

# ELECTRONIC FAST SWITCH

**GB** Instructions manual **CE**

## STATIC COMPENSATION

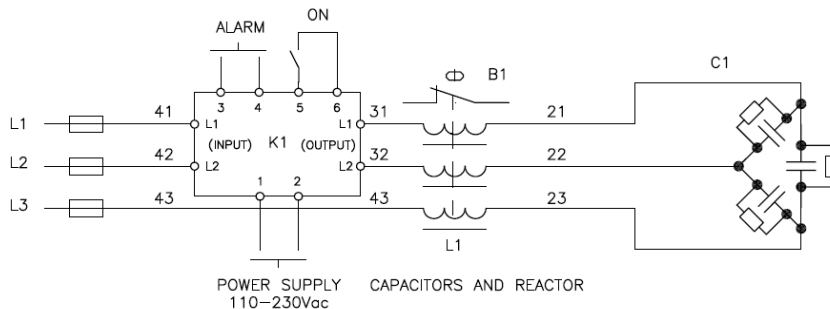
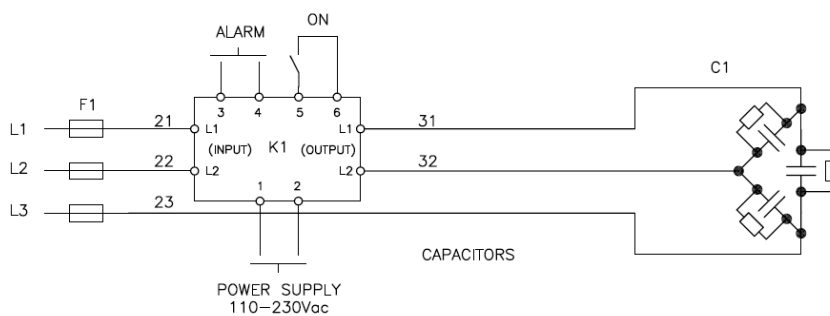
### STATIC SWITCHING UNIT

Static compensation is very often the only way to afford networks with relatively high fluctuating loads (milliseconds). The main advantages of this compensation system are:

- an immediate answer to the compensation request;
- no electromagnetic contactors: the total absence of mobile mechanic parts increase the number of switching operations and reduce the maintenance;
- the lack of transients in the capacitor switching connections minimizes disturbance such as flicker, noise, voltage drop;

Examples of field application where the use of a static unit is effective are steel companies, lifts, welding units....

### FUNCTIONAL DIAGRAM



## TECHNICAL DATA

ORDER CODE	IS050K0IE050K	IS100K0IE100K
<b>POWER SECTION</b>		
Type	EFS50	EFS100
Rated voltage Urms	400-415V	400-415V
Max. current I <sub>max</sub>	86A	160A
Frequency	50Hz	50Hz
Cable cross section	25mm <sup>2</sup>	50mm <sup>2</sup>
Dissipation loss power	120W	320W
Max power (kvar)	50kvar	100kvar
<b>CONTROL SECTION</b>		
Rated voltage Un	110÷230Vac	110÷230Vac
Power	15W	30W
Cable cross section	1,5mm <sup>2</sup>	1,5mm <sup>2</sup>
Activation	Using external contact voltage free (type SSR Bi-directional opto-mos recommended);24Vdc not necessary	
<b>SWITCHING TIME</b>		
Duty cycle max speed	20ms ON – 20ms OFF	20ms ON – 20ms OFF
<b>CLIMATE CATEGORY</b>		
Operating ambient temperature	-5/+45°C	-5/+45°C
<b>MECHANICAL CHARACTERISTICS</b>		
Weight	~3Kg	~3,5Kg
Dimensions WxHxD	Fig.1	Fig.2
<b>ALARM</b>		
Description		
Over temperature	Off-Off-On-Off	
Over current	Off-On-Off-Off	
Low aux. supply voltage or SCR in short-circuit or Thyristor fails to start	Off-On-On-Off	
<b>LED CONDITIONS</b>		
Description		
Starting phase	(blinking) → On-Off-Off-Off	
Ready to insert	On-Off-Off-Off	
Inserted	On-Off-Off-On	
<b>REFERENCE STANDARDS</b>		
EN 61921 EN 50178		

# DIMENSIONS

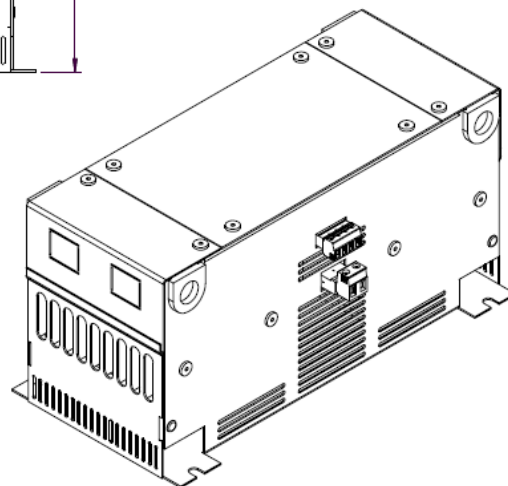
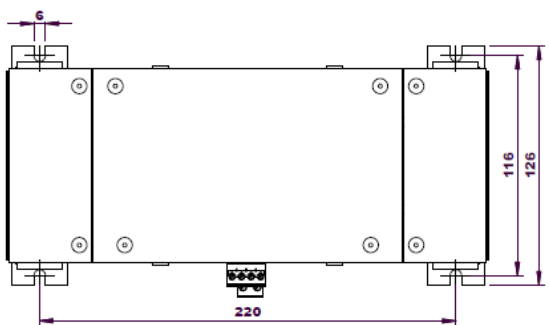
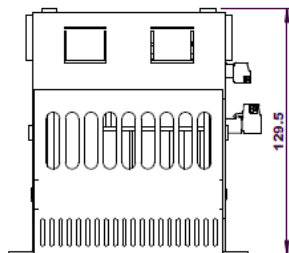
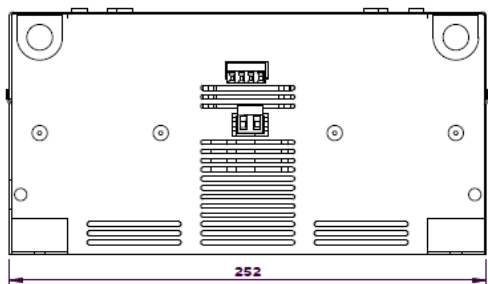


Fig.1

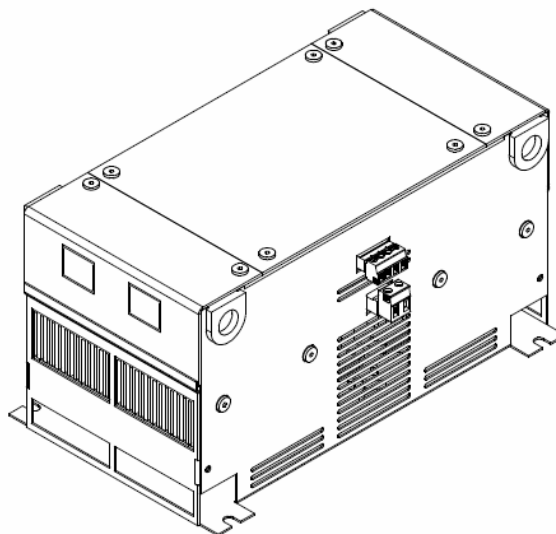
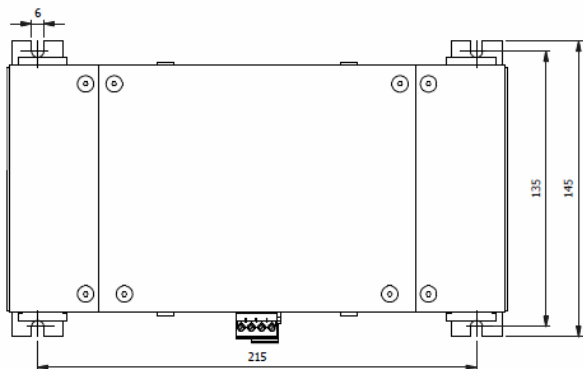
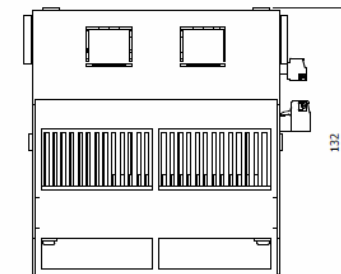
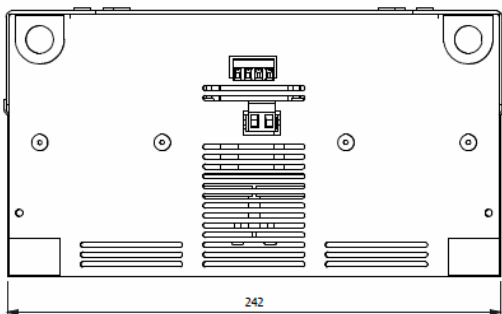


Fig.2

# WARNING

- For safety reason (IEC 831-1 par. 22) install a discharge device on the bank using high voltage resistor (example: main supply 400V, resistor voltage  $\geq 1000V$ ).
- In de-tuned systems with 400V main supply, capacitors with rating voltage  $\geq 460V$  are required.
- Live parts in the systems must not be touched.

## INFORMATION AND TECHNICAL SERVICE

For information, please contact:

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