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

TO
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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	-10 °C TO +60 °C
	VOLTAGE	AC 150 V, DC 200 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.	×	×
	CONTACT SHALL BE MEASURED AT DC — A	— mΩ MAX.	—	—
INSULATION RESISTANCE	100 V DC.	1000 MΩ MIN.	×	×
VOLTAGE PROOF	500 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 UNLOCK : 25 N MAX LOCKING DEVICE WITH LOCK : 35 N MAX	×	—
MECHANICAL OPERATION	1000 TIMES INSERTIONS AND EXTRACTIONS.	CONTACT RESISTANCE: 15 mΩ MAX.	×	—
		— RESISTANCE: — mΩ MAX.	—	—
VIBRATION	FREQUENCY 10 TO 55 Hz, SINGLE AMPLITUDE 0.75 mm, AT 2 h, FOR 3 DIRECTIONS.	①NO ELECTRICAL DISCONTINUITY OF 10 μs. ②NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.	×	—
SHOCK	490 m/s ² DIRECTIONS OF PULSE 11 ms AT 3 TIMES FOR 9 DIRECTIONS.	①NO ELECTRICAL DISCONTINUITY OF 10 μs. ②NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.	×	—

ENVIRONMENTAL CHARACTERISTICS				
DAMP HEAT (STEADY STATE)	EXPOSED AT 40 °C, 90 TO 95 %, 96 h.	①INSULATION RESISTANCE: 5 MΩMIN (AT HIGH HUMIDITY). ②INSULATION RESISTANCE: 50 MΩMIN (AT DRY). ③NO 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.	①INSULATION RESISTANCE: 100 MΩMIN. ②NO 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.	×	—
RESISTANCE TO SOLDERING HEAT	SOLDER TEMPERATURE, +380±10°C, FOR IMMERSION DURATION, 3 ₀ ⁺¹ s.	NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.	×	—
SOLDERABILITY	SOLDERED AT SOLDER TEMPERATURE, +350±10°C FOR IMMERSION DURATION, 2 TO 3 s.	WETTING ON SOLDER SURFACE, NO SOLDER CLUSTER.	×	—

REMARKS NOTE(1) R/T : ROOM TEMPERATURE	DRAWN	DESIGNED	CHECKED	APPROVED	RELEASED
	T.HORII 05.11.30	Id.Nagano 05.12.05	E.Kumai 05.12.08	M. Sato 05.12.10	

Unless otherwise specified, refer to JIS C 5402.

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

HRS HIROSE ELECTRIC CO., LTD.	SPECIFICATION SHEET	PART NO. HR10A-7R-4P (73)
CODE NO. (OLD) CL	DRAWING NO. ELC4-020539-73	CODE NO. CL110-0306-6-73

