAL CHARACTERISTICS						
Contact Insertion and Extraction Forces 		Measured with a φ 3.58±0.003 steel gauge.		Insertion and extraction force 0.8 N MIN.	X	—
Mating and Unmating Forces		Measured with an applicable connector.		Mating and unmating force 100 N MAX.	X	—
Contact retention force		Apply pull force to the wire after crimping connected contact.		Do not move the terminal : 50N MAX.	X	—
Mechanical Operation		Mated and unmated 200 times.		Contact resistance: 4 mΩ MAX.	X	—
Vibration		Frequency: 10 → 500 → 10 Hz, Single Amplitude 0.75 mm, Acceleration: 98 m/s <sup>2</sup> , 11min/cycle, for 3 h in each of three mutually perpendicular directions.		1) No electrical discontinuity of more than10μs. 2) No damage, cracks or looseness of parts.	X	—
Shock		Acceleration: 490m/s <sup>2</sup> , half sine wave pulses of 11ms. Performed 3 times in each of three mutually perpendicular directions.		1) No electrical discontinuity of more than10μs. 2) No damage, cracks or looseness of parts.	X	—
ENVIRONMENTAL CHARACTERISTICS						
Rapid change of temperature		Temperature -55→ R/T <sup>(3)</sup> → +125 → R/T °C Time 30 → 2 to 3 → 30 → 2 to 3 min under 5 cycles.		1) insulation resistance: 5000 MΩ MIN. 2) No damage, crack and looseness of parts.	X	—
Damp heat (Steady state)		Subjected to 40° C, at a humidity of 90 to 95% for 96h.		1) Insulation resistance: 50 MΩ MIN (At high humidity). 2) Insulation resistance: 500 MΩ MIN (At dry). 3) No damage, crack and looseness of parts.	X	—
Corrosion salt mist <sup>(4)</sup>		Subjected to 5% salt spray for 1000h.		No heavy corrosion which impairs functionality.	X	—
Sealing <sup>(4)</sup>		Subjected to a depth of 2m for 14 days.		No water penetration into the connector.	X	—
Air tightness <sup>(4)</sup>		17.6 kPa of air pressure applied to the inside of the mated connector for 30s.		No air bubbles emitted from the inside of the connector.	X	—
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE	
	4	DIS-C-00003790	HT.ZENBA	HY.KOBAYASHI	20200130	
REMARK 			APPROVED	SU.OBARA	20130409	
Notes (1) Above specifications shows the values in assembled condition with applicable crimp contacts. (Applicable crimp contact:HR41-SC-111) (2) Include temperature rise caused by 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	HY.KOBAYASHI	20130409	
			DESIGNED	TY.SUZUKI	20130408	
			DRAWN	TY.SUZUKI	20130408	
Unless otherwise specified, refer to IEC 60512 (JIS C 5402).						
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC4-118083-00	
	SPECIFICATION SHEET		PART NO.	HR41-25WBPD-3SC		
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL141-0023-0-00		1/1