

SmartOnline S3MX Series 3-Phase 380/400/415V 60kVA 54kW On-Line Double-Conversion UPS

MODEL NUMBER: S3M60KX











Highly efficient 94% on-line UPS with compact design protects mission-critical equipment against downtime due to power disturbances.

Features

Battery Backup and VFI Operation Protect Critical LoadsThe SmartOnline® S3M60KX IGBT UPS supports the continuous availability of your most important loads through all power conditions, providing a compact backup power platform that's easy to manage and inexpensive to operate. Sophisticated voltage and frequency independent (VFI) operation and advanced IGBT rectifier technology with DSP control deliver reliable output power quality. Providing up to 60kVA of clean, continuous power, this 3-phase UPS system is perfect for critical applications in IT, communications, corporate, commercial, retail, financial, security, transportation, emergency and light industrial environments.

Best-in-Class Footprint for Easy Integration into Your Network ApplicationThis on-line double-conversion UPS system has a very small footprint of just 0.28 square meters. It requires less valuable space in your facility, and you can install the UPS system in spaces that would previously have required expensive retrofitting.

Efficient Operation and Design Reduces Cost of OwnershipThis IGBT UPS benefits from highly efficient transformer-free double-conversion technology that delivers operating cost savings. It achieves 94% efficiency in double-conversion mode and up to 98% in ECO mode, reducing your power and cooling costs. A low THDi (<3%) improves generator compatibility. A low THDv (2%) and active power factor correction improve output performance. The hardware and firmware platform design reduces the number of unique boards, improving mean time to repair (MTTR) and resulting in reduced downtime. Built-in static and maintenance bypass transfer UPS load to utility power during faults, overloads and maintenance, which also avoids costly system downtime.

External Batteries Supply Reliable Backup with Expandable Runtime OptionsThe S3M60KX uses external scalable battery cabinets, such as BP480V40, BP480V65 and BP480V100 (sold separately), to provide up to three hours of backup support in case of a power failure. The UPS system automatically restarts after a lengthy power outage.

Intuitive LCD Interface Delivers Important Performance Information at a GlanceThe interactive frontpanel LCD interface displays critical operating conditions and diagnostic data, including operating mode, input/output voltage, load, battery voltage, backup runtime and fault conditions. Four LEDs provide information about line, bypass, battery and fault status.

Highlights

- Best-in-class footprint and power density minimize space requirements for up to 60kVA
- Intuitive LCD interface offers key performance, configuration and diagnostics info
- High efficiency (94% on-line, 98% ECO mode) helps reduce operating costs
- Add optional WEBCARDLX with latest version of PADM20 for enhanced remote management
- Parallel capability provides increased capacity and redundancy up to 3 units

Applications

- Fit 60kVA UPS and batteries in best-in-class footprint to save space for revenue-generating equipment
- Back up critical IT equipment and data in network, telecom, financial and light industrial applications
- Maintain small data-center, automation-system and production-line operations during all power conditions

Package Includes

- S3M60KX SmartOnline S3MX Series 3-Phase 380/400/415V 60kVA 54kW On-Line Double-Conversion UPS
- P3080KIT parallel cable kit
- RS-232 cable
- Owner's manual



Network Management Card Offers Remote Monitoring and ControlThe optional WEBCARDLX (sold separately) with the latest version of PowerAlert Device Manager firmware (PADM20) provides enhanced remote management capabilities, including customizable dashboard graphs to fit user preferences. The PADM20 upgrade and Tripp Lite's PowerAlert Element Manager (PAEM) software form a powerful tool for expanding maintenance functions in large installations, including firmware update checks and backup and restoration of device configurations.

Parallel Capability Provides Additional Capacity and Redundancy up to 3 UnitsConnect up to three S3M60KX units in parallel using separate/shared battery cabinets for increased capacity.

Specifications

OVERVIEW		
UPC Code	037332225405	
UPS Type	On-Line	
INPUT		
Rated input current (Maximum Load)	93.2A	
Nominal Input Voltage(s) Supported	220/380V 3-PH Wye; 230/400V 3-PH Wye; 240/415V 3-PH Wye	
Nominal Input Voltage Description	3-Phase Wye, 4 wire plus ground (L1, L2, L3, N, G)	
UPS Input Connection Type	Hardwire	
Input Circuit Breakers	125A (3 pole)	
Input Phase	3-Phase	
Power Factor (Input)	.99PF (100% load)	
THDi	<3% (100% load)	
OUTPUT		
Output Capacity (VA)	60000	
Output Capacity (kVA)	60	
Output Capacity (Watts)	54000	
Output Capacity (kW)	54.00	
Output Capacity Details	Supports up to 100% load continuously in double conversion mode; Supports 100-110% load for 10 minutes, 110 to 130% load for 1 minute and greater than 130% for 1 second before switching to bypass mode; Inverter mode is automatically restored as load levels are reduced to less than 70%; Configuration options support up to 3 S3M30KX systems wired in parallel for increased capacity or fault-tolerant, redundant operation	
Power Factor	0,9	
Crest Factor	3:1	
Frequency Compatibility	50 / 60 Hz; Supports 50 to 60 Hz and 60 to 50 Hz conversion	
Frequency Compatibility Details	Automatic frequency selection	
Output Voltage Regulation (Line Mode)	+/- 1%	



Output Voltage Regulation (Battery	11V of nominal	
Output Voltage Regulation (Battery +/-		
(Node)	1%	
Output AC Waveform (AC Mode) Pur	re Sine wave	
Output AC Waveform (Battery Mode)	re Sine wave	
Nominal Output Voltage(s) Supported 220	0/380V 3-PH Wye; 230/400V 3-PH Wye; 240/415V 3-PH Wye	
Output Receptacles Har	ardwire	
Individually Controllable Load Banks No		
BATTERY		
Expandable Runtime Yes	s	
bati hre	P480V100; <a class="productLink" href="//tripplite.eaton.com/external-ups-battery-pack-40-100-Ah-no-
ttery~BP480V100-NIB">BP480V100-NIB ; BP480V40; BP480V40-BE/a> ; BP480V40-NIB">BP480V40-BE/a> ; BP480V65	
DC System Voltage (VDC) +/-	240	
Battery Recharge Rate (Included Batteries) 9 h	nours to 90% (Internal batteries)	
VOLTAGE REGULATION		
Voltage Regulation Description Onl	nline, double-conversion power conditioning maintains output within 1% of the selected nominal voltage in online ode	
USER INTERFACE, ALERTS & CONTROLS		
and	D DISPLAY: offers a variety of graphical, text and numeric information to indicate a wide range of UPS operation d fault / warning conditions, including current operating mode, alarm status, load level, battery charge, input / tput voltage & frequency, estimated runtime and more (see user manual for a detailed listing)	
turr ope and	N / ENTER BUTTON: turns the UPS on and confirms a selection from the settings menu; OFF / ESC BUTTON: ns off the UPS and returns to the previous item in the settings menu; TEST / UP BUTTON: initiates UPS self-test eration and advances to the next item in the settings menu; MUTE / DOWN BUTTON: silences the audible alarm d advances to the previous item in the settings menu; Press TEST/UP & MUTE/DOWN buttons simultaneously for second to enter or exit the settings menu (See user manual for detailed information)	
MO OTI	arms warn users of a variety of operational conditions: BYPASS MODE (beeps every 2 seconds), BATTERY DDE (beeps every 4 seconds), FAULT MODE (beeps continuously), OVERLOAD (beeps twice per second), FHER WARNINGS (beeps once per second), FAULT (beeps continuously); All alarms can be silenced, except /ERLOAD & OTHER WARNINGS conditions	
LED Indicators 4 L	.EDs report BYPASS / LINE / BATTERY / FAULT modes	
PHYSICAL		
Primary Form Factor Tov	wer	
Cooling Method Far	ns	
Installation Form Factors Supported with Included Accessories	wer	
Primary UPS Depth (mm) 790	0	



Primary UPS Height (mm)	1,010	
Primary UPS Width (mm)	360	
Shipping Dimensions (hwd / in.)	47.24 x 18.89 x 35.82	
Shipping Dimensions (hwd / cm)	119.99 x 47.98 x 90.98	
Shipping Weight (lbs.)	286.00	
Shipping Weight (kg)	129.73	
UPS Housing Material	Steel	
UPS Power Module Dimensions (Height x Width x Depth, mm)	1010 x 360 x 790	
UPS Power Module Dimensions (hwd, cm)	100.99 x 35.99 x 78.99	
UPS Power Module Dimensions (hwd, in.)	39.76 x 14.17 x 31.10	
UPS Power Module Weight (kg)	107.95	
UPS Power Module Weight (lbs.)	238	
ENVIRONMENTAL		
Operating Temperature Range	32° to 104°F (0° to 40°C)	
Storage Temperature Range	32° to 95°F (0° to 35°C) with battery; 5° to 140°F (-15° to 60°C) without battery	
Relative Humidity	5 to 95%, non-condensing	
Operating Elevation (ft.)	< 3280ft (Capacity de-rates by 1% for every 328ft over 3280ft)	
Audible Noise	<70dBA at 1meter	
Operating Elevation (m)	< 1000m (Capacity de-rates by 1% for every 100m over 1000m)	
COMMUNICATIONS		
Network Management Cards	WEBCARDLX ; MODBUSCARDSV ; RELAYCARDSV	
Network Monitoring Port Description	Card accessory slot supports network management interface or programmable I/O relay card options	
Communications Cable	DB9/RS-232 cable included	
Communications Interface	DB9 Serial; EPO (emergency power off); Slot for SNMP/Web interface	
LINE / BATTERY TRANSFER		
Transfer Time	Zero transfer time Online to Battery, Inverter to Bypass 0ms (Synchronous), and Inverter to ECO mode < 10ms.	
Low Voltage Transfer to Battery Power (Setpoint)	120V(Ph-N), 208V (Ph-Ph) @ 50% load / 176V (Ph-N), 305V (Ph-Ph) @ 100% load.	
High Voltage Transfer to Battery Power (Setpoint)	276 (Ph-N), 478V (Ph-Ph) @ 50% or 100% load.	
FEATURES & SPECIFICATIONS		



Cold Start (Startup in Battery Mode During a Power Failure)	Cold-start operation supported	
High Availability UPS Features	Automatic inverter bypass; Manual bypass switch; Auto Probe Monitoring (requires WEBCARDLX); Zero transfer time; On-Line/Double-Conversion	
Green Energy-Saving Features	High efficiency economy mode operation	
Grounding Lug	Yes	
IP68 Rated	No	
IP20 Rated	No	
STANDARDS & COMPLIANCE		
Product Certifications	IEC/EN 62040	
Product Compliance	RoHS; CE (Europe); UKCA	
WARRANTY & SUPPORT		
Product Warranty Period (U.S. & Canada)	2-year limited warranty	
Product Warranty Period (International)	2-year limited warranty	
Product Warranty Period (Mexico)	2-year limited warranty	
Product Warranty Period (Puerto Rico)	2-year limited warranty	
3-Phase Warranty Statement	Tripp Lite 3-Phase UPS Factory Warranty	



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