

#### **REGULATION**

## TAILORED REGULATION

# SINGLE-PHASE OR THREE-PHASE VOLTAGE REGULATOR

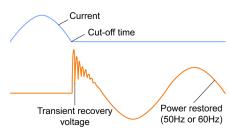
In many areas, the electrical network dedicated to public lighting lacks stability. This instability results from a varied energy mix, generating transient phenomena such as overvoltages and undervoltages. While high-quality drivers can protect themselves from variations of less than 50 ms, they cannot absorb longer disturbances. Our regulation solution ensures optimal management of electrical variations by stabilising the public lighting network, even during prolonged transient phenomena.

- > Single-phase cabinet 7 kVA
- > Three-phase cabinet from 8 kVA to 66 kVA

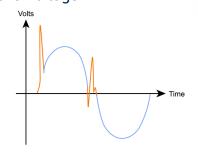


#### WHAT WE SOLVE

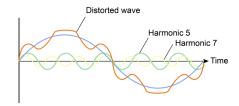
### Transient voltage



#### Transient overvoltage



#### Harmonic disturbances



#### A COMPLETE & TAILOR-MADE SOLUTION

- A complete stainless steel cabinet with space for the energy supplier's electricity meter
- Stabilisation of the supply voltage across all operating ranges
- Power supply without micro-interruptions
- Operates on an outdated network, overhead or underground, with separate or common neutral
- No overconsumption generated by voltage rise on the network
- Increased lifespan of lamps, electronic equipment and LED drivers
- Guaranteed nominal output voltage, regardless of the nominal voltage level of the upstream power supply network
- Downstream voltage control independent of upstream voltage
- A stable operating base to sustain downstream investments in high-performance LED equipment and communication nodes for remote management



## **FEATURES**

#### **VOLTAGE REGULATION**

- ± 2.5 V
- 98% energy efficiency across the entire operating range
- The regulator does not require a neutral reference to function
- Operates on all city networks with or without a separate neutral

# IN THE EVENT OF OVERVOLTAGE AND/OR NEUTRAL BREAK

- 270 V installation cut-off
- Automatic power restoration

#### STANDARD EQUIPMENT

- Schneider Electric 3-phase + neutral isolator switch 22 x 58
- Pre-wired space for 16 mm<sup>2</sup> electricity meter
- Regulator with magnetothermal input protection
- Neutral break and overvoltage controller
  > 270 V
- Upstream and downstream surge protection: type 2 surge arrester
- Output(s) with Schneider Electric fuse holder 14 x 51
- Thermal and hygrometric control
- Option: astronomical clock
- Other equipment on request

### **TECHNICAL DATA**

Power supply: 230 V Mono or Tetra (3ph + neutral),

50~60Hz

**Supply voltage:** 175~264 V **Insulation class:** Classe 1

**Permissible phase imbalance:**100 % **Stabilisation accuracy:** operation:

± 2.5 V from 150 V to 250 V, regulated mode **Permissible network types:** common neutral, separate neutral, mixed common & separate neutral networks

Efficiency: 98% from 150 V to 250 V. Low loss

across all operating thresholds

**Setpoint adjustment:** independent per phase **Lamp selector:** guaranteed compatibility with all ferromagnetic and electronic 170-240 V lamps **Behaviour in the event of a ± 15% input voltage variation:** regulation to the current setpoint voltage with an accuracy of ± 2.5 V from the setpoint. Adjustment speed: 40 ms/V

Operating temperature: -20°C to +60°C Storage temperature: -25°C to +70°C Humidity: 0 to 97%, integrated ventilation and hygrometry



#### **COMMERCIAL REFERENCES**

> L-REG~STB08: Three-pole control cabinet 8 kVA,

3 x 14 A, 230 V, stainless steel enclosure

> L-REG~STB11: Three-pole control cabinet 11 kVA,

3 x 17A, 230 V, stainless steel enclosure

> L-REG~STB16: Three-pole control cabinet 16 kVA,

 $3 \times 25 A$ , 230 V, stainless steel enclosure

> L-REG~STB21: Three-pole control cabinet 21 kVA,

 $3 \times 32A$ , 230 V, stainless steel enclosure

> L-REG~STB26: Three-phase control cabinet 26 kVA,

3 x 40 A, 230 V, stainless steel enclosure

> L-REG~STB36: Three-pole control cabinet 36 kVA,

3 x 53 A, 230 V, stainless steel enclosure

Other possible regulating powers: 45 kVA, 55 kVA, 66 kVA



> L-REG~STC07: Single-phase control cabinet 7 kVA, 32 A, 230 V, stainless steel enclosure

