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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)			
	CURRENT (*1)	AWG8	50A		APPLICABLE CONTACT	DF60-8SC (F) A		
		AWG10	40A			DF60-1012SC (F) A		
AWG12		31A		VOLTAGE	1000V AC/DC			
	RATED VOLTAGE	RATED CURRENT		OVERVOLTAGE CATEGORY	IP- DEGREE			
UL	600V AC/DC	AWG8 : 65A / AWG10 : 55A / AWG12 : 45A (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.			NO DAMAGE, CRACK OR LOOSENESS OF PARTS.		X	—
SHOCK		490 m/s ² DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS.			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								
Note 1: Include the temperature rising by current.								
Note 2: No condensing								
Note 3: Apply to the condition of long term storage for unused products before mount on pcb, After mounted on pcb, operating temperature and humidity range is applied for interim storage during transportation.								
	COUNT	DESCRIPTION OF REVISIONS			DESIGNED	CHECKED	DATE	
△								
Unless otherwise specified, refer to IEC 60512.					APPROVED	HS. OKAWA	17. 03. 29	
					CHECKED	TS. FUKUSHIMA	17. 03. 29	
					DESIGNED	TS. KUMAZAWA	17. 03. 29	
					DRAWN	TS. KUMAZAWA	17. 03. 29	
Note QT: Qualification Test AT: Assurance Test X: Applicable Test					DRAWING NO.		ELC-374734-00-00	
HRS	SPECIFICATION SHEET				PART NO.	DF60A-1S-10. 16C		
	HIROSE ELECTRIC CO., LTD.				CODE NO.	CL680-3058-0-00	△	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.

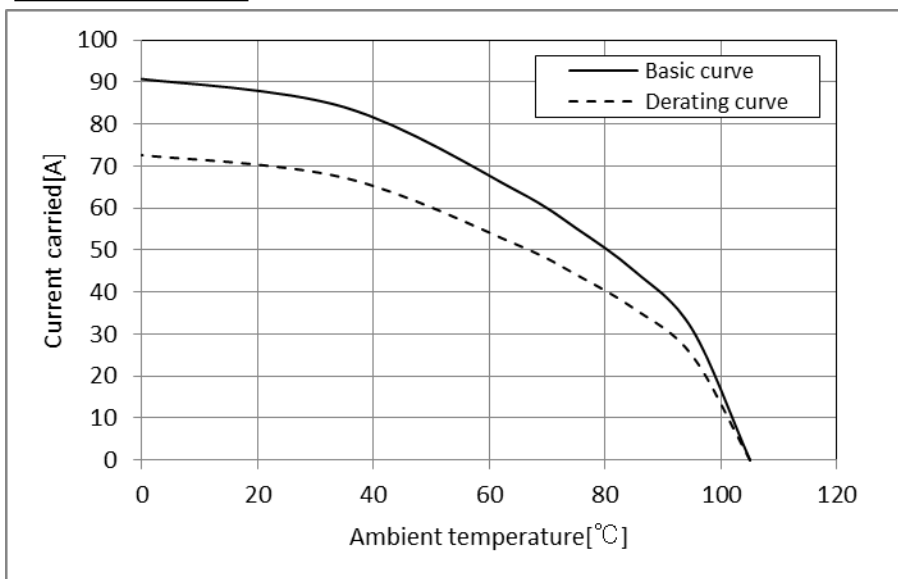
(Note 5) The value of rated current differs depending on the ambient temperature. It is recommended to use the product within the derating curve zone.

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

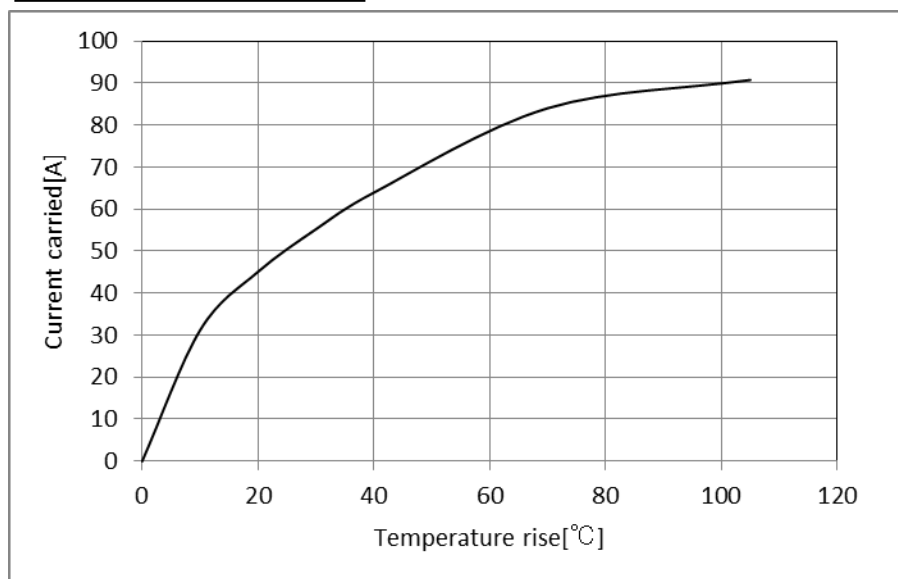
- Test specimen: Unused DF60-2P-10.16DS(27).
 Unused DF60-2S-10.16C
 Unused DF60-8SCFA
- Test cable spec: AWG 8
- Test condition: Turn on electricity under the static state and measure.
 (Test report # TR680E-20766)

[Reference]

Derating curve



Temperature rise curve



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

DRAWING NO.

ELC-374734-00-00



SPECIFICATION SHEET

PART NO.

DF60A-1S-10.16C

HIROSE ELECTRIC CO., LTD.

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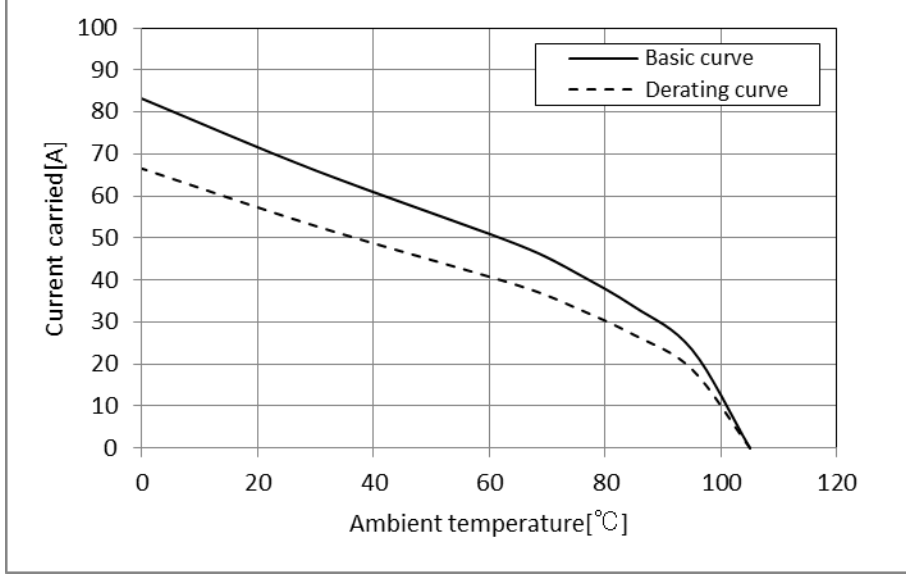
2/4

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

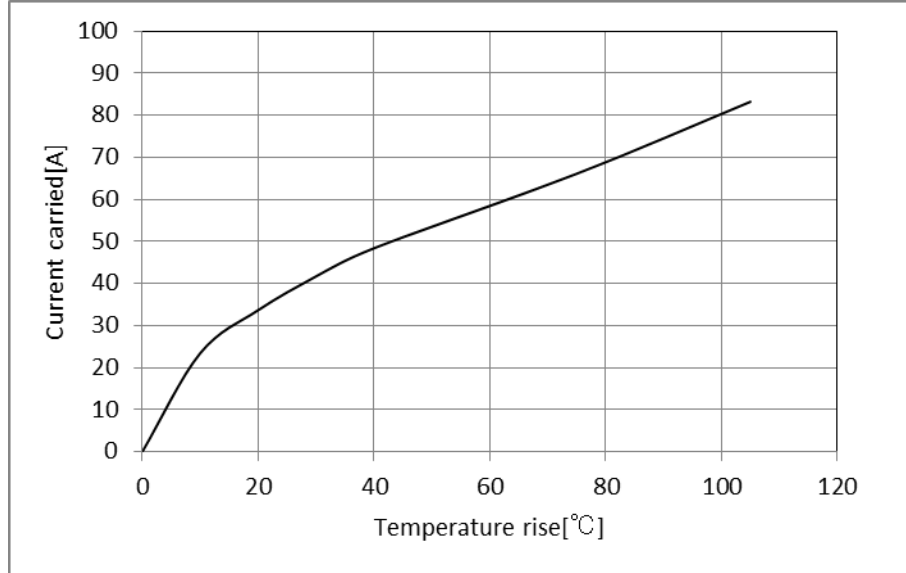
- Test specimen: Unused DF60-2P-10.16DS(27).
Unused DF60-2S-10.16C
Unused DF60-1012SCFA
- Test cable spec: AWG 10
- Test condition: Turn on electricity under the static state and measure.
(Test report # TR680E-20773)

[Reference]

Derating curve



Temperature rise curve



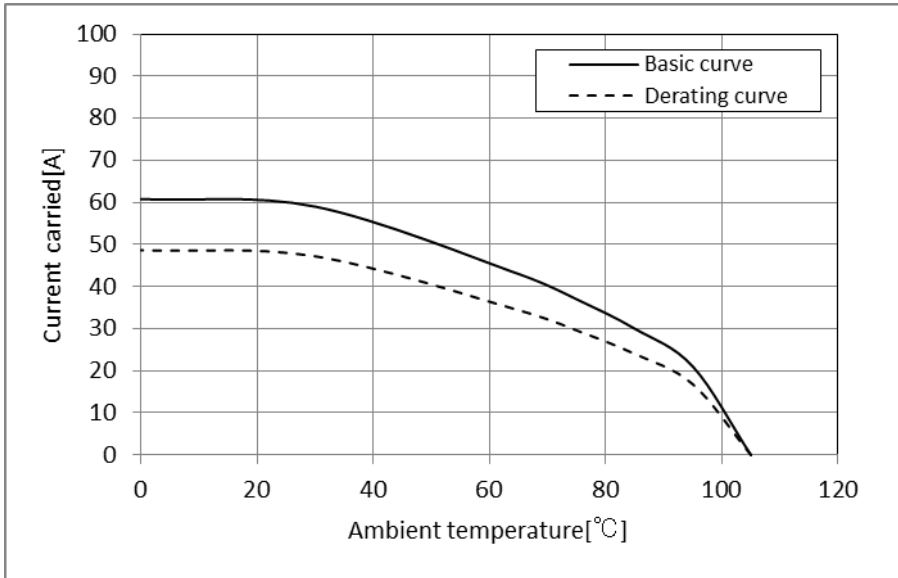
Note QT:Qualification Test AT:Assurance Test X:Applicable Test		DRAWING NO.		ELC-374734-00-00	
HRS	SPECIFICATION SHEET		PART NO.	DF60A-1S-10.16C	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL680-3058-0-00	⚠ 3/4

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

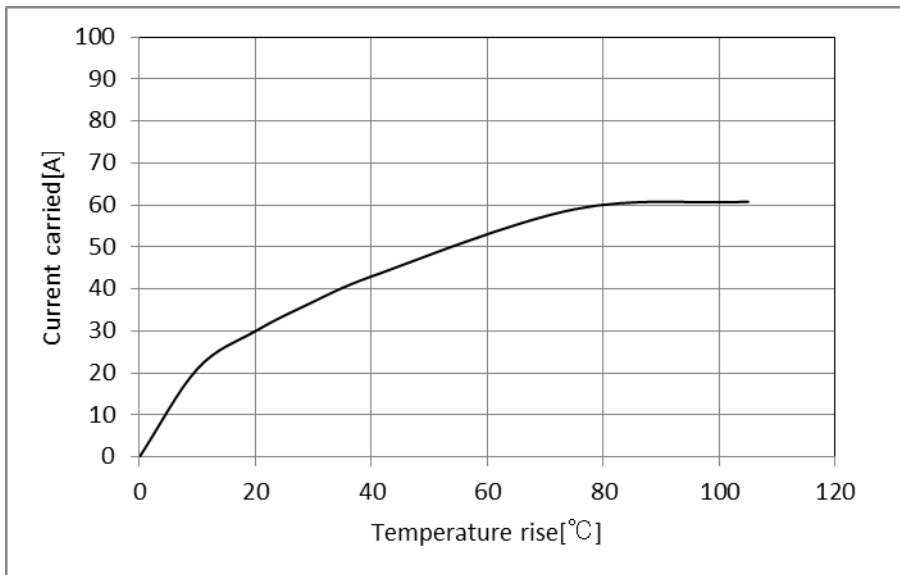
- Test specimen: Unused DF60-1P-10.16DS(27).
 Unused DF60-1S-10.16C
 Unused DF60-1012SCFA
- Test cable spec: AWG 12
- Test condition: Turn on electricity under the static state and measure.
 (Test report # TR680E-20802)

[Reference]

Derating curve



Temperature rise curve



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

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SPECIFICATION SHEET

PART NO.

DF60A-1S-10.16C

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CL680-3058-0-00



4/4