

APPLICABLE STANDARD					
RATING	OPERATING TEMPERATURE RANGE	-15 °C TO +60 °C	STORAGE TEMPERATURE RANGE	-10 °C TO +60 °C	
	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.	X	X
MARKING		CONFIRMED VISUALLY.		X	X
ELECTRIC CHARACTERISTICS					
CONTACT RESISTANCE	CONTACT SHALL BE MEASURED AT DC 1 A		80.6 mΩ MAX.	X	X
	GROUND SHALL BE MEASURED AT DC 1 A		70 mΩ MAX.	X	X
INSULATION RESISTANCE	250 V DC.		200 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 0.53±0.003 BY STEEL GAUGE.		INSERTION AND WITHDRAWAL FORCES : 0.2 N MIN.	X	—
CONNECTOR INSERTION AND WITHDRAWAL FORCES	MEASURED BY APPLICABLE CONNECTOR. LOCKING DEVICE WITH LOCK.		INSERTION AND WITHDRAWAL FORCES : 5 TO 50 N.	X	—
MECHANICAL OPERATION <sup>(2)</sup>	1000 TIMES INSERTIONS AND EXTRACTIONS.		CONTACT RESISTANCE: 90.6 mΩ MAX.	X	—
			GROUND RESISTANCE: 90 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.		① NO ELECTRICAL DISCONTINUITY OF 10 μs. ② NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.	X	—
SHOCK	490 m/s <sup>2</sup> 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.	X	—
ENVIRONMENTAL CHARACTERISTICS					
DAMP HEAT (STEADY STATE)	EXPOSED AT 40 °C, 90 TO 95 %, 96 h.		① INSULATION RESISTANCE: 2 MΩ MIN (AT HIGH HUMIDITY). ② INSULATION RESISTANCE: 20 MΩ MIN (AT DRY). ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—
RAPID CHANGE OF TEMPERATURE	TEMPERATURE -15→ R/T <sup>(1)</sup> → +60 → R/T °C TIME 30 → 10 TO 15 → 30 → 10 TO 15 min UNDER 5 CYCLES.		① INSULATION RESISTANCE: 200 MΩ MIN. . ② NO 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 + 60 °C , 96 h.		NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—
COLD	EXPOSED AT - 15 °C , 96 h.		NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—
SOLDERABILITY (SOLDERIRON METHOD)	SOLDERED AT SOLDER TEMPERATURE, +350±10°C FOR SOLDERING DURATION, 3 s.		WETTING ON SOLDER SURFACE. NO SOLDER CLUSTER.	X	—
RESISTANCE TO SOLDERING HEAT (SOLDERIRON METHOD)	SOLDER TEMPERATURE, +380±10°C ,FOR SOLDERING DURATION, 3 s.		NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.	X	—
COUNT	DESCRIPTION OF REVISIONS		DESIGNED	CHECKED	DATE
△					
REMARK			APPROVED	EJ. KUNII	15. 10. 02
NOTE (1) R/T : ROOM TEMPERATURE			CHECKED	EJ. KUNII	15. 10. 02
(2) THE MEASUREMENT CONDITION OF CONTACT RESISTANCE AT FIG-1. THE CABLE LINE BY THE SIDE OF A PLUG IS SET TO AWG#28.			DESIGNED	SJ. SHIMIZU	15. 10. 01
(3) RESISTANCE TO SOLDERING HEAT SHALL BE TESTED IN MOUNTED CONDITION WITH BOARD OF 1.6mm.			DRAWN	SJ. SHIMIZU	15. 10. 01
Unless otherwise specified, refer to IEC60512 (JIS C 5402) .					
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC-021266-71-00
HRS	SPECIFICATION SHEET		PART NO.	HR12-10R-8SD (71)	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL112-0505-5-71	△ 1/1

