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In case that the application demands a high level of reliability, such as automotive,
please contact a company representative for further information.

Applicable standard					
Rating	Operating temperature range	-55°C to + 105°C (NOTE 1)	Storage temperature range	-10°C to + 60°C (NOTE 3)	
	Operating humidity range	20% to 80% (NOTE 2)	Storage humidity range	40% to 70% (NOTE 3)	
	Voltage	1000V AC/DC	Applicable connector	DF60※-S-10.16C(##) 	
	Current (*1)	AWG8 : 50A	Applicable cable	AWG 8	
	Rated voltage	Rated current		Overvoltage category	IP-Degree
UL	600V AC/DC	AWG8: 65A (AT ambient Temp. 25°C) (Note 5)		—	—
C-UL	600V AC/DC	See above (*1) (Temp. rise up 30°C MAX)		—	—
TUV	600V AC/DC	See above (*1)		III	IP00
Specifications					
Item		Test method		REQUIREMENTS	
Construction				QT	AT
General examination		Visually and by measuring instrument.		According to drawing.	
Marking		Confirmed visually.		X	X
Electric characteristics					
Contact resistance millivolt level method		DC6V MAX, 1A		2mΩ MAX.	
				X	—
Mechanical characteristics					
Contact insertion and extraction forces		1.0±0.002 by steel gauge.		Insertion force 12.0 N MAX. Extraction force 2.0 N MIN.	
				X	—
Mechanical operation		30times insertions and extractions.		①Contact resistance: 2 mΩ MAX. ②No damage, crack or looseness of parts.	
				X	—
Vibration		Frequency 10 to 500 Hz, total amplitude 1.5mm, Acceleration 98m/s ² , at 2h for 3 directions.		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 each for 3 both axial directions.		①No electrical discontinuity of 1 μ s. ②No damage, crack or looseness of parts.	
				X	—
Crimp tensile strength		Apply wire tensile strength to caulking area axially until wire become loosen or breakdown.		AWG8 : 401N MIN	
				X	—
Environmental characteristics					
Damp heat (steady state)		Exposed at 40 ± 2°C , 90 to 95 % , 96 h.		①Contact resistance: 2 mΩ MAX. ②No damage, crack or looseness of parts.	
				X	—
Rapid change of temperature		Temperature -55°C→ +85°C Time 30MIN→ 30MIN Under 25 cycles. (The transferring time of the tank is 2-3 MIN) (After leaving the room temperature for 1-2h.)		①Contact resistance: 2 mΩ MAX. ②No damage, crack or looseness of parts.	
				X	—
Dry heat		Exposed at 105 ± 2°C, 250h (After leaving the room temperature for 1-2h.)		①Contact resistance: 2 mΩ MAX. ②No damage, crack or looseness of parts.	
				X	—
Remarks					
Note1: Include the temperature rising by current.					
Note2: No condensing.					
Note3: Apply to the condition of long term storage for unused products before mounted on PCB, After mounted on PCB, operation temperature and humidity range is applied for interim storage during transportation.					
	Count	Description of revisions	Designed	Checked	Date
	1	DIS-H-00004286	TS. MIYAKI	SZ. ONO	20181002
Unless otherwise specifid , refer to IEC 60512.				Approved	20150611
				Checked	20150610
				Designed	20150610
				Drawn	20150609
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			Drawing no.		ELC-342868-00-00
		Specification sheet		Part no. DF60-8SCA	
HIROSE ELECTRIC CO., LTD.		Code no.		CL680-3021-4-00	 1/3

(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 basic curve multiplied by 0.8 calculation.

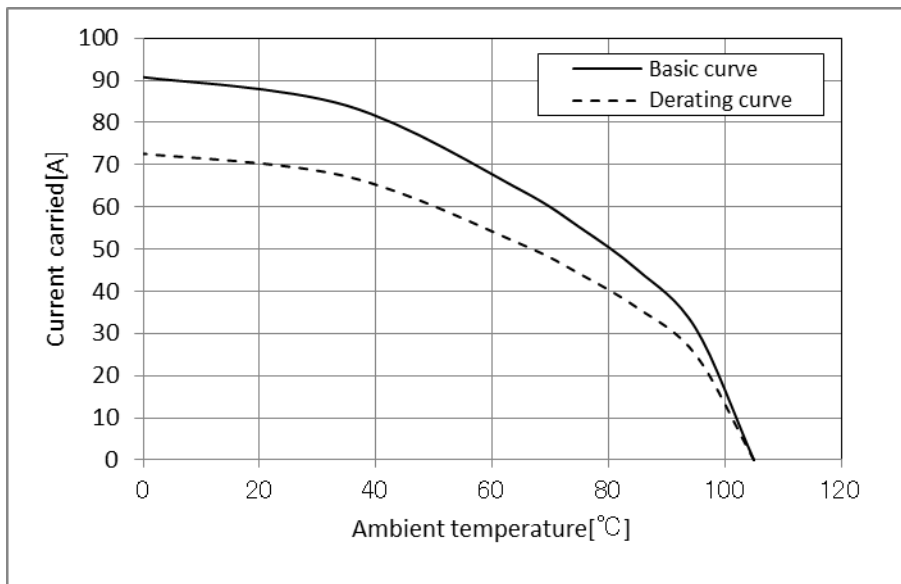
(Note 5) The value of rated current differs depending on the ambient temperature. It is recommended to use the product within the derating curve zone.

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

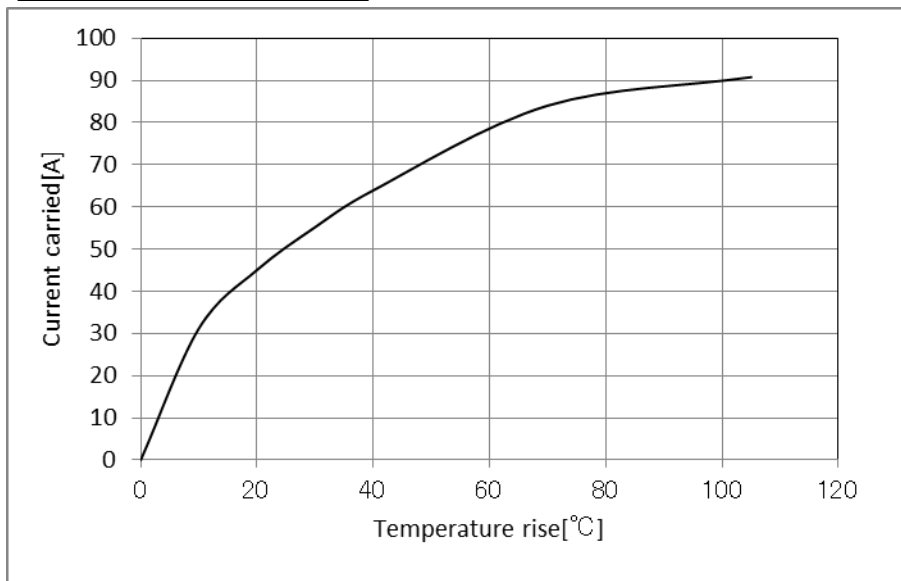
- Test specimen: Unused DF60-2P-10.16DS(27).
Unused DF60-2S-10.16C
Unused DF60-8SCFA
- Test cable spec: AWG 8
- Test condition: Turn on electricity under the static state and measure.
(Test report # TR680E-20766)

[Reference]

Derating curve



Temperature rise curve



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

DRAWING NO.

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SPECIFICATION SHEET

PART NO.

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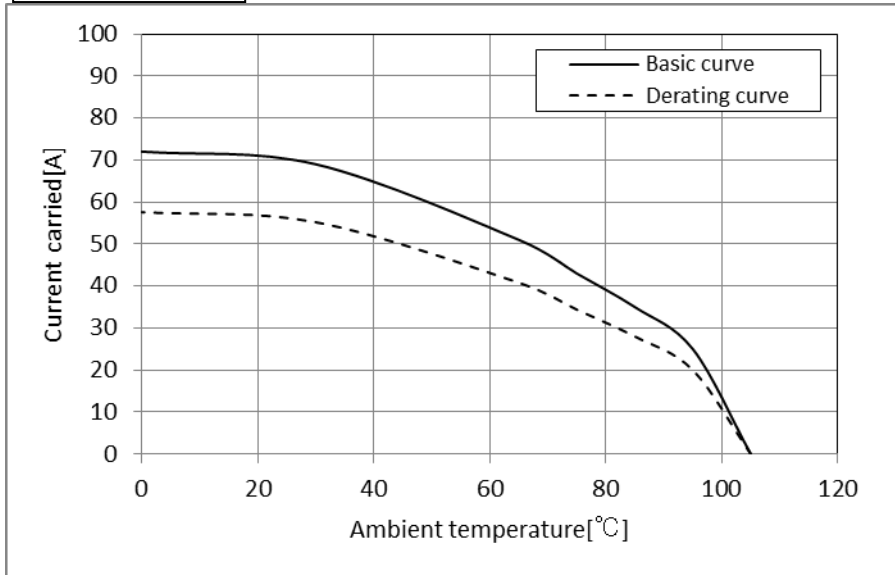
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(Note 7) Measurement method of derating curve is shown below.

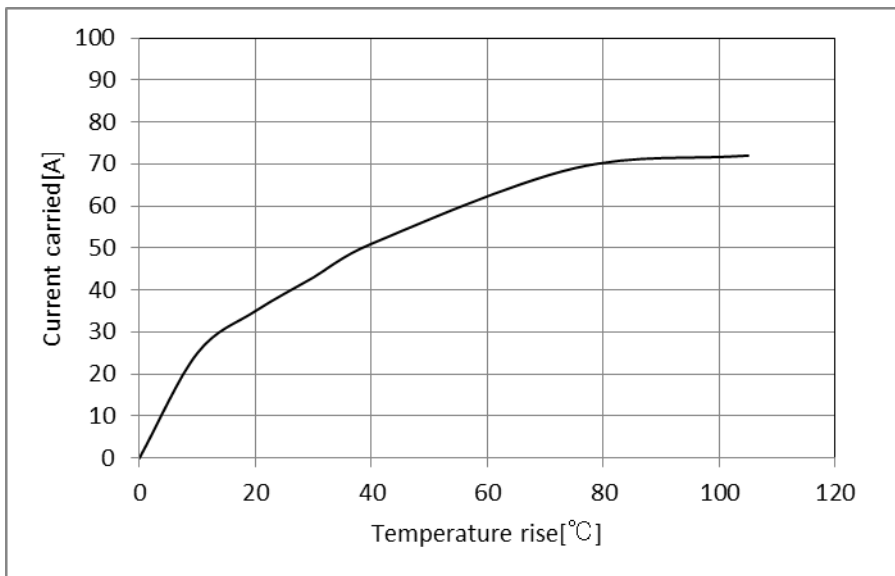
- Test specimen: Unused DF60-6P-10.16DS(27).
Unused DF60-6S-10.16C
Unused DF60-8SCFA
- Test cable spec: AWG 8
- Test condition: Turn on electricity under the static state and measure.
(Test report # TR680E-20802)

[Reference]

Derating curve



Temperature rise curve



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

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