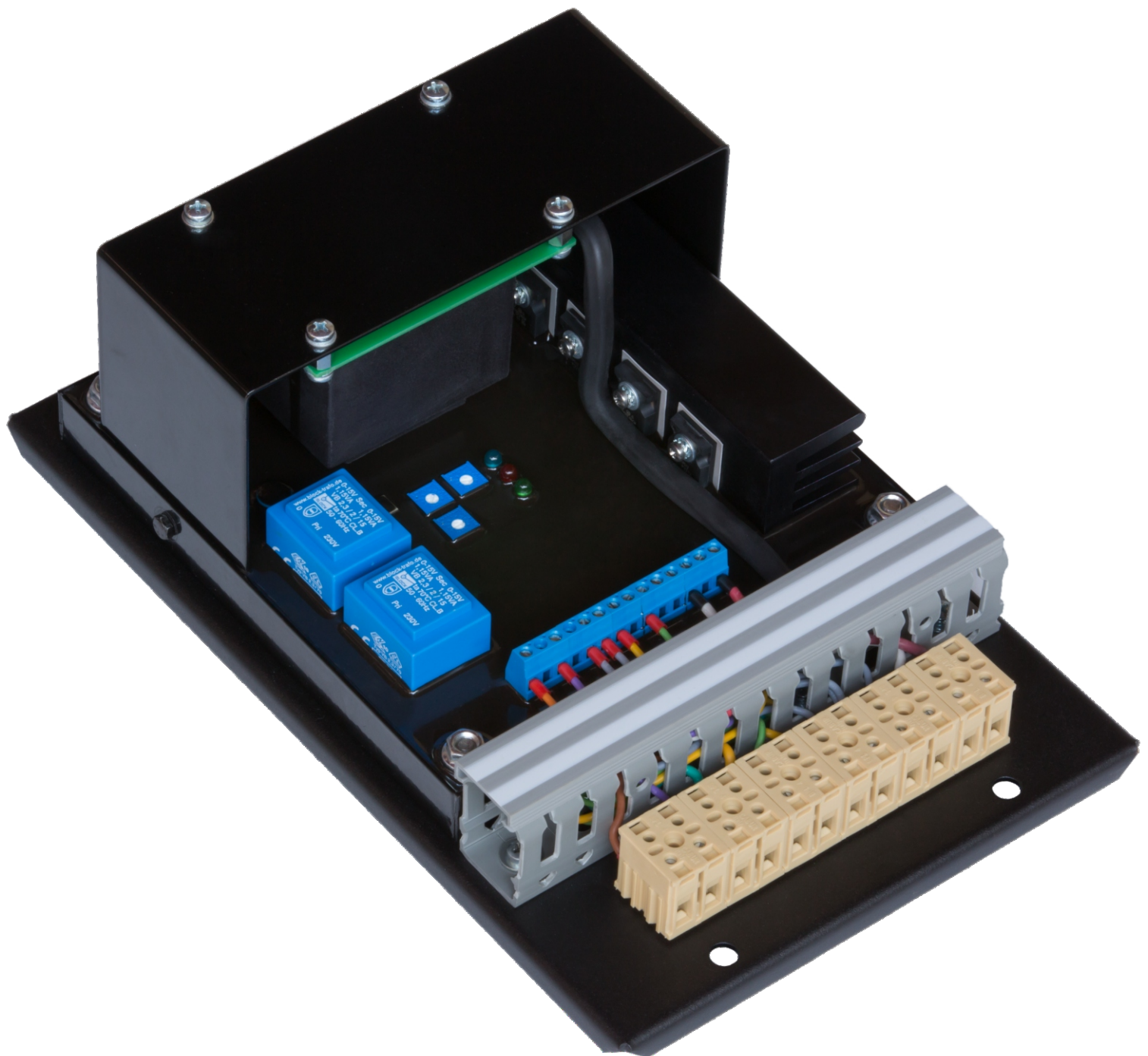
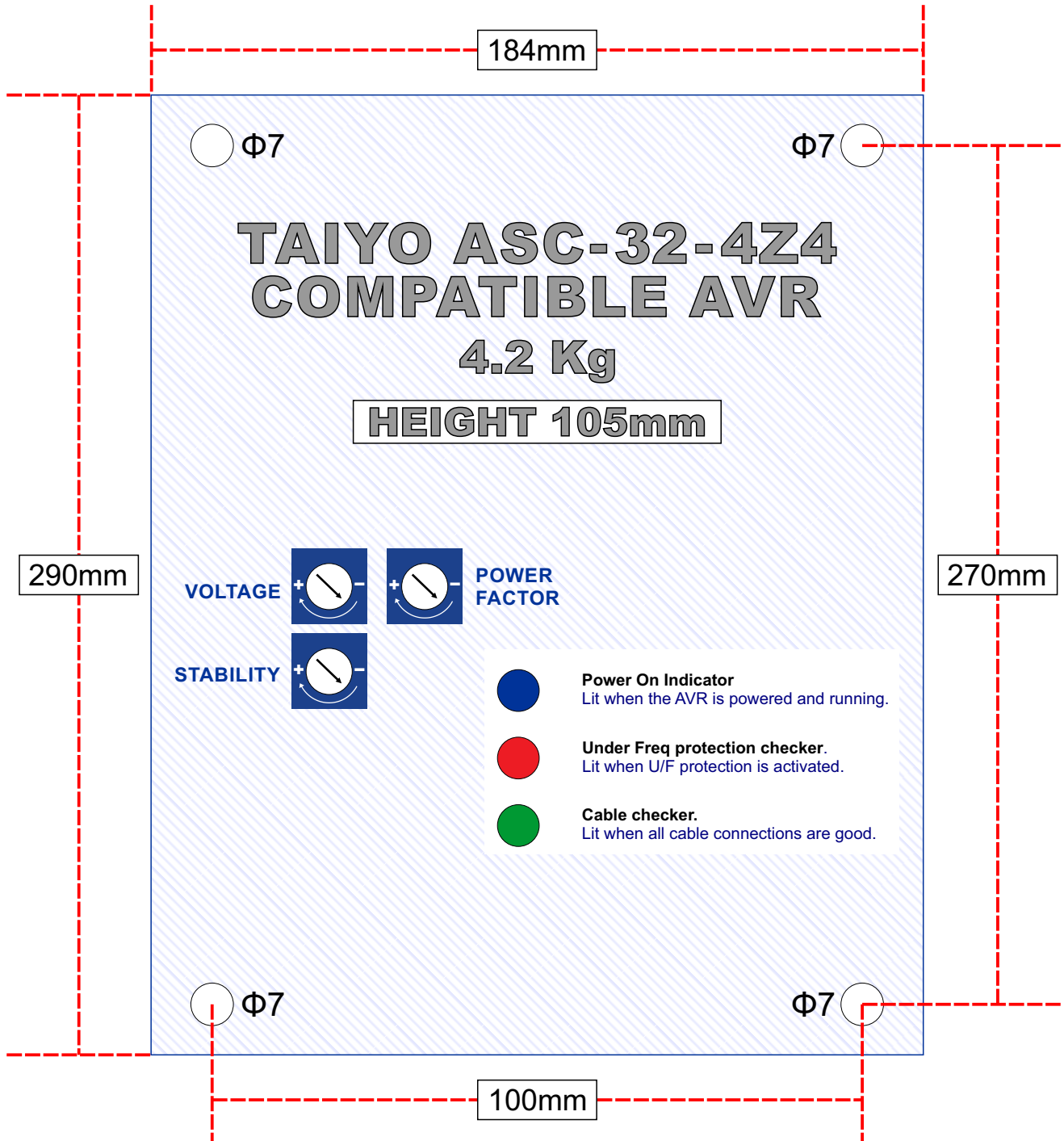


TAIYO ASC-32-4Z4 COMPATIBLE
AUTOMATIC VOLTAGE REGULATOR

USER MANUAL

TAIYO ASC-32-4Z4 COMPATIBLE
AUTOMATIC VOLTAGE REGULATOR





TAIYO ASC-32-4Z4 COMPATIBLE TERMINAL

R1	S1	T1	k	ℓ	k2	ℓ2	1	2	3	A	B
----	----	----	---	---	----	----	---	---	---	---	---

GENERAL DESCRIPTION

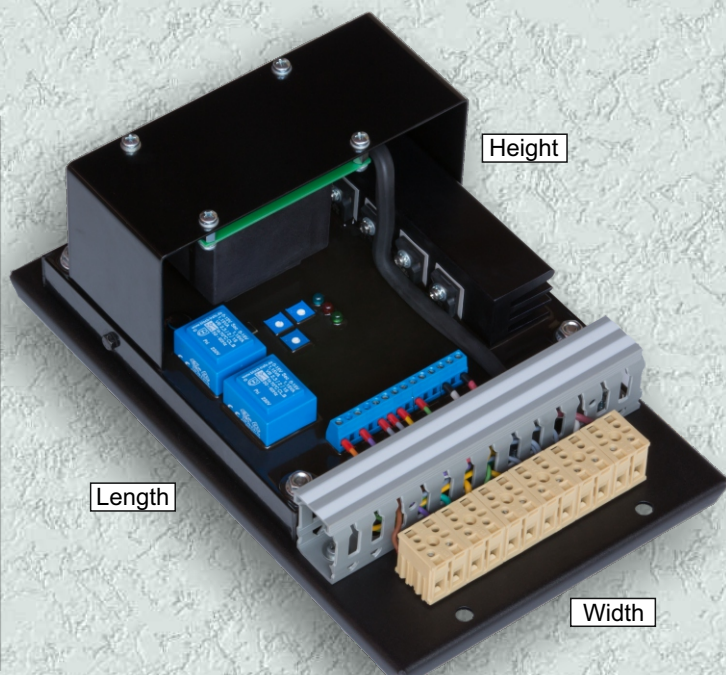
MODEL

TAIYO COMPATIBLE
ASC - 32-4Z4

TECHNICAL DESCRIPTION

This is the replacement of **TAIYO ASC - 32 - 4Z4**. This AVR has no need for any kind of modifications. This goes for the cables as well as the mounting. Its all the same except one thing, its better. Note that (as with every other compatible AVR we make) the inner design is completely different from the original and much improved in every aspect. Practically this AVR works much better and will never malfunction.

This is a subtractive regulator connected to a compound circuit. This set up is adjusted to provide a voltage higher than the rated voltage. The purpose of the regulator is to shunt the excess exciting current in order to maintain the voltage at its rated value.



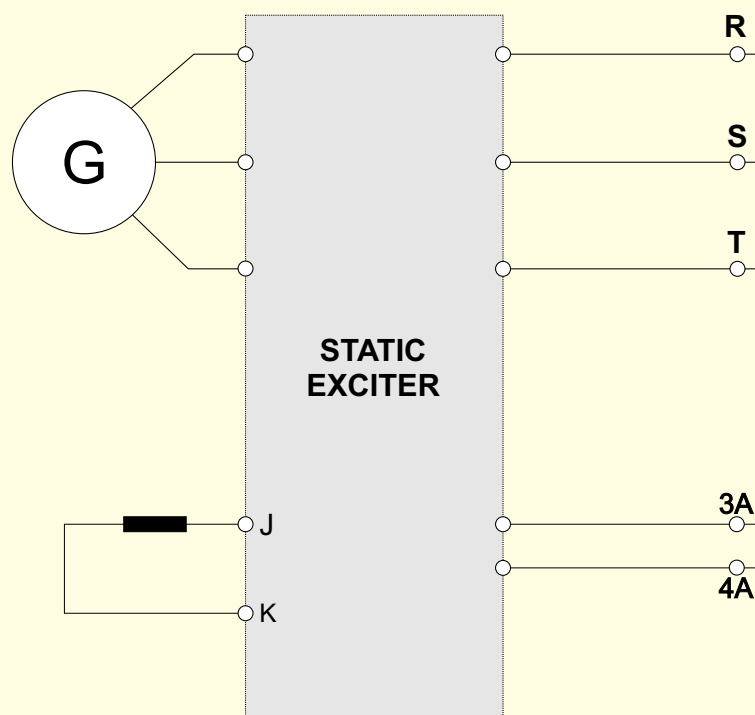
ADJUSTMENTS

- **VOLT** for voltage output level
- **STAB** for stability voltage control
- **P/F** for power factor correction
- **FINE POT** for external voltage level

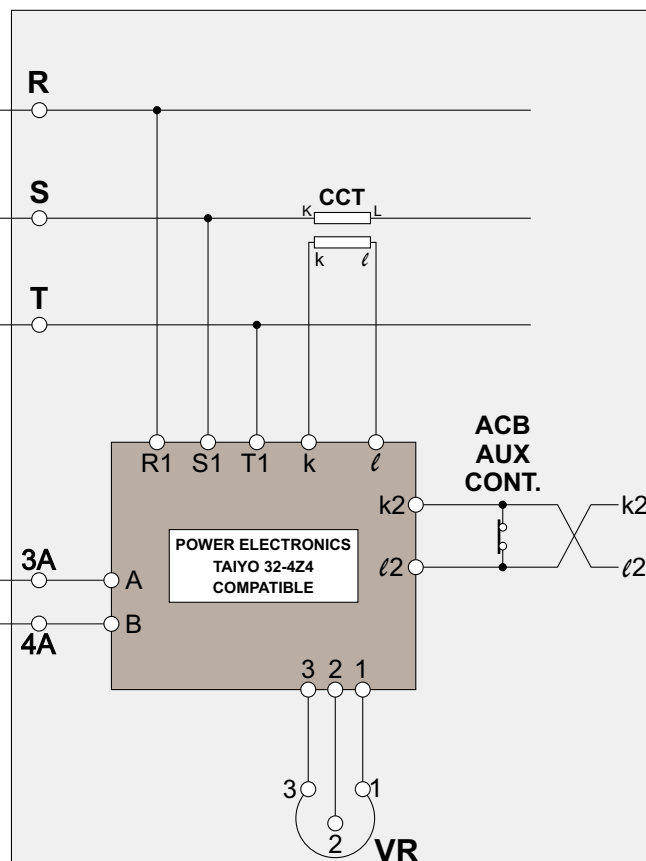
Dimensions (mm)

Length	Width	Height	Weight (Kg)
290	184	105	4.2

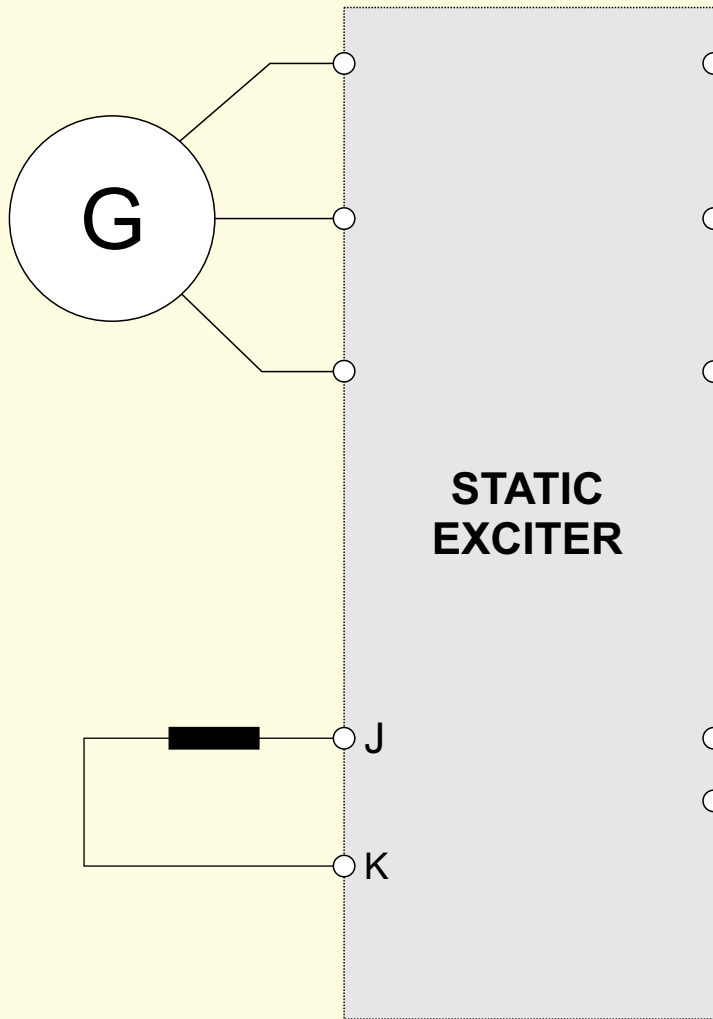
DESIGN AND MANUFACTURE
BY RESEARCH TEAM OF
POWER ELECTRONICS C.O.
GREECE



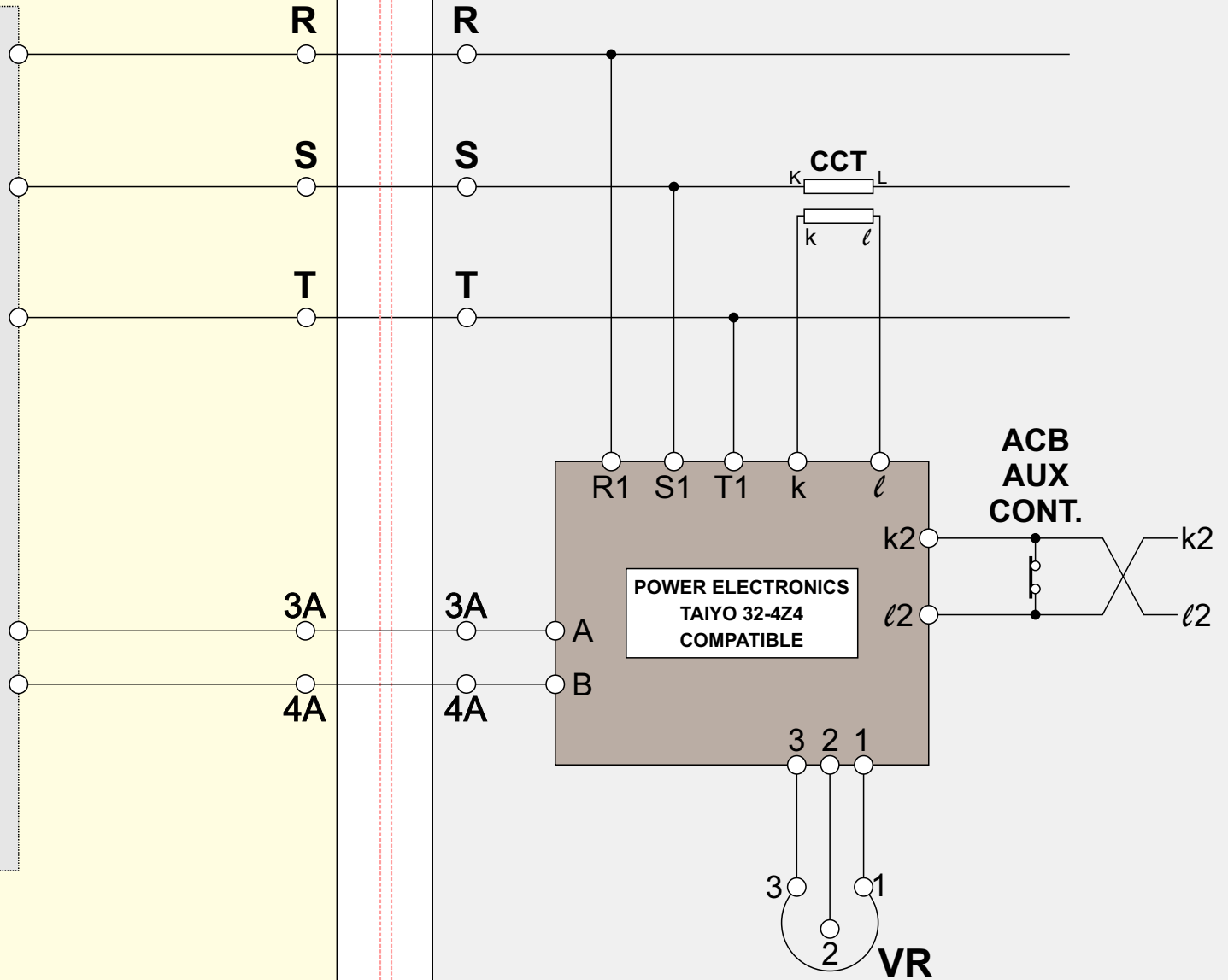
A.C. GENERATOR & EXCITER SIDE



SWITCH BOARD SIDE



A.C. GENERATOR & EXCITER SIDE



SWITCH BOARD SIDE

INSTRUCTIONS TO INSTALLING AND ADJUSTING THE AVR

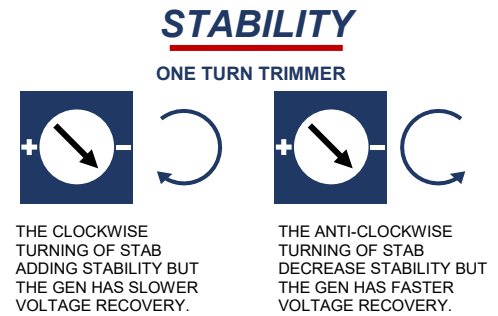
MODELS: TAIYO ASC-32- 4Z4 COMPATIBLE

STAB - Stability. It eliminates the voltage fluctuations.

To adjusting the STAB trimmer, proceed as follows:

1. Turn anti-clockwise the STAB trimmer all the way (1 turn).
2. Turn clockwise the STAB trimmer and set it just after the voltage fluctuation stops.

* Setting the trimmer at a far clockwise position will decrease the generator sensitivity. This may result to extensive voltage recovery time due to the vast self-induction loads.



(PRE-ADJUSTED TO THE POSITION YOU SEE HERE)

VOLT - Voltage. Voltage adjustment. It co-operates with the external pot.

To adjusting the VOLT trimmer, proceed as follows:

Since the engine has the right-periods (cycles), then the remote knob is adjusted to the middle position. Then the VOLT trimmer (which is located in the main unit) is adjusted until the right voltage is reached. All the above adjustments i.e. U/S, STAB, VOLT, must be done without any load in the generator, the switch (ACB) must be in OFF position.

P/F - Power Factor. This adjustment is done when the generator is already in parallel with another or others.

To adjusting the P/F trimmer proceed as follows:

We start by placing the trimmer to the middle position.

If turning it anti-clockwise, the amperes of generator build-up in relation to the other generator.

If the trimmer is moved in a clockwise manner, the amperes are reduced in relation to the other or others generators.

CONNECTING EXTERNAL VOLTAGE POTENTIOMETER

The value is always 500 Ohms and it's been provided.

RED LED

The red led is an "out of adjustment" capability indication led. This could happen if the generation frequency is lower, or if the engine shuts off or if there is a malfunction of the responsible systems of building the voltage around 600V and the generator voltage is lower than the voltage we trying to set. This is happening because the TAIYO ASC-32- 4Z4 can only subtract voltage.

BLUE LED

The blue led is an informative led that indicates the AVR is powered and running.

GREEN LED CABLE CHECKER. The green led will help to achieve the right installation.

It will light **only*** if all the below are ok:

1. The circuit of this led will activated, if only if a current transformer is installed.
2. The generator is 20% at least under load.
3. The identity of the phases is ok.
4. The suggestion of the phases is ok.
5. The polarity of current transformer is ok.

*If there is more than one wrong cable connection at the same time, there is a chance that the green led will be lighten.