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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	-25°C to +85°C	Storage Temperature Range	-10°C to +60°C
	Voltage	AC 100 V, DC 140 V	Wire Size	24 to 28 AWG Insulation outside diameter ϕ 1.15 MAX
	Current	2A	Applicable Cable	-
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	Contact shall be measured at DC 1A.	20 m Ω MAX.	X	-
	Ground shall be measured at DC 20A.	100 m Ω MAX.	X	-
Insulation Resistance	Measured at 100 V DC.	1000 M Ω MIN.	X	-
Voltage Proof	300 V AC applied for 1 min.	No breakdown.	X	-
MECHANICAL CHARACTERISTICS				
Connector Insertion and Withdrawal Forces	Measured with an applicable connector. (With lock)	Insertion and withdrawal forces : 70 N MAX.	X	-
Mechanical Operation	Mated and unmated 100 times.	Contact resistance: 20 m Ω MAX.	X	-
Vibration	Frequency: 10 Hz to 500 to 10 Hz every cycle Single amplitude: 0.75 mm, Acceleration 100m/s ² Performed over 10 cycles in each of t3 mutually perpendicular directions.	1) No electrical discontinuity of more than 10 μ s. 2) No damage, cracks or looseness of parts.	X	-
Shock	Acceleration: 500 m/s ² , Half sine wave pulses of 11 ms. Performed 3 times in each of 3 mutually perpendicular directions.	1) No electrical discontinuity of more than 10 μ s. 2) No damage, cracks or looseness of parts.	X	-
Contact Retention Force	Applying a pull force the wire after the applicable crimped contact is assembled the body.	20 N MIN.	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: 5 M Ω MIN. (At high humidity) 2) Insulation resistance: 50 M Ω MIN. (When dry) 3) No damage, cracks or looseness of parts.	X	-
Rapid Change of Temperature	Temperature: -55 \rightarrow R/T ⁽¹⁾ \rightarrow +85 \rightarrow R/T °C Time: 30 \rightarrow 2 to 3 \rightarrow 30 \rightarrow 2 to 3 min for 5 cycles.	1) Insulation resistance: 1000 M Ω MIN. 2) No damage, cracks or looseness of parts.	X	-
Corrosion Salt Mist	Subjected to 5% salt spray for 48 hours.	No heavy corrosion which impairs functionality. (compatibility)	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	-
Sealing ⁽²⁾	Subjected to a depth of 1.8 m for 48 hours.	No water penetration into the connector.	X	-
Air Tightness ⁽²⁾	40 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	-
Oil Resisting ⁽²⁾	Subjected in cutting oil for 48 hours.	No oil penetration into the connector.	X	-
COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
①				
NOTES (1) R/T : Room Temperature (2) Sealing and Air Tightness and Oil Resistaing are tested in mated condition with an applicable connector. (3) With compliant crimp terminals " HR22-PC1-221" installed. Unless otherwise specified, refer to IEC 60512. (JIS C 5402)		APPROVED	TP. KOMATSU	20240618
		CHECKED	HY. KOBAYASHI	20240617
		DESIGNED	HY. KISHI	20240614
		DRAWN	HY. KISHI	20240614
Note	QT:Qualification Test AT:Assurance Test X:Applicable Test	DRAWING NO.	ELC-396047-00-01	
	SPECIFICATION SHEET	PART NO.	HR22K-12WBR-20PC	
	HIROSE ELECTRIC CO., LTD.	CODE NO.	CL0122-1002-0-00	 1/1