# Yuasa Technical Data Sheet

# Yuasa SWL1800FR Industrial VRLA Battery

**Specifications** Nominal voltage (V) 10m rate Constant Power (Typ) to 9.6V at 20°C 1974 (W/Block) 10m rate Constant Power (Typ) to 1.6V/cell at 329 20°C (W/Cell)

20-hr rate Capacity to 10.5V at 20°C (Ah) 57.6 10-hr rate Capacity to 10.8V at 20°C (Ah) 55

**Dimensions** Length (mm)

216 (±0.7) Width (mm) 168 (±0.5) Height (mm) 223 (±0.7) Mass (kg) 23

**Terminal Type** 

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

**Operating Temperature Range** 

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

**Storage** 

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

**Case Material** 

Standard ABS (UL94:V0)

**Charge Voltage** 

Float charge voltage at 20°C (V)/Block 13.65 (±1%) Float charge voltage at 20°C (V)/Cell 2.275 (±1%) Float Chg voltage tmp correction factor from std 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

**Charge Current** 

20°C (mV)

Float charge current limit (A) No limit Cyclic (or Boost) charge current limit (A) 13.75

**Maximum Discharge Current** 

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

**Short-Circuit Current & Internal Resistance** 

Internal resistance - according to EN IEC 60896-21 10.09

Short-Circuit current - according to EN IEC 1437 60896-21 (A)

**Impedance** 

6 Measured at 1 kHz ( $m\Omega$ )

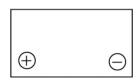
**Design Life & Approvals** 

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





# 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.









