



Doc. code

AVR B4

Page 1 di 4

STEN12AVR4B

Technical specification

Revision:

0

Index

1.	INTRODUCTION.....	2
2.	GENERAL CHARACTERISTICS.....	2
3.	ELECTRICAL SPECIFICATIONS.....	2
4.	PHYSICAL SPECIFICATIONS.....	2

Release 1	Responsibility UT	Author Utee	Valid from 14/02/2007	Datum 29/06/2007
--------------	----------------------	----------------	--------------------------	---------------------



Doc. code

AVR B4

Page 2 di 4

Revision: 0

STEN12AVR4B

Technical specification

1. INTRODUCTION

The Sincro AVR B4 Voltage Regulators are designed for use on 50/60Hz single-phase brushes generators EK-R and FK-R, in place of exciting systems. It is an efficient device for most of applications.

It is particularly suggested to obtain an optimal precise voltage output, with loadings at $\cos\phi \neq 1$ (in this condition a normal generator with capacitor exciting shows strong voltage dropping).

2. GENERAL CHARACTERISTICS

- Fuse included
- Fuse protection in case of missing or wrong sensing connection
- Special versions for low voltage generators and welders available on request

3. ELECTRICAL SPECIFICATIONS

Dc Output Power:

4,5 Adc at 120 Vdc (540W) maximum continuous,
6 Adc at 160 Vdc (960W) forcing one minute.

Exciter Field Dc Resistance:

10 ohms, minimum; 100 ohms maximum.

Ac Power Input:

Operating range: 220 Vac to 300 Vac, $\pm 10\%$, Single phase, 50/60 Hz.

Sensing Input:

100-130 Vac, single phase, 50/60 Hz or 200-240 Vac, single phase, 50/60 Hz.

Voltage Adjust Range:

$\pm 20\%$

Regulation Accuracy:

Better than $\pm 2.0\%$ no load to full load.

4. PHYSICAL SPECIFICATIONS

Operating Temperature:

-20°C to $+60^{\circ}\text{C}$.

Storage Temperature:

-40°C to $+85^{\circ}\text{C}$.

Release	Responsibility	Author	Valid from	Datum
1	UT	Utee	14/02/2007	29/06/2007



Doc. code

AVR B4

Page

3 di 4

STEN12AVR4B

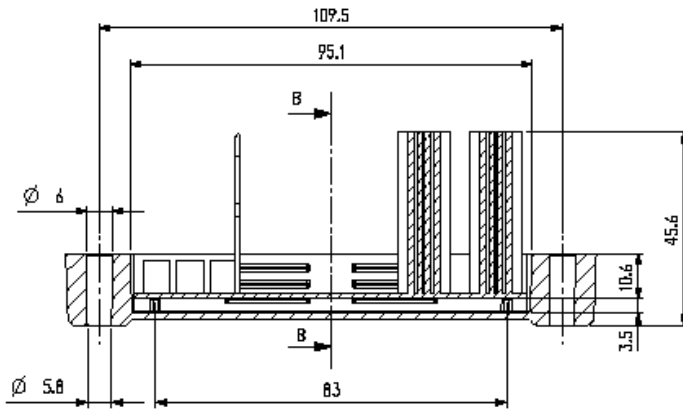
Technical specification

Revision:

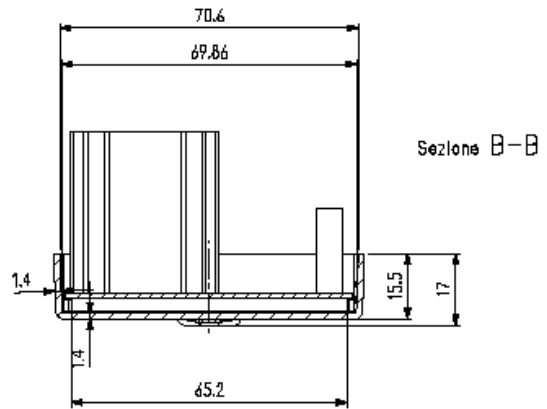
0

Dimensions and connection:

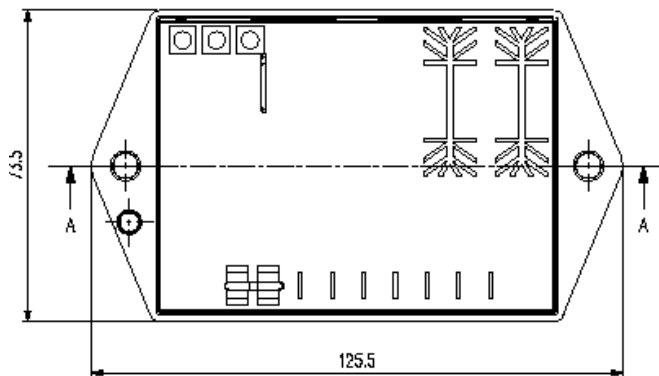
Max dimensions = 125,5 X 75,5 X 45,6 mm



Sezione A-A



Sezione B-B



Release 1	Responsibility UT	Author Utee	Valid from 14/02/2007	Datum 29/06/2007
--------------	----------------------	----------------	--------------------------	---------------------



Doc. code

AVR B4

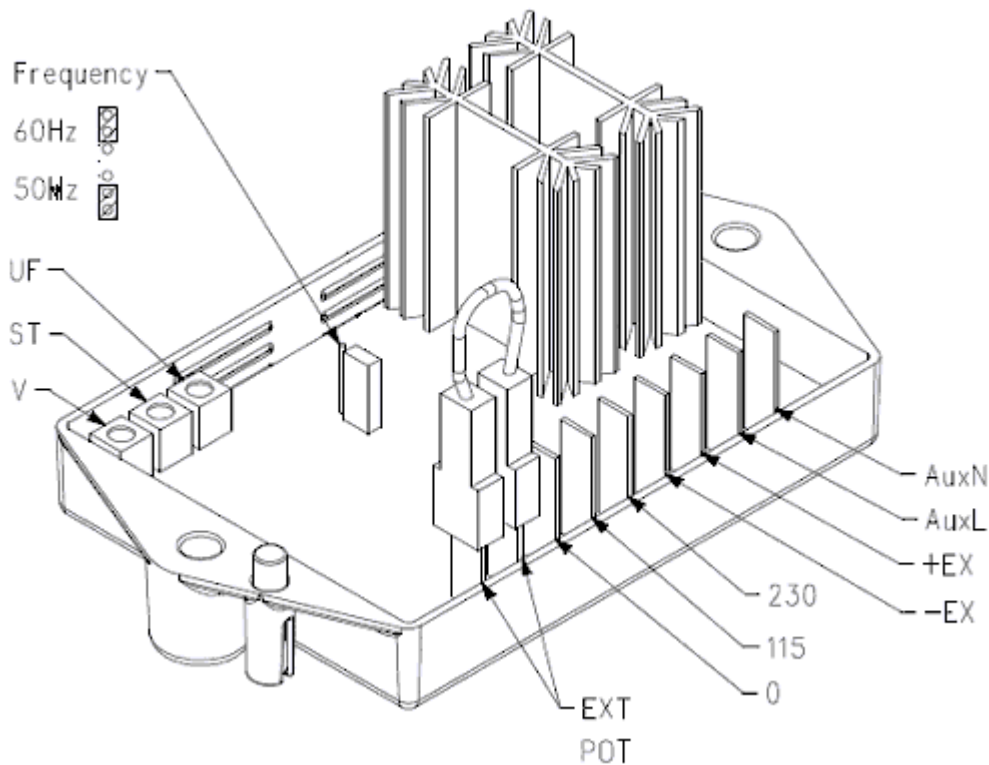
Page 4 di 4

STEN12AVR4B

Technical specification

Revision:

0



Trimmers:

- V – Voltage Adjustment**
- ST – Stability**
- UF – Under Frequency**

Jumpers:

- Hz – for set frequency, 50Hz or 60Hz**
- EXT, POT – closed when use trimmer V for voltage adjustment**

NOTE: Default configuration, for AC Power Input of 300V, 50Hz and use of trimmer V for voltage adjustment.

Connections:

- EXT, POT – External potentiometer**
- 0, 115 – Sensing 115V**
- 0, 230 – Sensing 230V**

- AuxL, AuxN – AC Power Input**
- EX, +EX - Field Output**

Release 1	Responsibility UT	Author Utee	Valid from 14/02/2007	Datum 29/06/2007
--------------	----------------------	----------------	--------------------------	---------------------