










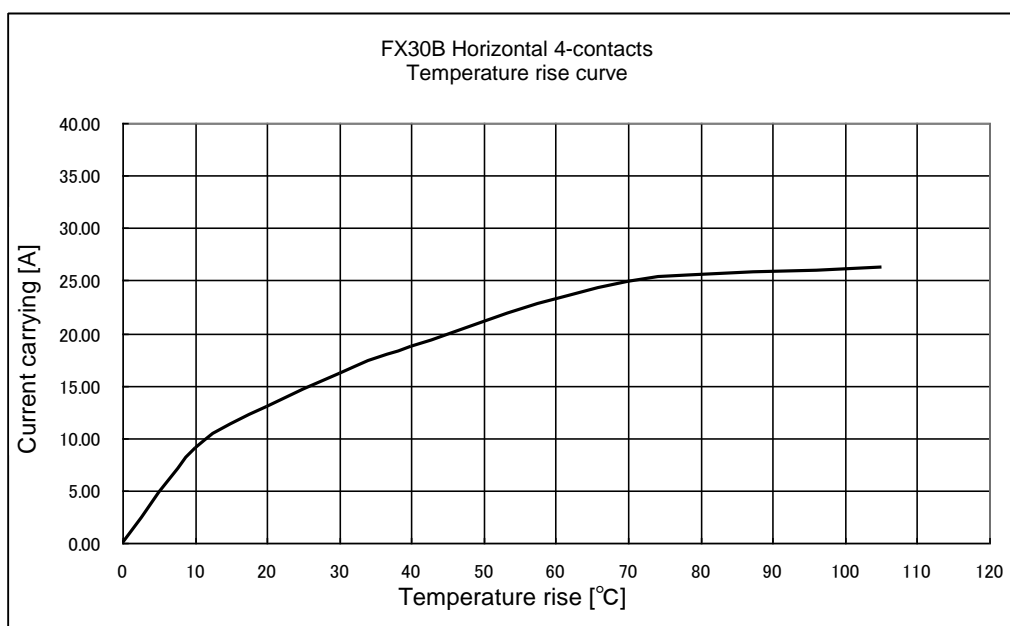
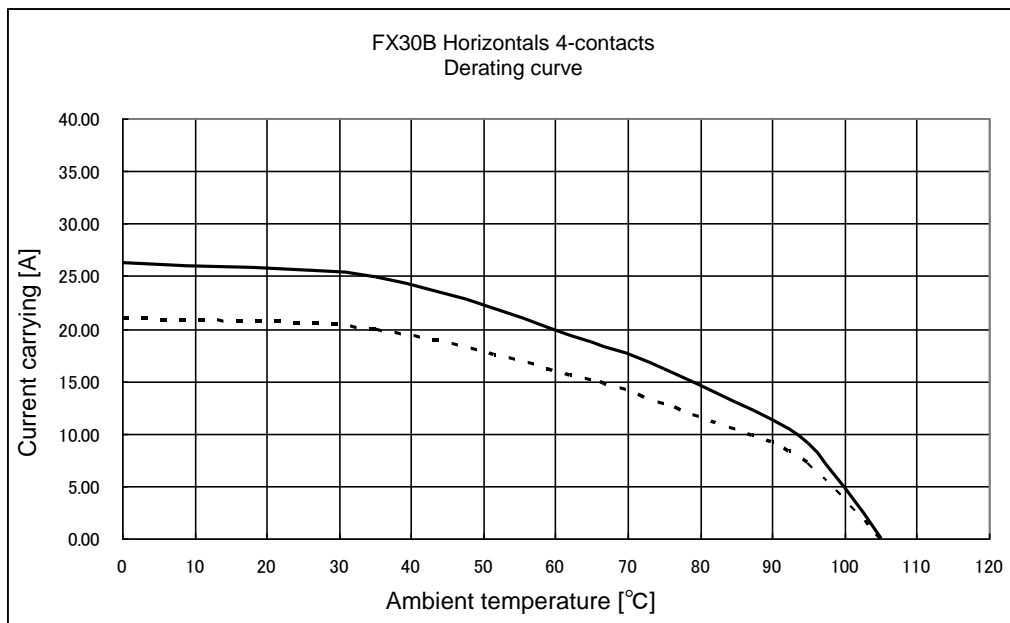


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In case of consideration for using Automotive equipment / device which demand high reliability, kindly contact our sales window correspondents.

Applicable standard 		UL : UL1977, C-UL : CSA22.2 No.182.3-M1987, TÜV : EN61984:2009 ⁽³⁾			
RATING	Voltage  	250 V AC/DC(UL/C-UL)	Operating Temperature Range	-55 °C to 105 °C ⁽¹⁾	
		150V AC/DC(TÜV)	Operating Humidity Range	Relative Humidity 85% max (Not dewed)	
	Current  	20 A (AMBIENT TEM 25°C)	Storage Temperature Range	-10 °C to 60 °C ⁽²⁾	
		13 A (UL/C-UL) 15 A (TÜV)	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.	x x
Marking		Confirmed visually.			x x
ELECTRIC CHARACTERISTICS					
Contact Resistance		10 mA(DC or 1000Hz)	2 mΩ MAX.		x -
Insulation Resistance 		250 V DC.	1000 MΩ MIN.		x -
Voltage Proof 		750 V AC for 1 min.	No flashover or breakdown.		x -
MECHANICAL CHARACTERISTICS					
Insertion and Withdrawal Forces		Measured by applicable connector.		Insertion Force: 20 N MAX. Withdrawal Force: 0.8 N MIN.	x -
Mechanical Operation		100 times insertions and extractions.		① Contact Resistance: 5 mΩ MAX. ② No damage, crack and looseness of parts.	x -
Vibration		Frequency 10 to 55 to 10Hz, approx 5min Single amplitude : 0.75 mm, 10 cycles for 3 axial directions.		① No electrical discontinuity of 1 μs. ② No damage, crack and looseness of parts.	x -
Shock		490 m/s ² , duration of pulse 11 ms, 3 times to both directions in 3 axial directions.			x -
ENVIRONMENTAL CHARACTERISTICS					
Damp Heat (Steady State)		Exposed at 40±2 °C, 90 ~ 95 %, 96 ±4h.		① Contact Resistance: 5mΩ MAX. ② Insulation Resistance: 1000 MΩ MIN.	x -
Rapid Change of Temperature		Temperature -55 → +105 °C Time 30 → 30 min. under 5 cycles. (Relocation time to chamber: within 2~3 MIN)		③ No damage, crack and looseness of parts.	x -
Dry heat		Exposed at +105±2°C for 96±4h.			x -
Cold		Exposed at -55±2°C for 96±4h.			x -
Sulfur Dioxide		Exposed at 25±2°C, 75±5%RH, 25 PPM for 96h±4h.		① Contact Resistance: 5mΩ MAX. ② No defect such as corrosion which impairs the function of connector.	x -
Resistance to Soldering Heat 		Solder bath : Solder temperature 260±5°C for immersion, duration 10±1sec. Soldering irons : 380°C MAX. for 10 sec.		No deformation of case of excessive looseness of the terminal.	x -
Solderability		Soldered at 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 immersed.	x -
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
	2	DIS-F-00002346	TS. 00N0	HT. YAMAGUCHI	17. 05. 12
REMARKS ⁽¹⁾ Include temperature rise caused by current-carrying. ⁽²⁾ "Storage" means a long-term storage state for the unused product before assembly to PCB. ⁽³⁾ Pollution degree:2 type of terminals :dip solder contacts.			APPROVED	HS. OKAWA	13. 03. 07
			CHECKED	KI. HIROKAWA	13. 03. 07
			DESIGNED	DK. AIMOTO	13. 03. 07
Unless otherwise specified, refer to JIS-C-5402,IEC60512.			DRAWN	DK. AIMOTO	13. 03. 07
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC4-347257-00
	SPECIFICATION SHEET		PART NO.	FX30B-4P-3. 81DSA20	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL570-3102-9-00	 1/2



[REFERENCE]



(note 4) Derating curve takes manufacturing tolerances into consideration as well as uncertainties in temperature measurement and the measuring set up and is derived from the base curve multiplied by 0.8 calculation.

(note 5) The value of rated current differs depending on the ambient temperature. it is recommended to use the product within the derating curve zone. if used under UL or TUV standard, please use within the standard specification.

(note 6) Measurement method of derating curve is shown below.

- Test Specimen : used FX30B-4P-3.81DS.
used FX30B-4S-3.81DS.
- Test condition : Turn on electricity under the static state and measure.
(Test report # TR570E-20627)

Note QT:Qualification Test AT:Assurance Test X:Applicable Test		DRAWING NO.		ELC4-347257-00	
HRS	SPECIFICATION SHEET		PART NO.	FX30B-4P-3.81DSA20	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL570-3102-9-00	△ 2/2