Yuasa Technical Data Sheet

Yuasa NP12-12FR Industrial VRLA Battery

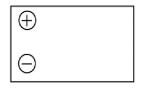
Specifications

| Charge-15°C to +50° -20°C to +60°Discharge-20°C to +60°StorageStorageCapacity loss per month at 20°C (% approx.)3Case MaterialABS (UL94:VCStandardABS (UL94:VCCharge Voltage13.65 (±1%)Float charge voltage at 20°C (V)/Block13.65 (±1%)Float charge voltage at 20°C (V)/Cell2.275 (±1%)Float charge voltage tmp correction factor from std-320°C (mV)2.275 (±1%)Cyclic (or Boost) charge Voltage at 20°C (V)/Cell2.42 (±3%)Cyclic (or Boost) charge current factor from std-420°C (mV)2.42 (±3%)Cyclic (or Boost) charge current limit (A)3Maximum Discharge Current3601 second (A)3601 minute (A)75Short-Circuit Current & Internal Resistance320Internal resistance - according to EN IEC 60896-21 44.39(mQ)Short-Circuit current - according to EN IEC 320Shoge-21 (A)16Design Life & Approvals16EUROBAT Classification: Standard Commercial3 to 5 years | Specifications Nominal voltage (V) 20-hr rate Capacity to 10.5V at 20°C (Ah) 10-hr rate Capacity to 10.8V at 20°C (Ah) | 12 12 11.1 |
|---|---|--|
| FASTON - Quickfit / release (JST where stated)6.35Operating Temperature Range-20°C to +60°Storage (in fully charged condition)-20°C to +60°Charge-15°C to +50°Discharge-20°C to +60°Storage-20°C to +60°Capacity loss per month at 20°C (% approx.)3Case Material | Length (mm) Width (mm) Height over terminals (mm) | 98 (±1) 97.5 (±2) |
| Storage (in fully charged condition) $-20^{\circ}C$ to $+60^{\circ}$ Charge $-15^{\circ}C$ to $+50^{\circ}$ Discharge $-20^{\circ}C$ to $+60^{\circ}$ StorageCapacity loss per month at $20^{\circ}C$ (% approx.)StandardABS (UL94:VCCharge VoltageFloat charge voltage at $20^{\circ}C$ (V)/BlockFloat charge voltage at $20^{\circ}C$ (V)/Cell 2.275 ($\pm1\%$)Float charge voltage tmp correction factor from std -3 $20^{\circ}C$ (mV) 2.275 ($\pm1\%$)Cyclic (or Boost) charge Voltage at $20^{\circ}C$ (V)/Cell 2.42 ($\pm3\%$)Cyclic (or Boost) charge Voltage at $20^{\circ}C$ (V)/Cell 2.42 ($\pm3\%$)Cyclic (or Boost) charge Voltage at $20^{\circ}C$ (V)/Cell 2.42 ($\pm3\%$)Cyclic (or Boost) charge Voltage at $20^{\circ}C$ (V)/Cell 2.42 ($\pm3\%$)Cyclic (or Boost) charge Voltage at $20^{\circ}C$ (V)/Cell 2.42 ($\pm3\%$)Cyclic (or Boost) charge current from std -4 $20^{\circ}C$ (mV) -4 Charge Current -4 Float charge current limit (A)No limitCyclic (or Boost) charge current limit (A) 3 Maximum Discharge Current -75 Short-Circuit Current & Internal ResistanceInternal resistance - according to EN IEC 320 $60896-21$ (A) -16 Design Life & Approvals -16 EUROBAT Classification: Standard Commercial 3 to 5 years | | 6.35 |
| Capacity loss per month at 20°C (% approx.)3Case Material StandardABS (UL94:VCCharge Voltage13.65 (\pm 1%)Float charge voltage at 20°C (V)/Block13.65 (\pm 1%)Float charge voltage at 20°C (V)/Cell2.275 (\pm 1%)Float Chy voltage tmp correction factor from std 20°C (mV)-3Cyclic (or Boost) charge Voltage at 20°C (V)/Block14.5 (\pm 3%)Cyclic (or Boost) charge Voltage at 20°C (V)/Cell2.42 (\pm 3%)Cyclic (or Boost) charge Voltage at 20°C (V)/Cell2.42 (\pm 3%)Cyclic (or Boost) charge Voltage at 20°C (V)/Cell2.42 (\pm 3%)Cyclic (or Boost) charge Voltage at 20°C (V)/Cell2.42 (\pm 3%)Cyclic (or Boost) charge Voltage at 20°C (V)/Cell3Charge CurrentNo limitFloat charge current limit (A)No limitCyclic (or Boost) charge current limit (A)3Maximum Discharge Current3601 second (A)3601 minute (A)320Short-Circuit Current & Internal ResistanceInternal resistance - according to EN IEC 60896-21 44.39(m\Omega)320Short-Circuit current - according to EN IEC32060896-21 (A)16Impedance16Measured at 1 kHz (m\Omega)16Design Life & Approvals3 to 5 years | Storage (in fully charged condition) Charge | -20°C to +60°C -15°C to +50°C -20°C to +60°C |
| StandardABS (UL94:VCCharge Voltage13.65 (±1%)Float charge voltage at 20°C (V)/Block13.65 (±1%)Float charge voltage at 20°C (V)/Cell2.275 (±1%)Float Chg voltage tmp correction factor from std-320°C (mV)Cyclic (or Boost) charge Voltage at 20°C (V)/Block14.5 (±3%)Cyclic (or Boost) charge Voltage at 20°C (V)/Cell2.42 (±3%)Cyclic Chg voltage tmp correction factor from std-420°C (mV)2.42 (±3%)Cyclic (or Boost) charge Voltage at 20°C (V)/Cell2.42 (±3%)Cyclic Chg voltage tmp correction factor from std-420°C (mV)2.42 (±3%)Cyclic (or Boost) charge Current factor from stdFloat charge current limit (A)No limitCyclic (or Boost) charge Current3Maximum Discharge Current31 second (A)3601 minute (A)75Short-Circuit Current & Internal Resistance320(m\Omega)Short-Circuit current - according to EN IEC 60896-21 44.39(mQ)Short-Circuit current - according to EN IEC 60896-21 44.39(mQ)Short-Circuit current - according to EN IEC 60896-21 (A)Impedance320Measured at 1 kHz (mQ)16Design Life & ApprovalsEUROBAT Classification: Standard Commercial3 to 5 years | - | 3 |
| Float charge voltage at 20°C (V)/Block13.65 (±1%)Float charge voltage at 20°C (V)/Cell2.275 (±1%)Float Chg voltage tmp correction factor from std-320°C (mV)2.0°C (v)/Block14.5 (±3%)Cyclic (or Boost) charge Voltage at 20°C (V)/Block14.5 (±3%)Cyclic (or Boost) charge Voltage at 20°C (V)/Cell2.42 (±3%)Cyclic Chg voltage tmp correction factor from std-420°C (mV)2.42 (±3%)Charge CurrentFloat charge current limit (A)No limitCyclic (or Boost) charge current limit (A)3Maximum Discharge Current3601 second (A)3601 minute (A)75Short-Circuit Current & Internal ResistanceInternal resistance - according to EN IEC 60896-21 44.39(mQ)Short-Circuit current - according to EN IEC32060896-21 (A)16Impedance16Design Life & Approvals3 to 5 years | | ABS (UL94:V0) |
| $20^{\circ}C (mV)$ $Charge Current$ Float charge current limit (A) No limit Cyclic (or Boost) charge current limit (A) 3 Maximum Discharge Current 1 second (A) 360 1 minute (A) 75 Short-Circuit Current & Internal Resistance Internal resistance - according to EN IEC 60896-21 44.39 (mQ) Short-Circuit current - according to EN IEC 60896-21 44.39 (mQ) Short-Circuit current - according to EN IEC 320 60896-21 (A) Impedance Measured at 1 kHz (mQ) 16 Design Life & Approvals EUROBAT Classification: Standard Commercial 3 to 5 years | Float charge voltage at 20°C (V)/Block 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 current limit (A)No limitCyclic (or Boost) charge current limit (A)3Maximum Discharge Current3601 second (A)3601 minute (A)75Short-Circuit Current & Internal Resistance75Internal resistance - according to EN IEC 60896-21 44.39(mΩ)Short-Circuit current - according to EN IEC 60896-21 44.3932060896-21 (A)320Impedance16Design Life & Approvals3 to 5 years | 20°C (mV) | -4 |
| 1 second (A)3601 minute (A)75Short-Circuit Current & Internal ResistanceInternal resistance - according to EN IEC 60896-21 44.39(m Ω)Short-Circuit current - according to EN IECShort-Circuit current - according to EN IEC32060896-21 (A)16ImpedanceMeasured at 1 kHz (m Ω)16Design Life & ApprovalsEUROBAT Classification: Standard Commercial3 to 5 years | Float charge current limit (A) | |
| $\begin{array}{l} \mbox{Internal resistance - according to EN IEC 60896-21 44.39} \\ \mbox{(m}\Omega) & & & & & \\ \mbox{Short-Circuit current - according to EN IEC} & & & & \\ \mbox{Short-Circuit current - according to EN IEC} & & & & \\ \mbox{60896-21 (A)} & & & & & \\ \mbox{Impedance} & & & & \\ \mbox{Impedance} & & & & \\ \mbox{Measured at 1 kHz (m}\Omega) & & & & \\ \mbox{Impedance} & & & & \\ \mbox{Measured at 1 kHz (m}\Omega) & & & & \\ \mbox{Design Life & Approvals} & & & \\ \mbox{EUROBAT Classification: Standard Commercial} & & & & & \\ \end{tabular}$ | 1 second (A) | |
| Short-Circuit current - according to EN IEC32060896-21 (A)ImpedanceImpedance16Design Life & Approvals16EUROBAT Classification: Standard Commercial3 to 5 years | Internal resistance - according to EN IEC 60896-21 | 44.39 |
| Measured at 1 kHz (mΩ)16Design Life & Approvals3 to 5 yearsEUROBAT Classification: Standard Commercial3 to 5 years | Short-Circuit current - according to EN IEC | 320 |
| EUROBAT Classification: Standard Commercial 3 to 5 years | - | 16 |
| | | 3 to 5 years up to 5 |





Layout



3rd Party Certifications ISO9001 - Quality Management Systems



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.



YUAS

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