Yuasa Technical Data Sheet

Yuasa SWL1850FR Industrial VRLA Battery

Specifications

Nominal voltage (V) 12 10m rate Constant Power (Typ) to 9.6V at 20°C 1916 (W/Block)

319

10m rate Constant Power (Typ) to 1.6V/cell at

20°C (W/Cell)
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)
74

Dimensions

 Length (mm)
 350 (±2)

 Width (mm)
 166 (±1)

 Height (mm)
 174 (±2)

 Mass (kg)
 23.3

Terminal Type

Threaded terminal - (M=Male or F=Female) M6 (F)
Torque (Nm) 4.8

Operating Temperature Range

Storage (in fully charged condition) $-20^{\circ}\text{C to } +50^{\circ}\text{C}$ Charge $-15^{\circ}\text{C to } +50^{\circ}\text{C}$ Discharge $-20^{\circ}\text{C to } +60^{\circ}\text{C}$

Storage

Capacity loss per month at 20°C (% approx.)

Case Material

Standard ABS (UL94:V0)

Charge Voltage

Float charge voltage at 20°C (V)/Block 13.65 (\pm 1%) Float charge voltage at 20°C (V)/Cell 2.275 (\pm 1%)

Float Chg voltage tmp correction factor from std -3 20°C (mV)

Cyclic (or Boost) charge Voltage at 20°C (V)/Block 14.5 (±3%) Cyclic (or Boost) charge Voltage at 20°C (V)/Cell 2.42 (±3%)

Cyclic Chg voltage tmp correction factor from std -4

20°C (mV)

Charge Current

Float charge current limit (A) No limit
Cyclic (or Boost) charge current limit (A) 16.5

Maximum Discharge Current

1 second (A) 800 1 minute (A) 500

Short-Circuit Current & Internal Resistance

Internal resistance - according to EN IEC 60896-21 9.35

 $(m\Omega)$

Short-Circuit current - according to EN IEC 1529

60896-21 (A)

Impedance

Measured at 1 kHz (m Ω) 4.4

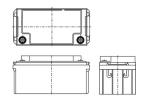
Design Life & Approvals

EUROBAT Classification: Long life 10 to 12 years Yuasa design life at 20°C (yrs) up to 10 years





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.







