

Nov. 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	
<b>CONSTRUCTION</b>					
GENERAL EXAMINATION	VISUALLY AND BY MEASURING INSTRUMENT.	ACCORDING TO DRAWING.	X	X	
MARKING	CONFIRMED VISUALLY.		X	X	
<b>ELECTRIC CHARACTERISTICS</b>					
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	
<b>MECHANICAL CHARACTERISTICS</b>					
CONTACT INSERTION AND WITHDRAWAL FORCES	φ0.991 <sup>+0.003</sup> <sub>0</sub> 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 <sup>2</sup> 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	—	
<b>ENVIRONMENTAL CHARACTERISTICS</b>					
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°C → R/T <sup>(1)</sup> → +85°C → R/T 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 <sup>+1</sup> <sub>0</sub> 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 <sup>(2)</sup>	EXPOSED AT A DEPTH OF 1m FOR 0.5 h.	NO WATER PENETRATION INSIDE CONNECTOR.	X	—	
AIRTIGHTNESS <sup>(2)</sup>	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
Q					
REMARK			APPROVED	HY. KOBAYASHI	18. 06. 05
NOTES(1) R/T : ROOM TEMPERATURE			CHECKED	HY. KOBAYASHI	18. 06. 05
(2) SEALING AND AIRTIGHTNESS SHALL BE TESTED BY APPLICABLE CONNECTOR.			DESIGNED	DS. MATSUNE	18. 06. 05
Unless otherwise specified, refer to IEC 60512.(JIS C 5402)			DRAWN	DS. MATSUNE	18. 06. 05
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC-112005-31-00
<b>HRS</b>	SPECIFICATION SHEET		PART NO.	HR30-6P-3S (31)	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL130-0004-1-31	 1/1