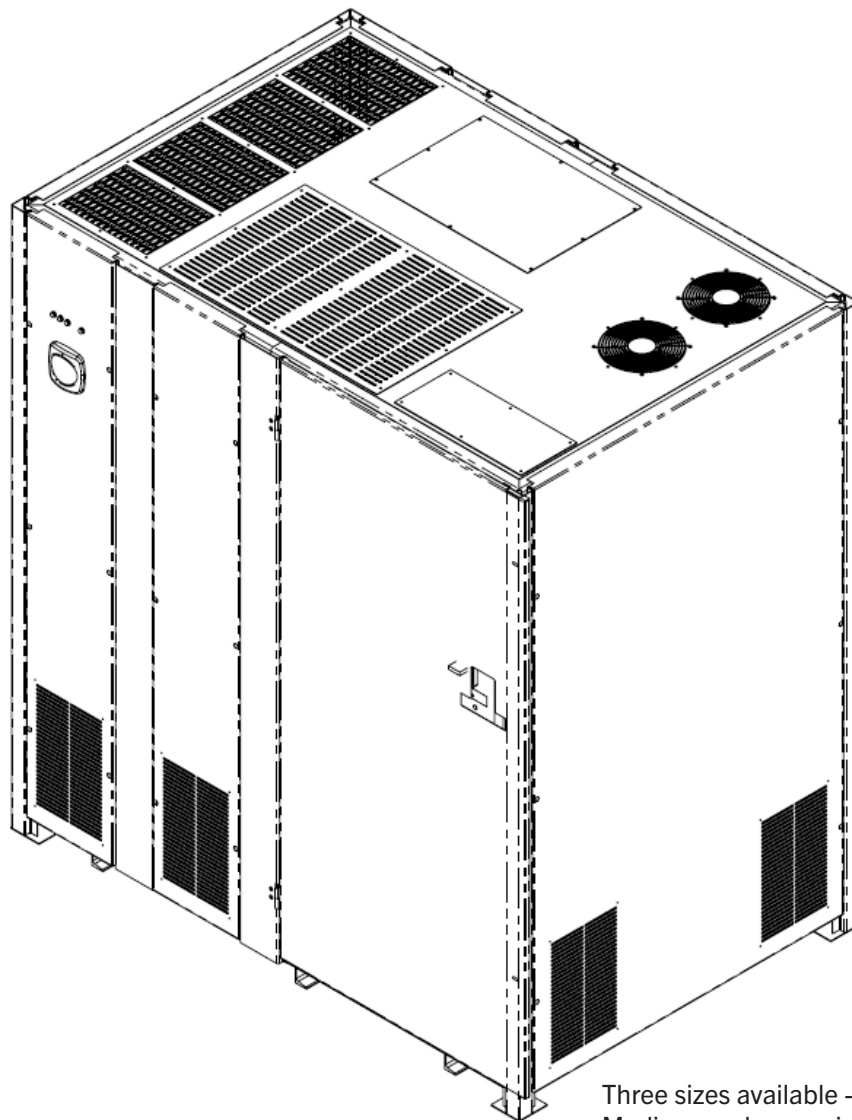


Three-Phase Automatic Voltage Regulator
10 kVA – 500 kVA



Three sizes available -
Medium enclosure pictured

INTRODUCTION

The Series 700A Three-Phase Power Processor is a solid-state, microprocessor-controlled voltage regulation and power conditioning system designed to provide clean, stable, spike-free power for sensitive electronic and industrial loads. It corrects voltage sags, surges, and transients within one cycle while providing galvanic isolation and exceptional noise attenuation.

The 700A corrects voltage deviations of wide input to within the safe operating limits recommended by CBEMA standards, while addressing the concerns of standards such as IEEE 1159, P1433, P1654, and ANSI C62.41 which define power anomalies, occurrences, and impact on operations. In extreme cases of voltage stability requirements, the Extended Range option can correct voltage variations of +13% to -40%.

Key Features

- Solid-state, 7-tap per phase voltage regulation
- Microprocessor-controlled tap selection
- Linear zero-crossing synchronization (no phase shift errors)
- Deep sag protection and surge suppression
- K-rated transformer suitable for mixed and nonlinear loads
- Handles 0.5 leading to 0.5 lagging power factor loads
- Automatic restart following loss of power (configurable)

Construction

- Enclosure: NEMA 1 (indoor)
- Input Protection: Main input circuit breaker
- Status Indication: Phase status lights and system alert indicator

Optional Features

- PM2020 Three-Phase Output Monitor (≥ 30 kVA)
Volts, amps, neutral current, min/max recording
- AOM2020 Advanced Output Monitor (≥ 30 kVA)
kW, kVA, kVAR, PF, frequency, energy, harmonics
- Communications (AOM2020): RS-232, RS-485, Ethernet TCP/IP, Modbus, DNP3
- ERR1040 Extended Regulator Range: +10% / -40% input (intermittent duty)
- RBS2020 Regulator Bypass Switch
- Under/Over Voltage Shutdown Options (UOV2020, PSO2020)
- Remote Emergency Power Off (REPO)

SPECIFICATIONS

Electrical

Input	208, 240, 480, or 600 VAC, 3-phase Delta
Output	208/120, 480/277
Frequency	60 Hz (± 3 Hz)
Continuous Ratings	10 - 500 kVA
Output Impedance	<3% typical
Input Voltage Regulation	+10%, -20%
Output Voltage Regulation	$\pm 2.5\%$ typical ($\pm 3\%$ maximum)
Overload Capacity	200% for 10 sec, 1000% for 1 cycle
THD Contribution	<1% THD added to output waveform
Efficiency	97% typical

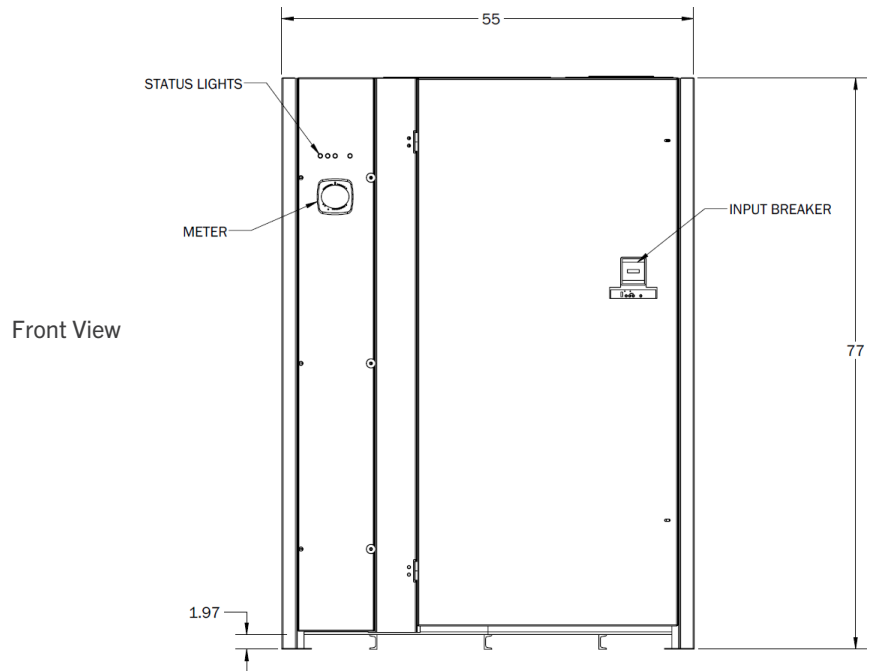
Environmental

Operating Temperature	32 to 104° F (0 to 40° C)
Humidity Rating	0 - 95% relative humidity (non-condensing)
Common Mode Noise Attenuation	≥ 140 dB
Transverse Mode	3 dB @ 1 kHz, 40 dB/decade thereafter

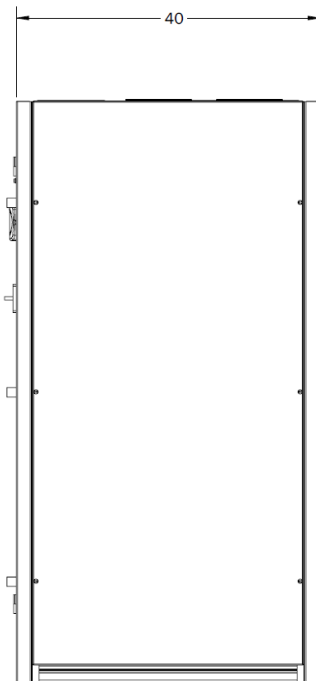
DIMENSIONAL DRAWINGS

(In inches, small enclosure pictured)

Enclosure	Height	Width	Depth
Small	77	55	40
Medium	77	72	48
Large	85	88	42



Side View



Top View

