Technical Specification

GENERAL

Output power rating (PF 1.0)	30, 40, 50, 60, 80, 100, 120, 150, 160, 200 kW
External paralleling	Up to 8 units with HotSync technology
Efficiency in double-conversion mode	Up to 97%
Efficiency in Energy Saver System (ESS) mode	Up to 99%
UPS topology	IGBT with PWM, double conversion
Degree of ingress protection	IP23, IP33 or IP54
Ambient temperature	0°C to 40°C up to 1000m altitude, higher ratings as optional
RoHS/WEEE compliancy	Yes
INPUT	
Nominal voltage rating Input voltage with internal transformers	380 V, 400 V, 415 V, 440 V or 480 V, conficurable 208 V - 690 V
Input frequency range	40 - 72 Hz
Input wiring	3ph+N+PE / 3ph+PE
Input power factor	0.99
Input THDi 100% linear load	< 4,5%
Soft start for generators	Yes
Internal back feed protection	Yes, for rectifier and bypass lines
Ουτρυτ	
Output wiring	3ph+N+PE / 3ph+PE
Rated output voltage Output voltage with internal transformers	380 V, 400 V, 415 V, 440 V or 480 V, configurable 208 V - 690 V
Output frequency	50 Hz / 60Hz configurable
Output UTHD	< 1% (100% linear load), < 5% (reference non-linear load)
Default overload capacity on inverter	10 min 102 – 110% load 60 s 111 – 125% load 10 s 126 – 150% load 300 ms > 150% load
Max overload capability on inverter	60 min 102 - 110% load 10 min 111 – 125% load 60s 126 – 150% load 300ms > 150% load
Overload capability on bypass	Continuous < 125% load, 50 ms 2000% load
Rated output power factor	1.0
Load power factor range	0.8 lagging to 0.8 leading

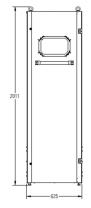
Eaton 9PHD Industrial UPS 30 - 200 kW

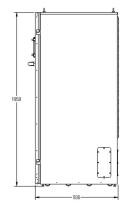
BATTERY		
Battery technology	VRLA, Li-Ion, NiCd, Eaton Super Capacitors	
Nominal battery voltage	432 V - 480 V	
Maximum charging current	29.3 A, 58.6 A, 87.9 A, 117.2 A depending on model	
Charging method	Voltage regulated current limited with Eaton ABM technology	
Boost charge function	Yes	
Temperature compensation	Yes	
Battery start option	Yes	

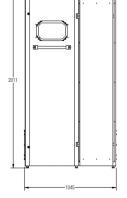
Communications		
MiniSlots	4 communication bays for Web/SNMP, ModBus/Jbus & Industrial realy	
Standard connectivity ports	Device USB and Host USB, RS-232 service port, relay output, 5 building alarm inputs, 1 relay output and a dedicated EPO	
Accessories		
Accessories for UPS	Internal transformers; Vibration dampers with mounting brackets; Seismic kit; Internal automatic transfer switch; Single feed kit; Earth fault monitoring; 24V Emergency Power Off (EPO); Custom system and battery voltages; Custom colors; Exhaust air management options	
Accessory cabinets	Industrial battery cabinets with long-life batteries; Matching transformer cabinet for one or two transformers; External maintenance bypass switch.	

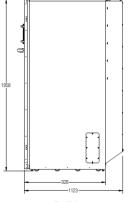
COMPLIANCE WITH STANDARDS		
Safety (CB certified)	IEC 62040-1	
EMC	IEC 62040-2	
Performance	IEC 62040-3	
RoHS	EU directive 2011/65/EU	
WEEE	EU directive 2012/19/EU	
Seismic testing	NEBS GR-63-CORE, Zone 4	

Due to continuous product imrovement programmes, specifications are subject to change without notice. For product specific specifications, contact Eaton sales representatives.









Eaton 9PHD Industrial 30kW–100kW

Rear Exhaust

Eaton 9PHD Industrial 80kW-200kW

Top Exhaust