

PRODUCT BROCHURE

# PCS100 AVC-40 150 kVA - 3600 kVA

Active Voltage Conditioner  
for sag correction



- Continuous protection from the most common utility voltage problems
- Fail-safe worry free operation
- Faster return on investment due to low operation costs

# Active Voltage Conditioner for sag correction

Industries in developed countries, with modern power networks, are not immune to voltage problems. Although utilities endeavor to supply reliable, high-quality power, voltage sags and surges will continue to be a fact of life.

01 PCS100 AVC-40  
Single line diagram

The PCS100 AVC-40 is an active voltage conditioner. It is a high performance power electronic system designed for industrial and large commercial applications. It responds instantly to power quality events, providing continuous regulation of voltage.

With high power capacity, the PCS100 AVC-40 is the perfect solution for industrial loads using significant power as well as large commercial buildings where continuity of service is paramount. The PCS100 AVC-40 is designed to target voltage sag events while also providing protection against swells. Sag events are the major cause of lost production.

## Key benefits

### Reduce the cost of sag events

The PCS100 AVC-40 closes the electrical compatibility gap between the supply and plant by protecting the load from utility induced voltage sag events. The PCS100 AVC-40 minimizes the undue stress to the expensive equipment, thus increasing the equipment lifetime.

### Improve plant operation

The PCS100 AVC-40 regulates the voltage, removing long term undervoltage, overvoltage and voltage imbalance to reduce waste and damage to the expensive equipment. It also removes voltage fluctuations, which can cause process variation, improving the quality of operation of the plant or the facility.

### Faster return on investment

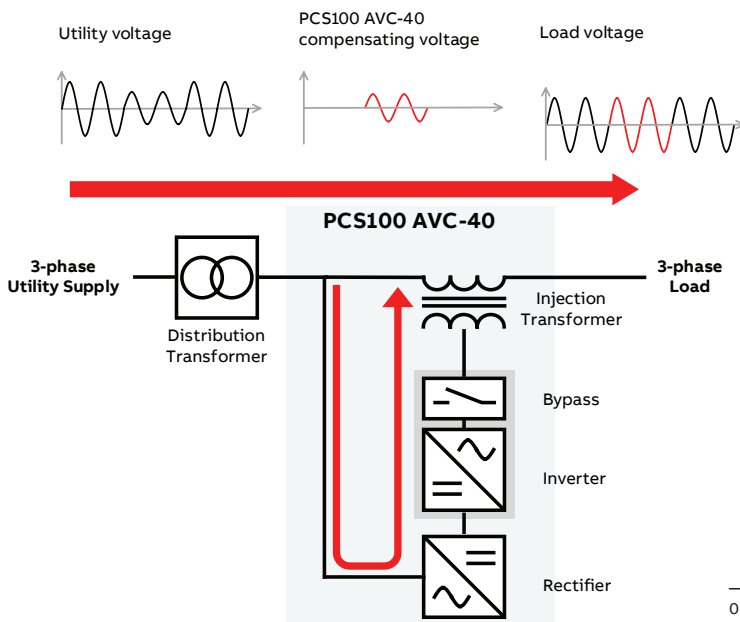
With industry leading efficiency exceeding 98 percent the PCS100 AVC-40 requires minimal costs for electricity and cooling. With no energy storage the ongoing maintenance cost is minimized, resulting in low total cost of ownership.

### Reduce damage to equipment

The PCS100 AVC-40 protects expensive equipment by regulating the voltage to remove long term undervoltage, overvoltage and voltage imbalances.

### Key features

- No energy storage
  - Increased system reliability with minimized maintenance
- Very high efficiency
- Continuous online regulation
- Industrial design
- Small footprint
  - Industry leading power density
- Regenerative load support
- Internal bypass
  - Redundant internal bypass design
- Connectivity
  - Ethernet
  - Modbus TCP
  - Integrated web server
  - E-mail notifications
- Multilingual graphical touch screen interface



# Complete power protection of commercial and industrial loads

The PCS100 AVC-40 ensures that equipment receives a clean, continuous flow of power, even during grid disturbances.



- **Electronics industry**
  - Sensitive machinery
  - Clean room control
- **Food and beverage**
  - High speed bottling
  - Packaging lines
  - Dairy processing
- **Automotive**
  - Welding process
  - Coating process
  - Painting process
- **Continuous process**
  - Fibre production lines
  - Film production lines
  - Extrusion process
- **Pharmaceutical**
  - Batch process
  - Climate control
- **Medical**
  - Sensitive medical
  - Imaging equipment

For further technical information, please refer to the PCS100 AVC-40 Technical Catalogue.

## Technical specifications

<b>Utility – Input</b>	
Power range	150 – 3600 kVA
Voltage (model specific)	220 V – 480 V, 3-phase
<b>Performance</b>	
Efficiency	Typically >98%
Sag correction response	Initial < 250 µs, complete < ½ cycle
Sag correction	
Three phase sags	60% to 100% for 30 s, 50% to 90% for 10 s
Single phase	45% to 100% for 30 s
Continuous regulation range	±10%



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