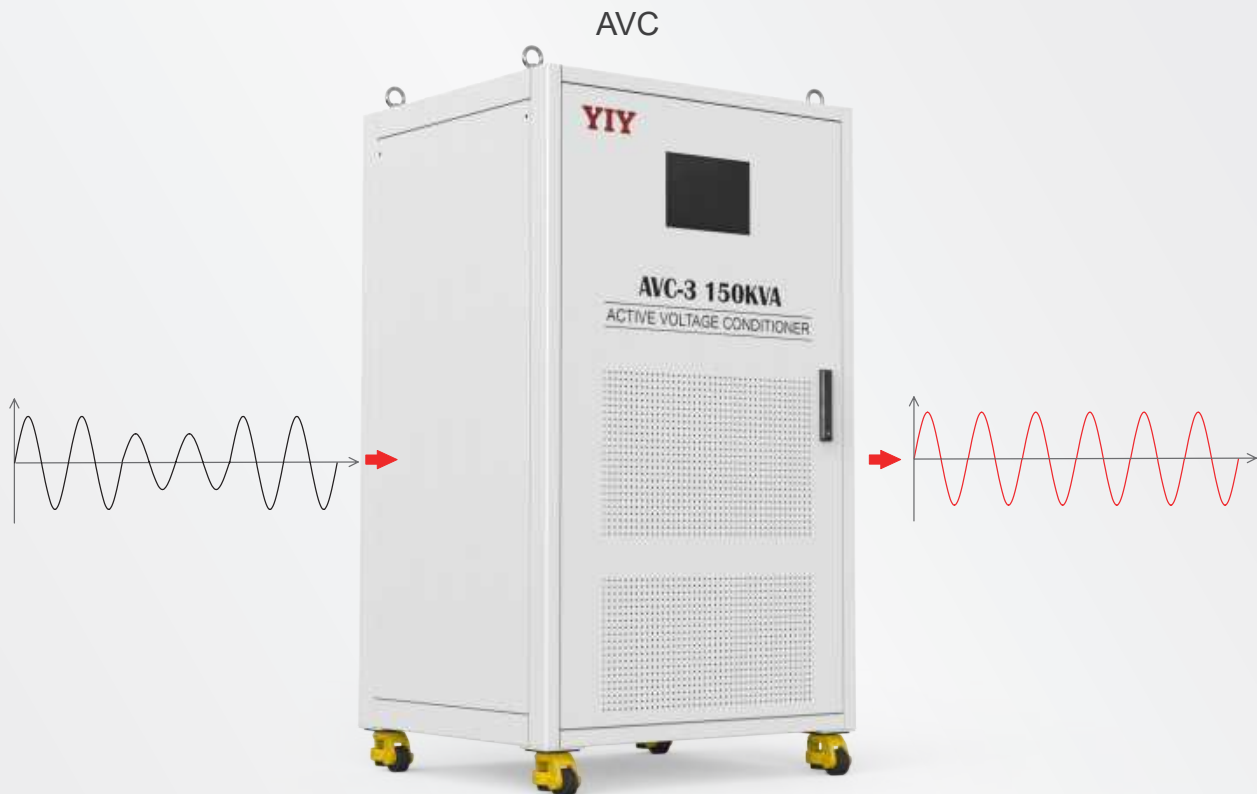


AVC

Active Voltage Conditioner

Voltage Sag Correction, Surge Correction, Continuous Voltage Regulation and Load Voltage Compensation.



Active Voltage Conditioner (AVC) is an electronic device that regulates and stabilizes the voltage of an electrical power system. AVC is used to control the reactive power in an electrical system, but it also provides additional functionality to regulate the system's voltage.

AVC uses advanced control algorithms and digital signal processing technology to detect voltage fluctuations and harmonics in the system and respond quickly to correct them. They can also provide voltage regulation and power factor correction, reducing energy consumption and improving the efficiency of the system.

AVC is commonly used in applications where a stable and reliable power supply is critical, such as data centers, hospitals, and industrial facilities. They can also be used in renewable energy systems to improve the stability and efficiency of the power supply.

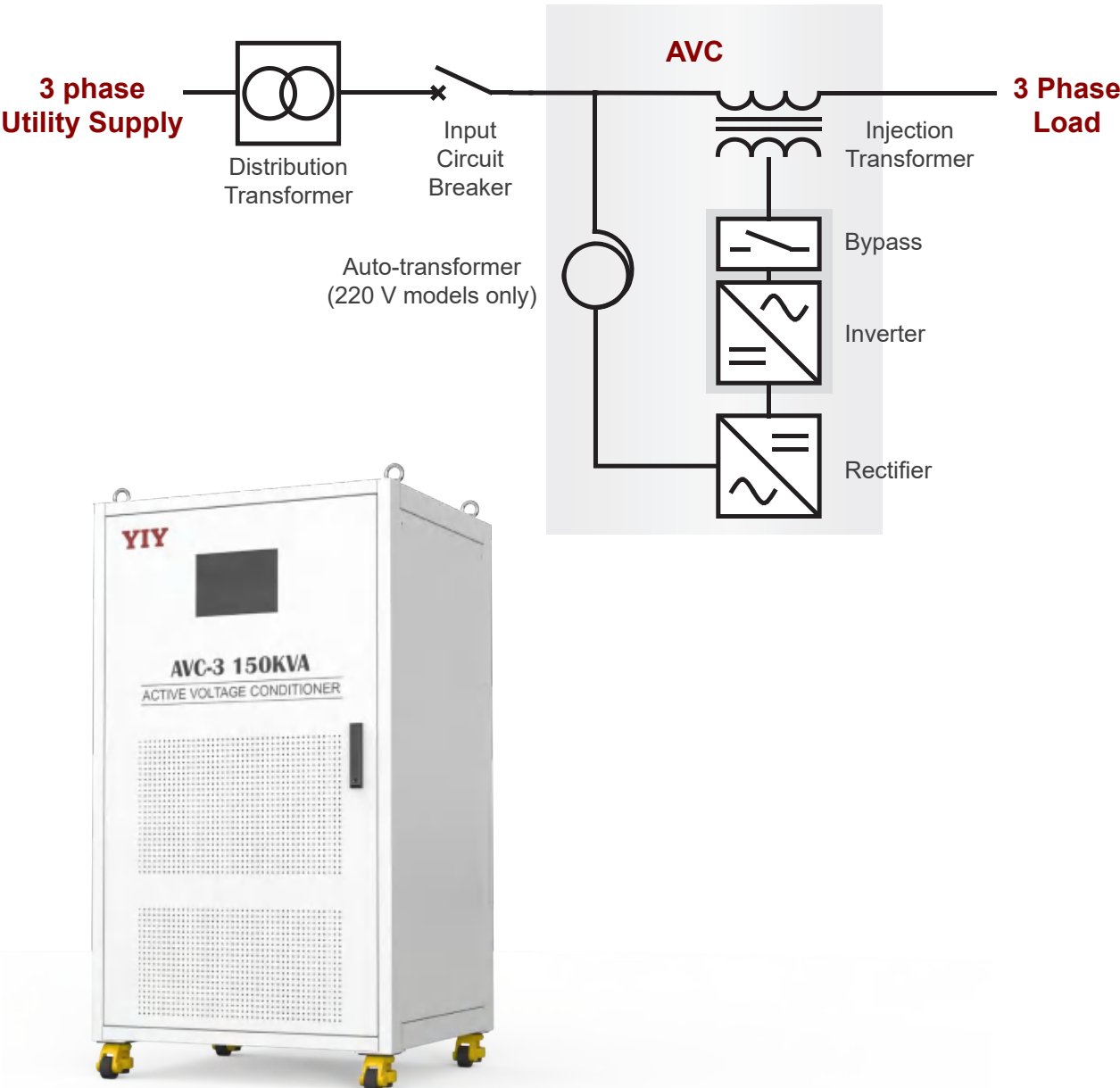
Overall, an Active Voltage Conditioner is a high-performance solution for regulating and stabilizing the voltage of an electrical power system, providing several benefits such as improved voltage stability, reduced power losses, improved power factor, and harmonic filtering.

• Working Principle

AVC consists of two converters that are not on the current path between the load and the utility. Instead, the corrective voltage injection is achieved by means of a transformer winding between the utility and the sensitive load. This configuration results in a very efficient and effective method to provide voltage correction with reduced risk of negative impacts on the load.

AVC requires no batteries as it draws the additional energy required during sag to make up the correction voltage from the utility supply. With no ongoing maintenance costs typically associated with batteries the cost of ownership for AVC systems is very small.

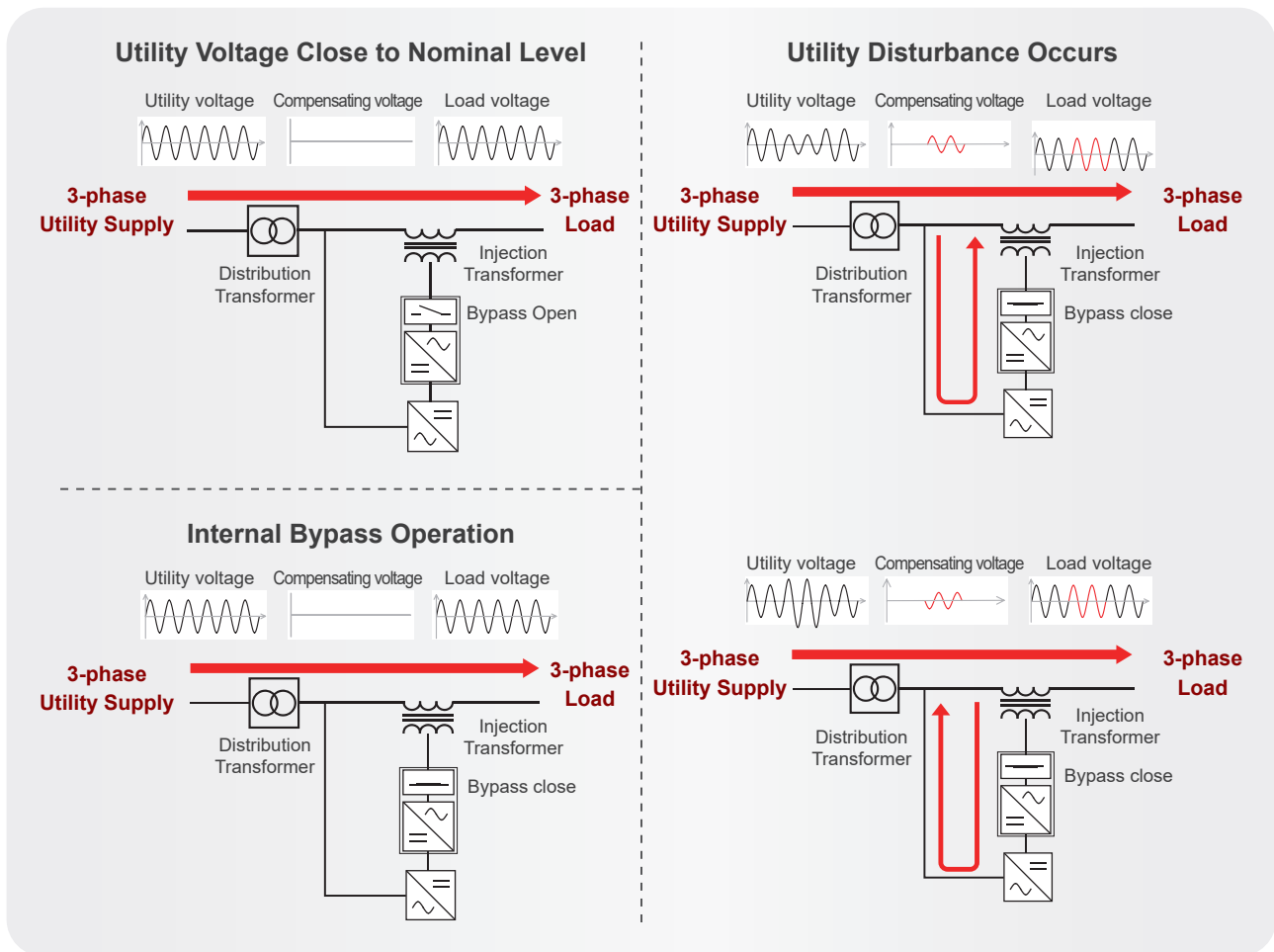
Furthermore, AVC contains a redundant internal bypass system that, in the event of overload or internal fault condition, ensures that the load is continued to be supplied from the utility.



• Technical Specifications

Input		
	Single Phase	Three Phase
Power Range	15KVA-50KVA	45KVA-150KVA,200KVA-500KVA
Nominal Voltage	220/230VAC	380/400VAC
Rated Frequency	50Hz/60Hz	
Wiring system	1Phase, 2Wire,+Earth	3 Phass+Neutral(4-Wire)
Output		
Voltage	Match The Rated Input Voltage	
	Input Voltage $\pm 20\%$ Range, Continuous Voltage Regulation With Accuracy $\pm 1\%$	
Over Load	Load $>100\%$, Automatically switch into bypass mode	
Performance		
Efficiency	$>95\%$	
Sag Compensation Response	$>250\mu s$	
Voltage Regulation Accuracy	0.1V	
Continuous Regulation Range	$-40\% \sim +20\%$	
Sag Compensation Capability	-30% Of The Rated Input Voltage, 90% Of The Rated Output Voltage Compensation Continuous. -40% Of The Rated Input Voltage, 80% Of The Rated Output Voltage Compensation, Continuous.	
Bypass		
Capacity	100% Typical Rating (KVA)	
Maximum Overload Capacity (Bypass)	120% 60S	
	150% 15S	
	300% 1S	
System Performance		
Insulation	Heat Resistance Grade: Class H	
Frequency	50Hz/60Hz	
Operating Temperature Range	0~45°C	
Temperature Derating	When The Temperature Exceeds 40 ° C, The Derating Will Decrease By 2% When 1 Degree Increases, Up To 50 °C.	
Working Altitude	When The Value Exceeds 2000M, The Derating Will Decrease By 1% When Every 100M Increases.	
Noise	65dB	
Mechanical Characteristics		
IP Code	IP20 (Side Ventilation)	
Incoming Mode	Upper Line	
User Interface		
User Display Interface	7-Inch Color Touch Screen With Multiple Languages.	
Touch Panel	All Parameter Control, System Event Log, Voltage Event Log	
Event Recording And Data Recording	Have	
Communication Protocol	RS485 CAN Modbus Tcp	
Standards And Certification		
Quality System	ISO9001	
Environment System	ISO14001	
Testing Certification	CE	
Safety Certification	IEC 62103	
EMC	IEC 61000-6-2	
Performance Standard	IEC 61000-4-3,4	

• Operational Detail



• Applications

• Electronics industry



• Food and beverage



• Automotive



• Continuous process



• Pharmaceutical industry



• Medical industry

