

SC030

zero cross thyristor triggering module

PRELIMINARY TECHNICAL INFORMATION

#### **HIGHLIGHTS**

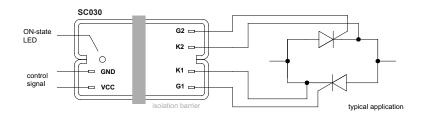
- -Zero crossing voltage network detection
- -For thyristor up to 3000V<sub>DRRM</sub> -On-state control LED indication
- -Modular system.
- -Ready to use.



non-contractual photo

#### **GENERAL DESCRIPTION**

Designed for the construction of great power AC static relays, for voltages up to 1200V<sub>AC</sub>. SC030 triggers 2 thyristors in antiparallel configuration (W1C) in the zero crossing of the network tension, which allows to obtain great advantages in the connection of loads (specially resistive).



#### **ABSOLUTE MAXIMUM RATINGS**

description	symbol	conditions & notes	min	max	units
continuous working AC voltage	V <sub>K1K2</sub>	network freg. 42 to 63Hz	200	1320	V <sub>AC</sub>
maximum AC peak voltage	V <sub>K1K2 peak</sub>	network freq. 42 to 63HZ		3000	V <sub>PEAK</sub>
control trigger voltage	V <sub>cc</sub>		8	30	V
control to output isolation	V <sub>ISO</sub>	1min @ 50Hz		5000	V <sub>AC</sub>

#### **RECOMMENDED OPERATION CONDITIONS**

description	symbol	conditions & notes	min	typ	max	units
continuous working AC voltage	V <sub>K1K2</sub>	network freq. 42 to 63Hz	500		1200	V <sub>AC</sub>
control trigger voltage	V <sub>cc</sub>			12		V
control current consumption	I <sub>cc</sub>			25	30	mA

#### **MECHANICAL SPECIFICATIONS**

description	symbol		units	
dimensions	HxBxT	92x40x30	mm	
Weight	W	132	gr	
control and power terminals		Fast-on 2,8 x 0,5 mm.		
module fixation		4 Holes Ø5,5 (compatible to standard modules with 80 mm. interaxis)		

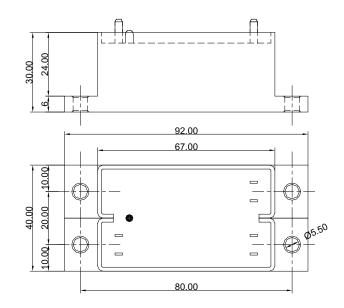
# **ENVIRONMENTAL SPECIFICATIONS**

description	
Protection grade	IP-00
Maximum humidity	50% Rh @ 35°C / 70% RH @ 20°C
Pollution grade	

Reserves the right to change limits, test conditions and dimensions given in this data sheet at any time without previous notice.



#### **DIMENSIONS DRAWING**

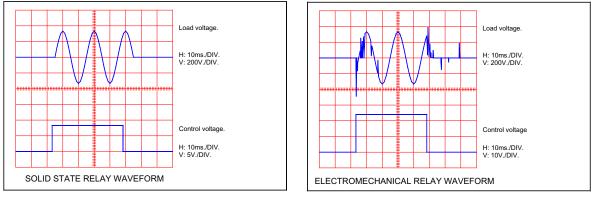


# **APPLICATION INFO**

Using 2 or 3 modules it is possible to make three-phase applications with connection to 2 or 3 phases (W3.2C and W3C).

Its high reverse voltage (3000V) makes the SC030 suitable for the connection of the capacitors in equipments of reactive energy regulation (up to  $690V_{_{RMS}}$  network).

# COMPARATIVE: SOLID STATE RELAY Vs ELECTROMECHANICAL RELAY



100301Rev.:0

Reserves the right to change limits, test conditions and dimensions given in this data sheet at any time without previous notice.



# **Cost Effective Products**

# SEMICODE ELECTRONICA

Offers to the market a comprehensive range of products from recognized manufacturers at the best price/ quality relationship, this products are provided with a basic reference code that allows maintaining the same product reference even if the original device manufacturer is replaced. SEMICODE product reference has to be considered as a generic brand.

Seeking the market needs and trends, we are constantly increasing the product portfolio with new products and suppliers, please ask for the updated information available to our local contacts.

SEMICODE products include semiconductors, passive components and accessories focused in power electronics market.

#### Datasheet Annotations:

**SEMICODE ELECTRONICA** annotate datasheets in the top left hard corner of the front page, to indicate product status. The annotations are as follows:

**Tentative information**: This is the most tentative form of information and represents a very preliminary specification. No actual design work on the product has been started.

**Preliminary Information**: The product is in design and development. The datasheet represents the product as it is understood but details may change.

Advance 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.

NOTICE: 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.

© SEMICODE ELECTRONICA 2008. TECHNICAL DOCUMENTATION – NOT FOR RESALE

Reserves the right to change limits, test conditions and dimensions given in this data sheet at any time without previous notice.