

# Eaton Power-Sure 700

## Intelligent protection for transmitters & industrial controls



The Eaton® Power-Sure™ 700 three-phase power line conditioning system provides exceptional system reliability that can be attributed to Eaton's processor-controlled zero-current cross tap switching technology.

The Power-Sure 700 combines voltage regulation with a transformer and filter to remove transients and noise. The combined effect is a regulating and shielded isolation transformer/system that solves 99 percent of the electrical disturbance problems, including electrical brownouts, sags, surges, transients and other electrical disturbances.

This state-of-the-art power conditioner also provides the protection, efficiency and reliability that are critical to every application with sensitive equipment.

### Features

- Processor controlled voltage regulation
- Tight output voltage regulation
- Zero-current switching
- Wide input regulation range
- Triple shielded, computer grade transformer
- Highly efficient—97 percent typical
- High inrush capability
- Transient protection and high frequency filter
- Over/under voltage protection (optional)
- Includes input circuit breaker
- Manual bypass switch (optional)

### Options

- RRM2020—Regulation Range Monitor has above, below and normal LED indicator lights that indicate when the input is beyond the regulation range or within the range.
- RBS202x—Integral Manual Rotary Maintenance Bypass Switch  
Specific models numbers include:
  - RBS2020 - 10 to 15 kVA units
  - RBS2021 - 25 to 30 kVA units
  - RBS2022 - 45 to 125 kVA units
  - RBS2023 - 150 kVA units
  - RBS2024 - 225 to 300 kVA units
- REP2020—Remote Emergency Power Off Option (REPO)—a remotely mounted pushbutton is provided with 50 feet of cable. The Shunt Trip option, STC2020, is required with this option.
- STC2020—Shunt Trip for Main Circuit Breaker Option.
- UOV2020—Under/Over Voltage Shutdown Option—if the output exceeds preset values, the unit output will shut off electronically & illuminate a diagnostic light.
- PSO2020—Under/Over Voltage Shutdown with Loss of Power Shut Off—instead of disabling the output, this option will shunt trip the main circuit breaker if the output voltage exceeds preset values. The Shunt Trip option, STC2020, is required with this option.
- ERR1040—Extended Regulation Range Option—provides +10% to -40% input regulation range for intermittent duty only. Output regulation is +5% to -6% from nominal with this option.



Powering Business Worldwide

# TECHNICAL SPECIFICATIONS\*

Technology	Tap changer
Input voltage range	+10% to -20%
Output voltage range	±3% typical
Input frequency range	47-53 Hz for 50 Hz models, 57-73 Hz for 60 Hz models
Efficiency	97% typical, 95% minimum
Load power factor	0.6 leading to 0.6 lagging
Common-mode noise attenuation	140 dB
Normal-mode noise attenuation	-3 dB @ 1000 Hz, -40 dBA per decade
Total harmonic distortion	Less than 1% added
Correction time	1 cycle typical, 1.5 cycle maximum
Overload rating	200% for 10 seconds, 1000% for 1 cycle
Overvoltage protection	Automatic electronic shutdown if output voltage exceeds +10% for 6 seconds (adjustable)

## ENVIRONMENTS

Indicator lights	Three green lights indicate regulated voltage on each phase. A fourth red light indicates an overtemperature condition
Audible noise	Less than 50 dBA @1 meter (depending on size)
Operating temperature	-10°C to +40°C
Altitude	Up to 10,000 ft

## STANDARDS

Safety agency	UL 1012, CSA, FCC Cat. A
Surge suppression	Meets ANSI/IEEE Standard C62.41-1991
Warranty	One year

\*Due to continuing product improvement programs, specifications are subject to change without notice.

## POWER-SURE 700 POWER CONDITIONERS (THREE-PHASE)

Part Number	kVA	Input voltage	Output voltage	Output distribution	Cabinet size (H x W x D, in)	Weight (lb)
T__-010k__	10	208/240/480	208Y/120	Hardwire	30.0 x 21.5 x 29.0	440
T__-015k__	15	208/240/480	208Y/120	Hardwire	30.0 x 21.5 x 29.0	520
T__-025k__	25	208/240/480/600	208Y/120	Hardwire	44.0 x 21.5 x 29.0	700
T__-030k__	30	208/240/480/600	208Y/120	Hardwire	44.0 x 21.5 x 29.0	720
T__-045k__	45	208/240/480/600	208Y/120	Hardwire	44.0 x 45.0 x 29.0	950
T__-050k__	50	208/240/480/600	208/120-480/277	Hardwire	44.0 x 45.0 x 29.0	970
T__-075k__	75	480/600	208/120-480/277	Hardwire	44.0 x 45.0 x 29.0	1100
T__-100k__	100	480/600	208/120-480/277	Hardwire	44.0 x 45.0 x 29.0	1660
T__-125k__	125	480/600	208/120-480/277	Hardwire	44.0 x 45.0 x 29.0	1980
T__-150k__	150	480/600	208/120-480/277	Hardwire	44.0 x 45.0 x 29.0	2200
T__-225k__	225	480/600	208/120-480/277	Hardwire	77.0 x 56.0 x 41.5	3300
T__-300k__	300	480/600	208/120-480/277	Hardwire	77.0 x 56.0 x 41.5	4000

Part #T\_\_ - 010k - Frequency rating  
6=60 Hz; 5=50 Hz

Input options: B=208 Vac, C=240 Vac, D=480 Vac, E=600 Vac  
Output options: L=208/120 Vac (wye) output, N=480/277 Vac (wye) output

- 75-300 kVA are available with 480/600V input only; requires an additional auto-transformer for lower input voltage
- Listings - UL listed, CSA Certified, except for 600V: no UL, CSA on 600V units
- For output distribution option, call factory
- K factor rated units available on request



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