

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, harmonics analysis and device diagnostics.

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.

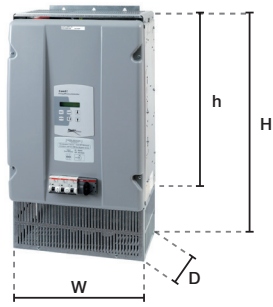
Compact dimensions and light weight enables easy and quick installation at any location.

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 Models

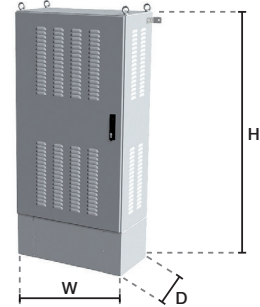
SmartLEC 20A - 80A



SmartLEC 100A - 125A



SmartLEC 160A - 250A



| Product Name | Catalogue Number | *ΔV | KVA | ** Dimensions (mm) | | | | Weight (kg) | Cross Section (mm²) |
|---------------|------------------|------------|-----|--------------------|-----|-----|------|-------------|---------------------|
| | | | | h | D | W | H | | |
| SmartLEC 20A | 0Lxx-SL0200-380 | 25, 35, 43 | 14 | 652 | 262 | 397 | 782 | 30/32/35 | 35 |
| SmartLEC 30A | 0Lxx-SL0300-380 | 25, 35, 43 | 21 | 652 | 262 | 397 | 782 | 48/50/57 | 35 |
| SmartLEC 50A | 0Lxx-SL0500-380 | 25, 35, 43 | 35 | 652 | 262 | 397 | 782 | 48/50/57 | 35 |
| SmartLEC 80A | 0Lxx-SL0800-380 | 25, 35, 43 | 55 | 658 | 293 | 533 | 815 | 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 200A | 0Lxx-SL2000-380 | 35 | 138 | - | 447 | 814 | 1756 | 250 | 120 |
| SmartLEC 250A | 0Lxx-SL2500-380 | 35 | 173 | - | 447 | 814 | 1756 | 280 | 120 |

*xx = ΔV - 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 ball | 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% |

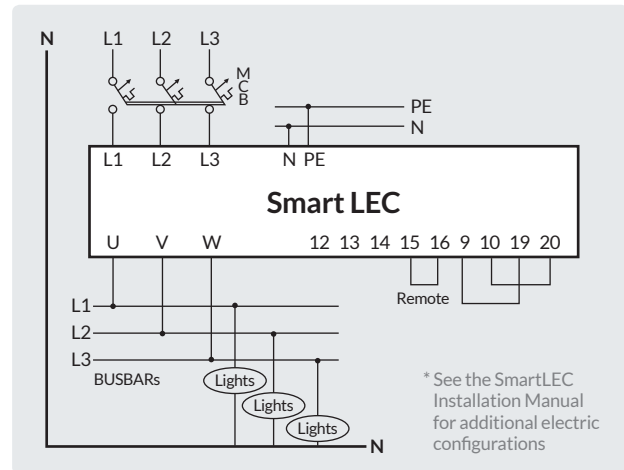
* EM - Electromagnetic ballast

Technical Specifications

| | |
|---------------------|---|
| Input Voltage | 3x230/400VAC ± 10% |
| Voltage Regulation | 2.5V |
| 1st step reduction | SmartLEC/25V: 2.5V SmartLEC/35V: 12.5V SmartLEC/43V: 2.5V |
| Frequency | 50Hz |
| Efficiency | 99% |
| IP Class | IP 20 |
| Ambient Temperature | -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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