

# SmartOnline S3MT-Series 3-Phase 60kVA Input (480V to 208V)/Output (208V to 480V) Isolation Transformers

# MODEL NUMBER: S3MT-60KWR480V











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-60KWR480V 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 97.5%

Not only is the S3MT-60KWR480V wrap-around transformer very efficient, with up to 97.5 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 overtemperature warning and overheating protection.

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

The compact footprint enables installation of the S3MT-60KWR480V with minimal space. The rugged stainless steel housing ships ready for immediate tower installation with a compatible 50–60kVA/kW S3M-Series 3-phase UPS system.

#### **Highlights**

- Dual 60kVA/kW 480V transformers for government, healthcare and corporate settings
- Up to 97.5% 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 50–60kVA/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**

- 50–60kVA/kW S3M-Series 208V 3-phase UPS system
- Not compatible with SUT40K or SUT60K

## **Package Includes**

- S3MT-60KWR480V 3-Phase 60kVA Input/Output Isolation Transformers
- (4) Bottom skirts
- (24) Screws
- Owner's manual

# **Specifications**

OVERVIEW	
UPC Code	037332253200
Efficiency	96.5% @ 100% load



Nominal Voltage / Frequency	Input transfomers (T-in) 480V / Output transformer (T-out) 208V, 3-PH / 60Hz
VA / Watt Capacity	30000
Transformer Type	Dry type, Input step-down isolation transformer and Output step-up Auto Transformer
INPUT	
Input Phase	3-Phase
Nominal Input Voltage(s) Supported	480V 3-PH Delta
UPS Input Connection Type	Hardwire
OUTPUT	
Output Capacity (VA)	60000
Output Capacity (kVA)	60
Nominal Output Voltage(s) Supported	480V 3-PH Wye
Output Receptacles	Hardwire
PHYSICAL	
Primary Form Factor	Tower
Cooling Method	8 x BALL BEARING, 120MM (1152 TOTAL CFM)
Form Factors Supported	Tower
Shipping Dimensions (hwd / in.)	70.90 x 27.60 x 37.80
Shipping Weight (kg)	684.92
Unit Dimensions (hwd / in.)	63.000 x 23.600 x 33.500
Unit Dimensions (hwd / cm)	160 x 60 x 85
Unit Weight (lbs.)	1398
Unit Weight (kg)	634.12
ENVIRONMENTAL	
Online Mode Heat Dissipation (BTU/Hr) @ Full Load	14334
INPUT TRANSFORMER	
Input Voltage	480V 3-PH Delta
Input Voltage Range	(-45%, +25%) for 40% load (-20%, +25%) for 100% load
Input Amp(s)	101 A
AC Input Configuration	Delta
AC Input Frequency	50/60
Frequency Range	40/70Hz



Voltage Selection	NONE
Input Inrush Current	920 A
VA Rating	60K
Input Number of Phases	3PH
AC Output Voltage (V)	120/208V 3-PH Wye
AC Output Amps	225 A
Output Number of Phases	3PH + N
AC Output Configuration	WYE
Output Isolation	Yes
Output Breaker Rating	250 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) 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	97.50%
Efficiency @ Full Load	96.50%
Heat Dissipation (BTU/Hr) @ Full Load	14334
Audible Noise (dBA @ 1m)	65dB max
APPLICATIONS	
UPS Applications	Mission Critical Applications
OUTPUT TRANSFORMER	
Input Voltage	120/208V 3-PH Wye
Input Voltage Range	(-45%,+25%)for 40 % load (-20%,+25%)for 100 % load
Input Amp(s)	173 A
AC Input Configuration	WYE
AC Input Frequency	50/60 HZ
Frequency Range	40-70HZ
Input Inrush Current	2020 A
Input Number of Phases	3PH+N
VA Rating	60K
AC Output Voltage (V)	480V 3-PH Wye
AC Output Amps	72 A



3PH+N
WYE
No
250 A
COPPER BAR
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 withen the corresponding transformer cools down to 125°C ±5°C
The transformers include an over-temperature protection relay and thermal switch on the secondary sides of the input (T-in) 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.
97.50%
96.50%
14334
65dB max
RoHS
2-year limited warranty
2-year limited warranty



© 2023 Eaton. All Rights Reserved.

Eaton is a registered trademark. All other trademarks are the property of their respective owners.