

ENSTO

Ensto Voltage Controller

Answer to voltage variation
in low-voltage networks



Better life.
With electricity.

An economical solution to compensate line voltage drops
in residential and rural single-phase networks.

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A line voltage regulator for low-voltage networks

Ensto wants to provide the power quality solution which enables DSOs to meet electricity distribution requirements. Ensto Voltage Controller is an economical solution to mitigate unwanted voltage variation in rural and residential areas.

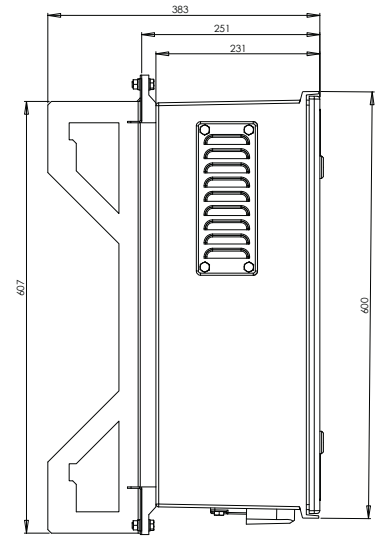
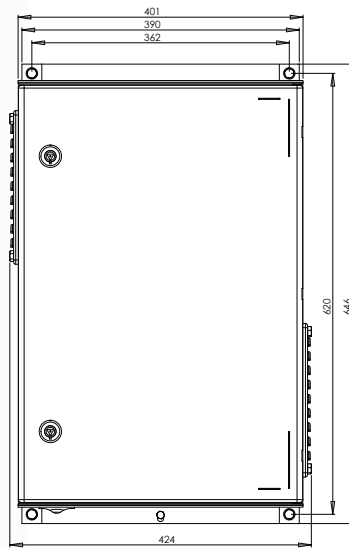
As penetration of rooftop solar power, electric vehicle charging and heat pumps increases in low-voltage distribution networks, voltage variation and phase unbalance may become a problem, especially in small residential and rural areas. The main concern of the DSO is the compliance of the EN 50160 power quality requirements. Overvoltage is one of the main issues that may occur when solar power installations are connected at the end of feeder. Quite often solar power generation must be limited or even interrupted. Correspondingly, voltage drops may occur when large loads are connected.

Ensto Voltage Controller is a bidirectional, single-phase solution to mitigate voltage variation in low-voltage network feeders. When installed close to the consumer connection point, the unit is able to increase or decrease line voltage automatically and autonomously into the permitted tolerance. Ensto Voltage Controller is reliable, safe and cost-efficient solution to reinforce distribution network in rural and residential areas where single-phase service is available. The unit can be installed on the wall or to a pole.

Product benefits

- › **Enables higher level** of solar power integration to LV feeders
- › **Compensate line** voltage drops
- › **Cost-efficient solution** compared to network reinforcement
- › **Safe and reliable** – double isolated, no need for grounding
- › **Quick and easy commissioning** – no settings or calibration
- › **Reusable and environmental friendly** – Air-cooled, free of oil

Product information



Technical Characteristics	VC6K-1P-000 / VC6K-1P-001
Rated power	6 kVA
Rated voltage	230 VAC -30%/+15%
Rated frequency	50 Hz
Rated current	25 A
Electrical wiring	1-phase (TN, TT)
Total voltage control range	-10% - +15%
Step voltage	5%
Reaction time	300 ms
Efficiency	>98,5%
Dimensions (W*H*D)	401*646*383 mm (with the pole mounting adaptor)
Weight	35 kg
Enclosure	UV resistant composite, IP 54, IK10
Bypass switch (VC6K-1P-001 only)	Contacteur switch, fully bypassing the unit
Noise emissions	≤46 dB(A)
Pole mounting adaptor included	

Recommended pole mounting accessories	
Steel buckle	COT36
Steel band	COT37
Tool for steel band	CT42
Surge arrester to insulated overhead line 275V, 15kA	SE45.275-15

> Location close to the problem area

> Fixes the problem by bringing the level back to nominal



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