

STATIC VOLTAGE STABILISERS

single-phase - GEMINI (1kVA to 10kVA)

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three-phase - AQUARIUS (10kVA to 30kVA)

AQUARIUS

The static stabiliser is used when correction **speed** represents a critical issue (for example, computers, laboratory equipment, measuring benches and medical instrumentation).

The stabilising system is designed to operate with rated voltage in accordance with the IEC38 Standard and is expected to be connected between main power supply and load user. However it is also designed so that it can operate with a different rated voltage (220V and 240V for single-phase; 380V and 415V for three phase) to be selected as necessary.

The stabiliser operates with a load variation range for each phase from 0 to 100% and is not affected by the power factor of the load.

The unit is housed in an IP21 metal enclosure with RAL7035 finish, suitably sized according to the power rating. Special cabinets for IP54 outdoor installation are available.

Data

- Voltage regulation: +15/-30%
- Output accuracy: $\pm 3\%$
- Typical response time: 1 cycle.

Main components

- Multi-tap autotransformer
- Input automatic circuit breaker
- Manual Bypass
- **Microprocessor control system**
- Thyristor based power circuit
- Digital display

The autotransformer (single- or three-phase) is provided with taps to be connected to the voltage stabiliser output in order to compensate for the fluctuations on the input voltage.

The **microprocessor** system monitors the input voltage and connects the right transformer tap to the voltage stabiliser output in order to guarantee the best regulation of the voltage to the load.

The electronic switches, controlled by the microprocessor, run the connection of the transformer taps to the output when the alternating current crosses the zero-point.

The display system, controlled by the microprocessor, shows load voltage and current. It also indicates when the output voltage is outside the regulation limits as well as overload condition and over temperature.

An acoustic alarm is available for signalling overload and overheating situations.

Accessories

- Isolation Transformer
- IP54 outdoor cabinet

Further details in the technical data tables