



Innovative Power Solutions & Voltage Stabilizers

AVS Catalog





AVS

Adjustable Voltage Source



Key Features

- Long-lasting and stable thyristor technology
- Voltage adjustment range: 0xVn% 200xVn%
- Output Current: OA 600A
- · Continuous operation at full load
- Independent voltage adjustment on each phase
- Soft-Start feature of Output Voltage
- Current Limiting and Overload protection
- 100% unbalanced Voltage and load capacity
- Production at all industrial input voltages
- 7" touchscreen Operator Panel
- It is produced on order

Optional Features

- Power boost feature by connecting in parallel
- Ethernet Web Server and Mod-Bus RTU
- · Power analyzer
- Portable Aluminum Cabinet
- Galvanic Isolation Transformer
- Surge Arrester

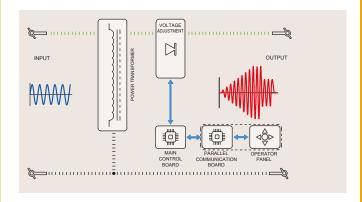


What is AVS Adjustable Voltage Source?

AVS Voltage Source is an AC Power supply whose Output Voltage can be adjusted.

In AVS produced with thyristor technology, voltage changes are made without interruption. Voltage switching can be done under full load.

In standard devices, the output voltage can be adjusted from OV to 2 times of nominal input voltage. Output voltage range can be changed for special projects.



In the AVS Voltage Source voltage adjustment is made directly from AC to AC. There is no AC/DC, DC/AC Voltage conversion.

Therefore, it does not generate electromagnetic noise or harmonic noise on the input or output side.

It can work with the same high performance in all inductive, capacitive, non-linear loads.

It is used in continuous operation and performance tests of electrical devices and machines at different voltages in laboratories or production lines.

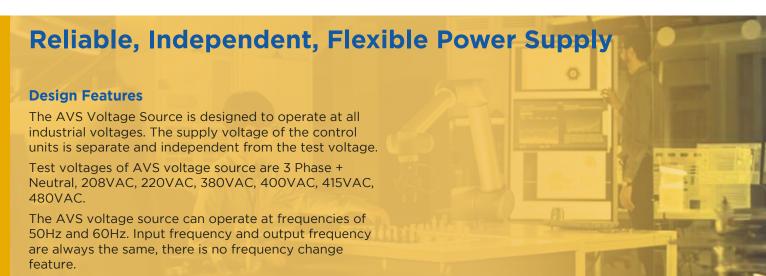
AVS voltage source has Soft-Start feature. The output voltage drops or rises to the value set by the operator at the speed selected by the operator.

In the AVS voltage source, the output voltage adjustment is made independently for each phase.

Applications

- ✓ Laboratories
- ✓ R&D Centers
- ✓ Serial production lines
- ✓ Industrial Machine manufacturers
- ✓ Electronic device manufacturers





Expanding systems with parallel connection

Parallel Connection Technology (Optional)

AVS voltage source has a power boost feature by connecting in parallel. This feature is optional and can be added during production.

For parallel operation; The inputs and outputs of 2 or more AVS voltage sources with the same technical specifications are short-circuited and the communication cable between the devices is attached. Parallel connected devices work together as one device and share the load between them. The maximum number of devices that can be connected in parallel is 16 pcs. AVS voltage sources with patented parallel connection technology work together and simultaneously to provide a very high power, uninterrupted and safe adjustable AC power supply solution.

Multi-master Modular System (Only for AVS with parallel connection)

There is no need for a separate master unit to operate AVS voltage sources in parallel. All AVS voltage sources can operate as master. With the patented software protocol, the master unit is selected automatically. A new master is selected in less than a second when the master unit is disabled. No Power interruption during master change. For parallel operation, it is sufficient to connect the communication cable.

Please contact with sales representative for special production requests and the right solutions. $\stackrel{=}{=}$ $^{1/2}$





AVS Voltage Sources have an ergonomic and user-friendly Operator Panel designed for management and monitoring

All operating parameters can be monitored from this panel and some operating parameters can be adjusted. There is two-step password protection for parameter changing.

Monitorable parameters: Input Voltages, AC Output Voltage, Output Current, Operating Frequency, Date-Time, Device status information, Fault and error codes. (In models with parallel connection feature, Device ID number, Number of devices connected in parallel, communication information)

Changeable Parameters: Rated Input Voltage, Output Voltage Set Value, Soft-Start Speed, Output Current Setting, Automatic Test Duration, Communication parameters, Date-Time information.

1. Touchscreen Operator Panel

- 7" inch Color Display
- Resistive Feature
- Backlight
- Three Language Options (On Order)
- Simple and Understandable Menu





Remote Monitoring and Management



It is designed for remote monitoring via network. The whole system can be monitored and managed with an Ethernet cable. The remote management interface is designed as browser-based. It can be connected from any computer with a web browser. No additional software is required.

With remote management interface, all parameters of all AVS Voltage Source can be monitored and some parameters can be changed.

There is two-step password protection for accessing the remote monitoring interface.



It is designed for monitoring and management via Mod-Bus. The whole system can be monitored and managed by connecting with a cable. All parameters of AVS voltage source can be monitored and some parameters can be changed.

Technical specifications

AVS Adjustable Voltage Sour	rce
General Features	
Power (kVA)	Between 10KVA - 6 Megawatts (With Parallel Connection Feature)
Technology	Fast and durable with Thyristor Technology
Number of Parallel Connection	Parallel connection up to 16 units
Input	
Rated Input Voltage	208-220-380-400-415-480 VAC 3Phase + Neutral
Voltage Tolerance	-%15 , +%15
Frequency	50 Hz. +/-%5 (60 Hz. Optional)
Output	
Voltage Range	Adjustable between 0% - 200%xVnominal
Voltage Tolerance	+/-%2
Output Current	50A - 90A - 120A - 160A - 270A - 570A
Soft-Start	Adjustable between 0 - 30 seconds
Constant Current Function	It can be used as a constant current source with output current limiting feature
Management Monitoring and Communication Interfaces	
Touchscreen Operator Panel	7" Touchscreen, Input Voltage, Output Voltage, Load Percentage, Frequency, Status Information, Fault Information, Parameter settings
Remote Management	Browser-based remote management with Ethernet connection
Interface	MOD-BUS RTU with RS485 connection
Protection Functions	
Overload Protection	It turns off the output voltage after 10 seconds at 115% load, 1 second at 125% load.
Current Protection	Input Circuit Breaker (Output Circuit Breaker optional)
Over Temperature Protection	Fan cooling works at 50°C. At 80°C, the power to the load is cut off.
Environmental Conditions	
Operating Temperature	-10 °C ~ +40 °C
Altitude Operating Height	1.500m
Humidity	90% none condensed
Cabinet Specifications	
Type-Protection Class	Free Standing Modular Cabinet, IP21 Indoor type
Paint-Color	Epoxy-Polyester Powder Paint RAL-7032
Cooling	Air cooling with thermostat controlled fan.

