



ИБП Eaton 9PHD Marine - Eaton 9PHD Marine UPS 30-200 кВт - листовка

Постоянная ссылка на страницу: <https://eaton-power.ru/catalog/online/eaton-9phd-marine/>

# Eaton 9PHD Marine UPS

30–200 kW



Designed, Manufactured  
and Tested in Finland

## Strong and Smart Power Protection Designed and Certified for Marine and Offshore

### Designed for marine and offshore environments

- Marine certificate from any marine classification society
- Marine vibration tested units
- Halogen free cables
- IP23 protection
- Conformally coated PCB boards
- Cable area designed to support marine cabling practices
- Vibration dampers and installation brackets for floor and wall
- Door handle, stopper and triangle key included

### Strong design for demanding environments

- Protection against dirt, dust, water and moisture with cover options up to IP54
- 1.5mm cover plates for robust use
- Protection for touch screen display

### Smart technology for maximizing reliability

- Large touch screen display for easy operation and reduced risk of human error
- Modular design allows building fault tolerant N+1 units
- Redundant monitored cooling fans in each power module
- Battery start feature
- Eaton's unique Hot Sync wireless paralleling for building n+1 systems with several UPS units

### Smart technology for minimizing operating costs

- The 9PHD UPS sets new standards with an operating efficiency level up to 97% in double conversion mode
- > 99% superior efficiency is delivered in Energy Saver System mode (ESS)
- Power factor 1 increases unit power by 10-20% compared to average UPS

### Easy deployment for optimizing installation costs

- Front access for installation and service
- Cabinet supports use of halogen free cables, double cables and large cables for installation
- Lifting lugs included for easier unit handling during installation
- Suitable for 3-wire and 4-wire networks and voltage range 380V-480V without transformers
- Small footprint due compact power electronics and internal transformer options

**EATON**

Powering Business Worldwide

# Eaton 9PHD Marine UPS 30–200 kW

## Technical specifications

General	
UPS output power rating (1.0 p.f.)	30, 40, 50, 80, 100, 120, 150, 160, 200 kW
Efficiency in double conversion mode	Up to 97%
Efficiency in Energy Saver System (ESS)	> 99%
Inverter/rectifier topology	Transformer-free IGBT with PWM
Audible noise	30–50 kW: < 60 dBA
	80–200 kW: < 65 dBA
	ESS operation: < 47 dBA
Ambient temperature	0°C to 45°C at sea level, higher temperatures are optional
Ingress protection	IP23, Optional: IP33; IP54

Input	
Input wiring	3ph + N + PE / 3ph + PE
Nominal voltage rating (configurable)	380 V-480 V, 50/60 Hz
With optional transformer	208 V- 690 V, 50/60 Hz
Input voltage range	Rectifier input + 20%, if voltage > 440 V +10% <b>Low</b> -15% at 100% load, -40% at 50% load without battery discharge Bypass +10% - (-15%)
Input frequency range	40-72 Hz
Input Power Factor	0.99
Input ITHD	30 kW: < 4.5%
	40-200 kW: < 3%
Soft start capability	Yes
Internal backfeed protection	Yes

Battery	
Battery type	VRLA, Ni-Cd
Charging method	ABM technology or Float
Temperature compensation	Optional
Battery nominal voltage (VRLA)	From 432 V (36 x 12 V, 216 cells) to 480 V (40 x 12 V, 240 cells)
	<b>Note:</b> Strings with different battery voltage may not be paralleled!
Charging current maximum*	30–50 kW 29.3 A
	80–100 kW 58.6 A
	120–150 kW 87.9 A
	160–200 kW 117.2 A
Battery start capability	Yes

\* when load level ≤ 40 kW/UPM

Output	
Output wiring	3ph + N + PE/ 3ph + PE
Nominal voltage rating (configurable)	380 V-480 V, 50/60 Hz
With optional transformer	208 V- 690 V, 50/60 Hz
Output UTHD	< 1% (100% linear load)
	< 5% (reference non-linear load)
Rated output power factor	1.0
Permitted load power factor	0.8 lagging - 0.8 leading
Overload on inverter	10 min 102-110%;
	60 sec 111-125%;
	10 sec 126-150%
	300 ms > 150%.
On battery mode 300 ms > 126%	
Overload when bypass available	Continuous < 125%, 10 ms 1000% <b>Note:</b> Bypass fuses may limit the overload capability!

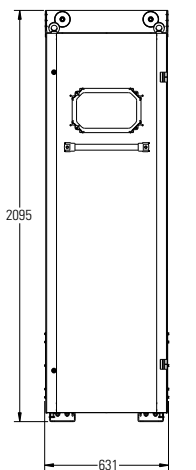
Accessories	
Accessories for UPS:	
Internal transformers; Cabinet protection IP33, IP54; ATS automatic transfer switch; Single feed kit; Earth fault monitoring; 24V Emergency Power Off (EPO); Special system voltages	
Accessory cabinets:	
Marine battery cabinets with long-life batteries; Matching transformer cabinet for one or two transformers; External maintenance bypass switch.	
Communication options:	
Web/SNMP; ModBus/Jbus; Industrial Relay	

Communications	
MiniSlot	4 communication bays
Serial ports	Built-in host and device USB
Relay inputs/outputs	5 relay inputs and dedicated EPO
	1 relay output

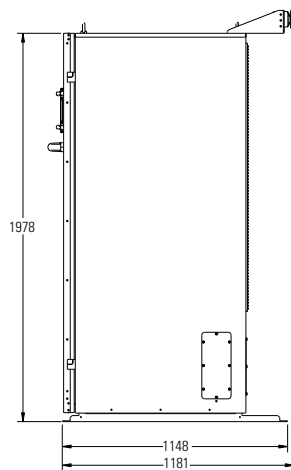
Compliance with standards	
Safety (CB certified)	IEC 62040-1
EMC	IEC 62040-2
Performance	IEC 62040-3

Marine class certificates are available from any class example: DNV, ABS, Lloyds Register Bueray Veritas etc

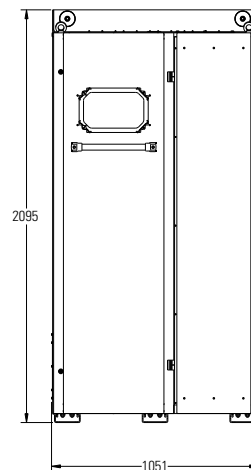
Due to continuous product improvement programmes, specifications are subject to change without notice.



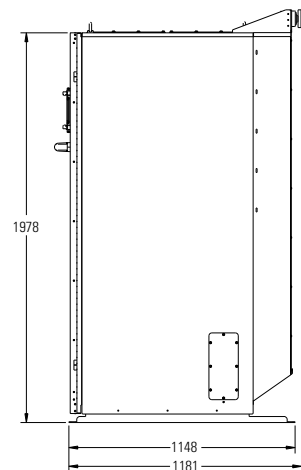
Eaton 9PHD Marine 30kW–100kW



Rear Exhaust



Eaton 9PHD Marine 80kW–200kW



Top Exhaust