

# 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 for protection against sag (-25%) and swell (+15%) conditions
- Fail-safe, no-break, auto-bypass
- Status indicating lights
- Shielded, copper wound isolation transformer
- Surge protection to ANSI/IEEE and IEC Standards
- High efficiency (96%) microprocessor controlled tap switcher
- Automatic under voltage protection
- UL1012, UL1449-2, <sub>C</sub>UL<sub>US</sub> Listed
- Two Year Limited Warranty

#### **Related Products**

- STV 100K
- 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		
ЕМІ	Less than 0.2 gauss at a distance of 3 ft.		

<sup>\*</sup> Contact Technical Services for other ratings.





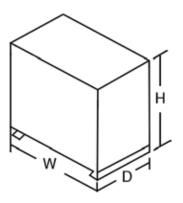
## **Mechanical Specifications**

Indicators	Indicating Lamps: 2 amber (over temperature and bypass mode), 1 green (regulated output present)			
Connections	Field wired, terminal blocks			
Size		Н	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.		
<b>Short Circuit Protection</b>	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

### **Selection Table**

Output KVA	Catalog Number	Vac Input	Vac Output	Ship Weight (lbs/kg)
	208 Vac I	nput, 208Y/120 Vac Out	put, 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 I	nput, 208Y/120 Vac Out	put, 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 I	nput, 480Y/277 Vac Out	put, 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 I	nput, 208Y/120 Vac Out	put, 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		480 Vac Input, 240	Y/139 Vac Output, 60 Hz Y/139 Vac Output, 60 Hz Y/139 Vac Output, 60 Hz	
	Contact Tech	nical Services for cus	stom voltages	