

EBG *electro*

LINE VOLTAGE STABILIZER

FOR VOLTAGE BAND CONTROL ACCORDING TO DIN EN 50160



EN |

EBG *group*

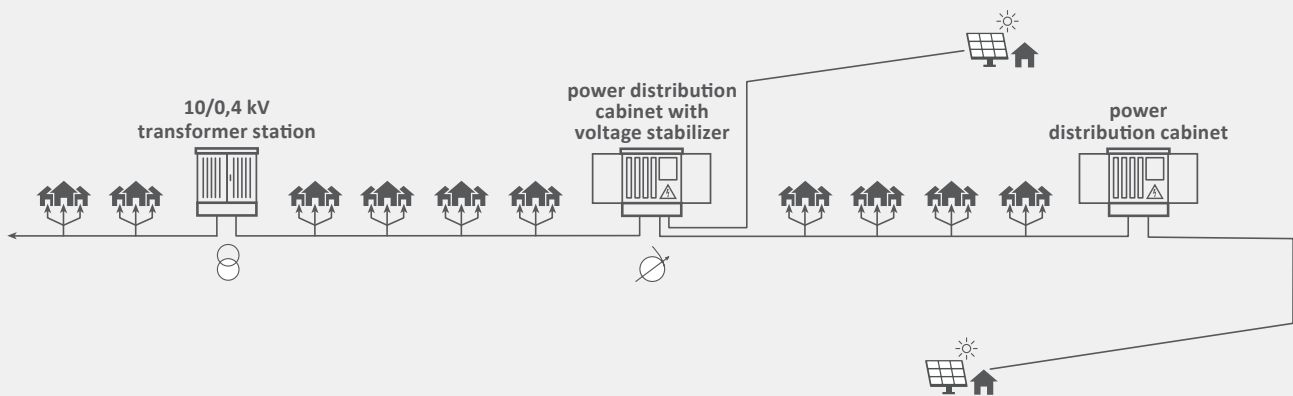
team made

NEW CHALLENGES

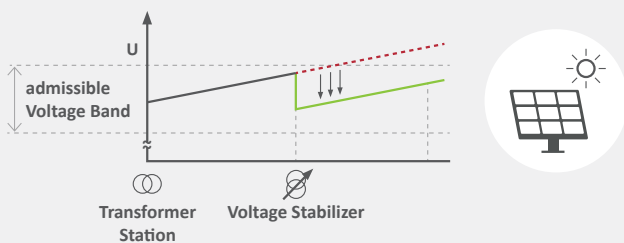
IN THE LOW-VOLTAGE GRID

Highly volatile power feeds from photovoltaic units take the classical approaches to voltage band control to their limits. The ongoing expansion of the charging infrastructure for e-mobility connects further high-load consumers to the grid, imposing further challenges for voltage band control.

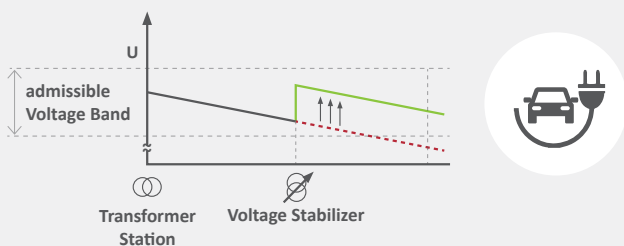
To maintain line voltage within the range defined by DIN EN 50160, active voltage stabilization is required. EBG provides a solution especially for long grid branches and distant consumers.



Voltage step-down in cases of overvoltage



Voltage step-up in cases of power sags



Function of the Voltage Stabilizer

- » the Voltage Stabilizer operates completely autonomously. Voltage stabilization need is detected by evaluation of the line voltage and the required voltage step is activated.
- » no external sensors required
- » voltage correction is effected by a line transformer combined with an innovative voltage stepping circuitry

Features

- » completely housed and wired for quick and easy installation
- » device is supplied fully parameterized, no on-site adjustment work required
- » robust technology, maintenance-free
- » voltage step-up and step-down within one device
- » suitable for all earthing schemes (TN-C, TN-C-S, TN-S, TT)
- » variant for three-wire-grid configurations available
- » compact-sized to fit into standard distribution cabinets
- » suitable also for temporary use cases

Conclusion:

- » cost-effective voltage band stabilization
- » helps to avoid costly line reinforcements



Data Sheet

Type	SR3		SR3X2		SR13
Implementation example	M001974	M003432	MV011910	MV012323	MV008900
Throughput capacity S_N	104 kVA	62 kVA	138 kVA	77 kVA	272 kVA
Phase current I_N	151 A	90 A	200 A	112 A	394 A
Voltage swing ΔU	$\pm 2,6 \%$	$\pm 4,3 \%$	$\pm 3,9 \%$	$\pm 7 \%$	$\pm 4,3 \%$
Number of steps	3		5		3
Longitudinal impedance Z_L	< 5 m Ω		< 5 m Ω		< 5 m Ω
Efficiency	> 99,8 %		> 99,8 %		> 99,8 %
Measures (WHD in mm)	245 x 820 x 200 (Module)		480 x 820 x 200 (Module)		1570 x 830 x 330 (Cabinet 2 x UCH size 1)
Line fusing (max.)	355 A gG		355 A gG		400 A gG
Overtoltage resistance	CAT IV (6 kV at 1,2/50 μ s peak)				
Displays	LED controls for on/off status, switch position, temperature alarm				
Settable parameters	Stepping threshold voltages, hysteresis, switching delays				



Options shown only represent a small selection – for more info, please contact us!

A STRONG GROUP

We have achieved all relevant certifications (Quality IATF 16949, DIN EN ISO 9001, Environment DIN EN ISO 14001, Energy DIN EN 16247, DIN EN ISO 50001). In addition, we have implemented an occupational health and safety management system according to the German statutory accident insurance and prevention association.

We co-operate with universities and research institutes to consistently develop our group of companies. In addition to providing access to the latest scientific findings, this also helps us to recruit qualified employees for our companies.

team made – because what we do is always a success of the team. Working together is the core as well as the motor of our innovative strength.

www.ebg-group.com

MISSION STATEMENT

- » We are leaders in what we do. We want to stay that way, at the same time being open to new things.
- » Profit can't buy everything, but without economic success, things will not work.
- » New ideas for products and processes do not just appear out of nowhere. We look for them and develop them systematically.
- » We challenge our staff – and we also support them.
- » We don't look for the culprit, we look for a solution to the problem. Everybody has to take on responsibility and learn from the mistakes.
- » Our successes are always team successes.
- » We talk cordially, honestly, and respectfully with our business partners and with each other.
- » We appreciate values; we'll say what we mean, and we'll do what we say.
- » Our mission statement is not for preaching Sunday sermons. It is our objective for Monday thru Friday (and, occasionally, Saturday too).
- » We might not always be the best. But always, we're the funniest.

EBG*electro*

EBG*eqs*

EBG*innolab*

EBG*plastics*

EBG*jung*