

PRELIMINARY TECHNICAL INFORMATION

HIGHLIGHTS

- Wide range.
- Reliability.
- Short delivery time.
- Ultrafast fuses included.
- Thermostat, snubber and varistor included.
- Ready to use.
- Working voltage up to 530 V_{RMS}.
- Insulation 3000 V_{RMS}/1 min.
- With plate for accessories.

Non-contractual photo

GENERAL SPECIFICATIONS

Nominal line to line input voltage (V _{RMS})	530 V _{AC} ±10%
Repetitive peak reverse voltage (V _{RRM})	1600 V _P
Maximum working current (I _{DC}) (1)	1063 A _{DC} @ 35°C TA
Maximum nominal working current (I _{DC}) (2)	881 A _{DC} @ 35°C TA
Cooling	Forced convection, 3 fan Ø120

(1): The maximum non continuous working current

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

SEMICONDUCTOR SPECIFICATIONS

Peak non-repetitive surge current (I _{TSM}) @ T _{JMAX}	13 kA @ T _P =10ms, V _{RM} =60%V _{RRM}
	14,4 kA @ T _P =10ms, V _{RM} =0V
I ² t capacity for fusing @ T _{JMAX}	845 kA ² s @ T _P =10ms, V _{RM} =60%V _{RRM}
	813 kA ² s @ T _P =10ms, V _{RM} =0V
Maximum rate of rise of on-state current (repetitive) (di _T /dt)	100 A/μs
Maximum rate of rise of on-state current (non-repetitive) (di _T /dt)	500 A/μs
Maximum peak on-state voltage (V _{TM})	1,3 V @ I _{TM} =1200A
Critical rate of rise of off-state voltage (dv/dt)	Min. 1000 V/μs @ T _J =125°C, V _D =2/3 V _{RRM}
Gate trigger voltage (V _{GT})	max. 2 V @ T _J =25°C, V _D =6V
	max. 3 V @ T _J =-40°C, V _D =6V
Gate trigger current (I _{GT})	max. 300 mA @ T _J =25°C, V _D =6V
	max. 400 mA @ T _J =-40°C, V _D =6V
Latching current (I _L)	400 mA @ T _J =25°C, t _p =30μs; V _D =6V
Holding current (I _H)	300 mA @ T _J =25°C; V _D =6V

PROTECTION

dv/dt protection (RC)	RC network 0,22μF/56 Ohms
Peak voltage protection (VDR)	550 V _{RMS} varistor
Current protection (Semiconductor fuses) (1)	069UR3S1000B
Microswitch (fuse indicators)	3 x MS 3V1-5N
Thermal protection (Thermostats)	90°C NC

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

120531 Rev.:0

RECTIFICADORES GUASCH, S.A.

Ciutat de Granada, 80
08005 BARCELONA
SPAIN

Se reserva el derecho de cambiar los límites, las condiciones de prueba y dimensiones indicadas en esta hoja sin previo aviso.
Reserves the right to change limits, test conditions and dimensions given in this data sheet at any time without previous notice.

Tel.: +34 93 309 88 91
Fax.: +34 93 300 18 41
e-mail: info@e-guasch.com
www.e-guasch.com

TERMINAL SPECIFICATIONS

Input power terminals (AC terminals)	(M12) 13 to 15 Nm
Module power terminals	(M8) 11 to 13 Nm
Output power terminals (DC terminals)	2xØ11 (M10) 13 to 15 Nm (1)
Control & signal terminals	WAGO 260 series terminal block 0,08-1,5mm ² (28-16 AWG)

(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 _{RMS} / 1 min

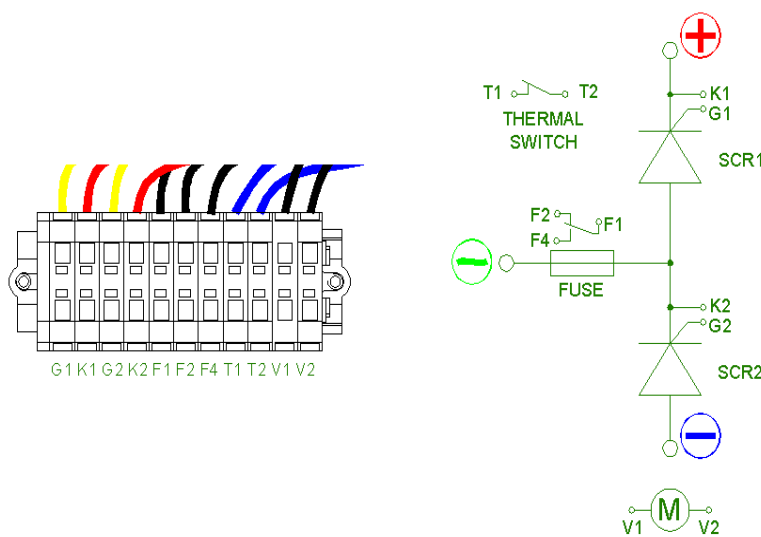
LOSSES

Power dissipation of semiconductors at full charge	Aprox. 1600 W
Maximum power dissipation of fuses at full charge	Aprox. 127 W
Maximum total power dissipation at full charge	Aprox. 1727 W

MECHANICAL SPECIFICATIONS

Mounting position	Vertical, fins perpendicular to ground
Storage temperature	-25 to 80°C
Width	489 mm
Depth	398 mm
Height	265 mm
Aprox. Weight	27 Kg.

CONNECTIONS AND DIMENSIONS

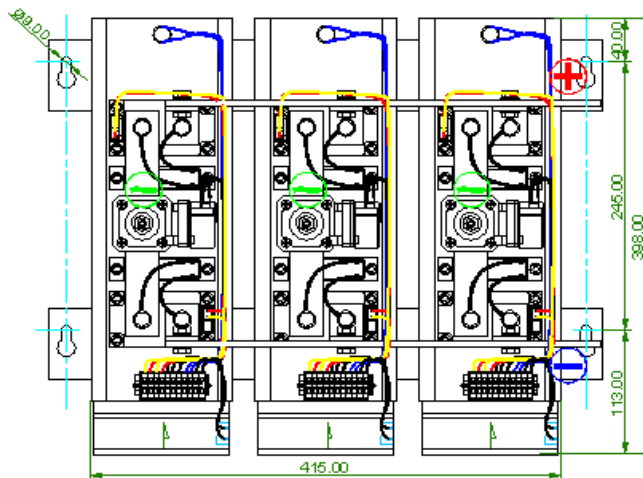
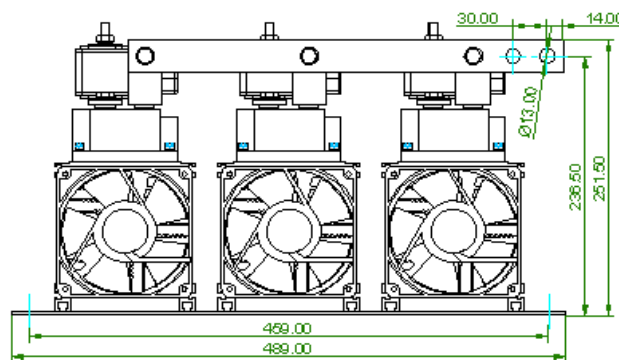
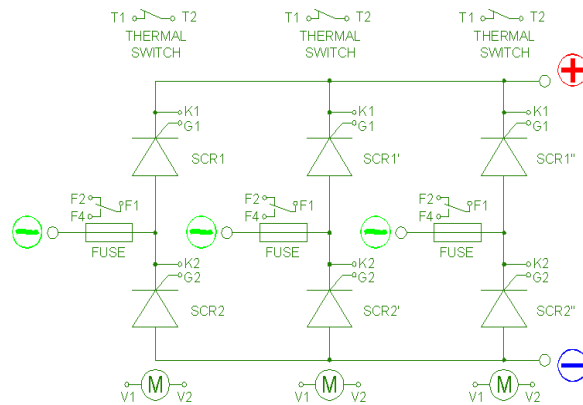


RECTIFICADORES GUASCH, S.A.

Ciutat de Granada, 80
08005 BARCELONA
SPAIN

Se reserva el derecho de cambiar los límites, las condiciones de prueba y dimensiones indicadas en esta hoja sin previo aviso.
Reserves the right to change limits, test conditions and dimensions given in this data sheet at any time without previous notice.

Tel.: +34 93 309 88 91
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.

120531 Rev.:0

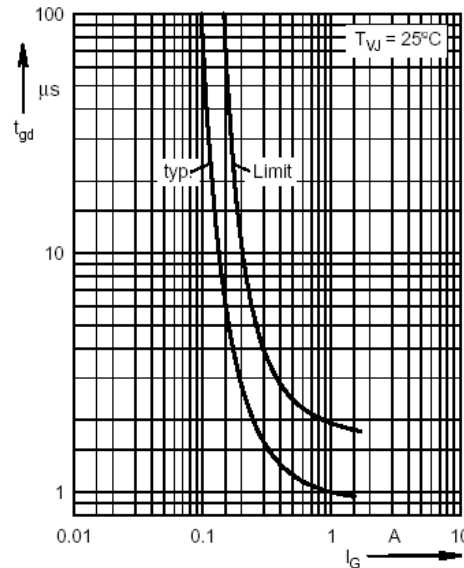
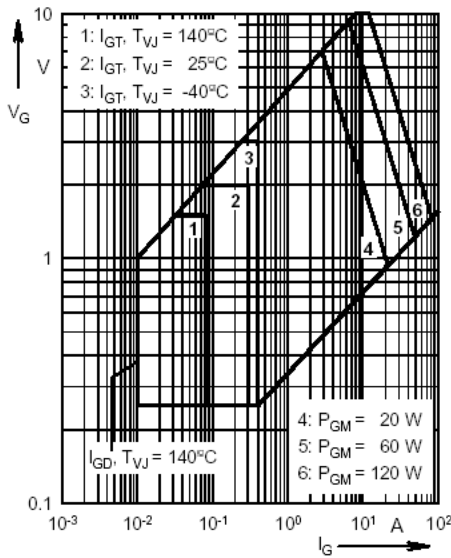
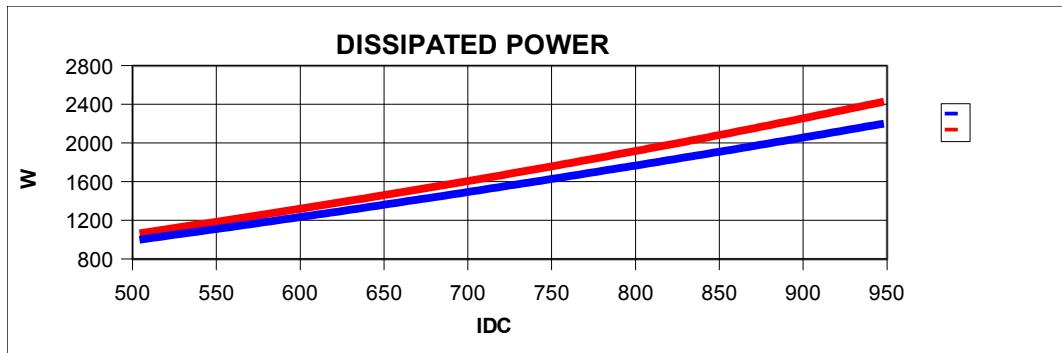
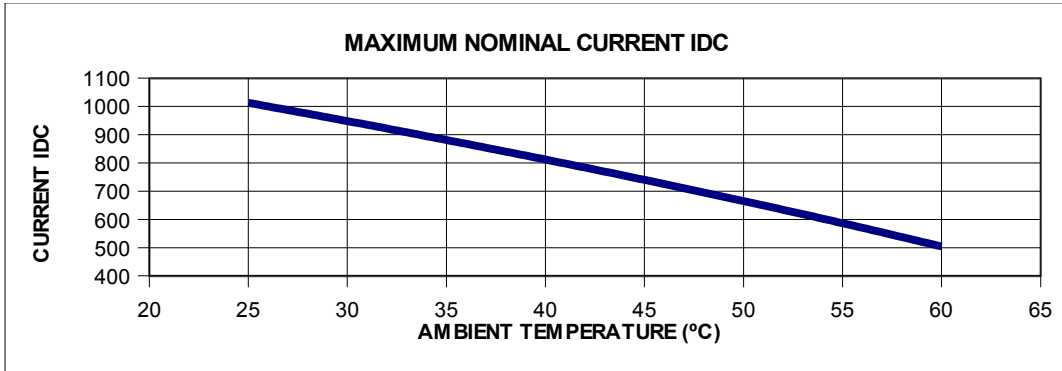
RECTIFICADORES GUASCH, S.A.

Ciutat de Granada, 80
08005 BARCELONA
SPAIN

Se reserva el derecho de cambiar los límites, las condiciones de prueba y dimensiones indicadas en esta hoja sin previo aviso.
Reserves the right to change limits, test conditions and dimensions given in this data sheet at any time without previous notice.

Tel.: +34 93 309 88 91
Fax.: +34 93 300 18 41
e-mail: info@e-guasch.com
www.e-guasch.com

POWER AND CHARACTERISTIC CURVES



120531 Rev.:0

ORDER CODES & OPTIONS

MF- B6C 0920 F 12 RCVTF /A
(1) (2) (3) (4) (5) (6) (7)

1- MF, Series identifier

2- B6C, Circuit identifier

3- 0920; Maximum current identifier

4-F, Refrigeration identifier (N:Natural; F: Forced)

5-12; $V_{RRM}/10$ 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

ANOTACIONES EN LA HOJA DE ESPECIFICACIONES:

RECTIFICADORES GUASCH, S.A. utiliza la siguiente anotación para identificar el estado del producto, en el lado izquierdo de la primera página:

PRELIMINARY TECHNICAL INFORMATION: El producto se encuentra en proceso de diseño y desarrollo. La información presenta los datos del producto pero algunas características pueden cambiar.

ADVANCED TECHNICAL INFORMATION: El producto se encuentra totalmente diseñado y las características se refieren a la fabricación en serie.

Sin anotación: Los parámetros del producto están fijados y se suministra de acuerdo con las especificaciones publicadas.

Los datos indicados en esta publicación corresponden a especificaciones de producto, queda excluida cualquier garantía expresa o implícita sobre sus propiedades o su aplicación, así como cualquier responsabilidad sobre daños directos o indirectos producidos por los materiales o resultantes de su aplicación. La empresa se reserva el derecho de realizar cambios en las especificaciones de los productos sin previo aviso. La información respecto a métodos de uso y aplicaciones se indica sólo como guía y no constituye garantía alguna de funcionamiento satisfactorio en un determinado equipo o aplicación. Es responsabilidad del usuario determinar la idoneidad del producto para su aplicación utilizando la información disponible y asegurarse de que la misma esta actualizada.

Cualquier nombre de producto o marca usada en esta publicación corresponde a marcas depositadas, marcas registradas o nombres protegidos por sus respectivos propietarios.

DATASHEET ANNOTATIONS:

RECTIFICADORES GUASCH, S.A. annotate datasheets in the left corner of the front page, to indicate product status:

PRELIMINARY TECHNICAL INFORMATION: The product is in design and development. The datasheet represents the product as it is understood but details may change.

ADVANCED TECHNICAL INFORMATION: The product design is complete and final characterisation for volume production is well in hand.

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

The technical data are to specify components, not to guarantee their properties. No warranty or guarantee expressed or implied is made regarding delivery or performance. The Company reserves the right to alter without prior notice the specification of any product. Information concerning possible methods of use is provided as a guide only and does not constitute any guarantee that such methods of use will be satisfactory in a specific piece of equipment. It is the user's responsibility to fully determine the performance and suitability of any equipment using such information and to ensure that any publication or data used is up to date.

All brand names and product names used in this publication are trademarks, registered trademarks or trade names of their respective owners.

DATASHEET ANNOTATIONS:

RECTIFICADORES GUASCH, S.A. Indiqué dans la notice technique a la part inferieur à gauche le suivant pour vous informer de la situation du produits

PRELIMINARY TECHNICAL INFORMATION: Le produit est dans la conception et le développement. La notice technique représente le produit comme il a été conçu mais les détails peuvent changer.

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

Les donnees indiqués dans la notice technique sont conformément aux spécifications des composants, sont exclues toutes autres conditions ou garanties exprimées ou implicites concernant la qualité et le bon fonctionnement des matériels, ainsi que toute responsabilité pour les dommages causés directement ou indirectement par les matériels ou résultant de leur utilisation. Nous nous réservons la possibilité de changement sans notification. L'information à propos des méthodes possibles d'usage est fournie comme un guide conformément aux spécifications et instructions et ne constitue pas garantie que telles méthodes d'usage sera satisfaisant dans un morceau spécifique d'équipement. C'est la responsabilité de l'Acheteur déterminer l'exécution et l'aptitude du produit et s'assure qu'il a la dernière mise à jour de la notice technique.

Des noms de marque et produit utilisés dans cette publication sont enregistrées et propriété de leurs propriétaires respectifs.

© RECTIFICADORES GUASCH, S.A.

DOCUMENTACION TECNICA, TECHNICAL DOCUMENTATION, DOCUMENTATION TECHNIQUE

PRODUCIDO EN ESPAÑA, PRODUCED IN SPAIN, PRODUIT EN ESPAGNA

PROHIBIDA SU VENTA, NOT FOR SALE, PAS A VENDRE

Your Needs, Our Solutions