

# TSVR

1-3200kVA

**Thyristor Technology**

**Wide Voltage Range**

**Full Protection**

SERVICE /  
TECH. SUPPORT

ECO FRIENDLY

20  
ms>%97  
Typic

EFFICIENCY



## GENERAL SPECIFICATIONS

- Automatic AC voltage regulator
- Maintenance-free thyristor technology
- 1kVA – 3.200kVA power range
- 1 Phase – 2 Phase – 3 Phase production
- Production at all industrial voltages
- Up to 60% undervoltage correction
- Up to 45% high voltage correction
- Response time: 20 ms
- Correction time: 100 ms – 200 ms
- 100% unbalanced voltage and load capacity
- Continuous protection against voltage fluctuations
- Independent voltage management on each phase
- Efficiency >97%
- Standard operator panel with 4x20 LCD display
- Electronic overload, overtemperature protection
- Low voltage / high voltage protection
- Design suitable for industrial environmental conditions
- TS EN ISO 9001: 2015 Quality certified

## OPTIONS

- 7" Touch Operator Panel
- Ethernet Web Server and Mod-Bus RTU
- Galvanic Isolation Transformer
- Lightning and High voltage Protection
- Automatic By-Pass Unit
- Maintenance Bypass Switch

## TECHNICAL SPECIFICATIONS

GENERAL SPECIFICATIONS		
Power (kVA)	1kVA - 3.200kVA power range	
Technology	Thyristor Technology, High-speed Voltage regulation, Maintenance-free design	
Thyristor configuration	6 Thyristors / 8 Thyristors / 10 Thyristors	
INPUT		
Nominal input voltage	3 Phase Model: 400VAC 3Phase+Neutral+Ground (Different voltages are optional)	1 Phase Model: 230VAC 1Phase+Neutral+Ground (Different voltages are optional)
Voltage tolerance	5 model -25%, +15% Optional: -15%, +15% / -35%, +15% / -50%, +15%	
Frequency	50 Hz. ± 5% (60 Hz. optional)	
OUTPUT		
Nominal output voltage	3 Faz Model: 400VAC 3Faz+Nötr+Toprak (Different voltages are optional)	1 Phase Model: 230VAC 1Phase+Neutral+Ground (Different voltages are optional)
Voltage tolerance	Between ± 1% and ± 5% (optional)	
Frequency	50 Hz. ± 5%	
Overload capacity	25% 1 minute, 150% 10 seconds, 151% and above 0.2 seconds	
Response time	20 ms	
Correction time	100 ms - 200 ms	
Efficiency	> 97% typic	
MANAGEMENT MONITORING AND COMMUNICATION INTERFACES		
With LCD Display operator pane	4x20 LCD display and mimic diagram Input voltage, Output voltage, Load percentage, Frequency, Status and Fault information, Parameter settings	
Touch screen operator panel (optional)	7" Touch Color Screen, Input voltage, Output voltage, Load percentage, Frequency, Status and Fault information, Parameter settings	
Remote management interface (optional)	Browser-based remote management via Ethernet connection MOD-BUS RTU with RS485 connection	
PROTECTION FUNCTIONS		
Voltage protection	Electronic protection for low voltage and high voltage	
Current protection	Input circuit breaker (Output circuit breaker optional)	
Overload protection	1 minute at 125% overload, 10 seconds at 150% overload, At >151% overload, the power supplied to the load is cut off after 0.2 seconds	
Over temperature protection	Fan cooling works at 50 °C. The power supplied to the load is cut off at 80 °C.	
Oversupply / Lightning protection	Surge arrester for Class-I or Class-II (optional)	
ENVIRONMENTAL CONDITIONS		
Operating temperature	-10 °C ~ +40 °C	
Altitude	1.500m	
Humidity	90% uncondensed	
Acoustic noise	< 55dB (at a distance of 1m and with covers closed)	
CABINET FEATURES		
Type - Protection class	Freestanding Modular Cabinet, IP21 Internal type (IP54 and higher protection class external Type Cabinets are optional)	
Paint - Color	Epoxy-Polyester Powder Coating - RAL-7035	
Cooling	Air cooling with thermostat controlled fan	

