





APPLICABLE STANDARD		TÜV, and UL certification planned			
Rating	Operating Temperature Range	-25°C to +105°C ⁽²⁾	Storage Temperature Range	-10°C to +60°C	
	Voltage	AC 600V , DC 600V			
	Current	16A (1.25mm ² cable) 21A (2mm ² cable) 30A (3.5mm ² cable) 40A (5.5mm ² cable)	Applicable Cable	1.25mm ² (AWG16) 2mm ² (AWG14) 3.5mm ² (AWG12) 5.5mm ² (AWG10)	
SPECIFICATIONS					
ITEM		TEST METHOD	REQUIREMENTS	QT	AT
CONSTRUCTION					
General Examination		Examined visually and with a measuring instrument.	According to the drawing.	X	X
Marking		Confirmed visually.		X	X
ELECTRICAL CHARACTERISTICS					
Contact Resistance		Measured at DC 1A.	1mΩ MAX.	X	—
Insulation Resistance		Measured at DC 500V.	1000MΩ MIN.	X	—
Voltage Proof		AC 2500V applied for 1min.(NECA C 2811)	No flashover or breakdown.	X	—
Short-Time Withstand Current Test		Measured at 150A applied for 1s. (1.25mm ² cable) Measured at 240A applied for 1s. (2mm ² cable) Measured at 420A applied for 1s. (3.5mm ² cable) Measured at 660A applied for 1s. (5.5mm ² cable) (JIS C 8201)	Contact Resistance: 1.5 mΩ MAX.	X	—
MECHANICAL CHARACTERISTICS					
Crimp Contact Insertion and Extraction Forces		Measured with an applicable connector.	Insertion Force: 70N MAX.	X	—
Mechanical Operation		Contact Inserted and Extracted 50 times.	1) No function impairing damage, cracks, or looseness of parts. 2) Contact Resistance: 1.5mΩ MAX. 3) Insertion Force: 70N MAX.	X	—
Vibration 		Frequency: 10 Hz to 55 Hz Single amplitude: 0.75 mm Performed two hours in each of three mutually perpendicular directions. (MIL-STD-1344 Method 2005, Condition 2)	1) No electrical discontinuity of 10μs. 2) No damage, cracks, or looseness of parts.	X	—
Shock		Acceleration: 500 m/s ² Half sine wave pulses of 11 ms. Performed five times both ways in each of three mutually perpendicular directions.	1) No electrical discontinuity of 10μs. 2) No damage, cracks, or looseness of parts.	X	—
Contact Retention Force		A 150N pulling force was applied to the connection side. (NECA C 2811)	No damage.	X	—
ENVIRONMENTAL CHARACTERISTICS					
Damp Heat (Steady State)		Subjected to 40±2°C, at a humidity 90% to 95%, for 96 hours. Returned to room temperature and normal humidity, and removed of any water. (NECA C 2811)	1) Insulation Resistance: 20MΩ MIN. 2) Voltage Proof: AC 2500V applied for 1min. No flashover or breakdown. 3) No damage, cracks, or looseness of parts.	X	—
Heat and Cold Resistance		Subjected to -25±3°C for 2 hours. Returned to room temperature for 1 hour. Subjected to 70±3°C for 2 hours. (NECA C 2811)	1) Insulation Resistance: 20MΩ MIN. 2) Voltage Proof: AC 2500V applied for 1min. No flashover or breakdown. 3) No damage, cracks, or looseness of parts.	X	—
Ageing Test		16A (1.25mm ² cable) 21A (2mm ² cable) 30A (3.5mm ² cable) 40A (5.5mm ² cable) With the rated current shown above applied, subjected to the following cycle 192 times. Subjected to 40±3°C for 10 minutes, cooled to 30°C and left for 10 minutes. (JIS C 8201)	1) Contact Resistance: 1.5mΩ MAX. 2) No damage, cracks, or looseness of parts.	X	—
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
	1	DIS-G-00003876	EK. KIDO	TP. KOMATSU	20200311
Notes			APPROVED	YH. YAMADA	20170830
(1) Above specifications show the values in assembled condition with applicable crimp contacts.			CHECKED	TP. KOMATSU	20170830
(2) Including temperature rise caused by current carrying.			DESIGNED	HT. ZENBA	20170830
Unless otherwise specified, refer to IEC 60512 (JIS C 5402).			DRAWN	EK. KIDO	20170830
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC-119728-00-00
	SPECIFICATION SHEET		PART NO.	EF2-D30-1	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL142-0103-0-00	 1/1