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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	-40 °C TO +100 °C	STORAGE TEMPERATURE RANGE	-40 °C TO +85 °C		
	VOLTAGE	AC 250 V , DC 350 V	_____	_____		
	CURRENT	12 A	APPLICABLE CABLE	_____		
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		5 mΩ MAX.	X	—	
INSULATION RESISTANCE	500 V DC.		1000 MΩ MIN.	X	—	
VOLTAGE PROOF	2000 V AC. FOR 1 min.		NO FLASHOVER OR BREAKDOWN.	X	—	
IMPULSE VOLTAGE PROOF	4kV STANDARD WAVE (1.2/50μs VOLTAGE WAVE) FOR POSITIVE VOLTAGE 3 TIMES AND NEGATIVE VOLTAGE 3 TIMES.		NO FLASHOVER OR BREAKDOWN.	X	—	
MECHANICAL CHARACTERISTICS						
CONTACT INSERTION AND WITHDRAWAL FORCES	φ0.97±0.003 BY STEEL GAUGE.		INSERTION AND WITHDRAWAL FORCES : 0.2 N MIN.	X	—	
CONNECTOR INSERTION AND WITHDRAWAL FORCES	MEASURED BY APPLICABLE CONNECTOR. (WITH LOCK)		INSERTION AND WITHDRAWAL FORCES : 5 TO 80 N. (CONTACT PORTION:TIN-LEAD PLATING) 5 TO 50 N. (CONTACT PORTION:GOLD PLATING)	X	—	
MECHANICAL OPERATION	100 TIMES INSERTIONS AND EXTRACTIONS.		CONTACT RESISTANCE: 10 mΩ MAX.	X	—	
VIBRATION	FREQUENCY: 10 TO 55 Hz (1CYCLE : 5min), SINGLE AMPLITUDE 0.75 mm, AT 10CYCLES, FOR 3 DIRECTIONS.		①NO ELECTRICAL DISCONTINUITY OF 10μs. ②NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—	
SHOCK	490 m/s ² DURATIONS OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS.		①NO ELECTRICAL DISCONTINUITY OF 10μs. ②NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—	
CONTACT RETENSION FORCE	APPLYING A PULL FORCE THE WIRE AFTER THE APPLICABLE CRIMPED CONTACT IS ASSEMBLED WITH THE BODY.		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 ARTS.	X	—	
RAPID CHANGE OF TEMPERATURE	TEMPERATURE -40→ R/T ⁽¹⁾ → +100 → R/T °C TIME 30 → 10 TO 15 → 30 → 10 TO 15 min UNDER 5 CYCLES.		①INSULATION RESISTANCE: 1000 MΩ MIN. ②NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—	
CORROSION SALT MIST	EXPOSED IN 5 % SALT WATER SPRAY FOR 48h.		NO HEAVY CORROSION RUIN THE FUNCTION.	X	—	
DRY HEAT	EXPOSED AT + 100 °C , 96 h.		NO DAMAGE, CRACK AND LOOSENESS OFPARTS.	X	—	
COLD	EXPOSED AT - 40 °C , 96 h.		NO DAMAGE, CRACK AND LOOSENESS OFPARTS.	X	—	
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE	
						
REMARK	NOTE 1. (1)R/T:ROOM TEMPERATURE. 2. ABOVE SPECIFICATIONS SHOWS THE VALVE IN ASSEMBLED CONDITION WITH APPLICABLE CRAMP CONTACT. Unless otherwise specified, refer to IEC 60512.			APPROVED	EJ. KUNII	16.02.17
				CHECKED	EJ. KUNII	16.02.17
				DESIGNED	SJ. SHIMIZU	16.02.17
				DRAWN	SJ. SHIMIZU	16.02.17
Note	QT:Qualification Test AT:Assurance Test X:Applicable Test		DRAWING NO.	ELC-112083-72-00		
	SPECIFICATION SHEET		PART NO.	HR31-5.08P-5SC(72)		
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL131-0002-2-72	 1/1	