

# Yuasa Technical Data Sheet



## Yuasa EN160-4 Industrial VRLA Battery

### Specifications

Nominal voltage (V)	4
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	672.2
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	163

### Dimensions

Length (mm)	206 (±2)
Width (mm)	210 (±1)
Height (mm)	240 (±1)
Mass (kg)	24

### Terminal Type

Threaded terminal - (M=Male or F=Female)	M8 (F)
Torque (Nm)	6 (±0.5)

### Operating Temperature Range

Storage (in fully charged condition)	-20°C to +50°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

### Storage

Capacity loss per month at 20°C (% approx.)	3
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### Case Material

Standard	ABS (UL94:V0)
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### Charge Voltage

Float charge voltage at 20°C (V)/Block	4.52 (±1%)
Float charge voltage at 20°C (V)/Cell	2.26 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V)/Block	4.8 (±2%)
Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.40 (±2%)
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4

### Charge Current

Float charge current limit (A)	No limit
Cyclic (or Boost) charge current limit (A)	40.75

### Maximum Discharge Current

1 second (A)	1500
1 minute (A)	960

### Short-Circuit Current & Internal Resistance

Internal resistance - according to EN IEC 60896-21 (mΩ)	1.81
Short-Circuit current - according to EN IEC 60896-21 (A)	3009

### Impedance

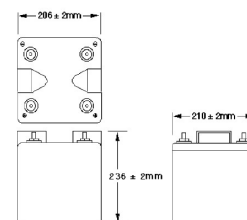
Measured at 1 kHz (mΩ)	1.2
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### Design Life & Approvals

EUROBAT Classification: Very Long Life	12+
Yuasa design life at 20°C (yrs)	12



### Layout



### 3rd Party Certifications

ISO9001 - Quality Management Systems  
ISO14001 - Environmental Management Systems  
EN 18001 OHSAS Management Systems  
UNDERWRITERS LABORATORIES Inc.



## Safety

### Installation

Can be installed and operated in any orientation except permanently inverted.

### Handles

Batteries must not be suspended by their handles (where fitted).

### Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

### Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

### Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.

