



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 <sup>0</sup> <sub>-0.003</sub> 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 <sup>2</sup> AT 2 h, for 3 directions.	①No electrical discontinuity of 10 μs. ②No damage, crack and looseness of parts.	X	—
Shock		490 m/s <sup>2</sup> 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 <sup>(1)</sup> → +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
①					
REMARK (1) R/T : Room temperature The std. Value above indicates at the state applicable contact assembled.			APPROVED	EJ. KUNII	16.05.17
			CHECKED	EJ. KUNII	16.05.17
			DESIGNED	MM. ISHII	16.05.17
			DRAWN	MM. ISHII	16.05.17
Unless otherwise specified, refer to IEC 60512 (JIS C 5402).					
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC-021588-71-00
	SPECIFICATION SHEET		PART NO.	RP13A-12PG-20SC (71)	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL113-0210-8-71	 1/1