

CDT31-N Series UPS



Features

- 6, 10, 15 and 20 kVA UPS capacity
- 3-Phase input, 1-Phase output
- Double Conversion with capability for switching to Multi-Mode (Automatically switches between Double Conversion and Line Interactive modes according to mains status if Multi-Mode is activated)
- Intelligent controls with Digital Signal Processing (DSP)
- Unlimited parallel expansion capability
- 3-Level intelligent charging mode
- Wide ranges of input voltage and input frequency
- Excellent generator compatibility
- Shared or separated batteries in parallel configuration (selectable)
- Adjustable charging current
- Advanced battery management
- Intelligent monitoring function
- Easy maintenance by providing optional MBB (Make Before Break) manual bypass
- Optional Emergency Power Off function (EPO)

Technical Specifications

General				
UPS model	CDT31-N06	CDT31-N10	CDT31-N15	CDT31-N20
Rated power	6kVA/5.4kW	10kVA/9kW	15kVA/12kW	20kVA/16kW
Applicable standard	IEC62040-3			
UPS classification	VFI SS CCC* *C: 1 or 2 or 3 by order refer to IEC 62040-3			
UPS topology	Double Conversion / Multi-Mode (selectable by user)			
Efficiency	94%			
Parallel expansion capability	Up to 48 units			
N+1 redundancy capability	Yes			
Dimensions (H×W×D)	443 × 131 × 580 mm		616 × 250 × 502 mm	
Weight	23kg	25kg	45kg	46kg
Acoustic noise at 1m	≤55dBA		≤58dBA	
Degree of protection against hazards and water ingress	IP20			
Mean Time Between Failures (MTBF)	100,000h			
Environmental				
Operating temperature	0°C to +40°C			
Storage temperature	-25°C to +55°C			
Humidity	0 to 95% non-condensing			
Altitude	at rated power	≤1500m		
	0.974 × rated power	≤2000m		
	0.920 × rated power	≤3000m		
	0.872 × rated power	≤4000m		
	0.820 × rated power	≤5000m		
Input				
Phases required	3Ph+N+PE			
Rated voltage	400Vac			
Voltage tolerance	100% load	±20%		
	70% load	-30% to +20%		
	50% load	-48% to +20%		
Frequency range	35Hz to 70Hz			
Power factor	≥0.99			
THDi	≤3%			
Bypass voltage range	max. voltage	230Vac +10%		
	min. voltage	230Vac -20% (optional -10%)		
Output				
Output phases available	1Ph+N+PE			

Output (continue)				
Rated voltage	230Vac			
Voltage regulation	double conversion mode		±1%	
	stored energy mode		±1%	
Power factor	0.9		0.8	
Frequency	double conversion mode		50/60Hz ±10% (adj.)	
	stored energy mode		50/60Hz ±0.1%	
Crest factor	3:1			
THD	linear load		≤2%	
	nonlinear load		≤3%	
Transfer time	double conversion mode to stored energy mode		0.00Sec	
	double conversion mode to bypass		0.00Sec	
Overload	double conversion mode		60min	
	up to 110%		10min	
	>110% up to 125%		1min	
	>125% up to 150%		transfer to bypass	
	>150%			
	energy saving mode (according to breaker curve)		40A breaker	60A breaker
			100A breaker	125A breaker
Battery				
Battery type	All types of lead acid and gel, sealed or vented			
Normal voltage	192Vdc up to 240Vdc (selectable)			
Max. charge current	6A		10A	
Protections				
Short circuit				
Overload				
Output overvoltage				
Overheat				
Battery low				
Battery reverse (optional)				
Self-diagnostics				
EPO (optional)				
Display				
Audible & visual	Mains Failure, Low Battery, Overload, System Fault			
Status LED & LCD	Double Conversion Mode, Energy Saving Mode, Low Battery, Battery Test Failure, Overload, UPS Fault			
LCD information	Input Voltage, Input Frequency, Output Voltage, Output Frequency, Load Percentage, Battery Voltage, Parameters Set., History Record			
Communication Interface				
USB, RS485, Dry contacts (optional), SNMP card (optional), Relay card (optional), Parallel port				

In the interest of continual product improvement all specifications are subject to change without notice.