

CDH33-N40 Hot Plug Rackmount Power Module



Features

- The world's highest density power solution (1.15 VA/cm^3 or 18.81 VA/inch^3)
- 40kVA UPS module capacity
- 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)
- Designed for standard 19" rack
- Unlimited parallel expansion capability
- 3-Level intelligent charging mode
- Wide ranges of input voltage and input frequency
- Excellent generator compatibility
- 3-Phase input, 3-Phase output
- Separated AC input for rectifier and bypass
- Hot plug/Hot swappable module UPS
- Separated bypass for module
- Shared or separated batteries in parallel configuration (selectable)
- Selectable external battery quantity (384Vdc up to 480Vdc)
- Adjustable charging current
- Advanced battery management
- Intelligent monitoring function
- Possibility of replacing any faulty module during operation in parallel mode, without affecting the other modules
- Optional Emergency Power Off function (EPO)
- On-grid capability for testing UPS in 100% load without real full loads
- Near zero MTTR (5min)

Technical Specifications

General			
UPS model		CDH33-N40	
Rated apparent power		40kVA	
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		96%	
Parallel expansion capability		Unlimited	
N+1 redundancy capability		Yes	
Dimensions and weight		Dimensions (H×W×D)	Weight
		131 (3U) × 443 (19”) × 630 mm	39kg
Acoustic noise at 1m		≤58dBA	
Degree of protection against hazards and water ingress		IP20	
Mean Time Between Failures (MTBF)		250,000h	
Mean Time To Repair (MTTR)		5min	
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	400Vac +10%	
	min. voltage	400Vac -20% (optional-10%)	

Output		
Output phases available		3Ph+N+PE
Rated voltage		400Vac
Voltage regulation		
double conversion mode		±1%
stored energy mode		±1%
Power factor		0.9
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
Output (continue)		
Overload	double conversion mode	
	up to 110%	60min
	>110% up to 125%	10min
	>125% up to 150%	1min
	>150%	transfer to bypass
	energy saving mode	according to bypass breaker curve
Battery		
Battery type		All types of lead acid and gel, sealed or non-sealed
Normal voltage		384Vdc up to 480Vdc (selectable)
Max. charge current per module		10A per module
Protections		
Short circuit		
Overload		
Output overvoltage		
Overheat		
Battery low		
Battery reverse (optional)		
Self-diagnostics		
EPO		
Display		
UPS module	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.