

# SmartOnline S3MT-Series 3-Phase 100kVA Input (480V to 208V)/Output (208V to 480V) Isolation Transformers

MODEL NUMBER: **S3MT-100KWR480V**



Enclosure with step-down and step-up transformers offers line isolation and protection to the connected 3-phase UPS and its load.

## Features

### Get Complete Step-Down/Step-Up and Isolation Protection

S3MT-100KWR480V includes two transformers in a single cabinet: a 480V (Delta) to 208V (Wye) input isolation step-down transformer and a 208V (Wye) to 480V (Wye) output auto step-up transformer. It isolates the UPS and connected components from line surges and spikes caused by utility power disruptions that can damage equipment or corrupt data. The dual transformers are ideal for 4-wire (3Ph+N+PE) loads in government, manufacturing, healthcare and corporate settings with 480V electrical mains and 480V IT loads.

### Performs with High Efficiency up to 97.8%

Not only is the S3MT-100KWR480V wrap-around transformer very efficient, with up to 97.8 percent efficiency, but it is also very quiet with a noise profile less than 65 dBA. Built-in circuit breakers on both transformers help prevent dangerous power overloads. Eight ball-bearing cooling fans help prevent overheating. An overheat-sensing relay and switch combine with red alarm indicators to provide over-temperature warning and overheating protection.

### Small Footprint for Quick Installation in a Compact Space

The compact footprint enables installation of the S3MT-100KWR480V with minimal space. The rugged stainless steel housing ships ready for immediate tower installation with a compatible 80–100kVA/kW S3M-Series 3-phase UPS system.

## Highlights

- Dual 100kVA/kW 480V transformers for government, healthcare and corporate settings
- Up to 97.8% efficiency with a quiet acoustic profile less than 65 dBA
- Resettable protection relay/switch and red alarm indicators warn against overheating
- Rugged stainless steel housing with compact footprint comes ready for installation
- Compatible with select 80–100kVA/kW S3M-Series 208V 3-phase UPS systems

## Applications

Protect equipment in government, healthcare, manufacturing, corporate and other settings that have 480V electrical mains and 480V IT loads

## System Requirements

80–100kVA/kW S3M-Series 208V 3-phase UPS system

## Package Includes

- S3MT-100KWR480V 3-Phase 100kVA Input/Output Isolation Transformers
- (4) Bottom skirts
- (24) Screws
- Owner's manual

## Specifications

OVERVIEW	
UPC Code	037332253217
Efficiency	96.7% @ full load

Nominal Voltage / Frequency	Input transformers (T-in) 480V / Output transformer (T-out) 208V, 3-PH / 60Hz
VA / Watt Capacity	100000
Transformer Type	Dry type, Input step-down isolation transformer and Output step-up Auto Transformer
<b>INPUT</b>	
Input Phase	3-Phase
Nominal Input Voltage(s) Supported	480V 3-PH Delta
UPS Input Connection Type	Hardwire
<b>OUTPUT</b>	
Output Capacity (VA)	100000
Output Capacity (kVA)	100
Nominal Output Voltage(s) Supported	480V 3-PH Wye
Output Receptacles	Hardwire
<b>PHYSICAL</b>	
Primary Form Factor	Tower
Cooling Method	8 x BALL BEARING, 172x152mm (1928 TOTAL CFM)
Form Factors Supported	Tower
Shipping Dimensions (hwd / in.)	85.40 x 27.60 x 37.80
Shipping Weight (kg)	939.84
Unit Dimensions (hwd / in.)	77.600 x 23.600 x 33.500
Unit Dimensions (hwd / cm)	197.1 x 60 x 85
Unit Weight (lbs.)	1960
Unit Weight (kg)	889.04
<b>ENVIRONMENTAL</b>	
Heat Dissipation (BTU/Hr) @ Full Load	22526
<b>INPUT TRANSFORMER</b>	
Input Voltage	480V 3-PH Delta
Input Voltage Range	(-45%, +25%) for 40% load (-20%, +25%) for 100% load
Input Amp(s)	168 A
AC Input Configuration	Delta
AC Input Frequency	50/60
Frequency Range	40/70Hz

Voltage Selection	NONE
Input Inrush Current	1450 A
VA Rating	100K
Input Number of Phases	3PH
AC Output Voltage (V)	120/208V 3-PH Wye
AC Output Amps	374 A
Output Number of Phases	3PH + N
AC Output Configuration	WYE
Output Isolation	Yes
Output Breaker Rating	400 A
Connection Type	COPPER BAR
LED Warning Light Functions	The over-temperature warning LED light will turn ON when the output/secondary of the Input transformer reaches 160°C ±5°C and will turn OFF when the corresponding transformer cools down to 125°C ±5°C
Over Temperature Reset	The transformers include an over-temperature protection relay and thermal switch on the secondary sides of the input (T-in) transformer and on the primary side of the output (T-out) transformer to protect the transformer from overheating. Thermal switches on input and output transformers will open the corresponding transformer breaker if either of the transformer reaches 155°C/311°F to 165°C/329°F. Once the transformer cools down to 120°C/248°F to 130°C/266°F, the corresponding warning LED light will turn OFF, and the corresponding transformer breaker maybe closed to restart operation.
Efficiency @ Half Load	97.80%
Efficiency @ Full Load	96.70%
Heat Dissipation (BTU/Hr) @ Full Load	22526
Audible Noise (dBA @ 1m)	65dB max
<b>APPLICATIONS</b>	
UPS Applications	Mission Critical Applications
<b>OUTPUT TRANSFORMER</b>	
Input Voltage	120/208V 3-PH Wye
Input Voltage Range	(-45%,+25%)for 40 % load (-20%,+25%)for 100 % load
Input Amp(s)	287 A
AC Input Configuration	WYE
AC Input Frequency	50/60 HZ
Frequency Range	40-70HZ
Input Inrush Current	3330 A
Input Number of Phases	3PH+N
VA Rating	100K
AC Output Voltage (V)	480V 3-PH Wye
AC Output Amps	120 A

Output Number of Phases	3PH+N
AC Output Configuration	WYE
Output Isolation	No
Output Breaker Rating	400 A
Connection Type	COPPER BAR
LED Warning Light Functions	The over-temperature warning LED light will turn ON when the input/primary of the Output transformer reaches 160°C ±5°C and will turn OFF when the corresponding transformer cools down to 125°C ±5°C
Over Temperature Reset	The transformers include an over-temperature protection relay and thermal switch on the secondary sides of the input (T-in) transformer and on the primary side of the output (T-out) transformer to protect the transformer from overheating. Thermal switches on input and output transformers will open the corresponding transformer breaker if either of the transformer reaches 155°C/311°F to 165°C/329°F. Once the transformer cools down to 120°C/248°F to 130°C/266°F, the corresponding warning LED light will turn OFF, and the corresponding transformer breaker maybe closed to restart operation.
Efficiency @ Half Load	97.80%
Efficiency @ Full Load	96.70%
Heat Dissipation (BTU/Hr) @ Full Load	22526
Audible Noise (dBA @ 1m)	65dB max
<b>STANDARDS &amp; COMPLIANCE</b>	
Product Compliance	RoHS
<b>WARRANTY &amp; SUPPORT</b>	
Product Warranty Period (Worldwide)	2-year limited warranty
Product Warranty Period (U.S. & Canada)	2-year limited warranty