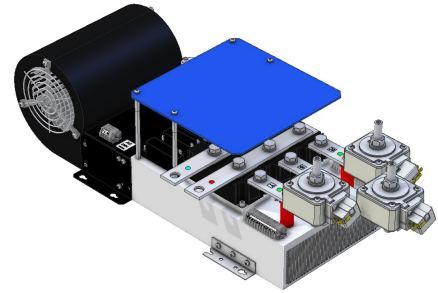


**HIGHLIGHTS**

- Radial fan
- High reliability
- Ultrafast fuses included
- Thermostat, snubber and varistor included
- Working voltage up to 480V<sub>RMS</sub>
- Insulation 3000 V<sub>RMS</sub> /1 min
- Accesories support plate (e.g.:control cards)



non-contractual photo

**GENERAL SPECIFICATIONS**

Nominal line to line input voltage (V <sub>RMS</sub> )	480 V <sub>AC</sub> ±10%
Repetitive peak reverse voltage (V <sub>RRM</sub> )	1600 V <sub>p</sub>
Maximum working current (I <sub>DC</sub> ) (1)	1186 A <sub>DC</sub> @ 35°C T <sub>AMB</sub>
Maximum nominal working current (I <sub>DC</sub> ) (2)	958 A <sub>DC</sub> @ 35°C T <sub>AMB</sub>
Working altitude	≤1000 m ASL
Cooling (3)	Forced air, radial fan, 230 V <sub>RMS</sub> , 50 Hz, 207 W

(1): Maximum non-continuous working current.

(2): Maximum continuous working current without thermal protection trip.

(3): Performance at 60 Hz mains frequency differs from 50 Hz. For 60 Hz applications please consult the factory.

**SEMICONDUCTOR SPECIFICATIONS**

Peak non-repetitive surge current (I <sub>TSM</sub> )	18 kA @ T <sub>p</sub> =10 ms, V <sub>RM</sub> =60%V <sub>RRM</sub>
	19.8 kA @ T <sub>p</sub> =10 ms, V <sub>RM</sub> ≤ 10V
I <sup>2</sup> t capacity for fusing @ T <sub>JMAX</sub>	1620 kA <sup>2</sup> s @ T <sub>p</sub> =10 ms, V <sub>RM</sub> =60%V <sub>RRM</sub>
	1960 kA <sup>2</sup> s @ T <sub>p</sub> =10 ms, V <sub>RM</sub> ≤ 10V
Maximum rate of rise of on-state current (repetitive) (di <sub>r</sub> /dt)	150 A/μs
Maximum rate of rise of on-state current (non-repetitive) (di <sub>r</sub> /dt)	300 A/μs
Maximum peak on-state voltage (V <sub>TM</sub> )	1.3 V @ I <sub>TM</sub> = 1700 A
Critical rate of rise of off-state voltage (dv/dt)	min. 1000 V/μs @ T <sub>J</sub> = 125°C, V <sub>D</sub> = 80% V <sub>DRM</sub>
Gate trigger voltage (V <sub>GT</sub> )	max. 3 V @ T <sub>J</sub> = 25°C, V <sub>D</sub> = 10 V, I <sub>T</sub> = 3 A
Gate trigger current (I <sub>GT</sub> )	max. 300 mA @ T <sub>J</sub> = 25°C, V <sub>D</sub> = 10 V, I <sub>T</sub> = 3 A
Holding current (I <sub>H</sub> )	1000 mA @ T <sub>J</sub> = 25°C, V <sub>D</sub> = 12 V

**PROTECTIONS**

dv/dt protection (RC)	RC network 0.22 μF / 56 Ω
Peak voltage protection (VDR)	550 V <sub>RMS</sub> varistor
Current protection (Semiconductor fuses) (1)	069UR3S1250B
Microswitch fuse indicators	3 x MS 3V1-5N
Thermal protection (thermostat)	80°C NC

(1): Fuses only for shortcircuit protection. User must provide external protection for continuous overloads and cable size.

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### TERMINAL SPECIFICATIONS

Input power terminals (AC terminals)	(M12) 13 to 15 Nm
Module power terminals	(M10) 12 to 15 Nm
Output power terminals (DC terminals)	1xØ13 (M12) 13 to 15 Nm (1)
Control and auxiliary terminals block	WAGO series 260 terminal block 1.5 mm <sup>2</sup> / AWG 16

(1): Tightening should be performed with two wrenches, avoiding transmitting lateral efforts to the connection terminal which would produce a deterioration of the element semiconductor.

### ENVIRONMENT SPECIFICATIONS

Protection grade (EN 60520 / CEI 529 / UNE 20324)	IP 00
Humidity max.	50% RH @ 35°C / 90 % RH @ 20°C
Pollution degree	III
Isolation	3000 V <sub>RMS</sub> / 1 min

### LOSSES

Power dissipation of semiconductors at full charge	Approx. 2012 W
Maximum power dissipation of fuses at full charge	Approx. 159 W
Maximum total power dissipation at full charge	Approx. 2170 W

### MECHANICAL SPECIFICATIONS

Mounting position	Any
Storage temperature	-25°C to 80°C
Width	292 mm
Depth	365 mm
Height	850 mm
Approx. Weight	22.2 kg

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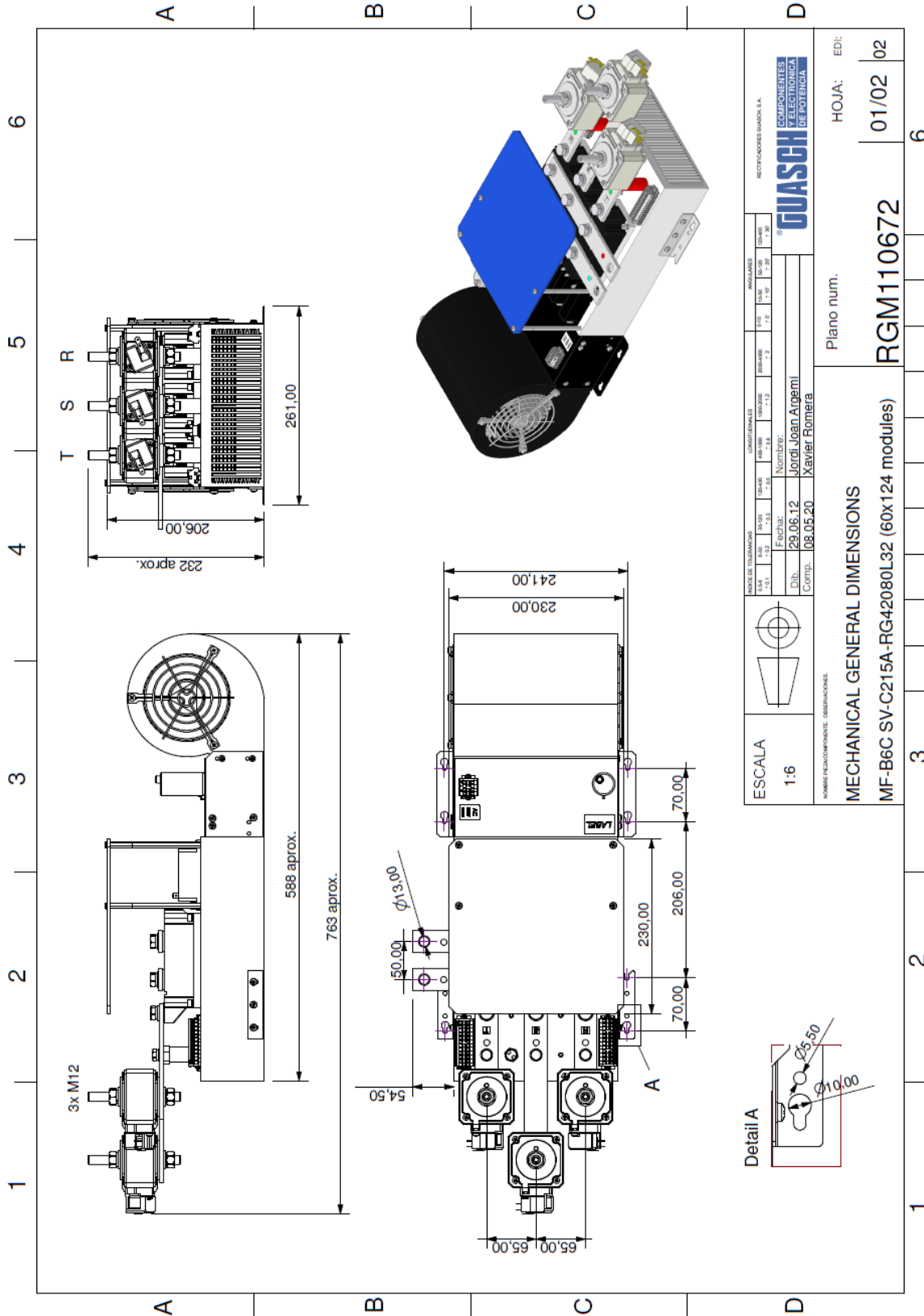
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**MECHANICAL DIMENSIONS**



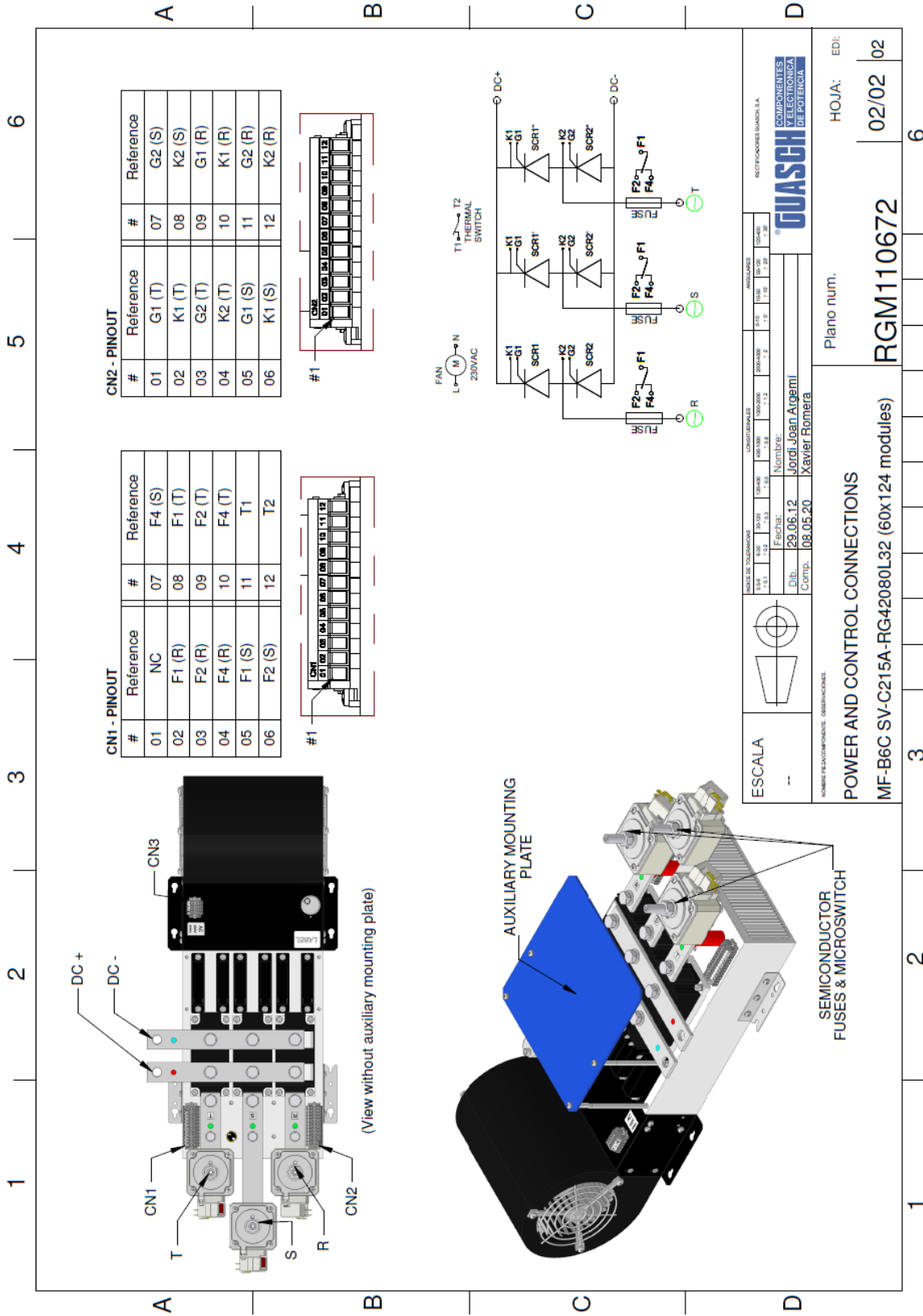
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**CIRCUIT & CONTROL / AUXILIARY TERMINALS**



ESCALA: ---

MODELOS TRANSFORMACIONES: 100V-200V, 150V-200V, 200V-200V, 230V-200V, 240V-200V, 250V-200V, 260V-200V, 270V-200V, 280V-200V, 290V-200V, 300V-200V, 310V-200V, 320V-200V, 330V-200V, 340V-200V, 350V-200V, 360V-200V, 370V-200V, 380V-200V, 390V-200V, 400V-200V, 410V-200V, 420V-200V, 430V-200V, 440V-200V, 450V-200V, 460V-200V, 470V-200V, 480V-200V, 490V-200V, 500V-200V, 510V-200V, 520V-200V, 530V-200V, 540V-200V, 550V-200V, 560V-200V, 570V-200V, 580V-200V, 590V-200V, 600V-200V, 610V-200V, 620V-200V, 630V-200V, 640V-200V, 650V-200V, 660V-200V, 670V-200V, 680V-200V, 690V-200V, 700V-200V, 710V-200V, 720V-200V, 730V-200V, 740V-200V, 750V-200V, 760V-200V, 770V-200V, 780V-200V, 790V-200V, 800V-200V, 810V-200V, 820V-200V, 830V-200V, 840V-200V, 850V-200V, 860V-200V, 870V-200V, 880V-200V, 890V-200V, 900V-200V, 910V-200V, 920V-200V, 930V-200V, 940V-200V, 950V-200V, 960V-200V, 970V-200V, 980V-200V, 990V-200V, 1000V-200V.

RECTIFICADORES GUASCH, S.A.

**GUASCH** COMPONENTES Y ELECTRONICA DE POTENCIA

Nombre: Jordi Joan Argemí  
 Dib.: 29.06.12  
 Comp.: 08.05.20  
 Xavier Homera

Plano num.: RGM110672

HOJA: 02/02

POWER AND CONTROL CONNECTIONS  
 MF-B6C SV-C215A-RG42080L32 (60x124 modules)

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 Fax.: +34 93 300 18 41  
 e-mail: info@e-guasch.com  
 www.e-guasch.com

## MOUNTING CONSIDERATIONS

It's necessary a minimum distance of 100 mm with regard to the envelope. The free air circulation should be guaranteed. Avoiding the heat sources of nearby to assembly.

In the real applications it is important to consider a safety margin with regarding the working current, we recommend a margin of the 20%.

For critical cases (24 hours work, repetitive overloads...), margins of the 30% to 50% are used.

## ORDER CODES & OPTIONS

MF- B6C 1180 F 16 RCVTF /A  
(1) (2) (3) (4) (5) (6) (7)

1- MF, Series identifier

2- B6C, Circuit identifier

3- 1180; Maximum current identifier

4-F, Refrigeration identifier (F: Forced)

5-16;  $V_{RRM}/10$  identifier

6-Accessories:

RC: Resistance-capacitor (snubber) included

V: Varistor included

T. Thermal switch included

F: Semiconductor fuse protection included. (fuse also includes microswitch)

7-Options:

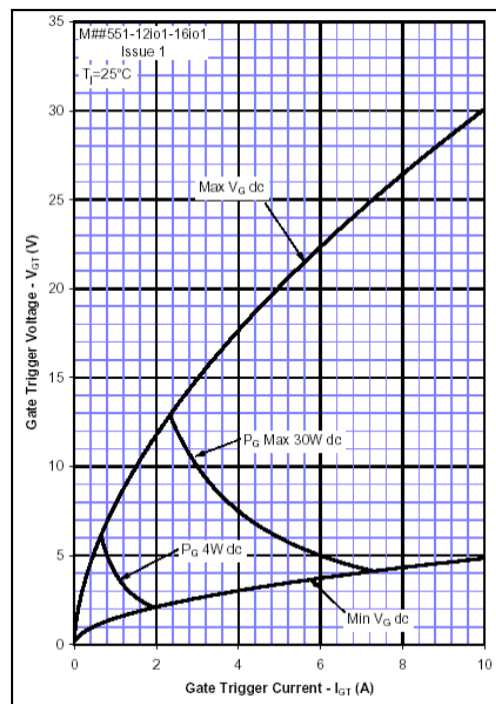
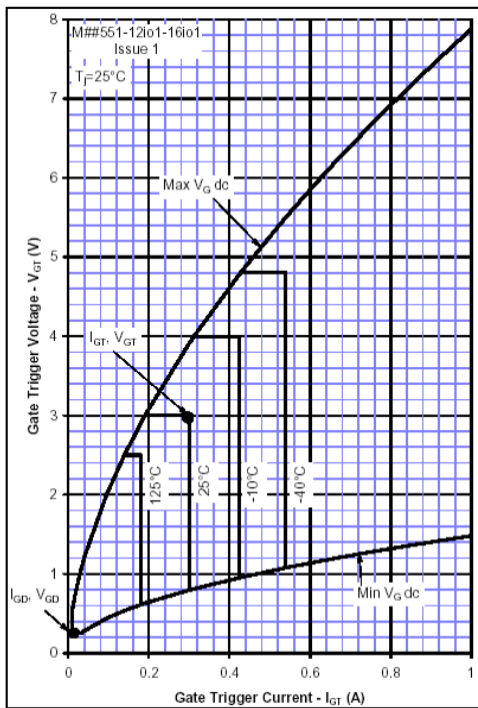
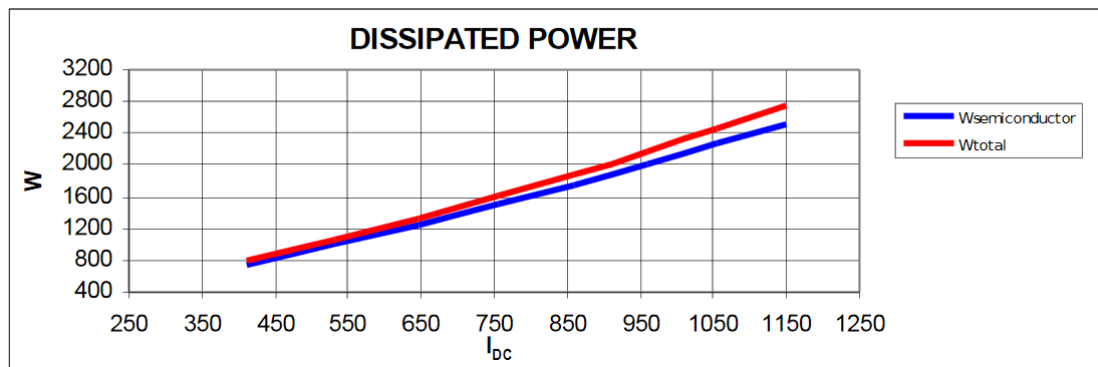
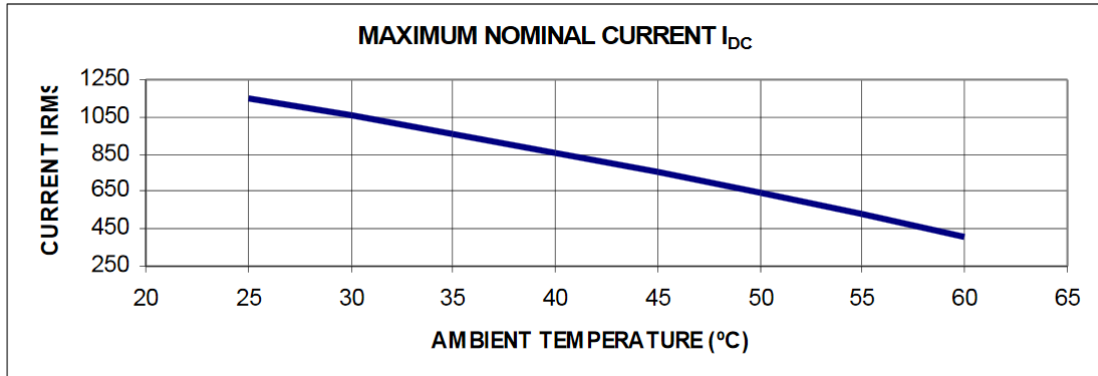
/A or without indication: Power output terminals on right side (standard type)

/B: Power output terminal on left side.

/C: Positive output on right side & negative output on left side

/D: Positive output on left side & negative output on right side

**OVERALL PERFORMANCE**



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No Annotation: The product parameters are fixed and the product is available to data sheet specification.

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