

# Eaton 9155M and 9355M UPS

1ph: 20 - 30 kVA

3ph: 20 - 40 kVA



#### Advanced vessel or rig power protection for:

- Navigation systems
- Communication systems
- Ship automation
- Computer systems
- Integrated bridge



# EATON

Powering Business Worldwide

## Double conversion UPS

### Qualified design for marine and offshore environment

- Compact design for saving space
- Easy to install, mounting rails can be bolted or welded to the deck/bulk head
- IP22 protection class
- Vibration absorbers under and at the back of the cabinet
- Maintenance from the front

### Premium power performance

- Double conversion provides the highest level of protection available by isolating the output power from all input anomalies.
- Active power factor correction (PFC) provides 0,99 input power factor and less than 4,5% ITHD, thus eliminating interference with other critical equipment in the same network and enhancing compatibility with generators.
- The UPS is optimized for protecting modern 0,9 p.f. rated IT equipment without the need to oversize.

### True reliability

- Patented Powerware HotSync® technology makes possible to parallel up to four UPSs to increase availability or add capacity. The technology enables load sharing without any communication line, thus eliminating single point of failure.
- ABM® technology charges batteries only when necessary, preventing batteries corrosion and prolonging batteries service life by up to 50%.
- Internal automatic static bypass switch
- Internal mechanical bypass switch

### Extensive configurability

- Configurable to frequency converter operation (50 → 60Hz and 60 → 50Hz)
- A multilingual graphical LCD display makes possible to monitor the UPS status easily.
- Wide software and connectivity options provide monitoring, management and shutdown capabilities over network
- Internal space for 1 - 2 optional input/output transformers

### Cost savings and sustainability

- Compact space efficient tower design offers smaller footprint enabling easy data centre space-planning and preserving valuable raised-floor real estate.
- Possibility for internal transformer eliminate the need for costly and space-consuming external cabinets.
- A single technical platform used in Eaton's UPS products guarantee easy upgrades and similarity in service, thus lowering total cost of ownership.
- A range of service agreement options can be easily customized for customers' needs and budget.
- Eaton uses sustainable materials and highly efficient manufacturing technology, thus generating dramatic savings in carbon footprint as compared to competitive UPS systems.

# Eaton 9155M/9355M UPS 20 - 40 kVA

## TECHNICAL SPECIFICATIONS

### UPS output power rating (0,9 p.f.)

kVA	20	30	40
kW	18	27	36

### General

Efficiency in double conversion mode (full load)	93% (without transformer)
Efficiency in double conversion mode (half load)	91% (without transformer)
Distributed paralleling with Hot Sync technology	4
Field upgradeable	yes
Inverter/rectifier topology	transformer-free IGBT with PWM
Audible noise	<50 dB
Colour	RAL 7035

### Input

Nominal voltage rating (configurable)	380, 400, 415 V 50/60 Hz
With external transformer	e.g. 230, 440, 480, 690 V
Input voltage range	Low -20% at 100% load/-50% at 50% load without battery discharge; High +10%/max +20%
Input frequency range	45-65 Hz
Input power factor	0,99
Input ITHD	less than 4,5%
Soft start capability	Yes
Internal backfeed protection	Yes

### Output

Nominal voltage rating (configurable)	220/380, 230/400, 240/415 V 50/60 Hz
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With transformer	e.g. 230, 440, 480, 690 V
Output UTHD	<3% (100% linear load); <5% (reference non linear load)
Output power factor	0,9 (e.g. 27 kW at 30 kVA)
Permitted load power factor	0,7 lagging - 0,8 leading

### Battery

Type	Maintenance free VRLA batteries, NiCd
Charging method	ABM technology or Float
Temperature compensation	Optional
Battery nominal voltage (lead-acid)	432 V (36x12 V, 216 cells)
Charging current / Model	Default 3 A *Max 60 A

\*May be limited by maximum UPS input current rating

### Accessories

Isolation transformer, long-life batteries, external battery cabinets, X-Slot connectivity (Web/SNMP, ModBus/Jbus, Relay, Hot Sync, ViewUPS-X remote display), Hot Sync parallel tie cabinet, integrated manual bypass, external maintenance bypass switch

### Communications

X-Slot	2 communication bays
Serial ports	1 available
Relay inputs/outputs	2/1 programmable

### Compliance with standards

Classification survey report On request

## Standard UPS with 3-phase input

Description	Rating	Dimensions (HxWxD)	Weight
9155-20-NT-M	20 kVA / 18 kW	1745x575x762 (+200) mm	450 kg with input transformer
9155-30-NT-M	30 kVA / 27 kW	1745x575x762 (+200) mm	450 kg with input transformer
9355-20-NT-M	20 kVA / 18 kW	1745x575x762 (+200) mm	425 kg with I/O transformers
9355-30-NT-M	30 kVA / 27 kW	1745x575x762 (+200) mm	455 kg with I/O transformers
9355-40-NT-M	40 kVA / 36 kW	1745x575x762 (+200) mm	355 kg with Output transformer

## External battery cabinets

Description	Rating	Runtime	Dimensions (HxWxD)	Weight
9X55-BAT-M-1x24Ah (30 kVA)	1x36x24 Ah	See runtime spec	1745x575x762 (+200) mm	550 kg
9X55-BAT-M-2x24Ah (30 kVA)	2x36x24 Ah	See runtime spec	1745x575x762 (+200) mm	970 kg

