

# YDC3300 SERIES

Online Transformerless UPS series  
Power range : 25~100kVA (3-Level PF: 1.0)

Mode: 3 phase input and 3 phase output



## High reliability design

- Wide input voltage range 66~166Vac, no derating when input voltage  $\geq 96$ Vac.

## Power saving

- High input power factor, it can be up to 0.99.
- 3-level inverter topology, the efficiency can be up to 94%.

## Parallel redundancy function

- Support parallel expanded operation: maximum is 6 units.

## Flexible battery configuration

- Batteries number of each group can be selected from 16 pieces to 26 pieces.
- Large charging current can meet the requirement of long time backup.

## Intelligent management

- Support USB, RS485, RS232, SNMP, dry contact card.

## Strong load capacity

- Output power factor is 1.0, UPS can supply power to 100% unbalance load.
- High adaptability for load, it can connect full inductive load or capacitive load.

## Compatible with generator

- Power Walk In function, it can reduce the start current impact to system, and it can reduce the capacity of generator.

## LBS function

- LBS function can realize 2 independent UPS system work in synchronization, and it enhances the reliability of the system.

## UL certified

- Compliance to the UL1778 standard ensures the safe operation of the product.

## Technical Specifications:

MODEL	YDC3325S/H	YDC3330S/H	YDC3340H	YDC3350H	YDC3360H	YDC3380H	YDC33100H
Capacity	25kVA/25kW	30kVA/30kW	40kVA/40kW	50kVA/50kW	60kVA/60kW	80kVA/80kW	100kVA/100kW

### INPUT

Nominal voltage	208/120Vac or 220/127Vac (3Ph+N+PE)
Operating voltage range	66~166V for 40% load; 96~166V for 100% load
Operating frequency range	40~70Hz (50/60Hz Auto-Sensing)
Power factor	≥0.99
Harmonic distortion (THDi)	≤3% Non linear load
Bypass voltage range	Max. voltage: +25% (Optional +10%, +15%, +20%) Min. voltage: -40% (Optional -10%, -15%, -20%, -30%)
Frequency protection range	50/60Hz ± 10%
Generator input	Support

### OUTPUT

Output voltage	208/120Vac or 220/127Vac (3Ph+N+PE)
Voltage regulation	± 1%
Power factor	1.0
Output frequency	Line Mode: ± 1%/ ± 2%/ ± 4%/ ± 5%/ ± 10% of the rated frequency (Optional) Bat. Mode: 50/60 (± 0.02%)Hz
Crest factor	3:1
Harmonic distortion (THDv)	≤2% Linear load ≤5% Non linear load
Overload	≤110% 60min, ≤125% 10min, ≤150% 1min, > 150% 1.2s shut down inverter

### EFFICIENCY

Efficiency	Up to 94%
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### BATTERY

Battery voltage	Standard unit	± 120Vdc (4 × 20pcs 12V9AH)	/			
	Long run unit	± 96/108/120/132/144/156Vdc (16/18/20/22/24/26pcs, 20pcs default, 20~26pcs output power factor 1.0, 18pcs output power factor 0.9, 16pcs output power factor 0.8)				
Charge current	Standard unit	5.4A	/			
	Long run unit	20A Max.	40A Max.	60A Max.	80A Max.	

### SYSTEM FEATURES

Transfer time	Utility to Battery: 0ms; Utility to Bypass: 0ms
Backfeed protection	Support
Alarm	Overload, utility abnormal, UPS fault, battery low, etc
Protection	Short circuit, overload, over temperature, battery low, fan fault alarm
Remote LCD	Support
Communication	USB, RS232, RS485, parallel port, dry contact, intelligent slot, LBS, SNMP card (Optional), relay card (Optional)

### ENVIRONMENTAL

Operating temperature	0~40°C
Storage temperature	-25~55°C (No battery)
Humidity range	0~95% (Non-condensing)
Altitude	< 1000m, derating required when > 1000m
Noise level	< 58dB      < 60dB      < 63dB      < 65dB      < 66dB      < 68dB

### PHYSICAL

Dimension W×D×H	S: 400 × 935 × 1065mm H: 300 × 800 × 1000mm	400 × 935 × 1065mm	442 × 850 × 1200mm	600 × 850 × 1600mm
Net weight	375kg/95kg	380kg/96kg	150kg	160kg      165kg      283kg      321kg

### STANDARDS

Safety	UL1778, CSA 22.2-107.3-14
EMC	FCC Part 15 Subpart B, ANSI C63.4 2014

- Specifications are subject to change without prior notice
- Data above are typical values for reference only, not as a basis for engineering design

## YDC BR 25–100kVA battery pack specification

MODEL	YDC-BT40040	YDC-BT20040	YDC-BT40065	YDC-BT20065	YDC-BT400100	YDC-BT200100
<b>BATTERY SYSTEM</b>						
Battery type	VRLA (Lead acid maintenance free battery)					
Typical battery recharging time	4 hours (To 90% of full capacity)					
Typical battery life	3–5 years, depend on discharging cycle and ambient temperature					
System voltage	± 120Vdc					
Battery quantity	2*20 pcs	20 pcs	2*20 pcs	20 pcs	2*20 pcs	20 pcs
Capacity	40Ah	40Ah	65Ah	65Ah	100Ah	100Ah
<b>PHYSICAL</b>						
Dimension W × D × H	600 × 850 × 1600mm	442 × 850 × 1200mm	800 × 1100 × 1600mm	800 × 900 × 1200mm	800 × 1100 × 1600mm	800 × 900 × 1200mm
Net weight	676kg	330kg	1083kg	608kg	1637kg	930kg
<b>ENVIRONMENT</b>						
Operating environment	0°C ~ 40°C					
Relative humidity	0–95% (Non condensing)					
<b>STANDARDS</b>						
Safety	UL1778 5th Edition CSA C22.2 NO.107.3–14					

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Remark: YDC-BT-40040 "YDC"means series;"BT"means Battery Tower;"40"means battery number inside the tower;"040"means the battery capacity.

## Transformer specification 1

MODEL	S3MT-60k480V	S3MT-60k600V	S3MT-100k480V	S3MT-100k600V
Capacity	3-Phase 60k Input Isolation Transformer, Delta 480V/208V Wye	3-Phase 60k Input Isolation Transformer, Delta 600V/208V Wye	3-Phase 100k Input Isolation Transformer, Delta 480V/208V Wye	3-Phase 100k Input Isolation Transformer, Delta 600V/208V Wye
Transformer Type	Dry-Type			
<b>INPUT</b>				
Input Voltage	480V	600V	480V	600V
Input Voltage Range	-45%,+25% @ 40% load -20%,+25% @100% load			
Input Connection	3Ph+PE			
Input Connection Type	Copper Bar			
Input Frequency	50/60Hz			
<b>OUTPUT</b>				
Transformer Output Voltage	208/120Vac(3PH+N+PE)			
Output Connection Type	Copper bar			
Transformer Output Breaker Rating	250A	250A	400A	400A
Output Watts	60kW	60kW	100kW	100kW
<b>Efficiency</b>				
Full Load Efficiency	96.50%		96.70%	
Half Load Efficiency	97.50%		97.70%	
<b>PHYSICAL</b>				
Dimension W × D × H	600 × 850 × 1200mm			
Net weight	358kg	358kg	489kg	476kg
<b>ENVIRONMENT</b>				
Operating temperature	0–40°C			
Storage temperature	-15–60°C			
Humidity range	< 95%			
Altitude	< 1000m, derating required when > 1000m			
Noise level	65dB max			
<b>STANDARDS</b>				
Safety	cTUVus: UL 1778 5th Edition, CSA C22.2 NO.107.3–14			
EMC	FCC Part15 Subpart B / ANSI C63.4 2014			

## Transformer specification 2

MODEL	S3MT-30kWR480V	S3MT-60kWR480V	S3MT-100kWR480V
Configuration	Input Isolation(T-In) Delta/Wye Output AutoTransformer(T-Out) Wye/Wye		
<b>INPUT</b>			
T-In Input Voltage	480Vac		
T-In Input Connection Type	Copper bar		
T-In Input Connection	3PH+PE		
T-In Rated AC Input Frequency	50/60Hz		
T-Out Input Voltage	208Vac		
T-Out Input Connection Type	Copper bar		
T-Out Input Connection	3PH+N+PE		
T-Out Rated AC Input Frequency	50/60Hz		
<b>OUTPUT</b>			
T-In Transformer Output Voltage	208Vac		
T-In Output Connection Type	Copper bar		
T-In Output Connection	3PH+N+PE		
T-In Full Load Efficiency	95.2%	96.5%	96.7%
T-Out Transformer Output Voltage	480Vac		
T-Out Output Connection Type	Copper bar		
T-Out Output Connection	3PH+N+PE		
T-Out Full Load Efficiency	95.2%	96.5%	96.7%
<b>PHYSICAL</b>			
Dimension W × D × H	600*850*1600mm		600*850*1970mm
Net weight	436kg	634kg	889kg
<b>ENVIRONMENT</b>			
Operating temperature	0~40℃		
Storage temperature	-15~60℃		
Humidity range	< 95%		
Altitude	< 1000m, derating required when > 1000m		
Noise level	65dB max		
<b>STANDARDS</b>			
Safety	cTUVus: UL 1778 5th Edition, CSA C22.2 NO.107.3-14		
EMC	FCC Part15 Subpart B / ANSI C63.4 2014		

Note: Two transformer in one Cabinet: Input Isolation Transformer (T-In) 480V Input (Delta) to 208V Output (Wye) Transformer, and Output Auto Transformer (T-Out) 208V (Wye) Input to 480V (Wye) output.