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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 100 V , DC 140 V	————	————
	Current	————	Applicable cable	ϕ7

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	ϕ0.57 $^{0}_{-0.003}$ 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	—
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)	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
A					

REMARK

(1) R/T : Room temperature
The std. Value above indicates at the state applicable contact assembled.

Unless otherwise specified, refer to IEC 60512 (JIS C 5402).

APPROVED	EJ.KUNII	16.03.23
CHECKED	EJ.KUNII	16.03.23
DESIGNED	MM.ISHII	16.03.23
DRAWN	MM.ISHII	16.03.23

Note QT:Qualification Test AT:Assurance Test X:Applicable Test

DRAWING NO. ELC-028674-71-00

HRS	SPECIFICATION SHEET	PART NO.	RP13A-12PK-20SC(71)	
	HIROSE ELECTRIC CO., LTD.	CODE NO.	CL113-1012-0-71	A 1/1 1

FORM HD0011-2-1