**SVG dynamic power controller for rack mounting 100 kVar**

Suitable for active dynamic compensation of inductive and capacitive reactive power and balancing of unbalanced loads. Low-feedback and low-loss operation due to 3-level topology and high clock frequency. Compensation of the neutral conductor current in the 4-wire connection as well as automatic mains frequency detection. Compensation strategy can be changed during operation, adjustable standby mode and automatic restart after power failure.

Mains filter based on SIC technology with reduced power loss, increased efficiency and low cooling air and weight requirements.

Connection: 3-wire with / without N

Compensation power: 100 kVar

Modular expandability: unlimited

Rated voltage: 400 V (-30% / +10%)

Mains frequency: 45 - 62 Hz

Power loss at nominal current: <1.5

Compensation modes individual for each phase:

- Inductive & capacitive reactive power (adjustable up to 1.0)

- Load balancing (phase - phase + phase - N)

Response time: <15 μs

Clock frequency: 20 kHz on average

Parameterisation & operation:

External, graphic touch panel 4.3" with backlighting

User interface features:

- Display of the compensation power by displaying the mains and load side.

- Visualisation of measured values, spectra and waveforms

- Operating times freely adjustable via weekly schedule

- Logbook for operating and alarm messages with time stamp

- Password-protected configuration

- Data storage via external, optional universal measuring device

- Languages: German & English

- No additional software required

Communication interfaces:

1x RS485 Modbus RTU

1x on/off switch

1x connection for external display

Measured value acquisition: 3-phase measurement of load current with current transformer

Current transformer: 1.5 x In / 5 A,

Accuracy class: 0.5 / 1

Input load: <0.5VA

Current transformer position: low voltage, medium voltage (parameterisable)

Current transformer and current transformer disconnector available separately.

Ambient temperature: -10 to +40°C

Derating:>45°C

Humidity: 5% to 95%, non-condensing

Installation altitude: up to 1500 m above sea level without derating

Power loss at rated current: <3

Cooling: focussed air cooling

Cooling air requirement: 810 m³ / h depending on ambient temperature

Design: Cabinet module for 19" integration

Cable connection: feed from rear

Degree of protection: IP 20

Dimensions in mm (HxWxD): 500x190x550

Colour scheme: none (galvanised sheet steel)

Weight: 39 kg

Approvals:

- CE Conformity

- DNVGL

Optional accessories available:

Interfaces: Ethernet (TCP/IP), Modbus TCP

Potential-free I/Os: via external module

Delivery includes:

Installation instructions, operating instructions in German.

A qualified network analysis is recommended to determine the required compensation power.

Manufacturer: Janitza electronics GmbH

Type: SVG Pro LCD R 400 V 100 kVar

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