Yuasa Technical Data Sheet

Yuasa SWL2300E Industrial VRLA Battery

Specifications Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C	2400
(W/Block)	100
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	400
10-hr rate Capacity to 10.8V at 20°C (Ah)	78
Dimensions	
Length (mm)	261 (±3)
Width (mm) Height (mm)	168 (±2) 224.5 (±1)
Mass (kg)	28.3
Terminal Type	
Threaded terminal - (M=Male or F=Female) Torque (Nm)	M6 (F) 4.8
Operating Temperature Range	
Storage (in fully charged condition)	-15°C to +40°C
Charge Discharge	-15°C to +50°C -15°C to +50°C
Storage	15 0 10 . 50 0
Capacity loss per month at 20°C (% approx.)	3
Case Material	
Standard FR version available	ABS (UL94:HB) UL94:V0
Charge Voltage	
	12 (5 (1 10/)
Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float charge voltage at 20°C (V)/Cell Float Chg voltage tmp correction factor from std 20°C (mV)	
Float charge voltage at 20°C (V)/Cell Float Chg voltage tmp correction factor from std 20°C (mV) Cyclic (or Boost) charge Voltage at 20°C (V)/Block	2.275 (±1%) -3 14.5 (±3%)
Float charge voltage at 20°C (V)/Cell Float Chg voltage tmp correction factor from std 20°C (mV)	2.275 (±1%) -3 14.5 (±3%) 2.42 (±3%)
Float charge voltage at 20°C (V)/Cell Float Chg voltage tmp correction factor from std 20°C (mV) Cyclic (or Boost) charge Voltage at 20°C (V)/Block Cyclic (or Boost) charge Voltage at 20°C (V)/Cell	2.275 (±1%) -3 14.5 (±3%) 2.42 (±3%)
Float charge voltage at 20°C (V)/Cell Float Chg voltage tmp correction factor from std 20°C (mV) Cyclic (or Boost) charge Voltage at 20°C (V)/Block Cyclic (or Boost) charge Voltage at 20°C (V)/Cell Cyclic Chg voltage tmp correction factor from std 20°C (mV) Charge Current	2.275 (±1%) -3 14.5 (±3%) 2.42 (±3%) -4
Float charge voltage at 20°C (V)/Cell Float Chg voltage tmp correction factor from std 20°C (mV) Cyclic (or Boost) charge Voltage at 20°C (V)/Block Cyclic (or Boost) charge Voltage at 20°C (V)/Cell Cyclic Chg voltage tmp correction factor from std 20°C (mV) Charge Current Float charge current limit (A)	2.275 (±1%) -3 14.5 (±3%) 2.42 (±3%) -4 No limit
Float charge voltage at 20°C (V)/Cell Float Chg voltage tmp correction factor from std 20°C (mV) Cyclic (or Boost) charge Voltage at 20°C (V)/Block Cyclic (or Boost) charge Voltage at 20°C (V)/Cell Cyclic Chg voltage tmp correction factor from std 20°C (mV) Charge Current Float charge current limit (A) Cyclic (or Boost) charge current limit (A)	2.275 (±1%) -3 14.5 (±3%) 2.42 (±3%) -4
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Float charge voltage at 20°C (V)/Cell Float Chg voltage tmp correction factor from std 20°C (mV) Cyclic (or Boost) charge Voltage at 20°C (V)/Block Cyclic (or Boost) charge Voltage at 20°C (V)/Cell Cyclic Chg voltage tmp correction factor from std 20°C (mV) Charge Current Float charge current limit (A) Cyclic (or Boost) charge current limit (A) Maximum Discharge Current 1 second (A) 1 minute (A) Short-Circuit Current & Internal Resistance	2.275 (±1%) -3 14.5 (±3%) 2.42 (±3%) -4 No limit 19.5 520 240
Float charge voltage at 20°C (V)/Cell Float Chg voltage tmp correction factor from std 20°C (mV) Cyclic (or Boost) charge Voltage at 20°C (V)/Block Cyclic (or Boost) charge Voltage at 20°C (V)/Cell Cyclic Chg voltage tmp correction factor from std 20°C (mV) Charge Current Float charge current limit (A) Cyclic (or Boost) charge current limit (A) Maximum Discharge Current 1 second (A) 1 minute (A)	2.275 (±1%) -3 14.5 (±3%) 2.42 (±3%) -4 No limit 19.5 520 240
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Float charge voltage at 20°C (V)/Cell Float Chg voltage tmp correction factor from std 20°C (mV) Cyclic (or Boost) charge Voltage at 20°C (V)/Block Cyclic (or Boost) charge Voltage at 20°C (V)/Cell Cyclic Chg voltage tmp correction factor from std 20°C (mV) Charge Current Float charge current limit (A) Cyclic (or Boost) charge current limit (A) Maximum Discharge Current 1 second (A) 1 minute (A) Short-Circuit Current & Internal Resistance Internal resistance - according to EN IEC 60896-21 (m Ω) Short-Circuit current - according to EN IEC 60896-21 (A) Impedance	2.275 (±1%) -3 14.5 (±3%) 2.42 (±3%) -4 No limit 19.5 520 240 17.71 1857
Float charge voltage at 20°C (V)/Cell Float Chg voltage tmp correction factor from std 20°C (mV) Cyclic (or Boost) charge Voltage at 20°C (V)/Block Cyclic (or Boost) charge Voltage at 20°C (V)/Cell Cyclic Chg voltage tmp correction factor from std 20°C (mV) Charge Current Float charge current limit (A) Cyclic (or Boost) charge current limit (A) Maximum Discharge Current 1 second (A) 1 minute (A) Short-Circuit Current & Internal Resistance Internal resistance - according to EN IEC 60896-27 (m Ω) Short-Circuit current - according to EN IEC 60896-21 (MP) Impedance Measured at 1 kHz (m Ω)	2.275 (±1%) -3 14.5 (±3%) 2.42 (±3%) -4 No limit 19.5 520 240 17.71
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Float charge voltage at 20°C (V)/Cell Float Chg voltage tmp correction factor from std 20°C (mV) Cyclic (or Boost) charge Voltage at 20°C (V)/Block Cyclic (or Boost) charge Voltage at 20°C (V)/Cell Cyclic Chg voltage tmp correction factor from std 20°C (mV) Charge Current Float charge current limit (A) Cyclic (or Boost) charge current limit (A) Maximum Discharge Current 1 second (A) 1 minute (A) Short-Circuit Current & Internal Resistance Internal resistance - according to EN IEC 60896-27 (m Ω) Short-Circuit current - according to EN IEC 60896-21 (MP) Impedance Measured at 1 kHz (m Ω)	2.275 (±1%) -3 14.5 (±3%) 2.42 (±3%) -4 No limit 19.5 520 240 17.71 1857





Layout



3rd Party Certifications

ISO9001 - Quality Management Systems ISO14001 - Environmental Management Systems ISO45001 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.



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