Sep.1.2022 Copyright 2022 HIROSE ELECTRIC CO., LTD. All Rights Reserved.
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 100 V , DC 140 V	WIRE SIZE	————
	CURRENT	5 A	APPLICABLE CABLE	φ4.2 TO φ5

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 DC 1 A	5 mΩ MAX.	X	X
	CONTACT SHALL BE MEASURED DC —— A	—— mΩ MAX.	X	X
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	$\phi 0.991\ ^{+0.003}_{0}$ 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 : 30 N MAX.	X	—
MECHANICAL OPERATION	1000 TIMES INSERTIONS AND EXTRACTIONS.	CONTACT RESISTANCE: 10 mΩ MAX.	X	—
		——— RESISTANCE: ——— mΩ MAX.	—	—
VIBRATION	FREQUENCY 10 TO 55 Hz, (1CYC, 5min) SINGLE AMPLITUDE 0.75 mm, AT 10CYC, 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 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 TO 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 ℃, 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 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 ℃ , 96 h.	NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—
COLD	EXPOSED AT − 55 ℃ , 96 h.	NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—
RESISTANCE TO SOLDERING HEAT	SOLDER TEMPERATURE, + 380±10 ℃ , FOR IMMERSION DURATION, $3\ ^{+1}_{0}$ s.	NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.	X	—
SOLDERABILITY	SOLDERED AT SOLDER TEMPERATURE, +350±10℃ 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
A					

REMARK

NOTES (1) R/T : ROOM TEMPERATURE

(2) SEALING AND AIRTIGHTNESS SHALL BE TESTED BY APPLICABLE CONNECTOR.

Unless otherwise specified, refer to IEC 60512.(JIS C 5402)

APPROVED	HY. KOBAYASHI	18.06.05
CHECKED	HY. KOBAYASHI	18.06.05
DESIGNED	DS. MATSUNE	18.06.05
DRAWN	DS. MATSUNE	18.06.05

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

DRAWING NO. ELC-112005-31-00

HRS	SPECIFICATION SHEET	PART NO.	HR30-6P-3S(31)	
	HIROSE ELECTRIC CO., LTD.	CODE NO.	CL130-0004-1-31	A 1/1

FORM HD0011-2-1