

Digital Voltage Controller, DVC 310

Improve your genset performance



Designed for alternators with SHUNT, AREP or PMG excitation, DEIF's Digital Voltage Controller, DVC 310, is a digital automatic voltage regulator, which monitors and regulates the alternator output voltage. The controller can improve genset performance, delivering up to a 10 % increase of load impact capability and is suitable for any application in the critical power, IPP and rental segments. Critical power applications in particular will benefit from the improved control on the Close Before Excitation sequence, increasing safety & allowing faster start-up.

No generator oversizing required

Due to high inrush currents during start-up, generators for electric motor starting and transformer magnetisation are often oversized by up to 200%. Featuring inductive motor starting and magnetisation boosting, DEIF's DVC 310 reduces oversizing requirements to a minimum.

Increased performance

Compared to analog AVR's, DEIF's Digital AVR handles larger load-steps within the same frequency/voltage boundaries. Typically, the gensets will accept 10% additional nominal load. With the embedded help features, this increases performance.

Protect your generator from humidity

Condensation build-up during idle time is a common problem in tropical climates. With its dedicated ventilation mode, the DVC 310 removes humidity in windings using the alternator fan and only allows for power generation when it is safe to do so.

Genset control solution

The DVC 310's built-in J1939 based communication offers an exclusive communication channel to DEIF's advanced controllers. Providing a high number of alternator data for display, broadcast or predictive maintenance, this feature is unique on the market. Using CAN bus-based communication for voltage regulation reduces the potential number of failure sources. Use the DVC 310 together with our, AGC-4, AGC 200 or GPC-3 controllers to maximize your benefits.

DVC 310 features

- ▶ Start management capability with start on threshold, soft start, and Close Before Excitation (CBE) functions
- ▶ Voltage regulation accuracy +/-0.25 %
- ▶ Optimise genset performance and size using exclusive engine help functions (load acceptance module, negative forcing, U/f, soft voltage recovery and stator current limitation)
- ▶ Exclusive drying and ventilation mode
- ▶ Voltage regulation via CAN bus
- ▶ Increase accuracy of settings
- ▶ Consistent control of regulation loops



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