

PRELIMINARY TECHNICAL INFORMATION

HIGHLIGHTS

- Up to 480 V_{AC} mains voltage supply.
- Rated output power 25 W.
- Low ripple and output noise.
- Rated output voltages 5 V_{DC} and ±15 V_{DC} .
- Auxiliary 15 V_{DC} isolated output.
- 4000 V_{AC} isolation.



non-contractual photo

SCPS6006 is a very rugged, robust and reliable OEM switched mode power supply in open chassis presentation that offers a stable supply working in a very wide input voltage and a great isolation between mains and output (> 4000 V_{AC}). It has as primary rated outputs: 5 V_{DC} for supply TTL devices and ±15 V_{DC}. Additionally it has an isolated 15 V_{DC} auxiliary output.

Easy to mount or integrate in your designs. Neat an easy connection by using an standard screw plug for AC mains and secondary output.

Initially designed to be the SC6006 power supply it is also suitable to work as power supply for any of our SCRs firing boards or with any application which needs to be adapted to a very changing input mains voltage.

TECHNICAL ESPECIFICATIONS

OVERVIEW

Description	Symbol	Notes / Test conditions	Min	Тур	Мах	Units
	V	±10%	195	230	480	V_{RMS}
Line voltage	v _{IN}		275		678	V _{DC}
Frequency range	f _w		47		63	Hz
Power output	P _{out}			25		W
Turical input aurrant		Full load @ 230V _{AC IN}		200		mA
rypical input current	_	Full load @ 400 V _{AC IN}		130		mA
la marka a suma n t Bar 16 m m		@ 230V _{AC IN}		11.5		А
Inrush current limiting	-	@ 400 V _{AC IN}		20		А
Typical efficiency	η	@ 230V _{AC IN} , full load		72%		
Isolation between mains and output		@ 1min		4000		$V_{\rm RMS}$
Isolation between secondaries		@ 1min		4000		$V_{\rm RMS}$
Minimum start up load		@ V1		100		mA
Minimum sustaining load		@ V1		25		mA
Tolerance output voltage		V1, V2			± 1%	
Charge regulation		V1, no charge to full charge		± 0.5%		
Mains regulation				± 0.2%		
Starting time after applying the supply vol	tage	lr			1.5	S
		w ith 3500uF			2	S

Data at $T_a = 25 \text{ °C}$, $V_{\text{\tiny IN}} = 230 \text{ V}_{\text{\tiny AC}}$ and rated values, unless otherwise indicated

CONFORMALS

Conformal coating	MIL-1-46058, Type UR
Security	EN60950-1, UL60950-1

EMC DIRECTIVE

This switched mode power supply is intended to work as part of an industrial fixed installation and is not for itself a functional unit destined to an end user. According 2004/108/CE directive, CE marking for this device not apply.



OUTPUTS

Description	Symbol	Notes / Test conditions	Min	Тур	Max	Units
V1 Output voltage	V ₁			15		V
V1 Output current	I _{nom1}			1200		mA
V2 Output voltage	V_2			5		V
V2 Output current	l nom4			500		mA
V3 Output voltage	V ₃			-15		V
V3 Output current	I _{nom4}			120		mA
V4 Output voltage	V_4			15		V
V4 Output current	l nom4			120		mA

CONNECTORS PINOUT

pin

1

2

J2 - MAIN OU	TPUTS CONNECTOR	
pin	designation	description
1	V3	-15 V _{DC}
2	GND	Ground
3	V2	5 V _{DC}
4	V1	15 V _{pc}

J3 – AUXILIAR OUTPUT CONNECTOR

designation

V4

GND2





Connector J1:	type MSTBV, PHOENIX CONTACT 1936021
Connector J2:	type MCV, PHOENIX CONTACT 1803442
Connector J3:	type KK, MOLEX 22-27-2021

BLOCK DIAGRAM



description

 $-15 V_{\rm DC}$

GND2

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



ENVIRONMENTAL CHARACTERISTICS

Description	Temperature	Relative Humidity
Storage	-15°C to +50°C	70%
Operating	-15°C to +50°C	700/
	>50 to 70°C 50% load	70%

MECHANICAL CHARACTERISTICS

Description	Notes / Test conditions		Units
Board		62 x 142 x 27	mm
Fixations	fixation holes diameter	3	mm
Weight (aprox)		155	gr



All dimensions in mm.





Cost Effective Products

SEMICODE ELECTRONICA

Offers to the market a comprehensive range of products from recognized manufacturers at the best price/quality ratio, 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 responsability 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 2013. TECHNICAL DOCUMENTATION – NOT FOR RESALE

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