

LEC A

The LEC A is a sophisticated 3-phase energy controller designed to control and stabilize the voltage provided to lighting elements. With the LEC A voltage supplied to the lighting circuits can be reduced up to 35V, in decrements of 2.5V.

BENEFITS

- 15% - 35% - energy saving
- Full protection against overtemperature and overload
- Built-in display and keypad for easy programming
- Seamless integration with energy management systems (EMS)
- Compact and highly efficient
- No harmonic distortions, THD/EMI free

FEATURES

Automatic Bypass

Automatic and complete bypass via an internal contactor in case of overtemperature or overload, without disruption to the line or load.

Manual Bypass

A built-in manual bypass switch that completely bypasses the LEC and supplies full net voltage to the lighting systems. This is usually required for maintenance.

Ignition Sequence

The LEC A provides an ignition sequence that allows the lighting elements to warm up completely before reducing their voltage. The length of the ignition period can be configured between 1-99 minutes.

Re-Ignition Sequence

The LEC A allows the ignition period to be repeated, according to user demand. This may be required in installations where users turn on the lights. The LEC A detects increases in the current (minimum 5A per phase) and repeats the ignition process.

Operation Modes

Manual – manually switches between saving and bypass modes. Used for maintenance

Remote – activates the LEC via an external command (timer or photocell)

Automatic – activates the LEC and the load at a configured time

Astro Clock – activates the LEC and the load according to time of sunrise/sunset

Real Time Clock

The real time clock enables LEC A operation in automatic and astro-clock modes, which depend on date and time.

Astronomic Clock

An astronomic table that controls outdoor lighting and allows lights to be turned on and off according to the time of sunset and sunrise. This minimizes the operating hours of the lighting and helps save additional 5-10% of energy.

Time Windows

LEC A has four defined time windows that control the different levels of voltage to the load at different times of the day.

Percentage Saved

The LEC A calculates and displays the estimated percentage saved and accumulated total saving in KWH.

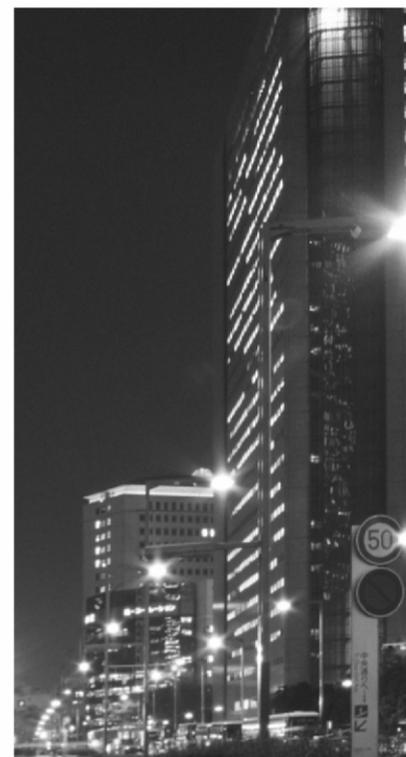


ENERGY SAVING:
15%- 35%

LIGHTING SYSTEMS:
Due to its flexibility in voltage reduction, the LEC A is recommended for use with Metal Halide bulbs

APPLICATIONS:
Logistics centers, retail stores, factories, service stations, street lighting

RANGE:
3x20A – 3x250A





COMMUNICATION & CONTROL

| | |
|-----------|---|
| RS232/485 | Integrated MODBUS/RTU protocol for bi-directional communication with any SCADA system or control equipment. |
| Input | Dry contacts terminals to control LEC Start, Stop or Bypass mode. Can be connected to a photocell, timer or control device. |
| Output | Dry contacts terminals for alarm state. Can be used for connecting an auxiliary device such as buzzer or flashing light. |

TECHNICAL SPECIFICATIONS

| | | | |
|---------------------|---|-----------------------|------------------------------|
| INPUT VOLTAGE | 3x230 VAC \pm 10% | IP CLASS | IP21 / IP31 (with covers) |
| OUTPUT VOLTAGE | Up to 35V reduction First decrement - 15V Following decrements - 2.5V | CLIMATE CLASS | 4K4H |
| FREQUENCY | 50Hz/60Hz | HUMIDITY | 0% - 90% |
| EFFICIENCY | 99.5% | SURGE VOLTAGE | 2000V |
| THD | < 1% | SURGE CURRENT | According to circuit breaker |
| AMBIENT TEMPERATURE | -20°C - +50°C | SHORT CIRCUIT CURRENT | According to circuit breaker |

| CATALOG NUMBER | I (A) | KVA | DIMENSIONS HxDxW (mm) | WEIGHT (kg) | Ht (mm) | Hb (mm) | POWER TERMINALS |
|-----------------|-------|-----|-----------------------|-------------|---------|---------|--------------------|
| 0L35-A10200-380 | 3x20 | 14 | 610x250x300 | 35 | - | - | 35mm ² |
| 0L35-A10300-380 | 3x30 | 21 | 612x285x396 | 51 | 26 | 155 | 35mm ² |
| 0L35-A10500-380 | 3x50 | 35 | 612x285x396 | 51 | 26 | 155 | 35mm ² |
| 0L35-A10800-380 | 3x80 | 55 | 643x313x536 | 69 | 26 | 175 | 35mm ² |
| 0L35-A11000-380 | 3x100 | 69 | 780x305x586 | 118 | 26 | 190 | 70mm ² |
| 0L35-A11250-380 | 3x125 | 86 | 780x305x586 | 118 | 26 | 190 | 70mm ² |
| 0L35-A11600-380 | 3x160 | 110 | 1500x455x800 | 230 | - | - | 120mm ² |
| 0L35-A12000-380 | 3x200 | 138 | 1500x455x800 | 240 | - | - | 120mm ² |
| 0L35-A12500-380 | 3x250 | 172 | 1500x455x800 | 280 | - | - | 120mm ² |

PROTECTION

Over-temperature Protection

Thermo-switches that monitor the temperature of key components protect the LEC from over-temperature faults.

- A fan will be activated at 60°C.
- The LEC will automatically switch to bypass mode at 140°C and will supply net voltage to the load, without voltage interruption.

Overload Protection

The LEC has two types of overload protection:

- Circuit breakers that protect against overload and short circuit current.
- Switches to bypass mode if the input current during saving mode is higher than 90% of the nominal current for more than 4 minutes.

For more information please contact us at

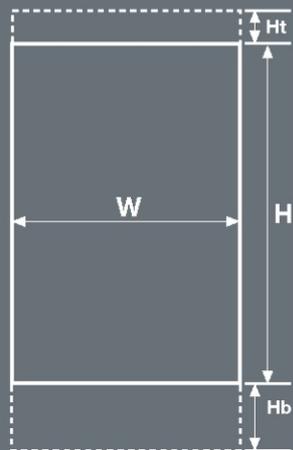
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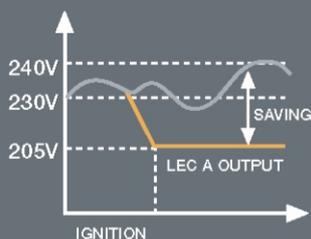
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AUTOMAÇÃO 



NOTES:

- Ht and Hb are used for optional top and bottom covers
- 160A – 250A devices are supplied in metal cabinets.



The LEC A is EMC approved
VDE EN 50178, 60439-1
AS/NZS 3100:2002
ETL UL - 916
CE marking

Power Electronics Systems (2006) Ltd.
is ISO 9001:2000 and IQNet approved

