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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	-10 °C TO +60 °C	Storage temperature Range	-10 °C TO +60 °C
	Voltage	AC 30 V , DC 42 V		
	Current		Applicable cable	φ 7.5
SPECIFICATIONS				
ITEM	TEST METHOD	REQUIREMENTS	QT	AT
CONSTRUCTION				
General examination	Visually and by measuring instrument.	According to drawing.	X	X
Marking	Confirmed visually.		X	X
ELECTRIC CHARACTERISTICS				
Contact resistance	Contact shall be measured AT DC 1 A	30 mΩ MAX.	X	-
Insulation resistance	250 V DC.	1000 mΩ MIN.	X	X
Voltage proof	300 V AC. for 1 min.	No flashover or breakdown.	X	X
MECHANICAL CHARACTERISTICS				
Contact insertion and withdrawal forces	φ 0.57 ⁰ _{-0.003} By steel gauge.	Insertion and withdrawal forces : 0.15 N MIN.	X	-
Connector insertion and withdrawal forces	Measured by applicable connector.	Insertion and withdrawal forces Locking device with lock : 70 N MAX.	X	-
Mechanical operation	1000 times insertions and extractions.	Contact resistance: 45 mΩ MAX.	X	-
Vibration	Frequency: 10 TO 55 Hz, Single amplitude 0.75 mm, — m/s ² AT 2 h, for 3 directions.	①No electrical discontinuity of 10 μs. ②No damage, crack and looseness of parts.	X	-
Shock	490 m/s ² duration of pulse 11 ms AT 3 times for 3 directions.	①No electrical discontinuity of 10 μs. ②No damage, crack and looseness of parts.	X	-
Lock strength	While mated, the force applied in the axial direction of mating is measured.	50 N MIN.	X	-
ENVIRONMENTAL CHARACTERISTICS				
Damp heat (steady state)	Exposed at 40 °C, 90 TO 95 %, 96 h.	①Insulation resistance: 10 MΩ MIN. (At high humidity). ②Insulation resistance: 100 MΩ MIN. (At dry). ③No damage, crack and looseness of parts.	X	-
Rapid change of temperature	Temperature -55 → R/T ⁽¹⁾ → +85 → R/T °C time 30 → 10 TO 15 → 30 → 10 TO 15 min under 5 cycles.	①Insulation resistance: 100 mΩ MIN. ②No damage, crack and looseness of parts.	X	-
Corrosion salt mist	Exposed in 5 % salt water spray for 48 h.	No heavy corrosion ruin the function.	X	-
Dry heat	Exposed AT + 85 °C , 96 h.	No damage, crack and looseness of parts.	X	-
Cold	Exposed AT - 55 °C , 96 h.	No damage, crack and looseness of parts.	X	-
COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
0				
REMARK		APPROVED	EJ. KUNII	16.05.17
(1) R/T : Room temperature		CHECKED	EJ. KUNII	16.05.17
The std. Value above indicates at the state applicable contact assembled.		DESIGNED	MM. ISHII	16.05.17
Unless otherwise specified, refer to IEC 60512 (JIS C 5402).		DRAWN	MM. ISHII	16.05.17
Note QT:Qualification Test AT:Assurance Test X:Applicable Test		DRAWING NO.	ELC-021588-71-00	
HRS	SPECIFICATION SHEET	PART NO.	RP13A-12PG-20SC (71)	
	HIROSE ELECTRIC CO., LTD.	CODE NO.	CL113-0210-8-71	1/1