

In case of consideration for using Automotive equipment / device which demand high reliability, kindly contact our sales window correspondents.

APPLICABLE STANDARD				APPLICABLE CABLE	Φ8.5±0.3													
RATING	OPERATING TEMPERATURE RANGE	-40°C TO +85°C		CABLE														
	VOLTAGE	250 V AC		CURRENT	1 A													
SPECIFICATIONS																		
ITEM	TEST METHOD		REQUIREMENTS		QT	AT												
CONSTRUCTION		VISUALLY AND BY MEASURING INSTRUMENT.		ACCORDING TO DRAWING.		X X												
MARKING		CONFIRMED VISUALLY.				X X												
ELECTRIC CHARACTERISTICS																		
CONTACT RESISTANCE	20 mV MAX. 10 mA (DC OR 1000 Hz)	BETWEEN CONTACT: 70 mΩ MAX. BETWEEN SHELL: 10 mΩ MAX		X	X	X												
INSULATION RESISTANCE	250 V DC.	1000 MΩ MIN.		X	X	X												
VOLTAGE PROOF	500 V AC FOR 1 min.	NO FLASHOVER OR BREAKDOWN.		X	X	X												
MECHANICAL CHARACTERISTICS																		
INSERTION AND WITHDRAWAL FORCES	MEASURED BY APPLICABLE CONNECTOR.	INSERTION FORCE	58.8 N MAX.	X	-	-												
MECHANICAL OPERATION	500 TIMES INSERTIONS AND EXTRACTIONS.	EXTRACTION FORCE	14.7 N MIN.	X	-	-												
VIBRATION	FREQUENCY 10 TO 500 Hz SINGLE AMPLITUDE 0.75 mm, 98 m/s ² AT 3h FOR 6 DIRECTIONS.	1) CONTACT RESISTANCE: 70 mΩ MAX. SHELL RESISTANCE: 10 mΩ MAX.	1) NO ELECTRICAL DISCONTINUITY OF 1μs. 2) CONTACT RESISTANCE: 70 mΩ MAX. SHELL RESISTANCE: 10 mΩ MAX	X	-	-												
SHOCK	490 m/s ² DIRECTIONS OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS.	3) NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	3) NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	-	-												
ENVIRONMENTAL CHARACTERISTICS																		
RAPID CHANGE OF TEMPERATURE	TEMPERATURE -40 → 5 TO 35 → 105 → 5 TO 35 °C TIME 30 → 5 → 30 → 5 min. UNDER 10 CYCLES.	1) CONTACT RESISTANCE: 70 mΩ MAX. SHELL RESISTANCE: 10 mΩ MAX.	1) CONTACT RESISTANCE: 70 mΩ MAX. SHELL RESISTANCE: 10 mΩ MAX.	X	-	-												
DAMP HEAT/ CURRENT CARRYING	MATED CONNECTOR WITH CONTACTS CONNECTED IN SERIES. EXPOSED WITH CURRENT CARRYING AT TEMPERATURE 85°C, HUMIDITY 85% FOR 1000h. DC 0.5A, 30V LEAVE AT ROOM TEMPERATURE FOR 2h AFTER TESTING	2) INSULATION RESISTANCE: 1000 MΩ MIN. 3) NO FLASHOVER OR BREAKDOWN. 4) NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	2) NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	-	-												
DRY HEAT/ CURRENT CARRYING	MATED CONNECTOR WITH CONTACTS CONNECTED IN SERIES. EXPOSED WITH CURRENT CARRYING AT TEMPERATURE 105°C. FOR 1000h. DC 0.5A, 30V LEAVE AT ROOM TEMPERATURE FOR 2h AFTER TESTING																	
COLD RESISTANCE	LEAVE AT -40 °C, FOR 500h LEAVE AT 5 TO 35°C FOR 1 TO 2h AFTER TESTING.	1) CONTACT RESISTANCE: 70 mΩ MAX. SHELL RESISTANCE: 10 mΩ MAX.	1) CONTACT RESISTANCE: 70 mΩ MAX. SHELL RESISTANCE: 10 mΩ MAX.	X	-	-												
CORROSION SALT MIST	EXPOSED IN 5% SALT WATER SPRAY FOR 48 h.	2) NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	2) INSULATION RESISTANCE: 25 MΩ MIN. 3) NO HEAVY CORROSION.	X	-	-												
COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE														
REMARK	<table border="1"> <tr> <td>APPROVED</td> <td>R.I. TAKAYASU</td> <td>12.07.25</td> </tr> <tr> <td>CHECKED</td> <td>E.J. WAKATSUKI</td> <td>12.07.25</td> </tr> <tr> <td>DESIGNED</td> <td>TS. ITO</td> <td>12.07.25</td> </tr> <tr> <td>DRAWN</td> <td>TY. ITO</td> <td>12.07.23</td> </tr> </table>						APPROVED	R.I. TAKAYASU	12.07.25	CHECKED	E.J. WAKATSUKI	12.07.25	DESIGNED	TS. ITO	12.07.25	DRAWN	TY. ITO	12.07.23
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Unless otherwise specified, refer to JIS C 5402.																		
Note	QT:Qualification Test	AT:Assurance Test	X:Applicable Test	DRAWING NO.	ELC4-122493-02													
HRS	SPECIFICATION SHEET		PART NO.	F140B-2015S-CVS (50)														
	HIROSE ELECTRIC CO., LTD.		CODE NO.	QL230-0533-0-50														
				△	1/2													

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SPECIFICATIONS

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
MIXED GAS	SULFUR DIOXIDE : 10 PPM HYDROGEN SULFIDE : 3 PPM TEMPERATURE : 40±2 °C HUMIDITY : 70 TO 80 % EXPOSED FOR 96 h	1) CONTACT RESISTANCE: 70 mΩ MAX. SHELL RESISTANCE: 10 mΩ MAX. 2) NO HEAVY CORROSION.	X	—
MACHINING OIL	SOAK IN MACHINING OIL AT TEMPERATURE 85 °C, FOR 100h TESTED WITH 3 DIFFERENT OILS SEPARATELY : UNISOLUBLE HD, UNISOLUBLE CC AND UNICUT TR15	1) CONTACT RESISTANCE: 70 mΩ MAX. SHELL RESISTANCE: 10 mΩ MAX. 2) INSULATION RESISTANCE: 500 MΩ MIN. 3) NO FLASHOVER OR BREAKDOWN. 4) NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	X	—
RESISTANCE TO SOLDERING HEAT	SOLDER TEMPERATURE 350 ± 10 °C, DURATION 3 ± 0.5 s AND 260 ± 5°C, DURATION10 ± 1 s FOR IMMERSION.	NO DEFORMATION OF CASE AND EXCESSIVE LOOSENESS OF THE TERMINALS.	X	—
SOLDERABILITY	SOLDERED AT SOLDER TEMPERATURE 230 ± 5 °C FOR IMMERSION, DURATION 3 ± 0.5 s.	MIN. 90% OF SOLDER IMMERSED AREA SHALL BE COVERED NEW SOLDER COATING.	X	—

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

DRAWING NO.

ELC4-122493-02



SPECIFICATION SHEET

PART NO.

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