



## SOLATRON™ PLUS SERIES - THREE PHASE POWER CONDITIONERS

SolaHD™ SOLATRON Plus Three Phase Power Conditioners by Emerson, protect equipment from chronic over and under voltage, switching transients, lightning and induced surges using a carefully designed surge suppression circuit linked to a shielded isolation transformer. These units regulate output voltage to  $\pm 3$  percent, even when input voltage varies from +10% to -25%. Response time to any line variation is 1.5 cycles regardless of power factor.

### 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

- Optional power quality metering/monitoring available
- 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

-  US 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

- SPD300K, SPD200K, STV100K and SPD50K
- Isolation Transformers

### ELECTRICAL SPECIFICATIONS

<b>Power Ratings</b>	20 - 200 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.

### 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>	Yellow 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

**SOLAHD**

For product information:  
www.solahd.com  
1.800.377.4384



**CONSIDER IT SOLVED™**

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## SELECTION TABLE

Output kVA	Catalog Number	Vac Input	Vac Output	Ship Weight lbs (kg)
<b>208 Vac Input, 208Y/120 Vac Output, 60Hz</b>				
30	63TAA330	208	208Y/120	750.0 (341.00)
50	63TAA350	208	208Y/120	950.0 (432.00)
75	63TAA375	208	208Y/120	1200.0 (545.00)
<b>480 Vac Input, 208Y/120 Vac Output, 60 Hz</b>				
20	63TCA320	480	208Y/120	600.0 (273.00)
30	63TCA330	480	208Y/120	750.0 (341.00)
50	63TCA350	480	208Y/120	950.0 (432.00)
75	63TCA375	480	208Y/120	1200.0 (545.00)
<b>480 Vac Input, 480Y/277 Vac Output, 60 Hz</b>				
20	63TCC320	480	480Y/277	600.0 (273.00)
30	63TCC330	480	480Y/277	750.0 (341.00)
50	63TCC350	480	480Y/277	950.0 (432.00)
75	63TCC375	480	480Y/277	1200.0 (545.00)
100	63TCC410	480	480Y/277	1600 (726.00)
150	63TCC415	480	480Y/277	2000 (907.00)
200	63TCC420	480	480Y/277	2300 (1043.00)
<b>600 Vac Input, 208Y/120 Vac Output, 60 Hz</b>				
20	63TDA320	600	208Y/120	600.0 (273.00)
30	63TDA330	600	208Y/120	750.0 (341.00)
50	63TDA350	600	208Y/120	950.0 (432.00)
75	63TDA375	600	208Y/120	1200.0 (545.00)

Contact Technical Services for custom voltages, kVA sizes. LCD display or power monitoring options.

## MECHANICAL SPECIFICATIONS

### Power Rating: 20-75 kVA, Three Phase

<b>Indicators</b>	Indicating Lamps: 1 red (bypass), 1 yellow (over temperature), 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

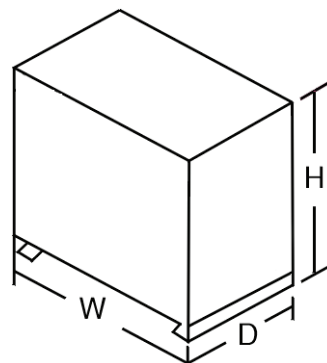
### Power Rating: 100-200 kVA, Three Phase

<b>Indicators</b>	LCD Status Display, 4 x 20 Character, 3-Button Interface			
<b>Connections</b>	Field wired, terminal blocks			
<b>Size</b>		H	W	D
	in	65	44	33
	mm	1651	1118	838

## ENVIRONMENTAL SPECIFICATIONS

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

## DESIGN STYLE



**SOLAHD**

United States: 1.800.377.4384 | Asia/Pacific: + 65.6891.7600 | Australia: + 61.3.9721.0387  
 Brazil: São Paulo/SP + 55.11.2122.5777 | Brazil: Camaçari/BA + 55.71.3496.4427 | Canada: + 1.888.765.2226  
 China: + 86.21.3418.3888 | Europe: + 33.3.2254.1390 | Mexico/Latin America: + 52.55.5809.5049  
 Middle East/Africa/India: + 971.4.811.8100  
[www.solahd.com](http://www.solahd.com)

  
**EMERSON**