



# SmartLEC

## Advanced Lighting Control and Energy Savings

SmartLEC is an advanced energy controller for lighting applications. Guaranteed direct energy saving of 15% - 43%

- Maximum saving, shortest ROI and highest efficiency using PowerSines INV™ technology
- Smart operation and diagnostics of lighting installations for intelligent use of lights, failures detection, preventive maintenance and extended lamps lifetime
- Wide range of applications: city lighting, motorways, tunnels and bridges, ports and airports, industrial lighting, logistic centers, retail and many others

### Fits for any requirement

SmartLEC regulates and stabilizes voltage in steps of 2.5V and is available in 25V, 35V and 43V series, offering the best price/performance ratio for installations with both high or low voltage requirements. SmartLEC models are offered in the range of 3x20A - 3x250A.

### Remote Energy Management System

SmartLEC seamlessly integrates with PowerSines Remote EMS monitoring and control system over the internet and enables remote operation of the entire SmartLEC functionality as well as reports, and real-time alerts.

In addition, SmartLEC can be integrated with third party control systems using open Modbus/RTU protocol for real-time data exchange.

### All-in-One device:

**Dynamic voltage stabilization and saving scenarios**, setting required voltage levels in four time windows to achieve optimum performance

**Precise electric and energy consumption measurements** of all network parameters per phase, and energy consumption sliced by days, weeks and months

**Automatic energy saving measurement** sliced by days, weeks and months

**Astronomic clock** for automatic operation of lighting according to sunset and sunrise at the device location

**Advanced diagnostics** and detection of lighting circuit failures and device operating status

**Ignition and re-ignition** assures lamps power-on switching at optimum voltage conditions

**Built-in protections** for the highest reliability including internal automatic bypass, manual changeover switch and output circuit breaker

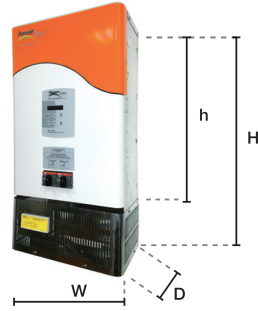
**Compact dimensions and light weight** enables easy and quick installation at any location

**High quality build** robust electro magnetic design and top-grade switchgear components assure life expectancy of over 15 years

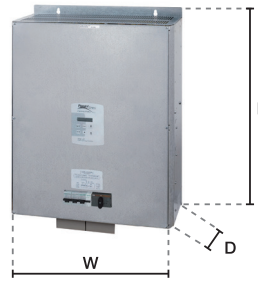
**Bi-directional communication** via RS232 channel with built-in Modbus/RTU protocol

# SmartLEC Product Models

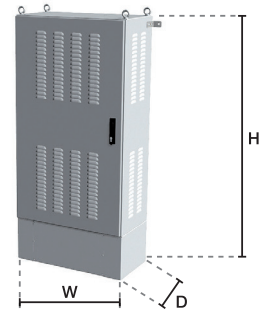
SmartLEC 20A - 80A



SmartLEC 100A - 125A



SmartLEC 160A - 250A



Product Name	Catalogue Number	* $\Delta V$	KVA	** Dimensions (mm)				Weight (kg)	Cross Section (mm <sup>2</sup> )
				h	D	W	H		
SmartLEC 20A	0Lxx-SL0200-380	25, 35, 43	14	652	243	397	781	30/32/35	35
SmartLEC 30A	0Lxx-SL0300-380	25, 35, 43	21	652	243	397	781	48/50/57	35
SmartLEC 50A	0Lxx-SL0500-380	25, 35, 43	35	652	243	397	781	48/50/57	35
SmartLEC 80A	0Lxx-SL0800-380	25, 35, 43	55	660	297	537	804	64/68/75	35
SmartLEC 100A	0Lxx-SL1000-380	25, 35, 43	69	781	291	586	951	102/110/120	70
SmartLEC 125A	0Lxx-SL1250-380	25, 35, 43	86	781	291	586	951	102/110/120	70
SmartLEC 160A	0Lxx-SL1600-380	35	110	-	447	814	1756	230	120
SmartLEC 250A	0Lxx-SL2500-380	35	173	-	447	814	1756	280	120

\* xx =  $\Delta V$  - Voltage regulation range \*\* Weights and dimensions are subject to change

## Lamps Compatibility and Savings

Lamp Type & Ballast	Application	SmartLEC Model	Savings %
High Pressure Sodium (HPS)	Street and road lighting, high masts, tunnels, outdoor lighting	35V, 43V	20% - 43%
T8, PL and PLL with EM ballast	Indoor lighting, warehouses, logistic, industrial, offices	25V, 35V	20% - 35%
Metal Halide (MH) with EM ballast	Warehouses, logistic, industry, sport facilities	25V	15% - 22%
CFL	Indoor lighting, car parking, offices	25V, 35V	15% - 20%

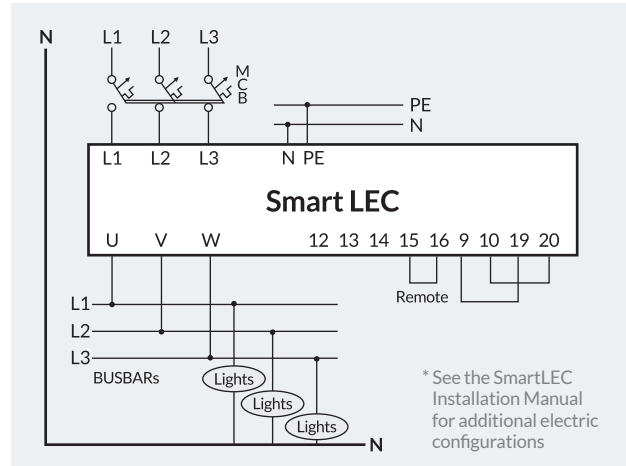
\* EM - Electromagnetic ballast

## Technical Specifications

Input Voltage	3x230/400VAC $\pm$ 10%
Voltage Regulation	2.5V
1 <sup>st</sup> Step Reduction	SmartLEC/25V: 2.5V SmartLEC/35V: 12.5V SmartLEC/43V: 2.5V
Frequency	50Hz
Efficiency	99%
IP Class	IP 20
Ambient	-20°C - +40°C
Measurements	A, V, kW, PF, kWh
Networks	TN-S, TN-C-S

\* Specifications are subject to change without notice

## Electric Diagram



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