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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	-25 °C TO +85 °C	STORAGE TEMPERATURE RANGE	-10 °C TO +60 °C	
	VOLTAGE	AC 30 V , DC 42 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	30 mΩ MAX.	X	X	
	CONTACT SHALL BE MEASURED AT DC — A	— mΩ MAX.	—	—	
INSULATION RESISTANCE	100 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	— BY STEEL GAUGE.	INSERTION AND WITHDRAWAL FORCES : — N MIN.	—	—	
CONNECTOR INSERTION AND WITHDRAWAL FORCES	MEASURED BY APPLICABLE CONNECTOR LOCKING DEVICE WITH LOCK.	INSERTION AND WITHDRAWAL FORCES : 50 N MAX.	X	—	
MECHANICAL OPERATION	1000 TIMES INSERTIONS AND EXTRACTIONS.	CONTACT RESISTANCE: 60 mΩ MAX.	X	—	
		— RESISTANCE: — mΩ MAX.	—	—	
VIBRATION	FREQUENCY 10 TO 55 Hz(1CYC, 5min), SINGLE AMPLITUDE 0.75 mm, AT 10 CYC, FOR 3 DIRECTIONS	① NO ELECTRICAL DISCONTINUITY OF 10 μs. ② NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.	X	—	
SHOCK	IN OPPOSITE DIRECTIONS OF EACH 3 DIMENSION ALAXIS FOR 3 TIMES AT 490 m/s ² DURATION OF PULSE 11 ms.	① NO ELECTRICAL DISCONTINUITY OF 10 μs. ② NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.	X	—	
BREAKING STRENGTH	MAX 30N SHALL BE APPLIED TP CABLE IN UP AND DOWN, LEFT AND RIGHT DIRECTIONS WHEN MATED	NO BREAKAGE OF CONNECTOR.	X	—	
ENVIRONMENTAL CHARACTERISTICS					
DAMP HEAT (STEADY STATE)	EXPOSED AT 40 °C, 90 TO 95 %, 96 h.	① INSULATION RESISTANCE: 10 MΩ MIN (AT HIGH HUMIDITY). ② INSULATION RESISTANCE:100 MΩ MIN (AT DRY). ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—	
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: 100 MΩMIN. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—	
CORROSION SALT MIST	EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h.	NO HEAVY CORROSION.	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	—	
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.	X	—	
SOLDERABILITY	SOLDERED AT SOLDER TEMPERATURE, + 350 ± 10 °C FOR IMMERSION DURATION, 2 TO 3 s.	SOLDER SURFACE TO BE FREE FROM PIN-HOLE, NO WETTING AND OTHER DEFECTS.	X	—	
SEALING ⁽²⁾	EXPOSED AT A DEPTH OF 1m FOR 0.5 h.	NO WATER PENETRATION INSIDE CONNECTOR.	X	—	
AIRTIGHTNESS ⁽²⁾	APPLY AIR PRESSURE 17.6 kPa FOR 0.5min TO INSIDE CONNECTOR	NO AIR BUBBLES INSIDE CONNECTOR	X	—	
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
①					
REMARK			APPROVED	HY. KOBAYASHI	18.03.16
NOTES(1) R/T : ROOM TEMPERATURE			CHECKED	HY. KOBAYASHI	18.03.16
(2)SEALING AND AIRTIGHTNESS SHALL BE TESTED BY APPLCIABLE CONNECTOR.			DESIGNED	DS. MATSUNE	18.03.16
Unless otherwise specified, refer to IEC 60512.(JIS C 5402)			DRAWN	DS. MATSUNE	18.03.16
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC-113454-31-00
HRS	SPECIFICATION SHEET		PART NO.	HR30-7R-12PD (31)	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL130-1017-9-31	△ 1/1