

CDT31-T Series UPS



Features

- 10, 15 and 20 kVA UPS capacity
- Transformer based UPS
- 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-T10	CDT31-T15	CDT31-T20
Rated power		10kVA/8kW	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		91%		
Parallel expansion capability		Up to 48 units		
N+1 redundancy capability		Yes		
Dimensions (H×W×D)		616 × 250 × 502 mm		
Weight		93kg	121kg	145kg
Acoustic noise at 1m		≤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	0.8		
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)	60A breaker	100A breaker	125A breaker
Isolation	Galvanic isolation from AC mains and DC link to AC output		
Battery			
Battery type	All types of lead acid and gel, sealed or vented		
Normal voltage	192Vdc up to 240Vdc (selectable)		
Max. charge current	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.