







APPLICABLE STANDARD					
RATING	OPERATING TEMPERATURE RANGE	-35 °C TO +105°C (NOTE1)	STORAGE TEMPERATURE RANGE		-10 °C TO +60°C (NOTE3)
	OPERATING HUMIDITY RANGE	20% TO 80% (NOTE2)	STORAGE HUMIDITY RANGE		40% TO 70% (NOTE3)
	APPLICABLE CONNECTOR 	DF59-4P-2FC(**) DF59-4P-2C DF59-4P-2SP(**)	CURRENT		3A
	VOLTAGE		SPECIFICATION	AC/DC 230V	
			UL/C-UL	 AC/DC 29.9V	
	TÜV	TBD			
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		DC6V MAX, 100mA.	50mΩ MAX.(DF59-4P-2FC(**)/2SP(**)) 30mΩ MAX.(DF59-4P-2C)		X -
INSULATION RESISTANCE		500V DC.	1000MΩ MIN.		X -
VOLTAGE PROOF		650V AC FOR 1 min.	NO FLASHOVER OR BREAKDOWN.		X -
MECHANICAL CHARACTERISTICS					
MECHANICAL OPERATION		30TIMES INSERTION AND EXTRACTION.(DF59-4P-2FC/2C) 10TIMES INSERTION AND EXTRACTION.(DF59-4P-2SP)	①50mΩ MAX.(DF59-4P-2FC(**)/2SP(**)) 30mΩ MAX.(DF59-4P-2C) ②NO DAMAGE, CRACK OR LOOSENESS OF PARTS.		X -
VIBRATION		FREQUENCY 10 TO 55Hz, SINGLE AMPLITUDE 0.75mm, AT 10CYCLES FOR 3DIRECTION.	①NO ELECTRICAL DISCONTINUITY OF 1 μ s. ②NO DAMAGE, CRACK OR LOOSENESS OF PARTS.		X -
SHOCK		490 m/s ² DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS.			X -
ENVIRONMENTAL CHARACTERISTICS					
DAMP HEAT (STEADY STATE)		EXPOSED AT 40 ± 2°C , 90 TO 95 %, 96 h. (AFTER LEAVING THE ROOM TEMPERATURE FOR 1-2h.)	①50mΩ MAX.(DF59-4P-2FC(**)/2SP(**)) 30mΩ MAX.(DF59-4P-2C)		X -
RAPID CHANGE OF TEMPERATURE		TEMPERATURE -55°C → +85°C TIME 30min → 30min UNDER 5 CYCLES. (THE TRANSFERRING TIME OF THE TANK IS 2-3 min) (AFTER LEAVING THE ROOM TEMPERATURE FOR 1-2h.)	②INSULATION RESISTANCE: 1000MΩ MIN. ③NO DAMAGE, CRACK OR LOOSENESS OF PARTS.		X -
RESISTANCE TO SOLDERING HEAT		1) REFLOW SOLDERING NUMBER OF REFLOW CYCLES : 2CYCLES MAX. «REFLOW AREA» DURATION ABOVE 220°C, 60sec. MAX. PEAK TEMPERATURE: 250°C, 10sec. MAX. «PRE-HEAT AREA» PRE-HEAT TEMPERATURE:150°C TO 180°C PRE-HEAT TIME:90sec. TO 120sec. 2) MANUAL SOLDERING SOLDERING IRON TEMPERATURE :350±10°C, SOLDERING TIME : 3sec. NO STRENGTH ON CONTACT.	NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.		X -
SOLDERABILITY		SOLDERING TEMPERATURE : 245°C DURATION OF IMMERSION :SOLDERING, FOR 5sec.	NEW UNIFORM COATING OF SOLDER SHALL COVER MINIMUM OF 95% OF THE SURFACE BEING IMMersed.		X -
NOTE 1: INCLUDE THE TEMPERATURE RISING BY CURRENT.					
NOTE2:NO CONDENSING					
NOTE3:APPLY TO THE CONDITION OF LONG TERM STORAGE FOR UNUSED PRODUCTS BEFORE PCB ON BOARD, AFTER PCB BOARD , OPERATING TEMPERATURE AND HUMIDITY RANGE IS APPLIED FOR INTERIM STRAGE DURING TRANSPORTATION.					
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
	3	DIS-H-00001641	TS. KUMAZAWA	TS. FUKUSHIMA	16. 05. 23
REMARKS Unless otherwise specified, refer to IEC60512. 			APPROVED	KI. AKIYAMA	11. 01. 12
			CHECKED	SZ. ONO	11. 01. 12
			DESIGNED	KT. ISHII	11. 01. 12
			DRAWN	KT. ISHII	11. 01. 12
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC4-330590-01
	SPECIFICATION SHEET		PART NO.	DF59-4S-2V (51)	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL667-0003-6-51	 1/1