

## Three-phase - 'ORION Plus' (80kVA to 1250kVA)

(independent phase voltage control)

PC SELECTABLE OUTPUT VOLTAGE	from 210V to 255V (L – N) from 360V to 440V (L – L)
FREQUENCY	50/60Hz $\pm$ 5%
ADMITTED LOAD VARIATION	up to 100%
ADMITTED LOAD UNBALANCE	up to 100%
COOLING	Natural air (Aided over 45°C)
AMBIENT TEMPERATURE	-25/+45 °C
STORAGE TEMPERATURE	-25/+60°C
RELATIVE HUMIDITY	95%
ADMITTED OVERLOAD	200 % 2min
COLOUR	RAL 7035
PROTECTION	IP 21
INSTALLATION	Indoor

Further details in the technical data tables



Orion Plus



**ORION Plus** stabilisers can be chosen to match different ranges of input voltage fluctuation ( $\pm 15/\pm 20\%$ ;  $\pm 25/\pm 30\%$ ;  $+15/-35\%$ ;  $+15/-45\%$ )

For  $\pm 15\%$ /  $\pm 20\%$  and  $\pm 25\%$ /  $\pm 30\%$  range, the change of stabilisation is obtained through different internal connections.

They are housed in modular cabinets suitable for any industrial environment and able to tolerate mechanical stress that may occur

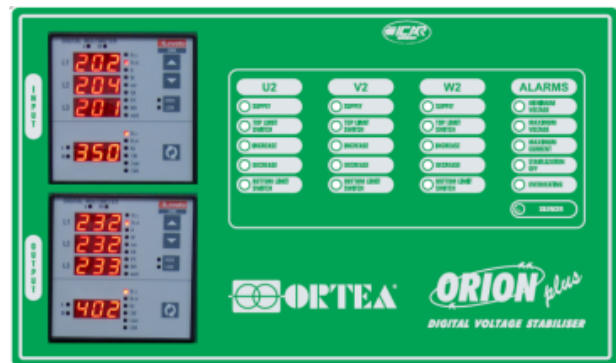
during transport and installation.

The ORION PLUS voltage stabilisers regulate the voltage independently on each phase. Typically, the stabiliser is used in case of unbalanced mains distribution and unbalanced three- or single-phase load distribution. **In this situation the presence of the neutral wire is required.** The stabiliser can also operate without neutral wire by adding a device able to generate it ( $\Delta/z_n$  or  $\Delta/Y_n$  isolating transformer or neutral inductance).

The stabilisers are air cooled (natural convection with cabinet internal temperature lower than  $45^\circ\text{C}$ ).

The measuring instrumentation for the ORION PLUS stabilisers is incorporated in a control panel on the cabinet door and consists of **two multi-task digital network analysers**. Such instruments are able to provide with information regarding the status of the lines upstream and downstream the voltage stabiliser such as phase and linked voltages, current, power factor, active power, apparent power, reactive power, etc.

The operating status of the stabiliser can be easily monitored by means of a LED interface placed on the front panel, which displays all the information regarding the operating of the three phases and the possible alarms. LED lights signal 'power on', reaching of voltage regulation limits and direction of voltage regulation (increase/decrease). Alarms for minimum and maximum voltages, maximum current, over-temperature and ventilation failure are also indicated. The alarm indicators are accompanied by an acoustic alarm.



Up to 260kVA  $\pm 15\%$ , an automatic circuit breaker is provided on the regulation circuit to protect against overload and short circuit on the voltage regulator.

From 300kVA  $\pm 15\%$ , an electronic voltage regulator protection system activates in case of overload on the voltage regulator. In such condition the load supply is not interrupted, but the stabiliser output voltage is automatically set to the lower between the mains voltage and the pre-set output voltage. The service continuity is guaranteed, although the voltage is not stabilised. When the overload condition ceases to exist, the stabiliser switches automatically back to regular functioning.

The logic control, performed on the true rms voltage, is based on the 2-way DSP microprocessor. By means of fine settings and specific configurations, this control system can be set by using a personal computer: this characteristic allows for solving any problem of voltage stability in any industrial plant.

**All ORION PLUS stabilisers are provided with SPD surge arrestors type 2.**



26 Orion Plus ready to be shipped