

APPLICABLE STANDARD					
RATING	OPERATING TEMPERATURE RANGE ⁽²⁾	-40°C TO +105°C	STORAGE TEMPERATURE RANGE	-10°C TO +60°C	
	VOLTAGE	AC, DC 1000V	—	—	
	CURRENT ⁽¹⁾	—	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 1A.	5 mΩ MAX	X	X
INSULATION RESISTANCE		500 V DC.	5000 MΩ MIN.	X	X
VOLTAGE PROOF		2200 V AC. FOR 1 min.	NO FLASHOVER OR BREAKDOWN.	X	X
IMPULSE VOLTAGE PROOF		APPLY 15KV STANDARD WAVEFORM (1.2/50 μs VOLTAGE WAVEFORM, POSITIVE/NEGATIVE POLARITIES, 3 TIMES EACH) BETWEEN THE CONTACTS IN MATED CONDITION.	NO FLASHOVER OR BREAKDOWN.	X	—
MECHANICAL CHARACTERISTICS					
CONTACT INSERTION AND WITHDRAWAL FORCES		φ1.57±0.003 BY STEEL GAUGE.	INSERTION AND WITHDRAWAL FORCES : 0.5 N MIN.	X	—
CONNECTOR INSERTION AND WITHDRAWAL FORCES		MEASURED BY APPLICABLE CONNECTOR.	INSERTION AND WITHDRAWAL FORCES : 100 N MAX.	X	—
CONTACT RETENTION FORCE		PULL A TERMINAL BY 20 N FROM TERMINAL AREA.	DO NOT MOVE THE TERMINAL.	X	—
MECHANICAL OPERATION		500 TIMES INSERTIONS AND EXTRACTIONS.	CONTACT RESISTANCE: 10 mΩ MAX.	X	—
VIBRATION		FREQUENCY: 10 → 55 → 10 (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 DEMENSION AXIS FOR 3 TIMES AT 490 m/s ² DURATIONS OF PULSE 11 ms.	① NO ELECTRICAL DISCONTINUITY OF 10 μs. ② NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.	X	—
ENVIRONMENTAL CHARACTERISTICS					
RAPID CHANGE OF TEMPERATURE		TEMPERATURE -40→ R/T ⁽³⁾ → +105 → R/T °C TIME 30 → 2 TO 3 → 30 → 2 TO 3 min UNDER 5 CYCLES.	① INSULATION RESISTANCE: 500 MΩ MIN. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—
DAMP HEAT (STEADY STATE)		EXPOSED AT 40 °C, 90 TO 95 %, 96 h.	① INSULATION RESISTANCE: 50 MΩ MIN (AT HIGH HUMIDITY). ② INSULATION RESISTANCE: 500 MΩ MIN (AT DRY). ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—
CORROSION SALT MIST ⁽⁴⁾		EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h.	NO HEAVY CORROSION RUIN THE FUNCTION.	X	—
DRY HEAT		EXPOSED AT +105°C, 96 h.	NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—
COLD		EXPOSED AT -40°C, 96 h.	NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—
SEALING ⁽⁴⁾		EXPOSED AT A DEPTH OF 2 m FOR 14 DAYS.	NO WATER PENETRATION INSIDE CONNECTOR.	X	—
AIR TIGHTNESS ⁽⁴⁾		APPLY AIR PRESSURE 17.6kPa FOR 0.5min TO INSIDE CONNECTOR.	NO AIR BUBBLES INSIDE CONNECTOR.	X	—
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
△		DIS-A-00065601			
REMARK			APPROVED	TP. KOMATSU	20220301
NOTES(1) ABOVE SPECIFICATIONS SHOWS THE VALUES IN ASSEMBLED CONDITION WITH APPLICABLE CRIMP CONTACTS. (APPLICABLE CRIMP CONTACT:HR41A-SC-111) (2) INCLUDING TEMPERATURE RISE DUE TO CURRENT CARRYING. (3) R/T : ROOM TEMPERATURE. (4) CORROSION SALT MIST, SEALING AND AIRTIGHTNESS SHALL BE TESTED UNDER MATED CONDITION WITH AN APPLICABLE CONNECTOR.			CHECKED	EJ. KUNII	20220301
			DESIGNED	SH. KOYAMA	20220228
			DRAWN	SH. KOYAMA	20220228
			Unless otherwise specified, refer to IEC 60512 (JIS C 5402).		
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC-118400-81-00
HRS	SPECIFICATION SHEET		PART NO.	HR41A-17WBRA-3SC (81)	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL0141-0218-9-81	△ 1/1