

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 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.	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
0					
REMARK NOTES(1) R/T : ROOM TEMPERATURE (2) SEALING AND AIRTIGHTNESS SHALL BE TESTED BY APPLCIABLE CONNECTOR.			APPROVED	HY. KOBAYASHI	18.03.16
			CHECKED	HY. KOBAYASHI	18.03.16
			DESIGNED	DS. MATSUNE	18.03.16
			DRAWN	DS. MATSUNE	18.03.16
Unless otherwise specified, refer to IEC 60512.(JIS C 5402)					
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