

SOLATRON™ Plus Series - Three Phase Power Conditioners

Features

- Rugged, industrial design
- High overload capability
- High MTBF - No fans used
- No power factor restriction on loads
- Tight regulation of $\pm 3\%$ typical for protection against sag (-25%) and swell (+15%) conditions
- Fail-safe, no-break, auto-bypass
- Status indicating lights
- Shielded, copper wound isolation transformer
- Surge suppression to ANSI/IEEE and IEC Standards
- High efficiency (96%) microprocessor controlled tap switcher
- Automatic under voltage protection
- UL1012, UL1449-2, cUL_{US} Listed
- Two-year limited warranty

Related Products

- STV100K
- Isolation Transformers

Applications

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

Electrical Specifications

Power Ratings	20, 30, 50, 75 KVA, Three Phase*
Nominal Voltages	See Selection Table
Input Voltage Range	-25% to +15% of nominal rated voltage
Output Voltage Range	Regulated to a max of $\pm 5\%$ (3% typical) of nominal voltage with an input voltage range of -25% to +15%.
Response Time	Responds to any line variation in <1.5 cycles typical.
Technology	Enhance Voltage Regulation (EVR), Microprocessor controlled electronic tap switching. 6 taps switched at zero current crossing with no output interruption.
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.



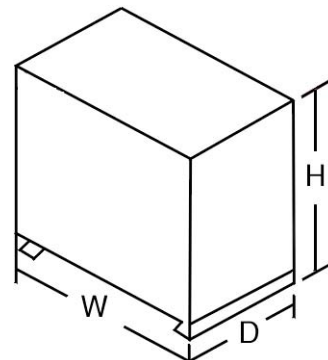
Mechanical Specifications

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	42	28	26
	mm	1016	712	661
Safety Agency Approvals	UL1012 and UL1449-2 cUL (Canadian Standard C22.2 No 125) Complies with Part 15 Subpart J of FCC rules for a Class A computing device.			

Environmental Specifications

Audible Noise	Less than 50 dBA at 3 feet
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



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 Suppression	Tested to ANSI/IEEE standard C62.41 A&B (IEEE 587 Cat A and B), 1000-4, 1000-5

Selection Table

Output KVA	Catalog Number	VAC Input	VAC Output	Ship Weight (lbs/kg)
208 VAC Input, 208Y/120 VAC Output, 60 Hz				
20	63TAA320	208	208Y/120	600/273
30	63TAA330	208	208Y/120	750/341
50	63TAA350	208	208Y/120	950/432
75	63TAA375	208	208Y/120	1200/545
480 VAC Input, 208Y/120 VAC Output, 60 Hz				
20	63TCA320	480	208Y/120	600/273
30	63TCA330	480	208Y/120	750/341
50	63TCA350	480	208Y/120	950/432
75	63TCA375	480	208Y/120	1200/545
480 VAC Input, 480Y/277 VAC Output, 60 Hz				
20	63TCC320	480	480Y/277	600/273
30	63TCC330	480	480Y/277	750/341
50	63TCC350	480	480Y/277	950/432
75	63TCC375	480	480Y/277	1200/545
600 VAC Input, 208Y/120 VAC Output, 60 Hz				
20	63TDA320	600	208Y/120	600/273
30	63TDA330	600	208Y/120	750/341
50	63TDA350	600	208Y/120	950/432
75	63TDA375	600	208Y/120	1200/545
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			
Contact Technical Services.				