L E C

Lighting Energy Controllers

LEC A - 50A

LEC A is an advanced, economical and unique unit, designated to save 25% to 35% of power consumption. In addition, the **LEC A** extends lighting elements lifetime and improves line power factor and line conduction losses, without change of infrustrucure, via controlling output voltage.

The **LEC A** is fully microprocessor based. All relevant parameter and data are displayed in a comprehensive language.

Lighting Energy Controllers

ENERGY SAVING

Voltage reduction within the nominal applied to H.I.D bulbs can save substantial energy. The voltage supplied in Europe is 230-245 VAC. The nominal voltage of H.I.D bulbs is: 207-253 VAC (230±10%).

The LEC A stabilizes the voltage applied to the discharge lights within steps of 5V.
Thus creating a current reduction resulting in:

- Energy saving to the end user: 25%-40%.
- Reduction of losses in the indicators: 44%-64%.
- Reduction of line losses: 44%-64%..
- Improvement in power factor ($\cos\phi$): 2%-10%.
- Lighting elements lifetime is extended.

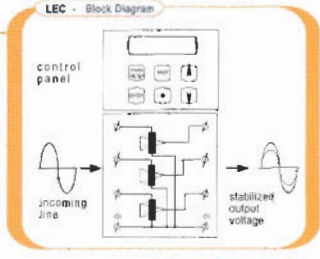
All this is achieved via inducing the unnecessary energy, resulting in a very compact, light and sturdy product.

LEC

- Saving of about 35%-40% of energy consumption.
- Substantial extended lifetime of lighting elements.
- Creates no wave distortion (THD)<1%.
- Requires no change in infrastructure; cables, capacitors ect.
- Requires no special snubbers or filters.
- Suits all types of lighting elements (Fluorescent,Metal Halide, HPS, Mercury).

User friendly.

Sturdy.



LEC A (Advanced)

The LEC A is designed and developed to function in a wide range of tasks, where variable levels of voltages are used to suit all activity hours.

The LEC A allows the client to determine the output voltage (saving) in 3 different time windows.

The LEC A enables full control and operation of lighting systems.

The LEC A is ready for local and remote operation via wireless and cellular means.

TECHNICAL SPECIFICATIONS

- The LEC A enables gradual reduction of 0-35v output voltage.
- The LEC A is applicable to all sorts of lighting elements.
- The LEC A has 3 modes of operation - **Remote, Manual and Automatic.**
- Parameters and running data are displayed currently.
- **Astro timer switch** included.

Process

Full Line voltage is applied after "ON" command is given. After 4 min and stabilization of the current, saving mode is switched on and output voltage will be as set.
Ignition period is flexible (4-8 min.)

Technical Data

Input voltage: 3x230 ± 15% (L-0), 3x400 (L-L)
Output current: (nominal before saving mode)

Dimensions (mm)

LEC A 3x30A H:612 D:258 W:396 - 44Kg
LEC A 3x50A H:612 D:258 W:396 - 44Kg
LEC A 3x80A H:643 D:295 W:536 - 65Kg
LEC A 3x125A H:720 D:285 W:585-128Kg
LEC A 3x160A H:720 D:285 W:585-128Kg

Programmable Parameters

- Local/ remote/ automatic operation
- 3 saving energy levels and time sequence

Displayed Parameters

Operation mode - **Ready, Ignition, Running**
- Current,KW, KWH per phase
- Intput and output voltage - V
- Phase current - A
- cos*f* from 0 - 1
- Clock - day, hour, minute

Communication

RS 232/ RS 485

Manual Bypass (optional)

Changeover switch (save/ off/ bypass)

Power switch gear

- Main contactor
- **Output** circuit braker
- **Contactors**
- Changeover bypass switch

- The LEC **is IP21,** and should be installed **in a suitable enclosure.**