

# LEC B Super

The LEC B Super is a 3-phase intelligent lighting controller designed to control the voltage provided to lighting circuits. The LEC B reduces the voltage supplied to lighting elements by 25v and provides sophisticated functions to control and operate the lights.

## BENEFITS

- 18% - 25% - 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 B Super 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 0-99 minutes.

### Re-Ignition Sequence

The LEC B Super allows the ignition sequence to be repeated automatically by detecting an increase in the current (minimum 5A across 3 phases). Required in installations where users turn on the lights manually in separate lighting circuits connected to the LEC output.

### Operation Modes

**Manual** – manual operation via the built-in keypad.

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

**Automatic** – activates the LEC at a configured time using the built-in real time clock.

**AstroClock** – activates the LEC according to time of sunrise/sunset.

### Real Time clock

The real time clock enables LEC B Super 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 B Super has four defined time windows that control the two different levels of voltage to the load at different times of the day.

### Under Voltage Protection

The LEC B Super automatically switches to the Bypass mode if the net voltage drops below 215V.



### ENERGY SAVING:

18%- 25%

### LIGHTING SYSTEMS:

The LEC B Super is recommended for use with Fluorescent, PL, LPS and HPS bulbs

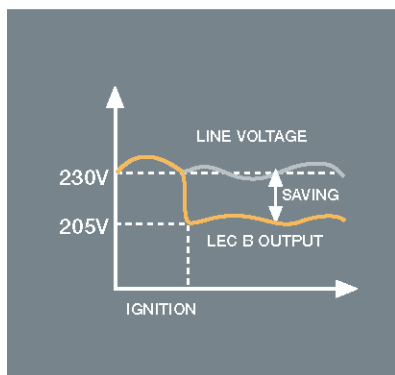
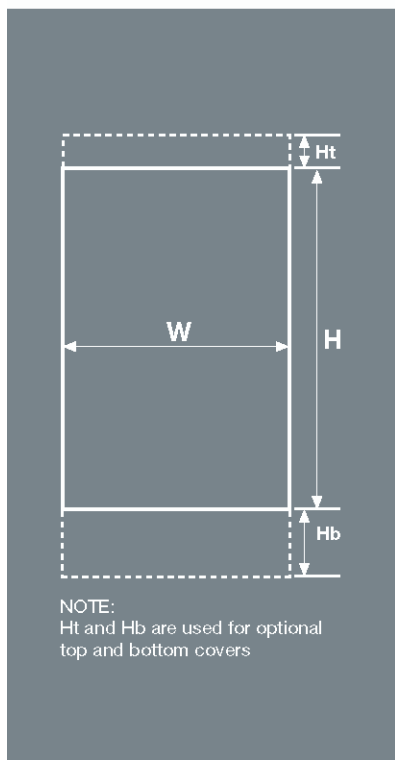
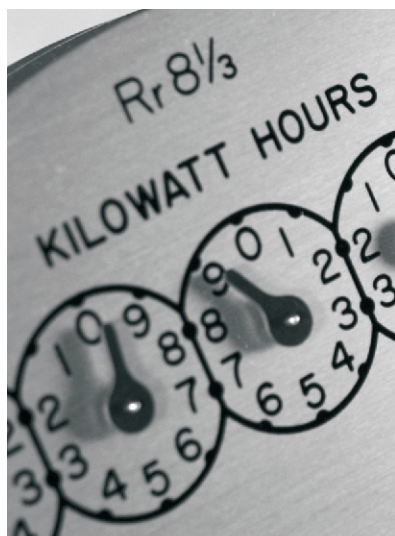
### APPLICATIONS:

Gas stations, street lighting, logistics centers, retail stores, factories, service stations, underground parking.

### RANGE:

3x20A – 3x160A





The LEC B 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



## COMMUNICATION & CONTROL

RS232/485	Integrated protocol for bi-directional data communication.
Input	Dry contacts terminals to control LEC Start, Stop or Bypass mode. Can be connected to photocell, timer or control device.
Auxiliary Input	Dry contacts terminals for connecting auxiliary external alarm inputs (e.g. cabinet door open) to the LEC B Super.
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	25V reduction	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
0L25-S20200-470	3x20	14	436x263x275	20.5	26.5	85	16mm <sup>2</sup>
0L25-S20300-470	3x30	21	436x263x275	20.5	26.5	85	16mm <sup>2</sup>
0L25-S20500-470	3x50	35	436x263x275	25	26.5	85	16mm <sup>2</sup>
0L25-S20800-470	3x80	55	612x285x396	34	26.5	26.5	35mm <sup>2</sup>
0L25-S21000-470	3x100	69	612x313x396	53	26.5	155	70mm <sup>2</sup>
0L25-S21250-470	3x125	86	612x313x396	53	26.5	155	70mm <sup>2</sup>
0L25-S21600-470	3x160	110	780x305x586	80	26.5	190	70mm <sup>2</sup>

## 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 overload protection via circuit breakers that protect against overload and short circuit current.

### Alarms & Warnings

The LEC B Super provides additional warnings and alarms regarding net conditions and LEC operation:

- Under voltage protection
- Over voltage protection
- Over current warning
- Over / under normalized current warning
- "No saving" warning

For more information please contact us at

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