

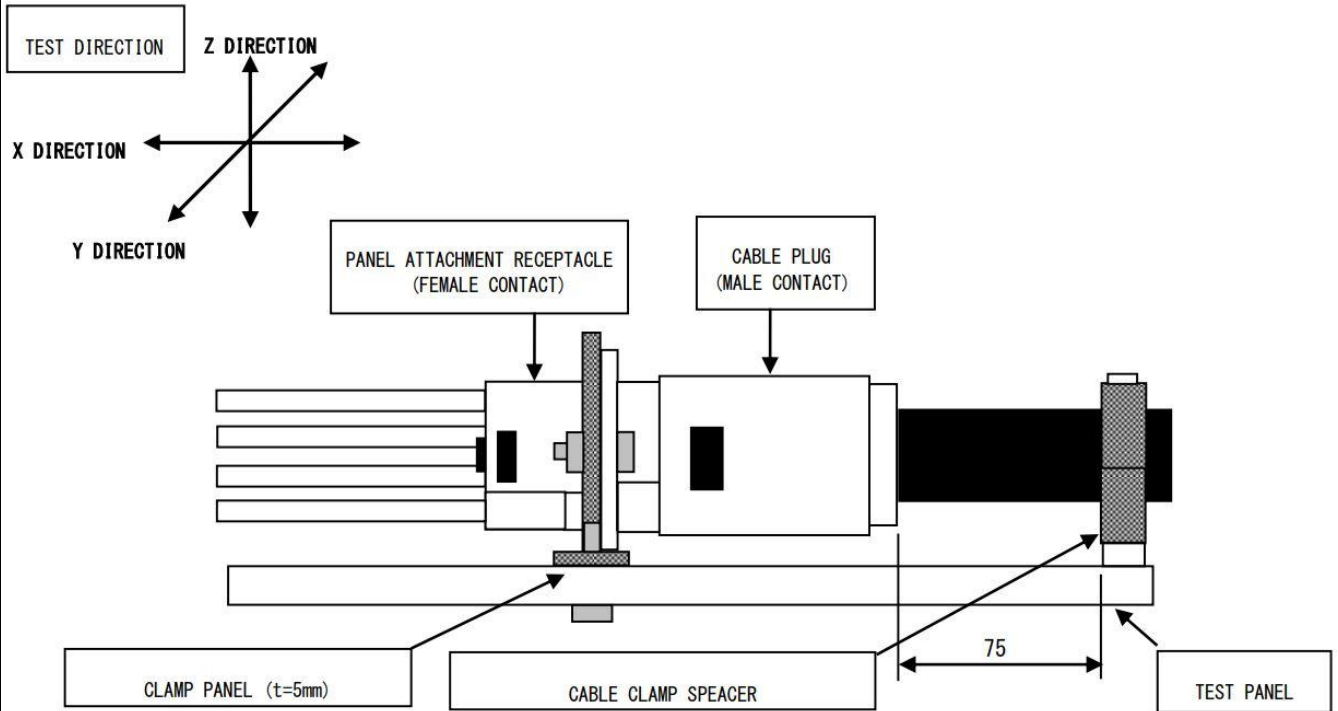
APPLICABLE STANDARD							
RATING	OPERATING TEMPERATURE RANGE	① -40°C TO +105°C	STORAGE TEMPERATURE RANGE	② -55°C TO +85°C			
	VOLTAGE	AC 300 V , DC 300 V	—	—			
	CURRENT	※ 5 A/PIN ※ DEPEND ON CABLE ALLOWABLE CURRENT.	APPLICABLE CABLE	AWG#24 TO AWG#28 (UL-STYLE : UL1007)			
<b>SPECIFICATIONS</b>							
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>ELECTRICAL CHARACTERISTICS</b>							
CONTACT RESISTANCE	100 mA (DC OR 1000 Hz) MAX.	③ 5 mΩ MAX. (CONTACT SPACING)		X	-		
		③ 40 mΩ MAX. (SHELL SPACING)		X	-		
INSULATION RESISTANCE	500 V DC.	5000 MΩ MIN.		X	-		
VOLTAGE PROOF	2200 V AC. FOR 1 min.	NO FLASHOVER OR BREAKDOWN.		X	-		
<b>MECHANICAL CHARACTERISTICS</b>							
CONTACT INSERTION AND WITHDRAWAL FORCES		APPLICABLE CONTACT.		INSERTION FORCE : 3 N MAX. WITHDRAWAL FORCE : 0.3 N MIN.		X	-
CONNECTOR INSERTION AND WITHDRAWAL FORCES		APPLICABLE CONNECTOR.		INSERTION FORCE : 98 N MAX. WITHDRAWAL FORCE : 14.7 N MIN.		X	-
CONTACT (LANCE) RETENTION FORCES		APPLY AXIAL PULL OUT FORCE AT THE SPEED RATE OF 25mm/min TO THE TERMINAL, AND MESURE THE FORCE WHEN THE TERMINAL IS PULL OUT.		29.4N MIN		X	-
CONDUCTOR PRESSURE BONDING FORCES		CRIMP THE CABLE ONLY AT THE CONDUCTOR, AND RETENTION FORCE SHALL EXCEED THE SPECIFICATION WHEN PULL FORCE IS APPLIED.		① AWG#24 : 22.3 N MIN. ② AWG#26 : 13.4 N MIN. ③ AWG#28 : 8.9 N MIN.		X	-
CABLE CLAMP STRENGTH		APPLY PULL FORCE OF 98 N IN MATING DIRECTION FOR A MINUTE.		① CONTACTS SHOULD BE RETAINED. ② NO DAMAGE. CRACK AND LOOSENESS OF PARTS.		X	-
MECHANICAL OPERATION		500 TIMES INSERTIONS AND EXTRACTIONS.		③ ① CHANGE IN CONTACT RESISTANCE OF CONTACTS : 10 mΩ MAX. ② NO DAMAGE. CRACK AND LOOSENESS OF PARTS.		X	-
VIBRATION		FREQUENCY : 10 TO 55 Hz, SINGE AMPLITUDE 0.75 mm, AT 2 h, FOR 3 DIRECTIONS. (REFERENCE FOR APPENDED FIGURE)		① NO ELECTRICAL DISCONTINUITY OF 10 μs. ② NO DAMAGE. CRACK AND LOOSENESS OF PARTS.		X	-
SHOCK		IN OPPOSITE DIRECTIONS OF EACH 6 DIMENSION AXIS FOR 3 TIMES AT 490 m/s <sup>2</sup> DURACTIONS OF PULSE 11 ms.		① NO ELECTRICAL DISCONTINUITY OF 10 μs. ② NO DAMAGE. CRACK AND LOOSENESS OF PARTS.		X	-
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE		
△							
REMARK				APPROVED	MN. KENJO	20211224	
ABOVE SPESIFICATION SHOWS THE VALUES IN ASSEMBLED CONDITION WITH APPLICABLE CRIMP CONTACTS.				CHECKED	KG. OKITA	20211224	
				DESIGNED	HY. MATSUDA	20211224	
				DRAWN	YK. MORIYAMA	20211224	
Unless otherwise specified, refer to IEC 60512.							
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC-397385-00-00		
<b>HRS</b>	SPECIFICATION SHEET		PART NO.	PQ50S2-2428SCA			
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL0236-0051-0-00	△	1/3	

SPECIFICATIONS					
ITEM	TEST METHOD	REQUIREMENTS	QT	AT	
<b>ENVIRONMENTAL CHARACTERISTICS</b>					
RAPID CHANGE OF TEMPERATURE	TEMPERATURE -55 → 15 TO 35 → 105 → 15 TO 35 °C TIME 30 → 2 TO 3 → 30 → 2 TO 3 min. UNDER 5 CYCLES.	③ ① CHANGE IN CONTACT RESISTANCE OF CONTACTS : 10 mΩ MAX. ② NO DAMAGE. CRACK AND LOOSENESS OF PARTS.	X	-	
HEAT RESISTANCE	EXPOSED AT 105 °C ± 2 °C, 96 h, AND COMBINE THE APPLICABLE CONNECTORS.	③ ① CHANGE IN CONTACT RESISTANCE OF CONTACTS : 10 mΩ MAX. ② INSULATION RESISTANCE : 1000 MΩ MIN. ③ NO DAMAGE. CRACK AND LOOSENESS OF PARTS.	X	-	
COLD RESISTANCE	EXPOSED AT -55 °C ± 3 °C, 96 h, AND COMBINE THE APPLICABLE CONNECTORS.	③ ① CHANGE IN CONTACT RESISTANCE OF CONTACTS : 10 mΩ MAX. ② INSULATION RESISTANCE : 1000 MΩ MIN. ③ NO DAMAGE. CRACK AND LOOSENESS OF PARTS.	X	-	
HUMIDITY	EXPOSED AT 60 °C ± 2 °C, 90 TO 95 %, 96 h, AND COMBINE THE APPLICABLE CONNECTORS.	③ ① CHANGE IN CONTACT RESISTANCE OF CONTACTS : 10 mΩ MAX. ② INSULATION RESISTANCE : 1000 MΩ MIN. (AFTER IT DRIER) ③ NO DAMAGE. CRACK AND LOOSENESS OF PARTS.	X	-	
MIXED FLOWING GUS	EXPOSED IN SO <sub>2</sub> 10 ppm, H <sub>2</sub> S 3 ppm, 70 TO 80 %, 24 h, AND COMBINE THE APPLICABLE CONNECTORS.	NO HEAVY CORROSIN RUIN THE FUNCTION.	X	-	
CORROSION SALT MIST	EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h, AND COMBINE THE APPLICABLE CONNECTORS.	NO HEAVY CORROSIN RUIN THE FUNCTION.	X	-	
<p>① ① THE PRODUCT PERFORMANCE IS GUARANTEED ONLY IN THE TEMPERATURE ADEQUATE PEOPLE'S ACTIVITIES. ② INCLUDE TEMPERATURE RISE CAUSED BY CURRENT-CARRYING. ③ SPECIFICATIONS FOR ASSEMBLED ITEM WITH APPLICABLE HOUSING.</p> <p>② PACKING MATERIALS ARE NOT INCLUDED.</p> <p>③ CABLE CONDUCTOR RESISTANCE IS NOT INCLUDED.</p>					
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 In case of consideration for using Automotive equipment / device which demand high reliability, kindly contact our sales window correspondents.

## APPENDED FIGURE

A CABLE PLUG (MALE CONTACT) AND A PANEL ATTACHMENT RECEPTACLE (FEMALE CONTACT)  
 VIBRATION TEST METHOD



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	HIROSE ELECTRIC CO., LTD.	CODE NO	CL0236-0051-0-00	△ 3/3