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Applicable standard ②△	UL : UL1977, C-UL : CSA22.2 No.182.3-M1987, TÜV : EN61984:2009(3)			
RATING	Voltage ③△ ②△	250 V AC/DC(UL/C-UL) 150V AC/DC(TÜV)	Operating Temperature Range	-55 °C to 105 °C (1)
			Operating Humidity Range	Relative Humidity 85% max (Not dewed)
	Current ③△ ②△	20 A (AMBIENT TEPM 25℃) 13 A (UL/C-UL) 15 A (TÜV)	Storage Temperature Range	-10 °C to 60 °C (2)
			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	10 mA(DC or 1000Hz)	2 mΩ MAX.	×	—
Insulation Resistance ④△	250 V DC.	1000 MΩ MIN.	×	—
Voltage Proof ④△	750 V AC for 1 min.	No flashover or breakdown.	×	—
MECHANICAL CHARACTERISTICS				
Insertion and Withdrawal Forces	Measured by applicable connector.	Insertion Force: 25 N MAX. Withdrawal Force: 1.0 N MIN.	×	—
Mechanical Operation	100 times insertions and extractions.	① Contact Resistance: 5 mΩ MAX. ② No damage, crack and looseness of parts.	×	—
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.	×	—
Shock	490 m/s^2 , duration of pulse 11 ms, 3 times to both directions in 3 axial directions.		×	—
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.	×	—
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.	×	—
Dry heat	Exposed at +105±2℃ for 96±4h.		×	—
Cold	Exposed at -55±2℃ for 96±4h.		×	—
Sulfur Dioxide	Exposed at 25±2℃, 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.	×	—
Resistance to Soldering Heat	Solder bath : Solder temperature 260±5℃ for immersion, duration 10±1sec.	No deformation of case of excessive looseness of the terminal.	×	—
①△	Soldering irons : 380℃ MAX. for 10 sec.			
Solderability	Soldered at solder temperature 240±3℃ for immersion, duration 3 sec.	A new uniform coating of solder shall cover a minimum of 95 % of the surface being immersed.	×	—

	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
④△	2	DIS-F-00002346	TS.OONO	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.

Unless otherwise specified, refer to JIS-C-5402,IEC60512.

APPROVED	HS.OKAWA	13.03.07
CHECKED	KI.HIROKAWA	13.03.07
DESIGNED	DK.AIMOTO	13.03.07
DRAWN	DK.AIMOTO	13.03.07

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

DRAWING NO. ELC4-347275-00

HRS	SPECIFICATION SHEET	PART NO.	FX30B-5S-3.81DSA	
	HIROSE ELECTRIC CO., LTD.	CODE NO.	CL570-3503-0-00 ④△	1/2

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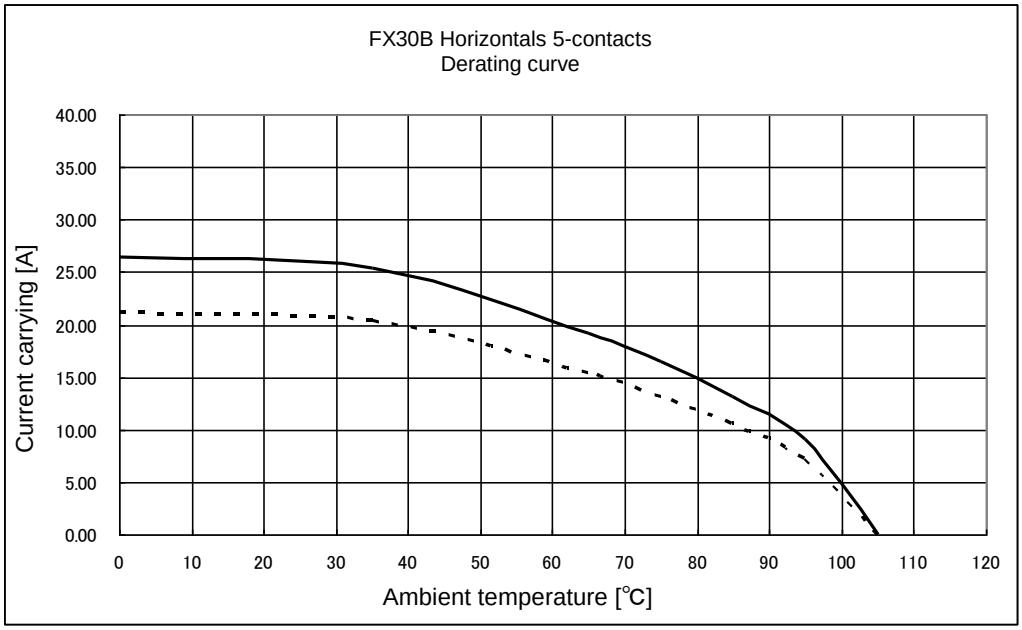
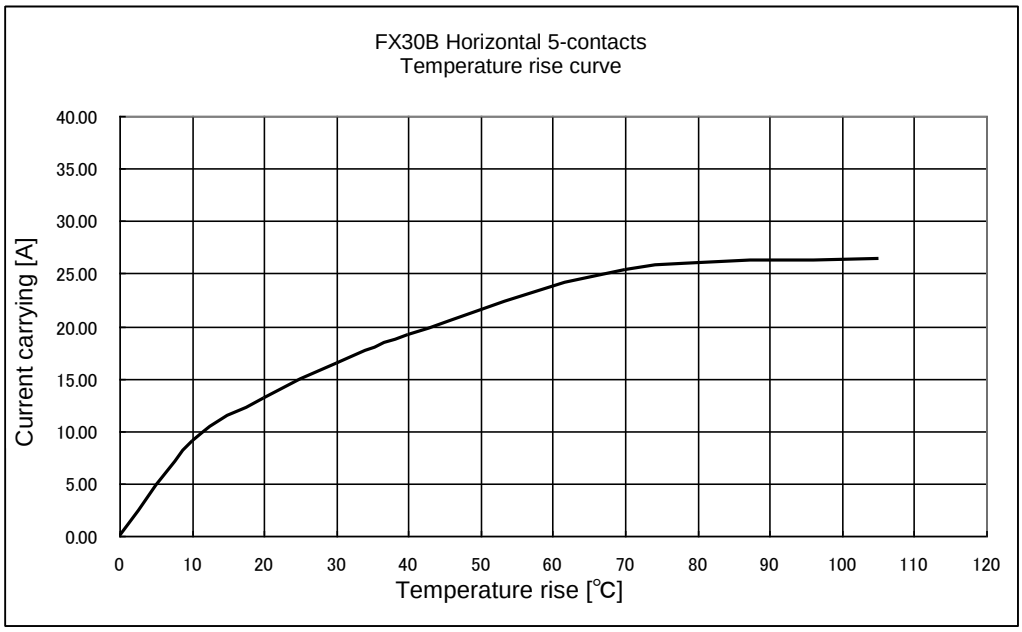
△3

[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-5P-3.81DS.
  used FX30B-5S-3.81DS.
- Test condition：Turn on electricity under the static state and measure.
  (Test report # TR570E-20627)