

Nov.1.2024 Copyright 2024 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.

COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE	COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE
△					△				
△					△				
APPLICABLE STANDARD									
RATING	OPERATING TEMPERATURE RANGE	-40 °C TO 85 °C ⁽¹⁾			STORAGE TEMPERATURE RANGE	-10 °C TO 60 °C ⁽²⁾			
	VOLTAGE	100 V AC			OPERATING HUMIDITY RANGE	40 % TO 80 %			
	CURRENT	0.5 A			STORAGE HUMIDITY RANGE	40 % TO 70 % ⁽²⁾			
SPECIFICATIONS									
ITEM		TEST METHOD			REQUIREMENTS			QT	AT
CONSTRUCTION									
GENERAL EXAMINATION		VISUALLY AND BY MEASURING INSTRUMENT.			ACCORDING TO DRAWING.			×	×
MARKING		CONFIRMED VISUALLY.						×	×
ELECTRIC CHARACTERISTICS									
CONTACT RESISTANCE		20 mV MAX. 1 mA (DC OR 1000Hz)			60 mΩ MAX. ⁽³⁾			×	
INSULATION RESISTANCE		100 V DC			500 MΩ MIN			×	
VOLTAGE PROOF		300 V AC FOR 1 min.			NO FLASHOVER OR BREAKDOWN.			×	
MECHANICAL CHARACTERISTICS									
INSERTION AND WITHDRAWAL FORCES		MEASURED BY APPLICABLE CONNECTOR.			INSERTION FORCE: 18.6 N MAX. WITHDRAWAL FORCE: 1.55 N MIN.			×	
MECHANICAL OPERATION		50 TIMES INSERTIONS AND EXTRACTIONS.			① CONTACT RESISTANCE: 80 mΩ MAX. ⁽³⁾ ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS			×	
VIBRATION		FREQUENCY 10 TO 55 Hz, AMPLITUDE : 1.5 mm, AT 2 h FOR 3 DIRECTION.			① NO ELECTRICAL DISCONTINUITY OF 1 μs. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.			×	
SHOCK		490 m/s ² , DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS.						×	
ENVIRONMENTAL CHARACTERISTICS									
DAMP HEAT (STEADY STATE)		EXPOSED AT 40±2 °C, 90 ~ 95 %, 96 h.			① CONTACT RESISTANCE: 80 mΩ MAX. ⁽³⁾ ② INSULATION RESISTANCE: 500 MΩ MIN.			×	
RAPID CHANGE OF TEMPERATURE		TEMPERATURE-55→+15~+35→+85→+15~+35°C TIME 30 → 2~3 → 30 → 2~3 min UNDER 5 CYCLES.			③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.			×	
CORROSION SALT MIST		EXPOSED IN 5% SALT WATER SPRAY FOR 48 h.			NO HEAVY CORROSION.			×	
SULFUR DIOXIDE		EXPOSED IN 10 PPM FOR 96 h. (TEST STANDARD: JIS-C-0090)						×	
RESISTANCE TO SOLDERING HEAT		1) REFLOW SOLDERING : REFLOW 2 TIMES UNDER THE TEMPERATURE PROFILE SHOWN BELOW. 2) SOLDERING IRONS : 360 °C MAX. FOR 5 sec.			NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.			×	
SOLDERABILITY		SOLDER TEMPERATURE : 240 ± 3°C FOR IMMERSION DURATION : 3 sec.			A NEW UNIFORM COATING OF SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMERSSED.			×	
REMARKS ⁽¹⁾ INCLUDE TEMPERATURE RISE OF CURRENT CARRYING. ⁽²⁾ "STORAGE" MEANS LONG-TERM STORAGE STATE BEFORE ASSEMBLY TO PCB. ⁽³⁾ INCLUDE CONDUCTOR RESISTANCE OF CABLE IN CASE THE MATED CONNECTOR IS CABLE TYPE. (L=12mm)				DRAWN	DESIGNED	CHECKED	APPROVED	RELEASED	
Unless otherwise specified, refer to JIS C 5402.				K. Shibuya '05.02.10	K. Shibuya '05.02.10	H. Yamaguchi '05.02.14	H. Okawa '05.02.14		
Note QT:Qualification Test AT:Assurance Test X:Applicable Test									
HRS HIROSE ELECTRIC CO., LTD.				SPECIFICATION SHEET			PART NO. FX15-31S-0.5SV		
CODE NO.(OLD) CL		DRAWING NO. ELC4 - 155329			CODE NO. CL 575-2201-7			1 1	

