



A BUYER'S CHECKLIST

VOLTAGE REGULATOR

Choosing an ideal Automatic Voltage Stabiliser starts with identifying your operational needs. This technical buyer's checklist is designed to help you uncover specific requirements, so you can be equipped with the information to make a better, smarter decision on your new investment.

The automatic voltage stabiliser's vast benefits are exceptionally ideal for the following applications:

- Facility Management (FM)
- Broadcasting & Long Distance Transmission Cable Projects
- Laboratory Testing & Quality Control Applications
- Petrol, Oil & Gas Industry
- Hospitality & Medical Industry
- Government & Military Sector
- Factory, Manufacturing & Plant Applications

Eliminate these common negative consequences with complete voltage protection for your operations:

- Frequent circuit breaker tripping
- Equipment unable to startup
- Equipment overheating
- Regular equipment breakdowns or component malfunctions
- Frequent equipment maintenance / replacements
- Lighting not bright enough / too bright / flickering
- Uneven motor speed / weak motor pumps
- Equipment failure at only certain time of the day

Your decision to begin your buying journey is key to success in your maintenance efforts. This is crucial for your equipment to achieve optimal performance, remove unreasonable repair costs, and ultimately – protect your precious uptime.

And if you're wondering "How do I know which Automatic Voltage Stabiliser is best for me?", no worries, we got your covered!

In this comprehensive buyer's checklist, we provide you with the **Top 6 Key Factors** every electrical professional should evaluate, to ensure your investment is both on point, and on budget.

1 Set Your Highest Goals

This step is crucial for high value production line equipment and mission critical loads. Identify the specific type of voltage anomaly you're trying to overcome. Having a clear direction gives you clarity and confidence to achieve the expected results for your operations. Solving common challenges like:

- Under Voltage
- Over Voltage
- Voltage Fluctuations
- Complying with strict voltage drop limits
- Ensuring both essential & non essential loads receive optimal voltage
- Eliminating the need to compensate using excessive and expensive cable runs
- Securing a stable and constant voltage supply provides for accurate and consistent readings.
- Fast response regulation speed is crucial for preventing arcing in equipment and switches
- Achieving a well regulated voltage supply to prevent loads from experiencing harmful effects (i.e. inconsistent welding results)

2 Determine Your Total Load Capacity

Find out the total load (in KVA) of all the equipment that you're providing voltage protection for. If you're planning to protect your entire facility:

- Use the same capacity as your mains incoming transformer.
- For future-proofing, select a higher capacity to cater for expansions.

- 1 ~ 100 KVA
- 100 ~ 500 KVA
- 500 ~ 1000 KVA
- Above 1000 KVA
- Others:

3 Regulating Single Or Three Phase Systems

 SINGLE PHASE Automatic Voltage Stabiliser

Voltage protection for only single phase load(s), no matter if your power system is three phase.

 THREE PHASE Automatic Voltage Stabiliser

Voltage protection for three phase load(s) or a combination of single and three phase loads.
Different models available for 3 Wire configuration (L1, L2, L3), and 4 Wire configuration (L1, L2, L3, Earth).

4 Consider The Nature Of Your Load

 For Motor Loads:

- When stabilising your voltage supply, consider the high startup current that is inherently created by motor loads.
- Size up your Automatic Voltage Stabiliser by at least 30% of your total load.
- This provides for optimal operations for your equipment, without causing unnecessary breaker tripping.

 For Sensitive Electronics or Critical Loading:

- Sensitive equipment require a stable and constant voltage supply to ensure accurate readings / peak performance.
- Choose an Automatic Voltage Stabiliser with precise output voltage accuracy.
- For best results, opt for Servo Electronic designs that provide $\pm 0.5\%$ voltage accuracy.

 For Rugged Industrial Application:

- Hash / salty / dusty environments affect the healthy lifespan and performance of your equipment.
- Choose an Automatic Voltage Stabiliser designed for robustness and reliability.
- Opt for Magnetic Induction designs that offer seamless and virtually maintenance-free operations.

5 Check Your Input Voltage Levels

The range between your minimum and maximum input voltage will determine a suitable voltage tolerance for your Automatic Voltage Stabiliser.

- Voltage tolerance typically ranges from $\pm 15\%$ up to $\pm 40\%$.
- The narrower the voltage tolerance, the more economical the cost of your investment will be.

Minimum

 kva

Maximum

 kva

6 Evaluate Your Space

Planning ahead for installations ensure sufficient room and seamless operations. The size of your Automatic Voltage Stabiliser depends on the capacity and model of your choice.

- Take into consideration that ample space is required for the ease of future servicing or maintenance.

Leaving 600 to 1000 mm space on the front and back of the unit is generally recommended.

- For bigger units (> 400KVA / 980 kg), plinths are typically used to raise an enclosure and to ensure final assembly fit and alignment is easier.

Estimated Dimensions:

Width	Depth	Height	Weight Limit:	Number of equipment required:
<input type="text"/> cm	<input type="text"/> cm	<input type="text"/> cm	<input type="text"/> kg	<input type="text"/>

What Is The Environment?

<input type="checkbox"/> Indoors	<input type="checkbox"/> Dusty	<input type="checkbox"/> Mountainous	<input type="checkbox"/> Outdoors	<input type="checkbox"/> Seaside	<input type="checkbox"/> Others: <input type="text"/>
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Find Out How Others Are Succeeding With Ashley Edison Voltage Solutions

For more case studies and guides to help you make a more informed decision on buying the ideal Automatic Voltage Stabiliser, visit [ashleyedison.com/voltage-solutions/](https://www.ashleyedison.com/voltage-solutions/)