

TreStar *Sx*[®]

12 - 80 kVA ■ Three Phase On-Line ■ Uninterruptible Power System

The TreStar SX[®] is a true online, double conversion UPS built tough to withstand industrial environments, and sensitive enough to handle the most delicate electronic and computer equipment. With features like a wide input voltage range, and advanced battery management, the TreStar SX is the smart choice for applications where continuous power is a MUST.

The TreStar SX totally isolates the connected load from the AC primary supply, protecting it from voltage sags, spikes, transients, RFI, and frequency variations. In the event of an AC power failure, an internal alarm sounds and the UPS will continue providing safe, clean power without interruption. When the AC power returns to normal, the TreStar SX automatically recharges the batteries to be ready for the next power disturbance. With available options such as remote diagnostics and a remote alarm unit, you'll know immediately when power problems or outages occur.

Reliability begins with design. The TreStar SX is designed to meet the power protection needs of today's sensitive electronic and computer loads. The TreStar SX is designed with circuitry to prevent unexpected failure. A front-mounted, user-friendly diagnostic display gives complete access to 15 critical measurements and 33 alarms, including measurements made just before and after an inverter stop.

The TreStar SX is designed to protect and extend the battery system -- the most sensitive and expensive component of a UPS System. The TreStar SX has superior battery diagnostic circuits and a weekly self-initiated diagnostic battery test to provide the highest level of protection against overheating, deep discharge and low current.

Features

General:

- True Online, Double Conversion UPS
- Automatic and Front Panel Operated Diagnostics
- Automatic Systems Bypass w/ Manual Isolation Switch
- Isolated Redundant Ready Separate Bypass Feed
- Internal Maintenance Bypass

Input:

- Input Voltage Rating: 208 VAC or 480 VAC (contact factory for other)
- Input Voltage Range: +/- 20% (166 - 250 VAC, 384 - 576 VAC)
- Input Power Factor: 0.82 typical without Harmonic Filter
- Input frequency: 60 Hz +/- 5%

Output:

- Voltage Rating: 208 VAC or 480 VAC (contact factory for other)
- Voltage Regulation: +/- 1% w/balanced load, 3% w/100% unbalanced load
- THD: Less than 3% for 100% linear, less than 5% for 100% nonlinear load
- Frequency Regulation: +/- 0.05%

Options

- REDDI PC and Network Communications Management Software
- REDDI SNMP Network Adapter
- External Maintenance Bypass
- 10% Input Harmonic Filter
- Extended Service and Maintenance
- External Battery Cabinets for Extended Battery Runtimes



Shown with optional battery cabinet.

Performance and Physical Specifications

TreStar SX 6024 Models	12 kVA			18 kVA			24 kVA		
kVA/kW @ .67 PF	12/8			18/12			24/18		
Input Voltage	208Y/120	480	480	208Y/120	480	480	208Y/120	480	480
Output Voltage	208Y/120	208Y/120	480Y/277	208Y/120	208Y/120	480/277	208Y/120	208Y/120	480Y/277
Field Upgradeable (kVA Output)	18/24	18/24	18/24	24	24	24	--	--	--
Nominal Input Current (Amps)	37	16	16	57	25	25	76	33	33
Maximum Input Current (Amps)	42	19	19	60	26	26	78	34	34
Nominal Output Current (Amps)	33	33	14	50	50	22	67	67	29
System Efficiency @ 100% Load	88	87	86	88	87	86	88	87	86
Height x Width x Depth (in.)	56 x 27.5 x 28.7			56 x 27.5 x 28.7			56 x 27.5 x 28.7		
Weight (lbs.)	900	1200	1400	900	1200	1400	900	1200	1400
TreStar SX 6036 Models	24 kVA			30 kVA			36 kVA		
kVA/kW @ .67 PF	24/18			30/20			36/24		
Input Voltage	208Y/120	480	480Y/277	208Y/120	480	480Y/277	208Y/120	480	480Y/277
Output Voltage	208Y/120	208Y/120	480Y/277	208Y/120	208Y/120	480Y/277	208Y/120	208Y/120	480Y/277
Field Upgradeable	30/36	30/36	30/36	36	36	36	--	--	--
Nominal Input Current (Amps)	75	33	33	93	40	40	112	49	49
Maximum Input Current (Amps)	78	34	34	97	42	42	118	51	51
Nominal Output Current (Amps)	67	67	29	83	83	36	100	100	43
System Efficiency @ 100% Load	89	89	89	89	89	89	89	89	89
Height x Width x Depth (in.)	56 x 27.5 x 28.7			56 x 27.5 x 28.7			56 x 27.5 x 28.7		
Weight (lbs.)	1300	1300	1300	1300	1300	1300	1300	1300	1300
TreStar SX 6050 Models	30 kVA			40 kVA			50 kVA		
kVA/kW @ .67 PF	30/24			40/32			50/40		
Input Voltage	208	480	480	208	480	480	208	480	480
Output Voltage	208Y/120	208Y/120	480Y/277	208Y/120	208Y/120	480Y/277	208Y/120	208Y/120	480Y/277
Field Upgradeable	40/50	40/50	40/50	50	50	50	--	--	--
Nominal Input Current (Amps)	115	50	50	127	55	55	157	68	68
Maximum Input Current (Amps)	132	57	57	152	66	66	192	83	83
Nominal Output Current (Amps)	83	83	36	111	111	48	138	138	60
System Efficiency @ 100% Load	87	88	88	87	88	88	87	88	88
Height x Width x Depth (in.)	63 x 53.2 x 28.7	63 x 35.4 x 28.7		63 x 53.2 x 28.7	63 x 35.4 x 28.7		63 x 53.2 x 28.7	63 x 35.4 x 28.7	
Weight (lbs.)	1750	1350	1350	1750	1350	1350	1750	1350	1350
TreStar SX 6080 Models	50 kVA			65 kVA			80 kVA		
kVA/kW @ .67 PF	50/40			65/52			80/60		
Input Voltage	208	480	480	208	480	480	208	480	480
Output Voltage	208Y/120	208Y/120	480Y/277	208Y/120	208Y/120	480Y/277	208Y/120	208Y/120	480Y/277
Field Upgradeable	65/80	65/80	65/80	80	80	80	--	--	--
Nominal Input Current (Amps)	157	68	68	208	90	90	258	112	112
Maximum Input Current (Amps)	192	83	83	254	110	110	311	135	135
Nominal Output Current (Amps)	139	139	60	180	180	78	222	222	96
System Efficiency 100%	88	87	86	88	87	86	88	87	86
Height x Width x Depth (in.)	63 x 53.2 x 28.7	63 x 35.4 x 28.7		63 x 53.2 x 28.7	63 x 35.4 x 28.7		63 x 53.2 x 28.7	63 x 35.4 x 28.7	
Weight (lbs.)	2200	1800	1800	2200	1800	1800	2200	1800	1800

Environmental

- Agency Compliance: UL 1778, FCC & CSPR22 Class A
- Transient Surge Suppression: IEEE/ANSI C62.41
- Ambient Operating Temperature: 32 - 104F (-8 to 40 degrees C)
- Acoustical Noise: 52 dBA at 3 feet
- Relative Humidity: 0-95%, non-condensing

Battery

Internal Battery	Valve Regulated Lead Acid (VRLA)
Recharge Time	Less than 8 hours to 90% w/standard battery

Communications

LCD Display	2 x 20 Character
Communications Ports	RS/232, Dry Contact (AS/400), Remote Alarm
SNMP Capability	With optional Network Adapter
Emergency Power Off (EPO)	Front panel push button, remote enabled

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