



## SOLATRON™ PLUS SERIES - THREE PHASE POWER CONDITIONERS

The rugged construction of the SOLATRON™ Plus series ensures high performance through inductive loads and poor power factor. This power quality solution for three phase equipment is able to handle many power quality problems including isolation, voltage regulation and surge protection. The lack of fans or batteries ensures long life and maintenance-free reliability.

### SUITABLE 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 (regulate output voltage to  $\pm 3\%$ ) for protection against under voltage (-25%) and over voltage (+10%) conditions
- No load current interruption for auto-bypass mode
- Status indicating lights
- Shielded, copper wound isolation transformer
- Surge protection to ANSI/IEEE 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
- Contact Technical Services for custom voltages: 240 Vac Input, 240Y/139 Vac Output, 60 Hz, 480 Vac Input, 240Y/139 Vac Output, 60 Hz, 600 Vac Input, 240Y/139 Vac Output, 60 Hz.

### CERTIFICATIONS AND COMPLIANCES

-  Listed
- UL 1012
- UL 1449
- CSA C22.2 No.107.1

### Electrical Specifications

<b>Power Ratings</b>	20, 30, 50, 75 kVA, Three Phase ①
<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 voltage or current zero cross with no load interruption based on RMS measurement
<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.

① Contact Technical Services for other ratings or desired options.

### Environmental Specifications

<b>Audible Noise</b>	Less than 65 dBA at 3 feet
<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)

### Mechanical Specifications

<b>Indicators</b>	Indicating Lamps for: over temperature; bypass; and regulated output voltage present		
<b>Connections</b>	Field wired, terminal blocks		
<b>Size</b>	H in (mm)	W in (mm)	D in (mm)
	42 (1016)	28 (712)	26 (661)

**SOLA** HD

For product information:  
www.solahd.com  
1.800.377.4384



## Selection Table

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

### 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>	Meets ANSI/IEEE Standard C62.41 Cat A and B