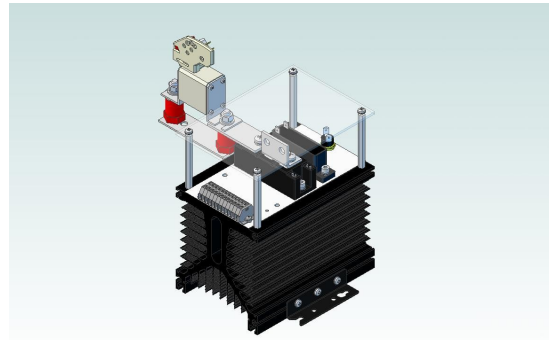


HIGHLIGHTS

- Reliability.
- Short delivery time.
- Ultrafast fuse included.
- Thermostat, snubber and varistor included.
- Ready to use.
- Working voltage up to 400 V_{RMS}.
- Insulation 3000 V_{RMS}/1 min.



Non-contractual image

GENERAL SPECIFICATIONS

Nominal line to line input voltage (V _{RMS})	400 V _{AC} ±10%
Repetitive peak reverse voltage (V _{RRM})	1200 V _P
Maximum working current (I _{RMS}) (1)	156 A _{RMS} @ 45°C TA
Maximum nominal working current (I _{RMS}) (2)	106 A _{RMS} @ 45°C TA
Cooling	Natural air

(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})	6000 A @ T _p =10ms, T _j =45°C, (50Hz), sine
	5250 A @ T _p =10ms, T _j =125°C, (50Hz), sine
I ² t capacity for fusing	180 kA ² s @ T _p =10ms, T _j =45°C, (50Hz), sine
	137 kA ² s @ T _p =10ms, T _j =125°C, (50Hz), sine
Maximum rate of rise of on-state current (repetitive) (di _T /dt)	150 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})	1,25 V @ I _{TM} =300A
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. 2,5 V @ T _j =25°C, V _D =6V
	max. 2,6 V @ T _j =-40°C, V _D =6V
Gate trigger current (I _{GT})	max. 150 mA @ T _j =25°C, V _D =6V
	max. 200 mA @ T _j =-40°C, V _D =6V
Latching current (I _L)	300 mA @ T _j =25°C, t _p =30μs; V _D =6V
Holding current (I _H)	200 mA @ T _j =25°C; V _D =6V

PROTECTION

dv/dt protection (RC)	RC network 0,068μF/150 Ohms
Peak voltage protection (VDR)	460 V _{RMS} varistor
Current protection (Semiconductor fuses) (1)	069GUDA0200F
Microswitch (fuse indicators)	MS4L 2-5 B6
Thermal protection (Thermostats)	90°C NC

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

121031 Rev.0

TERMINAL SPECIFICATIONS

Input power terminals (AC terminals)	(M8) 8 to 12 Nm
Module power terminals	(M6) 4,5 to 5,5 Nm
Output power terminals	2xØ8,5 (M8) 11 to 13 Nm (1)
Control & auxiliary terminals	WAGO series 260 terminal blocks 1,5 mm ² / 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 _{RMS} / 1 min

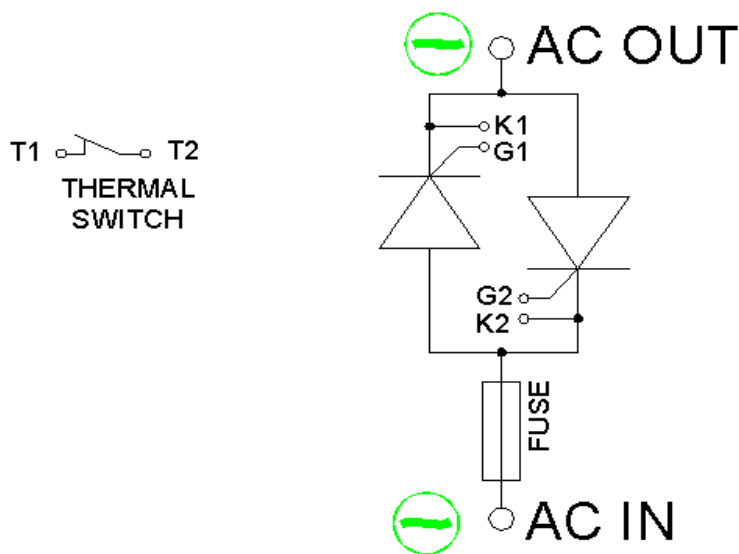
LOSSES

Power dissipation of semiconductors at full charge	Aprox. 122 W
Maximum power dissipation of fuse at full charge	Aprox. 14 W
Maximum total power dissipation at full charge	Aprox. 136 W

MECHANICAL SPECIFICATIONS

Mounting position	Any
Storage temperature	-25 to 80°C
Width	250 mm
Depth	267 mm
Height	180 mm
Aprox. Weight	3,6 Kg.

SCHEMATIC CIRCUIT



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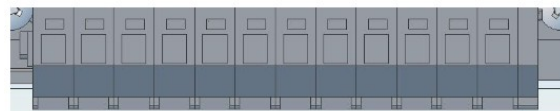
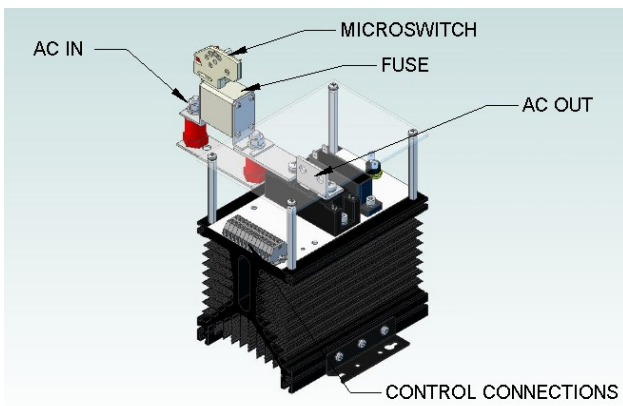
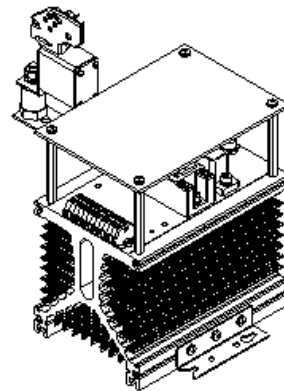
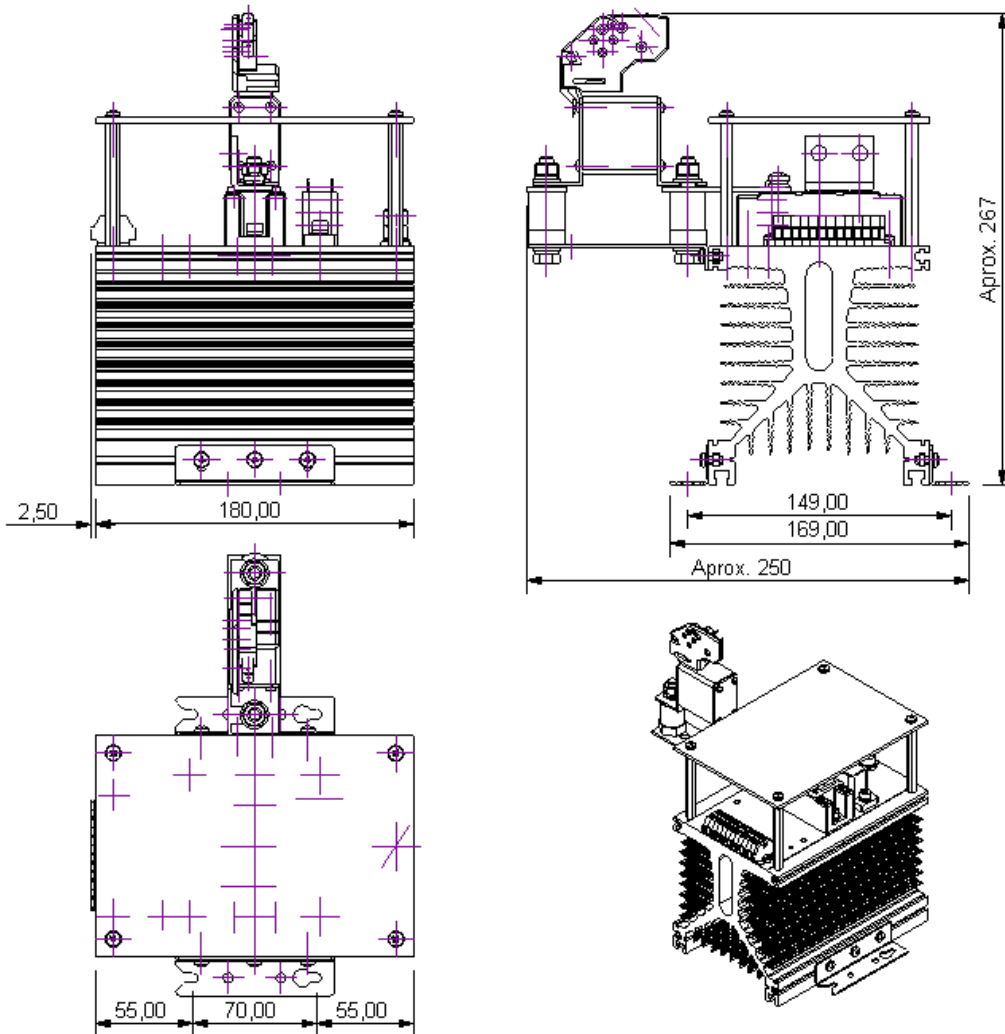
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DIMENSIONS



K1 G1 K2 G2 T1 T2 F1 F2 nc nc nc nc

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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.

ORDER CODES & OPTIONS

MF- W1C 0156 N 12 RCVTF
(1) (2) (3) (4) (5) (6)

1- MF, Series identifier

2- W1C, Circuit identifier

3- 0324; Maximum current identifier

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

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

6-Accessories:

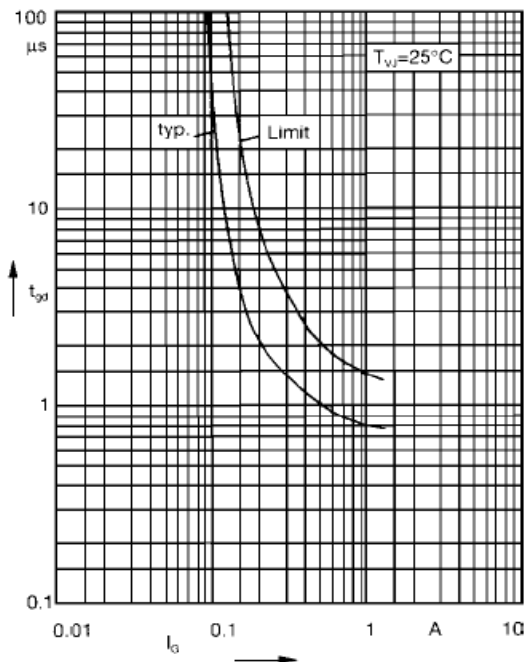
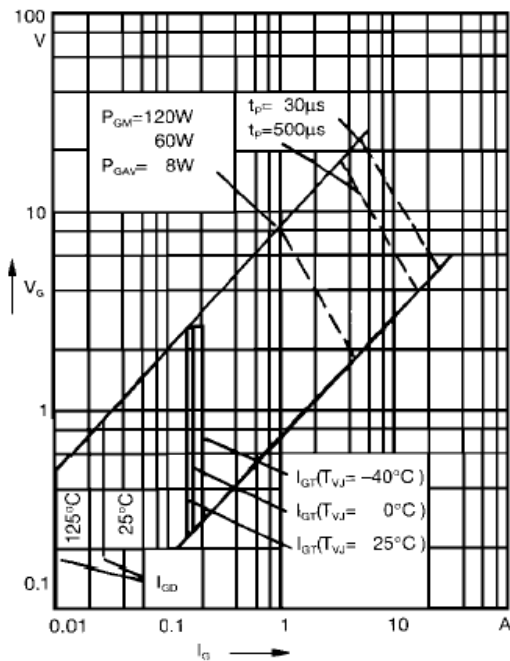
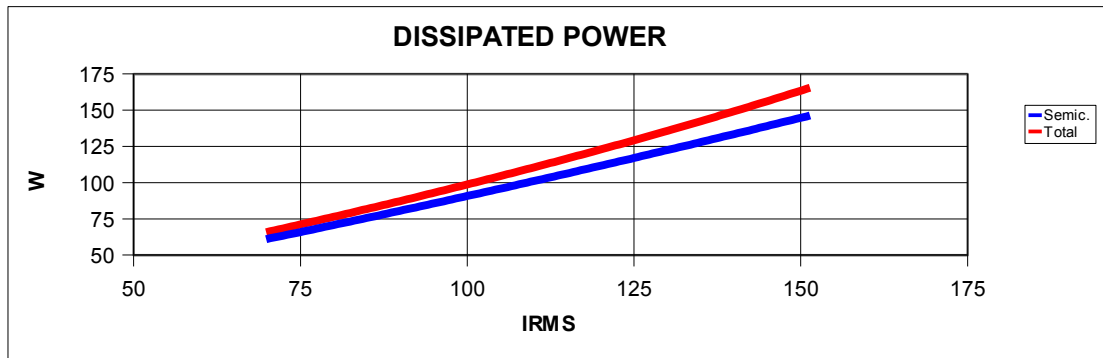
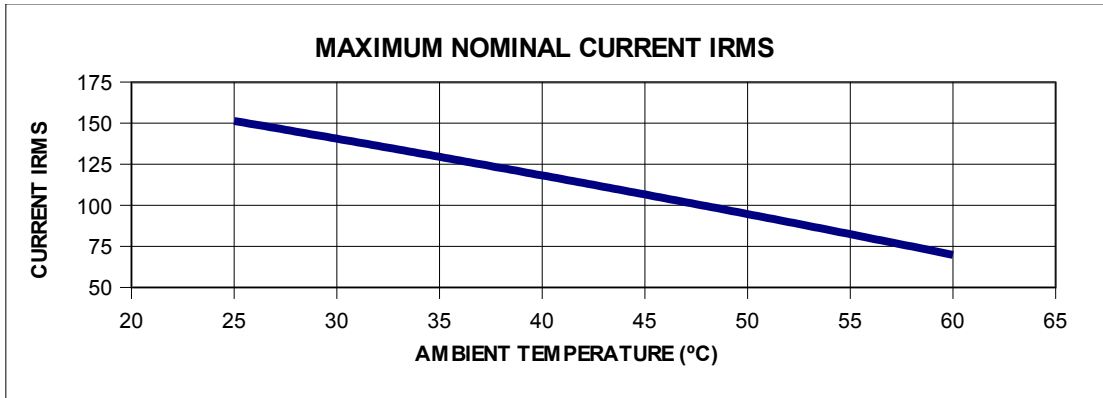
RC: Resistance-capacitor (snubber) included

V: Varistor included

T. Thermal switch included

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

GRAPHICAL INFORMATION



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