

## SOLATRON™ Plus Series - Three Phase Power Conditioners

### Applications

- Automatic Packaging Machinery
- Large Machine Tool Equipment
- UPS Bypass Circuits
- Retail Store
- Process Equipment

### Features

- Rugged, industrial construction
- High overload capability
- High MTBF - No fans used
- No power factor restriction on loads
- Tight regulation for protection against sag (-25%) and swell (+10%) conditions
- No load current interruption for auto-bypass mode
- Status indicating lights
- Shielded, copper wound isolation transformer
- Surge protection to ANSI/IEEE and IEC Standards
- High efficiency (96%) microprocessor controlled on-load tap changer
- Automatic over and under voltage regulation. Auto restart upon power loss and return
- Two year limited warranty

### Certifications and Compliances

-  Listed
  - UL 1012
  - CSA C22.2 No.125
- FCC Rules: complies with Part 15 Subpart J for a Class A computing device

#### Input Surge Suppressor

- UL 1449

### Related Products

- STV 100K
- Isolation Transformers



Selection Table

Output kVA	Catalog Number	Vac Input	Vac Output	Ship Weight lbs (kg)
<b>208 Vac Input, 208Y/120 Vac Output, 60 Hz</b>				
20	<b>63TAA320</b>	208	208Y/120	600.0 (273.00)
30	<b>63TAA330</b>	208	208Y/120	750.0 (341.00)
50	<b>63TAA350</b>	208	208Y/120	950.0 (432.00)
75	<b>63TAA375</b>	208	208Y/120	1200.0 (545.00)
<b>480 Vac Input, 208Y/120 Vac Output, 60 Hz</b>				
20	<b>63TCA320</b>	480	208Y/120	600.0 (273.00)
30	<b>63TCA330</b>	480	208Y/120	750.0 (341.00)
50	<b>63TCA350</b>	480	208Y/120	950.0 (432.00)
75	<b>63TCA375</b>	480	208Y/120	1200.0 (545.00)
<b>480 Vac Input, 480Y/277 Vac Output, 60 Hz</b>				
20	<b>63TCC320</b>	480	480Y/277	600.0 (273.00)
30	<b>63TCC330</b>	480	480Y/277	750.0 (341.00)
50	<b>63TCC350</b>	480	480Y/277	950.0 (432.00)
75	<b>63TCC375</b>	480	480Y/277	1200.0 (545.00)
<b>600 Vac Input, 208Y/120 Vac Output, 60 Hz</b>				
20	<b>63TDA320</b>	600	208Y/120	600.0 (273.00)
30	<b>63TDA330</b>	600	208Y/120	750.0 (341.00)
50	<b>63TDA350</b>	600	208Y/120	950.0 (432.00)
75	<b>63TDA375</b>	600	208Y/120	1200.0 (545.00)
<b>Custom Voltages</b>	<b>240 Vac Input, 240Y/139 Vac Output, 60 Hz</b> <b>480 Vac Input, 240Y/139 Vac Output, 60 Hz</b> <b>600 Vac Input, 240Y/139 Vac Output, 60 Hz</b>			
Contact Technical Services for custom voltages.				

Protection Specifications

<b>Under Voltage</b>	Output voltage will switch to bypass mode when input is less than 50% of nominal. Regulated output voltage will be re-established once input voltage is with specifications.
<b>Short Circuit Protection</b>	Input circuit breaker
<b>Over Temperature Protection</b>	Amber lamp indication of over temperature at approximately 180°C. Unit switches to by-pass mode until internal temperature is reduced to specified values.

Noise Suppression Performance Specifications

<b>Common Mode Noise Attenuation</b>	150 dB at 100 kHz
<b>Normal Mode Noise Attenuation</b>	65 dB at 100 kHz
<b>Surge Protection</b>	Tested to ANSI/IEEE standard C62.41 A&B

## Electrical Specifications

<b>Power Ratings</b>	20, 30, 50, 75 kVA, Three Phase*
<b>Nominal Voltages</b>	See Selection Table
<b>Input Voltage Range</b>	-25% to +10% of nominal rated voltage
<b>Output Voltage Range</b>	Regulated to $\pm 3\%$ of nominal voltage with an input voltage range of -25% to +10%.
<b>Response Time</b>	Responds to any line variation in <1.5 cycles typical.
<b>Technology</b>	Enhance Voltage Regulation (EVR), Microprocessor controlled electronic tap switching. 6 steps, switched independent of waveform zero cross, with no load interruption. Regulation is RMS based.
<b>Operating Frequency</b>	57-63 Hz
<b>Load Power Factor</b>	No Restriction
<b>Insulation Resistance</b>	100 megohms from winding to core measured at 500 Vdc
<b>Efficiency</b>	96% typical
<b>Overload Capability</b>	1000% of rated load for 1 second 200% of rated load for 1 minute
<b>EMI</b>	Less than 0.2 gauss at a distance of 3 ft.

\* Contact Technical Services for other ratings.

## Mechanical Specifications

<b>Indicators</b>	Indicating Lamps: 2 amber (over temperature and bypass mode), 1 green (regulated output present)			
<b>Connections</b>	Field wired, terminal blocks			
<b>Size</b>		H	W	D
	in	43	28	26
	mm	1093	712	661

## Environmental Specifications

<b>Audible Noise</b>	Less than 65 dBA at 1 meter
<b>Ambient Temperature</b>	0° to 40°C Operating, 0° to 80°C Storage
<b>Operating Altitude</b>	10,000 feet without derating
<b>Operating Humidity</b>	95% relative (non-condensing)

## Design Style

