

HRSA & HRSC SERIES SERVO VOLTAGE STABILIZERS

10 – 600 kVA 3/3 PHASE

1 – 30 kVA 1/1 PHASE

- ✓ Servo Motor
- ✓ Voltage Regulation controlled by Microprocessor
- ✓ Fast & Precise Output Voltage Correction
- ✓ Full Automatic Design
- ✓ Suitable for Industrial Applications



Standard Electrical Features

High Efficiency over 96%

User Friendly LCD Display and Mimic Diagram

Precise Output Voltage Correction Accuracy $\pm 1\%$

Overcurrent, High Temperature, High-Low Voltage and Short Circuit Protection

Microprocessor Controlled

At 100%-125% Load 1min, At Above 125% Load 10sec of operation

Manual Bypass

Fan Cooling

Optional Features

Different Input & Output Voltage Availabilities (380 – 400 – 415 VAC) upon request

Can work with 50Hz and 60Hz Grids

Can work with Isolation Transformers in the Input or Output

Different IP protection classes upon request

Technical Specifications

| INPUT | 10 - 600 kVA 3/3 Phase ; 1 - 30 kVA 1/1 Phase | | | | | | | | | | | | | | | | | | | |
|--|--|-----|-----|------|--------|-----|-----|-----|------|-----|-----|------|------|------|------|------|------|--|--|--|
| Input Voltage Correction Interval | 1:1 Phase: 160~260 VAC • 3:3 Phase: 275~450 VAC (Standard), 215~415 VAC (Optional) | | | | | | | | | | | | | | | | | | | |
| Operation Frequency | 47~65 Hz | | | | | | | | | | | | | | | | | | | |
| Line Input Protection | Overcurrent, Low and High Voltage Protection (Optional) | | | | | | | | | | | | | | | | | | | |
| OUTPUT | | | | | | | | | | | | | | | | | | | | |
| Output Voltage | 1:1 Phase: 220 VAC RMS $\pm 2\%$ • 3:3 Phase: 380 VAC RMS $\pm 1\%$ | | | | | | | | | | | | | | | | | | | |
| Overload Capacity | At 100%-125% Load; 1min ; over 125% Load: 10sec | | | | | | | | | | | | | | | | | | | |
| Correction Speed | ~90 Volt/sec | | | | | | | | | | | | | | | | | | | |
| Upturn Period | ~90 Volt/sec (160 VAC~250 VAC) | | | | | | | | | | | | | | | | | | | |
| Output Protection | Short Circuit - Overcurrent Protection, Overvoltage Protection (Optional) | | | | | | | | | | | | | | | | | | | |
| GENERAL | | | | | | | | | | | | | | | | | | | | |
| Operation | Full Automatic, Microprocessor Controlled, Servo Motor | | | | | | | | | | | | | | | | | | | |
| Cooling | Smart Fan System | | | | | | | | | | | | | | | | | | | |
| Monitoring | Monitoring Input Voltage, Output Voltage-Current,% Load and Transformer Temperature Values via Panel | | | | | | | | | | | | | | | | | | | |
| Total Efficiency | >96% | | | | | | | | | | | | | | | | | | | |
| Mechanical Bypass | Manually Controlled - Selects Voltage Regulator" Switch Turn On/Off | | | | | | | | | | | | | | | | | | | |
| Protection Level | IP 20 | | | | | | | | | | | | | | | | | | | |
| Operating Temperature | -10°C~50°C | | | | | | | | | | | | | | | | | | | |
| Storage Temperature | -25°C~60°C | | | | | | | | | | | | | | | | | | | |
| Relative Humidity | <90%, DIN (40040) | | | | | | | | | | | | | | | | | | | |
| Altitude | <2000m | | | | | | | | | | | | | | | | | | | |
| DIMENSIONS & WEIGHT 3/3 Phase-kVA | 6 | 10 | 15 | 22.5 | 30 | 45 | 60 | 75 | 100 | 120 | 150 | 200 | 250 | 300 | 400 | 500 | 600 | | | |
| Width mm | 420 | | | | 600 | | | | 650 | | | | 1550 | | | | 1890 | | | |
| Depth mm | 680 | | | | 980 | | | | 1100 | | | | 800 | | | | 1125 | | | |
| Height mm | 1200 | | | | 1400 | | | | 1750 | | | | 1650 | | | | 1840 | | | |
| Net Weight (Kg) | 65 | 120 | 140 | 155 | 185 | 235 | 345 | 365 | 465 | 550 | 570 | 1100 | 1150 | 1300 | 1575 | 2050 | 2590 | | | |
| Noise Level | <50 dB | | | | | | | | | | | | | | | | | | | |
| DIMENSIONS & WEIGHT 1/1 Phase-kVA | 1 | 2 | 3.5 | 5 | 7.5 | 10 | 15 | 20 | 25 | 30 | | | | | | | | | | |
| Width mm | 500 | | | | 550 | | | | 550 | | | | | | | | | | | |
| Depth mm | 350 | | | | 400 | | | | 650 | | | | | | | | | | | |
| Height mm | 300 | | | | 300 | | | | 1000 | | | | | | | | | | | |
| Net Weight (Kg) | 16 | 22 | 30 | 40 | 48 | 54 | 80 | 95 | 105 | 135 | | | | | | | | | | |
| Noise Level | <50 dB | | | | <54 dB | | | | | | | | | | | | | | | |