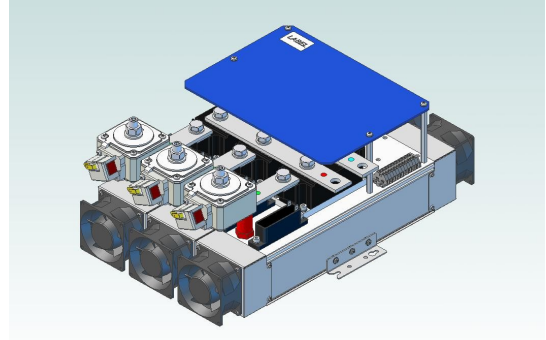


**HIGHLIGHTS**

- Wide range.
- Reliability.
- Short delivery time.
- Ultrafast fuses included.
- Thermostat, snubber and varistor included.
- Ready to use.
- Working voltage up to 480 V<sub>RMS</sub>.
- Insulation 3000 V<sub>RMS</sub>/1 min.
- With plate for accessories.



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)	890 A <sub>DC</sub> @ 35°C TA
Maximum nominal working current (I <sub>DC</sub> ) (2)	663 A <sub>DC</sub> @ 35°C TA
Working altitude	<= 1000 meters
Cooling (3)	Forced air, 2x3 fans 80x80 @ 230VRMS

(1): The maximum non continuous working current

(2): The maximum continuous working current without thermal protection activation

(3): Performance for 60Hz working conditions is different from 50Hz, for 60Hz applications please consult the factory.

**SEMICONDUCTOR SPECIFICATIONS**

Peak non-repetitive surge current (I <sub>TSM</sub> ) @ T <sub>JMAX</sub>	14.5 kA @ T <sub>P</sub> =10ms, V <sub>RM</sub> =60%V <sub>RRM</sub>
	16 kA @ T <sub>P</sub> =10ms, V <sub>RM</sub> <=10V
I <sup>2</sup> t capacity for fusing @ T <sub>JMAX</sub>	1050 kA <sup>2</sup> s @ T <sub>P</sub> =10ms, V <sub>RM</sub> =60%V <sub>RRM</sub>
	1280 kA <sup>2</sup> s @ T <sub>P</sub> =10ms, V <sub>RM</sub> <=10V
Maximum rate of rise of on-state current (repetitive) (di <sub>T</sub> /dt)	200 A/μs
Maximum rate of rise of on-state current (non-repetitive) (di <sub>T</sub> /dt)	400 A/μs
Maximum peak on-state voltage (V <sub>TM</sub> )	1,4 V @ I <sub>TM</sub> =1700A
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. 2.5 V @ T <sub>J</sub> =25°C, V <sub>D</sub> =12V, I <sub>T</sub> =3A
Gate trigger current (I <sub>GT</sub> )	Max. 250 mA @ T <sub>J</sub> =25°C, V <sub>D</sub> =12V, I <sub>T</sub> =3A
Holding current (I <sub>H</sub> )	300 mA @ T <sub>J</sub> =25°C; V <sub>D</sub> =12V

**PROTECTION**

dv/dt protection (RC)	RC network 0,22μF/56 Ohms
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)	85°C NC

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

121120 Rev.:4

### 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 & auxiliary terminals	WAGO series 260 terminal blocks 1,5 mm <sup>2</sup> / AWG 16

(1):The press should be performed with two keys, avoiding to transmit lateral efforts at terminal of connection, what would be able to produce the deterioration of the element semiconductor.

### ENVIRONMENT SPECIFICATIONS

Protection grade (EN-60529 / CEI529 / 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

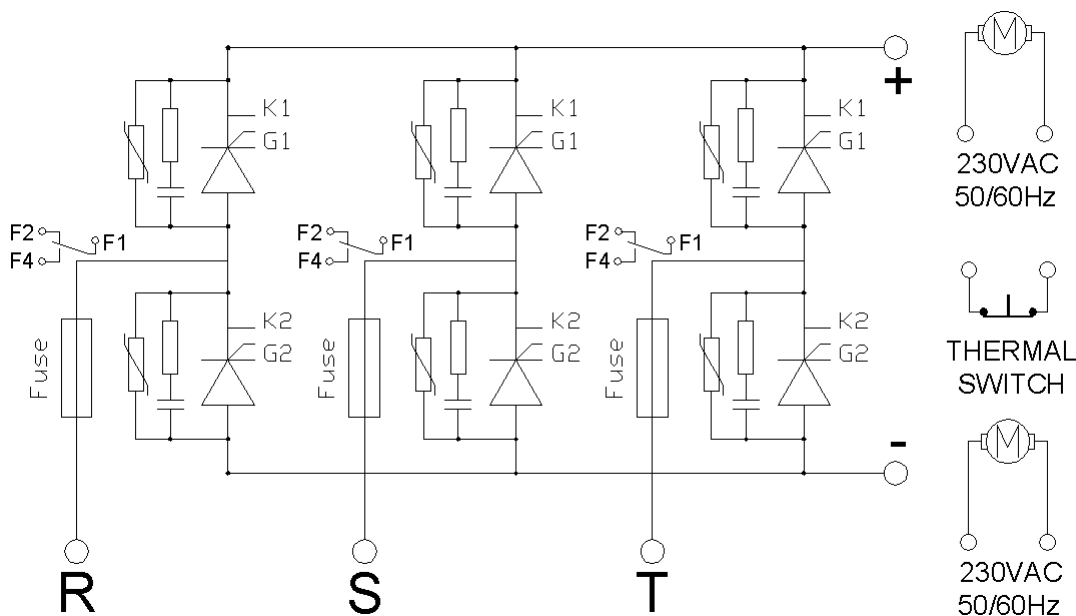
### LOSSES

Power dissipation of semiconductors at full charge	Aprox. 1250 W
Maximum power dissipation of fuses at full charge	Aprox. 110 W
Maximum total power dissipation at full charge	Aprox. 1360 W

### MECHANICAL SPECIFICATIONS

Mounting position	Any
Storage temperature	-25 to 80°C
Width	292 mm
Depth	365 mm
Height	850 mm
Aprox. Weight	19,40 Kg.

### CIRCUIT



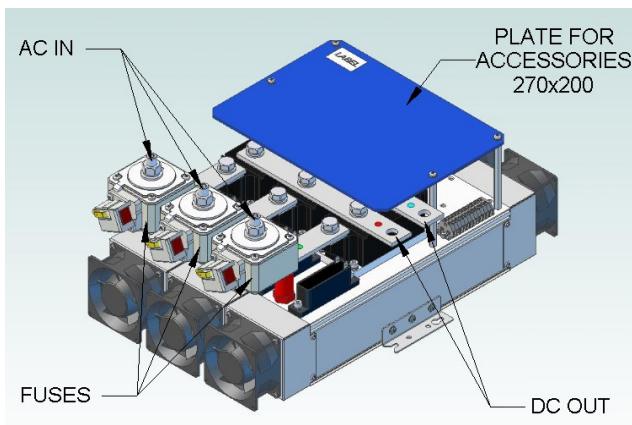
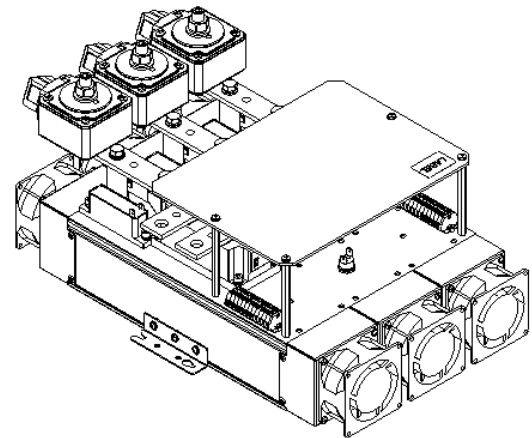
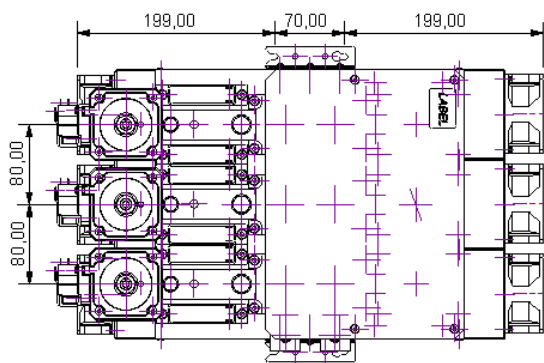
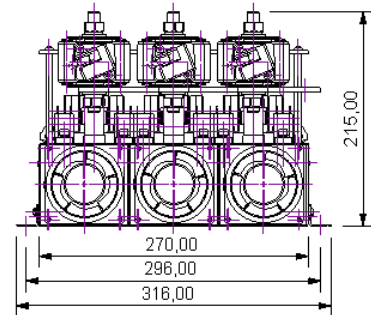
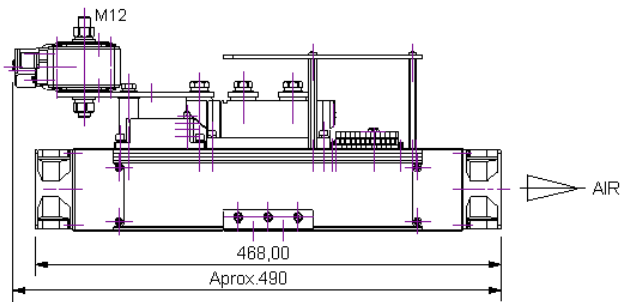
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SPAIN

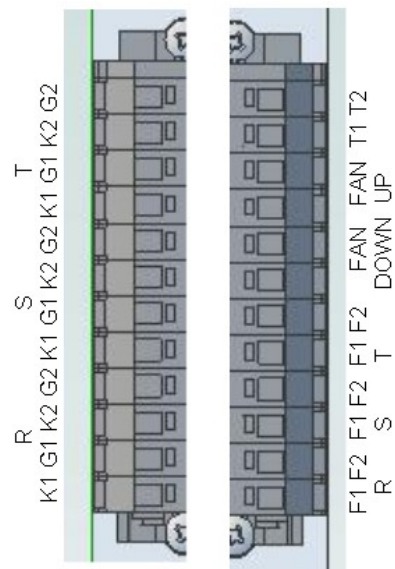
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**DIMENSIONS**



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**MOUNTING CONSIDERATIONS**

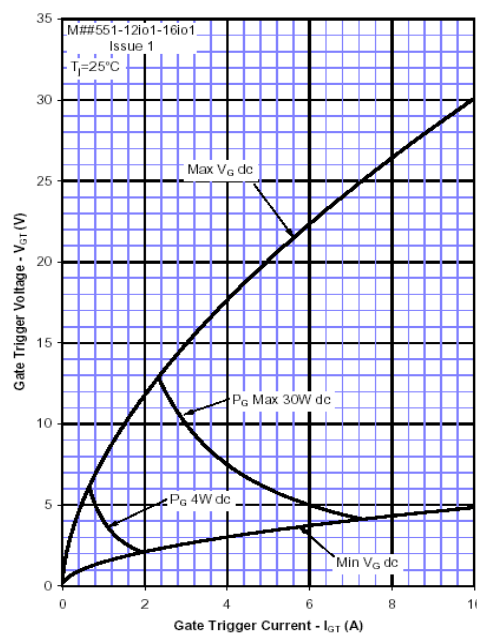
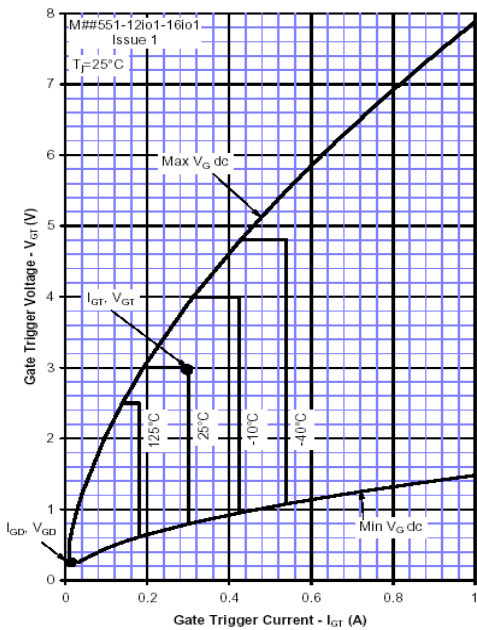
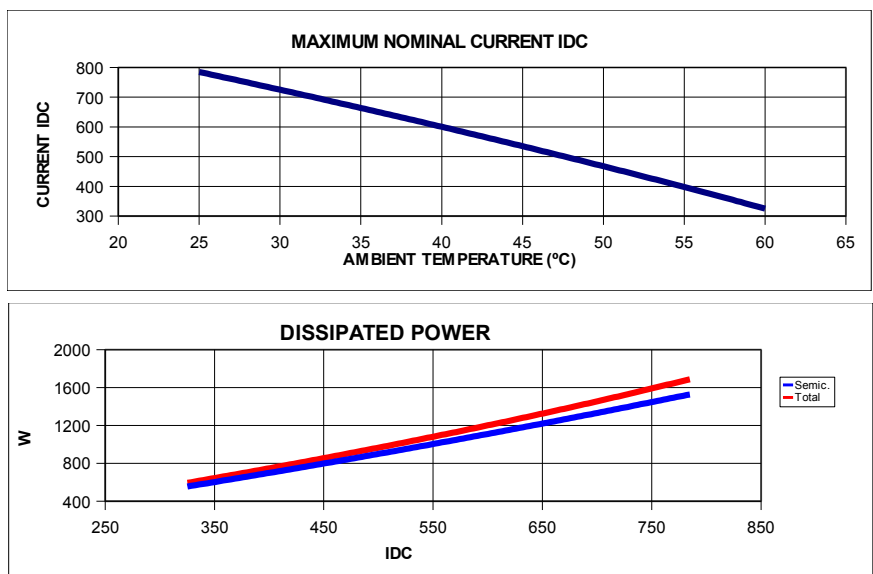
It's necessary a minimum distance of 100 mm with regard to the envelope. The free air circulation should be guaranteed. Avoiding the heat sources of nearby to assembly.

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.

For redundant application apply a -30% current data.

**POWER AND CHARACTERISTIC CURVES**



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 www.e-guasch.com

## ORDER CODES & OPTIONS

MF- B6C 0880 F 16 RCVTF /A  
(1) (2) (3) (4) (5) (6) (7)

1- MF, Series identifier

2- B6C, Circuit identifier

3- 0880; Maximum current identifier

4-F, Refrigeration identifier (N:Natural; 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

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

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**ADVANCED TECHNICAL INFORMATION:** La conception de produit est fini et la notice technique est comme il a été conçu pour la fabrication.

Sans annotation: La notice technique indique que le produit est selon la même

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