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In case of consideration for using Automotive equipment / device which demand high reliability, kindly contact our sales window correspondents.

COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE	COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE
△					△				
△					△				

APPLICABLE STANDARD			
RATING	OPERATING TEMPERATURE RANGE	-25 °C TO +85 °C	STORAGE TEMPERATURE RANGE
	VOLTAGE	AC 100 V , DC 140 V	
	CURRENT	2 A	APPLICABLE CABLE

SPECIFICATIONS				
ITEM	TEST METHOD	REQUIREMENTS	QT	AT

CONSTRUCTION				
GENERAL EXAMINATION	VISUALLY AND BY MEASURING INSTRUMENT.	ACCORDING TO DRAWING.	×	×
MARKING	CONFIRMED VISUALLY.		×	×

ELECTRIC CHARACTERISTICS				
CONTACT RESISTANCE	CONTACT SHALL BE MEASURED AT DC 1 A	10 mΩ MAX.	×	×
INSULATION RESISTANCE	100 V DC.	1000 MΩ MIN.	×	×
VOLTAGE PROOF	300 V AC FOR 1 min.	NO FLASHOVER OR BREAKDOWN.	×	×

MECHANICAL CHARACTERISTICS				
CONTACT INSERTION AND WITHDRAWAL FORCES	BY STEEL GAUGE.	INSERTION AND WITHDRAWAL FORCES: — N MIN.	—	—
CONNECTOR INSERTION AND WITHDRAWAL FORCES	MEASURED BY APPLICABLE CONNECTOR.	INSERTION AND WITHDRAWAL FORCES LOCKING DEVICE WITH LOCK : 70 N MAX.	×	—
MECHANICAL OPERATION	1000 TIMES INSERTIONS AND EXTRACTIONS.	CONTACT RESISTANCE: 15 mΩ MAX.	×	—
VIBRATION	FREQUENCY 10 TO 55 Hz, SINGLE AMPLITUDE 0.75 mm, — m/s ² AT 2 h, FOR 3 DIRECTIONS.	① NO ELECTRICAL DISCONTINUITY OF 10 μs. ② NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.	×	—
SHOCK	490 m/s ² DIRECTIONS OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS.	① NO ELECTRICAL DISCONTINUITY OF 10 μs. ② NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.	×	—
CONTACT RETENTION FORCE	APPLYING A PULL FORCE THE WIRE AFTER THE APPLICABLE CRIMPED CONTACT IS ASSEMBLE THE BODY.	20 N MIN.	×	—

ENVIRONMENTAL CHARACTERISTICS				
DAMP HEAT (STEADY STATE)	EXPOSED AT 40 °C, 90 TO 95 %, 96 h.	① INSULATION RESISTANCE: 5 MΩ MIN (AT HIGH HUMIDITY). ② INSULATION RESISTANCE: 50 MΩ MIN (AT DRY). ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	×	—
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.	① INSULATION RESISTANCE: 1000 MΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	×	—
CORROSION SALT MIST	EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h.	NO HEAVY CORROSION.	×	—
DRY HEAT	EXPOSED AT + 85 °C, 96 h.	NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	×	—
COLD	EXPOSED AT - 55 °C, 96 h.	NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	×	—

REMARKS		DRAWN	DESIGNED	CHECKED	APPROVED	RELEASED
NOTE(1) R/T : ROOM TEMPERATURE (2) ABOVE PERFORMANCE INDICATES AT THE STATE APPLICABLE CRIMP CONTACTS ARE INSTALLED.		<i>D. Matsume</i>	<i>D. Matsume</i>	<i>E. Kunii</i>	<i>M. Sato</i>	
Unless otherwise specified, refer to JIS C 5402.		'05.10.01	'05.10.01	'05.10.03	05.10.14	

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

HS HIROSE ELECTRIC CO., LTD.	SPECIFICATION SHEET	PART NO. HR10A-13R-20PC (73)
CODE NO. (OLD) CL	DRAWING NO. ELC4-027149-73	CODE NO. CL110-0704-9-73

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