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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						
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 CABLE	AWG8 TO AWG12	
	CURRENT (*1) 	AWG8	42A	APPLICABLE CONTACT 	DF60-8PC (F) A (07) DF60-1012PC (F) A (07) DF60A-8PC (F) A	
		AWG10	33A			
		AWG12	27A			
	RATED VOLTAGE	RATED CURRENT		OVERVOLTAGE CATEGORY	IP- DEGREE	
UL	600V AC/DC	AWG8:55A/AWG10:45A/AWG12:35A (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	QT	AT
CONSTRUCTION						
GENERAL EXAMINATION	VISUALLY AND BY MEASURING INSTRUMENT.			ACCORDING TO DRAWING.	X	X
MARKING	CONFIRMED VISUALLY.				X	X
ELECTRIC CHARACTERISTICS						
INSULATION RESISTANCE	1000V DC.			1000MΩ MIN.	X	—
VOLTAGE PROOF	3000V AC FOR 1 min.			NO FLASHOVER OR BREAKDOWN.	X	—
MECHANICAL CHARACTERISTICS						
VIBRATION	FREQUENCY 10 TO 500 Hz, TOTAL AMPLITUDE 1.5 mm, Acceleration of 98 m/s ² , AT 2 h, FOR 3 DIRECTIONS.			① NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	—
SHOCK	490 m/s ² DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS.			① NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	—
ENVIRONMENTAL CHARACTERISTICS						
DAMP HEAT (STEADY STATE)	EXPOSED AT 40 ± 2 °C, 90 TO 95 %, 96 h.			① INSULATION RESISTANCE: 1000MΩ MIN. ② NO 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.)			① INSULATION RESISTANCE: 1000MΩ MIN. ② NO DAMAGE, CRACK OR LOOSENESS OF PARTS.	X	—
DRY HEAT	EXPOSED AT 105 ± 2°C, 250h (AFTER LEAVING THE ROOM TEMPERATURE FOR 1-2h.)			① INSULATION RESISTANCE: 1000MΩ MIN. ② NO 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 PCB on board . After mounted on PCB board , operating temperature and humidity range is applied for interim storage during transportation.						
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE	
	6	DIS-H-00002440	TS. KUMAZAWA	TS. FUKUSHIMA	17. 01. 06	
Unless otherwise specifid , refer to IEC 60512.				APPROVED	KI. AKIYAMA	13. 06. 04
				CHECKED	OM. MIYAMOTO	13. 06. 04
				DESIGNED	TH. YOSHIZAWA	13. 06. 04
				DRAWN	TH. YOSHIZAWA	13. 06. 04
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.	ELC4-344824-00		
	SPECIFICATION SHEET		PART NO.	DF60-5EP-10. 16C		
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL680-3028-3-00		1/4



(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.

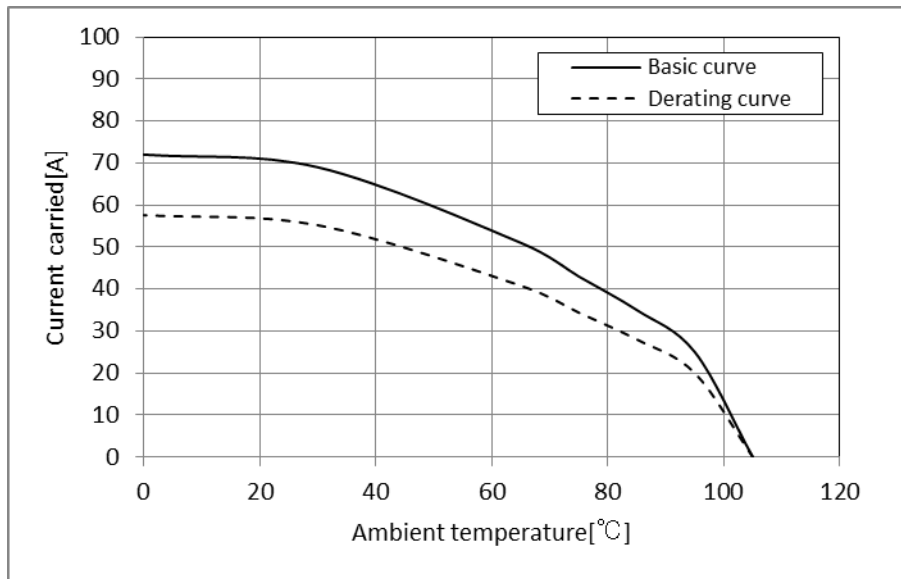
(Note 5) The value of rated current differs depending on the ambient temperature. It is recommended to use the product within the derating curve zone.

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

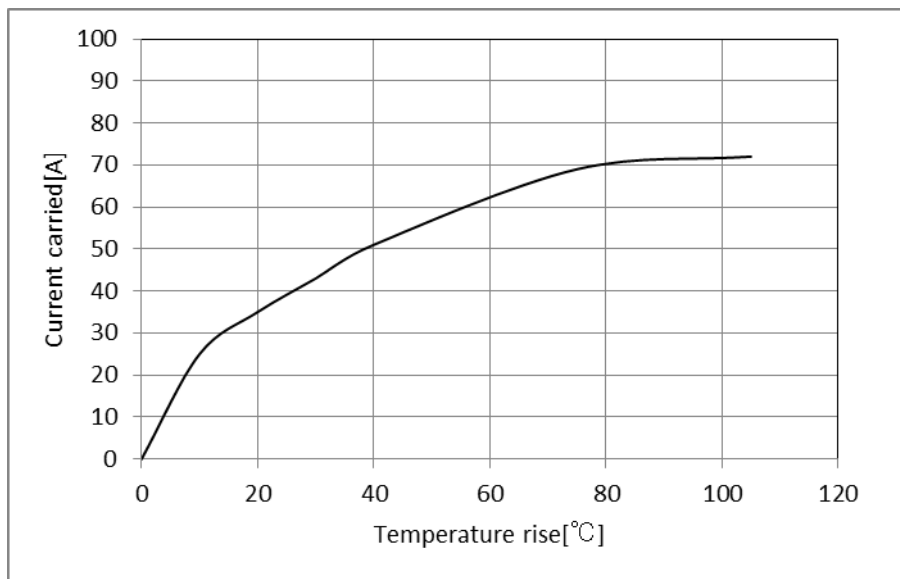
- Test specimen: Unused DF60-6P-10.16DS(27).
Unused DF60-6S-10.16C
Unused DF60-8SCFA
- Test cable spec: AWG 8
- Test condition: Turn on electricity under the static state and measure.
(Test report # TR680E-20802)

[Reference]

Derating curve



Temperature rise curve



Note QT:Qualification Test AT:Assurance Test X:Applicable Test		DRAWING NO.		ELC4-344824-00	
HRS	SPECIFICATION SHEET		PART NO.	DF60-5EP-10.16C	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL680-3028-3-00	2/4

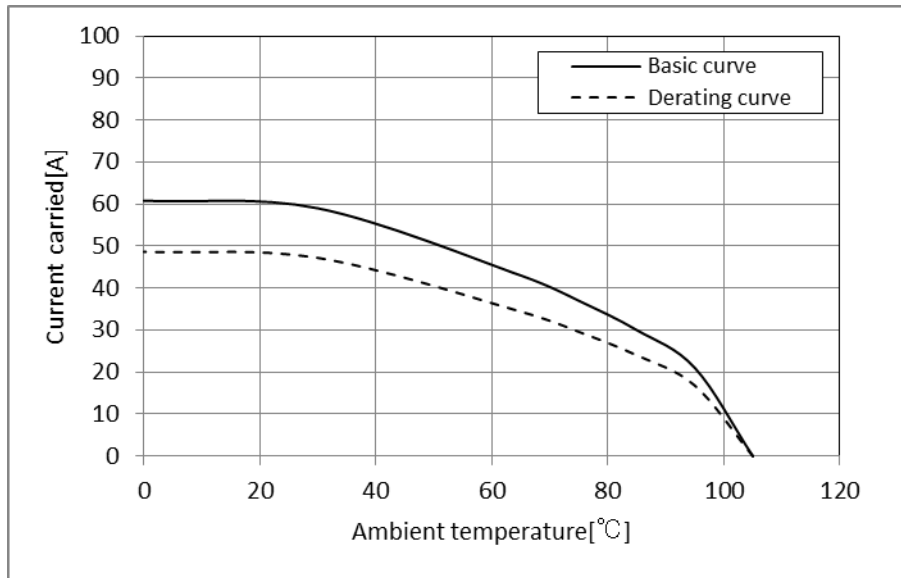


(Note 7) Measurement method of derating curve is shown below.

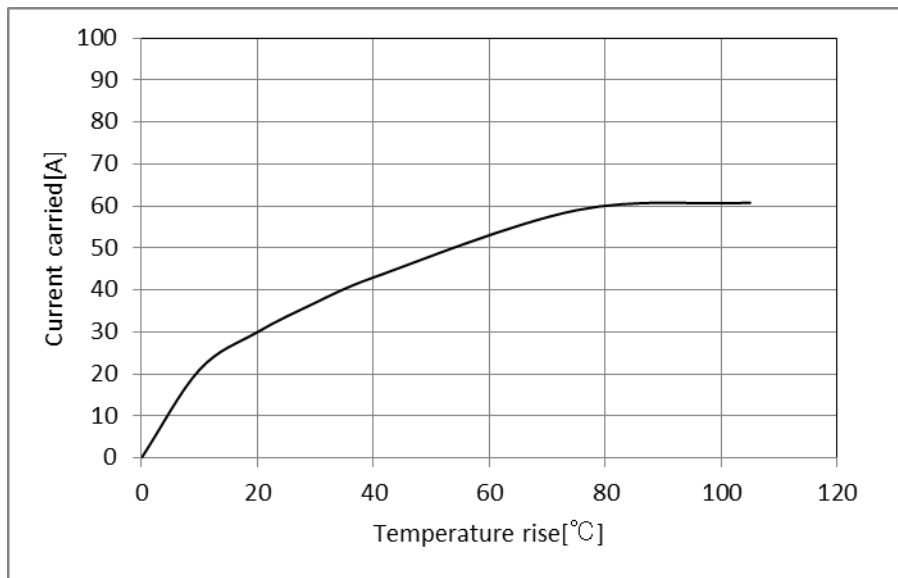
- Test specimen: Unused DF60-6P-10.16DS(27).
 Unused DF60-6S-10.16C
 Unused DF60-1012SCFA
- Test cable spec: AWG 10
- Test condition: Turn on electricity under the static state and measure.
 (Test report # TR680E-20802)

[Reference]

Derating curve



Temperature rise curve



Note QT:Qualification Test AT:Assurance Test X:Applicable Test		DRAWING NO.		ELC4-344824-00	
HRS	SPECIFICATION SHEET		PART NO.	DF60-5EP-10.16C	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL680-3028-3-00	

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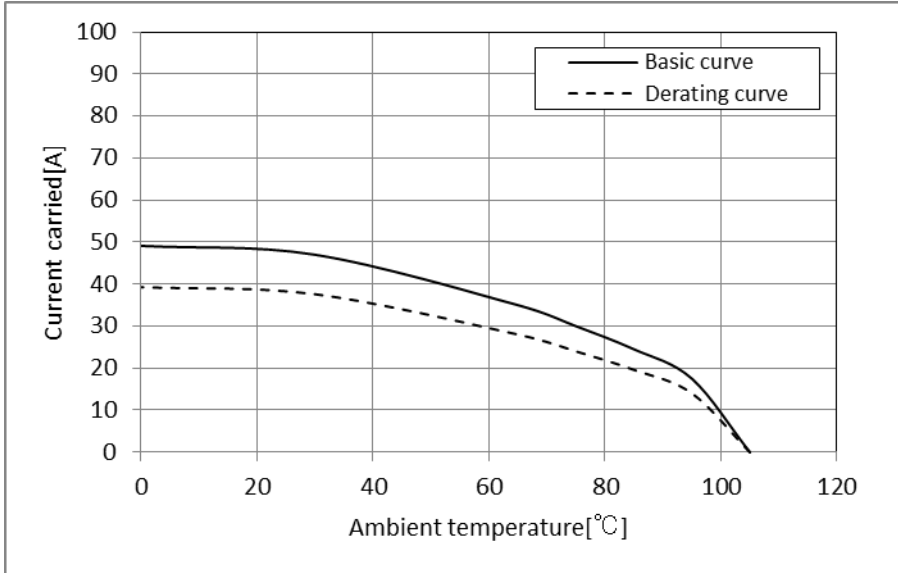


(Note 8) Measurement method of derating curve is shown below.

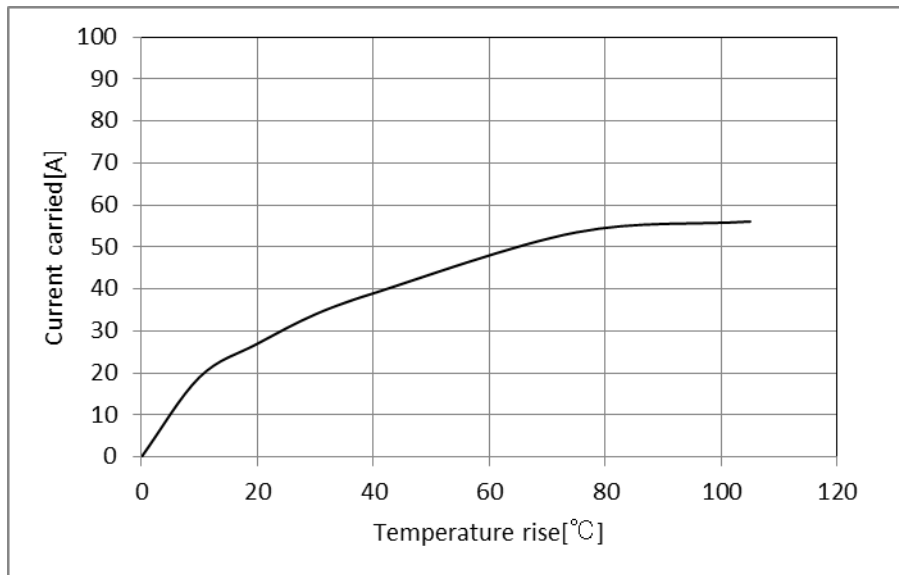
- Test specimen: Unused DF60-6P-10.16DS(27).
 Unused DF60-6S-10.16C
 Unused DF60-1012SCFA
- Test cable spec: AWG 12
- Test condition: Turn on electricity under the static state and measure.
 (Test report # TR680E-20802)

[Reference]

Derating curve



Temperature rise curve



Note QT:Qualification Test AT:Assurance Test X:Applicable Test		DRAWING NO.		ELC4-344824-00	
HRS	SPECIFICATION SHEET		PART NO.	DF60-5EP-10.16C	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL680-3028-3-00	4/4