

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

- STV100K
- Isolation Transformers



Selection Table

Output kVA	Catalog Number	Vac Input	Vac Output	Ship Weight lbs (kg)
208 Vac Input, 208Y/120 Vac Output, 60Hz				
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)
480 Vac Input, 208Y/120 Vac Output, 60 Hz				
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)
480 Vac Input, 480Y/277 Vac Output, 60 Hz				
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)
600 Vac Input, 208Y/120 Vac Output, 60 Hz				
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.				

Protection Specifications

Under Voltage	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.
Short Circuit Protection	Input circuit breaker
Over Temperature Protection	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

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

Electrical Specifications

Power Ratings	20, 30, 50, 75 kVA, Three Phase *
Nominal Voltages	See Selection Table
Input Voltage Range	-25% to +10% of nominal rated voltage
Output Voltage Range	Regulated to $\pm 3\%$ of nominal voltage with an input voltage range of -25% to +10%.
Response Time	Responds to any line variation in <1.5 cycles typical.
Technology	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.
Operating Frequency	57-63 Hz
Load Power Factor	No Restriction
Insulation Resistance	100 megohms from winding to core measured at 500 Vdc
Efficiency	96% typical
Overload Capability	1000% of rated load for 1 second 200% of rated load for 1 minute
EMI	Less than 0.2 gauss at a distance of 3 ft.

* Contact Technical Services for other ratings.

Mechanical Specifications

Power Rating: 20–75 kVA, Three Phase

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

Power Rating: 100–200 kVA, Three Phase

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

Environmental Specifications

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

Design Style

