

APPLICABLE STANDARD					
Rating	Operating Temperature Range	-25°C to +85°C	Storage Temperature Range	-10°C to +60°C	
	Voltage	AC 100 V, DC 140 V	_____	_____	
	Current	2 A	Applicable Cable	φ 4.2 to φ 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.	15 mΩ MAX.	X	X
Insulation Resistance		Measured at 100 V DC.	1000 MΩ MIN.	X	X
Voltage Proof		300 V AC applied for 1 min.	No flashover or breakdown.	X	X
MECHANICAL CHARACTERISTICS					
Contact Insertion and Extraction Forces		Measured with a — steel gauge.	Insertion and extraction forces: — MIN.	—	—
Mating and Unmating Forces		Measured with an applicable connector.	Mating and unmating forces : 30 N MAX. (Without lock)	X	—
Mechanical Operation		Mated and unmated 1000 times.	Contact resistance: 30 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	—
Breaking Strength		Force is applied to the cable in up, down, left and right directions while mated.	No breakage at 30 N.	X	—
ENVIRONMENTAL CHARACTERISTICS					
Damp Heat, Steady State		Subjected to a temperature of +40°C, at a humidity of 90 to 95% for 96 hours.	1) Insulation resistance: 10 MΩ MIN. (At high humidity) 2) Insulation resistance: 100 MΩ MIN. (When dry) 3) No damage, cracks or looseness of parts.	X	—
Rapid Change of Temperature		Temperature: -55 → R/T <sup>(1)</sup> → +85 → R/T °C Time: 30 → 2 to 3 → 30 → 2 to 3 min for 5 cycles.	1) Insulation resistance: 100 MΩ MIN. 2) No damage, cracks or looseness of parts.	X	—
Corrosion Salt Mist		Subjected to 5% salt spray for 48 hours.	No heavy corrosion ruins the function.	X	—
Dry Heat		Subjected to +85°C for 96 hours.	No damage, cracks or looseness of parts.	X	—
Cold		Subjected to -55°C for 96 hours.	No damage, cracks or looseness of parts.	X	—
Resistance to Soldering Heat		Soldering iron is placed to the soldering surface for 3 to 4 s. (Iron tip temperature +380±10°C)	No deformation or excessive looseness of terminals.	X	—
Solderability		Soldering iron is placed to the soldering surface for 2 to 3 s. (Iron tip temperature +350±10°C)	Soldering surface shall be free from pin-holes, de-wetted and un-wetted areas and other defects.	X	—
Sealing <sup>(2)</sup>		Subjected to a depth of 2.0 m for 14 days.	No water penetration into the connector.	X	—
Air Tightness <sup>(2)</sup>		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
Q					
NOTES (1) R/T : Room Temperature (2) Sealing and Air Tightness are tested in mated condition with an applicable connector.			APPROVED	HY. KOBAYASHI	18.02.26
			CHECKED	HY. KOBAYASHI	18.02.26
			DESIGNED	DS. MATSUNE	18.02.24
			DRAWN	AI. NISHIYAMA	18.02.22
Unless otherwise specified, refer to IEC 60512(JIS C5402).					
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC-119268-31-00
HRS	SPECIFICATION SHEET		PART NO.	HR30-6PE-6P (31)	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL130-0001-0-31	 1/1