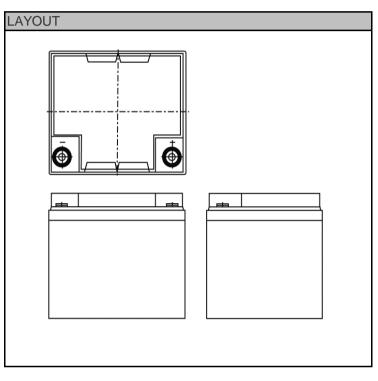
Data Sheet

NPL-Series - Valve Regulated Lead Acid Battery

NPL38-12I (FR)

Nominal voltage 12 V 20-hr rate Capacity to 10.5V at 20°C 38 Ah 10-hr rate Capacity to 10.8V at 20°C 33.44 Ah DIMENSIONS	SPECIFICATIONS			
20-hr rate Capacity to 10.5V at 20°C 38 Ah 10-hr rate Capacity to 10.8V at 20°C 33.44 Ah DIMENSIONS 197 (±0.5) mm Width 165 (±0.5) mm Width 165 (±0.5) mm Might 170 (±0.5) mm Might 170 (±0.5) mm Mass (typical) N/A mm Mass (typical) 14.0 kg TERMINAL TYPE Female threaded terminal M5 mm Torque 2.5 Nm OPERATING TEMPERATURE RANGE Storage (in fully charged condition) -20°C to +60°C Discharge -15°C to -50°C Discharge -20°C to +60°C Charge Storage (in fully charged condition) ABS (UL.94:HB) Flaat and Qbion ABS (UL.94:HB) Flaad and Option ABS (UL.94:HB) Flaat and Qbion ABS (UL.94:V0) CHARGE VOLTAGE 2275 (±1%) V/cell Float charge voltage temperature correction factor (for variations from the standard 20°C) -3 mV/cell/°C Cyclic (or Boost) charge at 20°C <t< td=""><td></td><td>12</td><td>V</td></t<>		12	V	
10-hr rate Capacity to 10.8V at 20°C 33.44 Ah DIMENSIONS			-	
DIMENSIONS 197 (±0.5) mm Width 165 (±0.5) mm Height 170 (±0.5) mm (height over terminals) N/A mm Mass (typical) 14.0 kg TERMINAL TYPE Female threaded terminal M5 mm Torque 2.5 Nm OPERATING TEMPERATURE RANGE Storage (in fully charged condition) -20°C to +60°C Charge -15°C to +50°C Discharge -20°C to +60°C Charge -15°C to +50°C Storage (in fully charged condition) -20°C to +60°C Charge Capacity loss per month at 20°C (approx) 3 % CASE MATERIAL Storage voltage temperature correction factor (for variations from the standard 20°C) -23 mV/cell/°C Charge voltage at 20°C 14.5 (±3%) V V/cell Cyclic Charge voltage temperature correction factor (for variations from the standard 20°C) -4 mV/cell/°C Cyclic (or Boost) charge at 20°C 2.42 (±3%) V/cell V/cell Cyclic (or Boost) charge at 20°C 2.42 (±3%) V/cell <t< td=""><td></td><td></td><td></td></t<>				
Length 197 (±0.5) mm Width 165 (±0.5) mm Height 170 (±0.5) mm Mass (typical) 14.0 kg TERMINAL TYPE Female threaded terminal M5 mm Torque 2.5 Nm OPERATING TEMPERATURE RANGE Storage (in fully charged condition) -20°C to +60°C Charge -15°C to +50°C Discharge -20°C to +60°C Storage (in fully charged condition) -20°C to +60°C Charge -15°C to +50°C Discharge -20°C to +60°C Standard Option ABS (UL.94:HB) Flame retardant option (FR) ABS (UL.94:W0) CASE MATERIAL Float charge voltage temperature correction factor (for variations from the standard 20°C) Cyclic (re Boost) charge at 20°C 14.5		55.44	All	
Width 165 (±0.5) mm Height 170 (±0.5) mm (height over terminals) N/A mm Mass (typical) 14.0 kg TERMINAL TYPE Female threaded terminal M5 mm Torque 2.5 Nm OPERATING TEMPERATURE RANGE Storage (in fully charged condition) -20°C to +60°C Charge -15°C to +50°C Discharge -20°C to +60°C Storage (in fully charged condition) -20°C to +60°C Capacity loss per month at 20°C (approx) 3 % CASE MATERIAL Standard Option ABS (UL.94:HB) Flame retardant option (FR) ABS (UL.94:V0) CHARGE VOLTAGE Vol 2.275 (±1%) V/cell Float charge voltage temperature correction factor (for variations from the standard 20°C) -3 mV/cell/°C Cyclic (or Boost) charge at 20°C 14.5 (±3%) V Cyclic (or Boost) charge current limit 6.00 <td></td> <td></td> <td></td>				
Height 170 (±0.5) mm (height over terminals) N/A mm Mass (typical) 14.0 kg TERMINAL TYPE				
N/A mm Mass (typical) 14.0 kg TERMINAL TYPE Female threaded terminal M5 mm Torque 2.5 N/m OPERATING TEMPERATURE RANGE Storage (in fully charged condition) -20°C to +60°C Discharge -15°C to +50°C Discharge Discharge -20°C to +60°C STORAGE Capacity loss per month at 20°C (approx) 3 % CASE MATERIAL Standard Option ABS (UL.94:HB) Flame retardant option (FR) ABS (UL.94:HB) Flame retardant option (FR) Float charge voltage temperature correction factor (for variations from the standard 20°C) 13.65 (±1%) V Cyclic (or Boost) charge at 20°C 13.45 (±3%) V V Cyclic (or Boost) charge at 20°C 14.5 (±3%) V V/cell/°C Cyclic (or Boost) charge at 20°C 14.5 (±3%) V V/cell Cyclic (or Boost) charge at 20°C 4 mV/cell/°C MV/cell/°C CHARGE CURRENT 14.5 (±3%) V V/cell Float charge outage temperature correction factor (for variation		, ,		
Nase (typical) 14.0 kg TERMINAL TYPE Female threaded terminal M5 mm Torque 2.5 Nm OPERATING TEMPERATURE RANGE Storage (in fully charged condition) -20°C to +60°C Charge -15°C to +50°C Discharge -20°C to +60°C Storage (in fully charged condition) -20°C to +60°C STORAGE Capacity loss per month at 20°C (approx) 3 % CASE MATERIAL Standard Option ABS (UL.94:HB) Flame retardant option (FR) CASES (UL.94:W0) CHARGE VOLTAGE Float charge voltage temperature correction factor (for variations from the standard 20°C) -3 mV/cell/°C Cyclic (or Boost) charge at 20°C 14.5 (±3%) V V/cell Cyclic Corbarge voltage temperature correction factor (for variations from the standard 20°C) -4 mV/cell/°C Cyclic (or Boost) charge at 20°C 14.5 (±3%) V V/cell Cyclic (or Boost) charge at 20°C -4 mV/cell/°C mV/cell/°C Cyclic (or Boost) charge current limit 6.00 A A MAXIMUM DISCHARGE CURRENT 1 </td <td></td> <td>, ,</td> <td></td>		, ,		
TERMINAL TYPE M5 mm Female threaded terminal M5 mm Torque 2.5 Nm OPERATING TEMPERATURE RANGE Storage (in fully charged condition) -20°C to +60°C Charge -15°C to +50°C Discharge Discharge -20°C to +60°C STORAGE Capacity loss per month at 20°C (approx) 3 % CASE MATERIAL Standard Option ABS (UL.94:HB) Flame retardant option (FR) ABS (UL.94:HB) Flame retardant option (FR) ABS (UL.94:W0) CHARGE VOLTAGE Float charge voltage temperature correction factor -3 mV/cell/°C Float charge voltage temperature correction factor -3 mV/cell/°C (cr variations from the standard 20°C) 14.5 (±3%) V Cyclic (or Boost) charge at 20°C 14.5 (±3%) V V/cell V/cell/°C Cyclic (or Boost) charge at 20°C 14.5 (±3%) V V/cell/°C W/cell/°C Cyclic (or Boost) charge current limit No limit A Cyclic (or Boost) charge current limit 6.00 A MAXIMUM DISCHARGE CURRENT 1 1 1 200 A		-		
Female threaded terminalM5mmTorque2.5NmOPERATING TEMPERATURE RANGEStorage (in fully charged condition)-20°C to +60°CCharge-15°C to +50°CDischarge-20°C to +60°CSTORAGE-20°C to +60°CCapacity loss per month at 20°C (approx)3%CASE MATERIALStandard OptionABS (UL.94:HB)Fleme retardant option (FR)ABS (UL.94:HB)Fleme retardant option (FR)ABS (UL.94:HB)Fleme retardant option (FR)ABS (UL.94:HB)Float charge voltage temperature correction factor (for variations from the standard 20°C)-3mV/cell/°CCyclic (or Boost) charge at 20°C14.5 (±3%)VCyclic Charge voltage temperature correction factor (for variations from the standard 20°C)-4mV/cell/°CCyclic Charge voltage temperature correction factor (for variations from the standard 20°C)-4mV/cell/°CCyclic Charge voltage temperature correction factor (for variations from the standard 20°C)-4mV/cell/°CCHARGE CURRENTFloat charge current limit6.00AMAXIMUM DISCHARGE CURRENT200ASHORT-CIRCUIT CURRENT & INTERNAL RESISTANCEInternal resistance18.22mShort-Circuit current804AIMPEDANCE-7.5mPERFORMANCE & CHARACTERISTICSRefer to the technical manualNPLDESIGN LIFEEUROBAT Classification: High performance10 to 12yearsYuasa design life @ 20°Cup to 10years </td <td></td> <td>14.0</td> <td>Ng</td>		14.0	Ng	
Torque 2.5 Nm OPERATING TEMPERATURE RANGE Storage (in fully charged condition) -20°C to +60°C Charge -15°C to +50°C Discharge -20°C to +60°C Discharge -20°C to +60°C Storage (in fully charged condition) -20°C to +60°C STORAGE Capacity loss per month at 20°C (approx) 3 % CASE MATERIAL Standard Option ABS (UL.94:HB) Flame retardant option (FR) ABS (UL.94:HB) Flame retardant option (FR) ABS (UL.94:V0) CHARGE VOLTAGE 500 (L94:V0) Float charge voltage temperature correction factor (for variations from the standard 20°C) 14.5 (±3%) V Cyclic (or Boost) charge at 20°C 14.5 (±3%) V 2.42 (±3%) V/cell Cyclic (or Boost) charge at 20°C 14.5 (±3%) V 2.42 (±3%) V/cell Cyclic (or Boost) charge current limit No limit A mV/cell/°C CHARGE CURRENT 1 1 Molent/°C Molent/°C Float charge current limit No limit A A MAXIMUM DISCHARGE CURRENT		M5	mm	
OPERATING TEMPERATURE RANGE Storage (in fully charged condition) -20°C to +60°C Charge -15°C to +50°C Discharge -20°C to +60°C Storage (in fully charged condition) -20°C to +60°C Discharge -20°C to +60°C STORAGE -20°C to +60°C Capacity loss per month at 20°C (approx) 3 % CASE MATERIAL Standard Option ABS (UL.94:HB) Flame retardant option (FR) ABS (UL.94:HB) Flame retardant option (FR) ABS (UL.94:W0) CHARGE VOLTAGE		-		
Storage (in fully charged condition)-20°C to +60°CCharge-15°C to +50°CDischarge-20°C to +60°CSTORAGE-20°C to +60°CCapacity loss per month at 20°C (approx)3%CASE MATERIALStandard OptionABS (UL.94:HB)Flame retardant option (FR)ABS (UL.94:V0)CHARGE VOLTAGE13.65 (±1%)VFloat charge voltage at 20°C13.65 (±1%)VFloat charge voltage temperature correction factor (for variations from the standard 20°C)-3mV/cell/°CCyclic (or Boost) charge at 20°C14.5 (±3%)VCyclic Charge voltage temperature correction factor (for variations from the standard 20°C)-4mV/cell/°CCyclic Charge voltage temperature correction factor (for variations from the standard 20°C)-4mV/cell/°CCHARGE CURRENT-4mV/cell/°CmV/cell/°CFloat charge current limitNo limitAAAQuito (or Boost) charge current limitNo limitAAMXIMUM DISCHARGE CURRENT200AA1 minute200AAAMAXIMUM DISCHARGE CURRENT18.22m1 second500AA1 minute804AAIMPEDANCEMeasured at 1 kHz7.5mPERFORMANCE & CHARACTERISTICSRefer to the technical manualNPLDESIGN LIFEEUROBAT Classification: High performance10 to 12yearsYuasa design life @ 20°Cup to 10years <td></td> <td>2.5</td> <td></td>		2.5		
Charge -15°C to +50°C Discharge -20°C to +60°C STORAGE -20°C to +60°C Capacity loss per month at 20°C (approx) 3 % CASE MATERIAL			2 460°C	
Discharge -20°C to +60°C STORAGE 3 Capacity loss per month at 20°C (approx) 3 Standard Option ABS (UL.94:HB) Flame retardant option (FR) ABS (UL.94:HB) Flame retardant option (FR) ABS (UL.94:V0) CHARGE VOLTAGE 2.275 (±1%) V/cell Float charge voltage temperature correction factor (for variations from the standard 20°C) -3 mV/cell/°C Cyclic (or Boost) charge at 20°C 14.5 (±3%) V Cyclic Charge voltage temperature correction factor (for variations from the standard 20°C) -4 mV/cell/°C Cyclic Charge voltage temperature correction factor (for variations from the standard 20°C) -4 mV/cell/°C Cyclic Charge voltage temperature correction factor (for variations from the standard 20°C) -4 mV/cell/°C CHARGE CURRENT Float charge current limit AO AO Stodnard 500 A A MAXIMUM DISCHARGE CURRENT 200 A 1 second 500 A A 1 minute 200 A A SHORT-CIRCUIT CURRENT & INTERNAL RESISTANCE M A IMPEDANCE				
STORAGE Capacity loss per month at 20°C (approx) 3 % CASE MATERIAL Standard Option ABS (UL.94:HB) Standard Option ABS (UL.94:V0) CHARGE VOLTAGE Float charge voltage at 20°C 13.65 (±1%) V Float charge voltage temperature correction factor (for variations from the standard 20°C) -3 mV/cell/°C Cyclic (or Boost) charge at 20°C 14.5 (±3%) V V/cell Cyclic Charge voltage temperature correction factor (for variations from the standard 20°C) -4 mV/cell/°C Cyclic Charge voltage temperature correction factor (for variations from the standard 20°C) -4 mV/cell/°C CHARGE CURRENT -4 mV/cell/°C mV/cell/°C Float charge current limit No limit A A Cyclic (or Boost) charge current limit 6.00 A MAXIMUM DISCHARGE CURRENT 1 1 second A A I second 500 A 1 1 MAXIMUM DISCHARGE CURRENT 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
Capacity loss per month at 20°C (approx)3%CASE MATERIALStandard OptionABS (UL.94:HB)Flame retardant option (FR)ABS (UL.94:VO)CHARGE VOLTAGE13.65 (\pm 1%)VFloat charge voltage at 20°C13.65 (\pm 1%)V/cellFloat charge voltage temperature correction factor (for variations from the standard 20°C)-3mV/cell/°CCyclic (or Boost) charge at 20°C14.5 (\pm 3%)VCyclic (or Boost) charge at 20°C14.5 (\pm 3%)V/cellCyclic (or Boost) charge at 20°C-4mV/cell/°CCyclic (or Boost) charge temperature correction factor (for variations from the standard 20°C)-4mV/cell/°CCHARGE CURRENT-4mV/cell/°CFloat charge current limitNo limitACyclic (or Boost) charge current limit6.00AMAXIMUM DISCHARGE CURRENT200A1 second500A1 minute200ASHORT-CIRCUIT CURRENT & INTERNAL RESISTANCEInternal resistanceInternal resistance18.22mShort-Circuit current804AIMPEDANCE7.5mPERFORMANCE & CHARACTERISTICSNPLRefer to the technical manualNPLDESIGN LIFEEUROBAT Classification: High performance10 to 12Yuasa design life @ 20°Cup to 10years	-	-20 C II	5 +00 C	
CASE MATERIAL Standard Option ABS (UL.94:HB) Flame retardant option (FR) ABS (UL.94:V0) CHARGE VOLTAGE 13.65 (±1%) V Float charge voltage at 20°C 13.65 (±1%) V/cell Float charge voltage temperature correction factor (for variations from the standard 20°C) -3 mV/cell/°C Cyclic (or Boost) charge at 20°C 14.5 (±3%) V Cyclic (or Boost) charge at 20°C 2.42 (±3%) V/cell Cyclic Charge voltage temperature correction factor (for variations from the standard 20°C) -4 mV/cell/°C Cyclic Charge voltage temperature correction factor (for variations from the standard 20°C) -4 mV/cell/°C CHARGE CURRENT Float charge current limit No limit A Float charge current limit 0.00 A MAXIMUM DISCHARGE CURRENT 1 second 500 A 1 1 1 second 500 A A MAXIMUM DISCHARGE CURRENT 18.22 m 1 second 500 A A Internal resistance 18.22 m Short-Circuit current 804 A A		3	0/_	
Standard OptionABS (UL.94:HB)Flame retardant option (FR)ABS (UL.94:V0)CHARGE VOLTAGE13.65 (±1%)VFloat charge voltage at 20°C13.65 (±1%)V/cellFloat Charge voltage temperature correction factor (for variations from the standard 20°C)-3mV/cell/°CCyclic (or Boost) charge at 20°C14.5 (±3%)VCyclic Charge voltage temperature correction factor (for variations from the standard 20°C)-4mV/cell/°CCyclic Charge voltage temperature correction factor (for variations from the standard 20°C)-4mV/cell/°CCHARGE CURRENT-4mV/cell/°CCFloat charge current limitNo limitACyclic (or Boost) charge current limit6.00AMAXIMUM DISCHARGE CURRENT16.00AMAXIMUM DISCHARGE CURRENT1200AShort-CIRCUIT CURRENT & INTERNAL RESISTANCE18.22m(according to EN IEC 60896-21)18.22mInternal resistance18.22mShort-Circuit current804AIMPEDANCE7.5mPERFORMANCE & CHARACTERISTICSRefer to the technical manualNPLDESIGN LIFEEUROBAT Classification: High performance10 to 12yearsYuasa design life @ 20°Cup to 10years		3	70	
Flame retardant option (FR) ABS (UL94:V0) CHARGE VOLTAGE 13.65 (±1%) V Float charge voltage at 20°C 13.65 (±1%) V/cell Float Charge voltage temperature correction factor (for variations from the standard 20°C) -3 mV/cell/°C Cyclic (or Boost) charge at 20°C 14.5 (±3%) V Cyclic Charge voltage temperature correction factor (for variations from the standard 20°C) -4 mV/cell/°C Cyclic Charge voltage temperature correction factor (for variations from the standard 20°C) -4 mV/cell/°C CHARGE CURRENT -4 mV/cell/°C mV/cell/°C Float charge current limit No limit A Cyclic (or Boost) charge current limit 6.00 A MAXIMUM DISCHARGE CURRENT 1 200 A 1 second 500 A 1 1 minute 200 A Short-CIRCUIT CURRENT & INTERNAL RESISTANCE (according to EN IEC 60896-21) Internal resistance 18.22 m Short-Circuit current 804 A IMPEDANCE Measured at 1 kHz 7.5 m PERFORMANCE & CHARACTERISTICS Refer to the technical manual		ABS (III	94·HB)	
CHARGE VOLTAGE 13.65 (±1%) V Float charge voltage at 20°C 13.65 (±1%) V/cell Float Charge voltage temperature correction factor (for variations from the standard 20°C) -3 mV/cell/°C Cyclic (or Boost) charge at 20°C 14.5 (±3%) V Cyclic Core Boost) charge at 20°C 14.5 (±3%) V Cyclic Charge voltage temperature correction factor (for variations from the standard 20°C) -4 mV/cell/°C Cyclic Charge voltage temperature correction factor (for variations from the standard 20°C) -4 mV/cell/°C CHARGE CURRENT Float charge current limit No limit A Float charge current limit No limit A A Cyclic (or Boost) charge current limit 6.00 A A MXIMUM DISCHARGE CURRENT 1 second A A 1 second 500 A A A 1 minute 200 A A A Short-CIRCUIT CURRENT & INTERNAL RESISTANCE (according to EN IEC 60896-21) Internal resistance 18.22 m Internal resistance 18.22 m Short-Circuit current 804 A		· · · · ·		
Float charge voltage at 20°C $13.65 (\pm 1\%)$ VFloat charge voltage temperature correction factor (for variations from the standard 20°C)-3mV/cell/°CCyclic (or Boost) charge at 20°C $14.5 (\pm 3\%)$ VCyclic Charge voltage temperature correction factor (for variations from the standard 20°C)-4mV/cell/°CCyclic Charge voltage temperature correction factor (for variations from the standard 20°C)-4mV/cell/°CCyclic Charge voltage temperature correction factor (for variations from the standard 20°C)-4mV/cell/°CCHARGE CURRENT-4mV/cell/°CmV/cell/°CFloat charge current limitNo limitAACyclic (or Boost) charge current limit6.00AAMAXIMUM DISCHARGE CURRENT500AA1 second500AA1 minute200ASHORT-CIRCUIT CURRENT & INTERNAL RESISTANCEI(according to EN IEC 60896-21)Internal resistance18.22mInternal resistance18.22mShort-Circuit currentAIMPEDANCEMeasured at 1 kHz7.5mPERFORMANCE & CHARACTERISTICSRefer to the technical manualNPLDESIGN LIFEEUROBAT Classification: High performance10 to 12yearsYuasa design life @ 20°Cup to 10yearsS	, ,	ADS (UL94:VU)		
Float charge voltage at 20°C 2.275 (±1%) V/cell Float Charge voltage temperature correction factor (for variations from the standard 20°C) -3 mV/cell/°C Cyclic (or Boost) charge at 20°C 14.5 (±3%) V Cyclic Charge voltage temperature correction factor (for variations from the standard 20°C) -4 mV/cell/°C Cyclic Charge voltage temperature correction factor (for variations from the standard 20°C) -4 mV/cell/°C CHARGE CURRENT -4 mV/cell/°C mV/cell/°C Float charge current limit No limit A Cyclic (or Boost) charge acurrent limit 6.00 A MAXIMUM DISCHARGE CURRENT 500 A 1 second 500 A 1 minute 200 A SHORT-CIRCUIT CURRENT & INTERNAL RESISTANCE (according to EN IEC 60896-21) Internal resistance 18.22 m Masured at 1 kHz 7.5 m PERFORMANCE & CHARACTERISTICS Refer to the technical manual NPL DESIGN LIFE UROBAT Classification: High performance 10 to 12 years Yuasa design life @ 20°C up to 10 years	CHARGE VOLTAGE	13.65 (+1%)	V	
(for variations from the standard 20°C)3Intv/cell/*CCyclic (or Boost) charge at 20°C14.5 (±3%)VCyclic Charge voltage temperature correction factor (for variations from the standard 20°C)-4mV/cell/°CCHARGE CURRENT-4mV/cell/°CFloat charge current limitNo limitACyclic (or Boost) charge current limit6.00AMAXIMUM DISCHARGE CURRENT6.00A1 second500A1 minute200ASHORT-CIRCUIT CURRENT & INTERNAL RESISTANCE0(according to EN IEC 60896-21)18.22mInternal resistance18.22mShort-Circuit current804AIMPEDANCE7.5mPERFORMANCE & CHARACTERISTICSRefer to the technical manualNPLDESIGN LIFEEUROBAT Classification: High performance10 to 12yearsYuasa design life @ 20°Cup to 10years	Float charge voltage at 20°C		-	
Cyclic (of Bodst) charge at 20 C2.42 (±3%)V/cellCyclic Charge voltage temperature correction factor (for variations from the standard 20°C)-4mV/cell/°CCHARGE CURRENT-4mV/cell/°CFloat charge current limitNo limitACyclic (or Boost) charge current limit6.00AMAXIMUM DISCHARGE CURRENT500A1 second500A1 minute200ASHORT-CIRCUIT CURRENT & INTERNAL RESISTANCE(according to EN IEC 60896-21)Internal resistance18.22mShort-Circuit current804AIMPEDANCE7.5mPERFORMANCE & CHARACTERISTICSRefer to the technical manualNPLDESIGN LIFEEUROBAT Classification: High performance10 to 12yearsYuasa design life @ 20°Cup to 10years	Float Charge voltage temperature correction factor (for variations from the standard 20°C)	-3	mV/cell/°C	
"-4""MV/Cell/*CCHARGE CURRENTNo limitAFloat charge current limitNo limitACyclic (or Boost) charge current limit6.00AMAXIMUM DISCHARGE CURRENT500A1 second500A1 minute200ASHORT-CIRCUIT CURRENT & INTERNAL RESISTANCE(according to EN IEC 60896-21)Internal resistance18.22mShort-Circuit current804AIMPEDANCE7.5Measured at 1 kHz7.5mPERFORMANCE & CHARACTERISTICSRefer to the technical manualNPLDESIGN LIFE10 to 12EUROBAT Classification: High performance10 to 12yearsYuasa design life @ 20°Cup to 10years	Cyclic (or Boost) charge at 20°C		•	
Float charge current limitNo limitACyclic (or Boost) charge current limit6.00AMAXIMUM DISCHARGE CURRENT11 second500A1 minute200ASHORT-CIRCUIT CURRENT & INTERNAL RESISTANCE(according to EN IEC 60896-21)Internal resistance18.22mShort-Circuit current804AIMPEDANCE7.5mPERFORMANCE & CHARACTERISTICSPERFORMANCE & CHARACTERISTICSRefer to the technical manualNPLDESIGN LIFE10 to 12yearsYuasa design life @ 20°Cup to 10years		-4	mV/cell/°C	
Cyclic (or Boost) charge current limit6.00AMAXIMUM DISCHARGE CURRENT11 second500A1 minute200ASHORT-CIRCUIT CURRENT & INTERNAL RESISTANCE(according to EN IEC 60896-21)Internal resistance18.22mShort-Circuit current804AIMPEDANCE7.5mPERFORMANCE & CHARACTERISTICSRefer to the technical manualNPLDESIGN LIFEEUROBAT Classification: High performance10 to 12yearsYuasa design life @ 20°Cup to 10years	CHARGE CURRENT			
MAXIMUM DISCHARGE CURRENT1 second5001 minute200ASHORT-CIRCUIT CURRENT & INTERNAL RESISTANCE(according to EN IEC 60896-21)Internal resistance18.22Maximum Market804AIMPEDANCEMeasured at 1 kHz7.5PERFORMANCE & CHARACTERISTICSRefer to the technical manualNPLDESIGN LIFEEUROBAT Classification: High performance10 to 12Yuasa design life @ 20°Cup to 10years	Float charge current limit	No limit	А	
1 second500A1 minute200ASHORT-CIRCUIT CURRENT & INTERNAL RESISTANCE(according to EN IEC 60896-21)Internal resistance18.22mShort-Circuit current804AIMPEDANCEMeasured at 1 kHz7.5mPERFORMANCE & CHARACTERISTICSRefer to the technical manualNPLDESIGN LIFEEUROBAT Classification: High performance10 to 12yearsYuasa design life @ 20°Cup to 10years	Cyclic (or Boost) charge current limit	6.00	А	
1 minute200ASHORT-CIRCUIT CURRENT & INTERNAL RESISTANCE(according to EN IEC 60896-21)Internal resistance18.22mInternal resistance18.22mShort-Circuit current804AIMPEDANCE804AMeasured at 1 kHz7.5mPERFORMANCE & CHARACTERISTICSNPLDESIGN LIFEEUROBAT Classification: High performance10 to 12yearsYuasa design life @ 20°Cup to 10years	MAXIMUM DISCHARGE CURRENT			
SHORT-CIRCUIT CURRENT & INTERNAL RESISTANCE(according to EN IEC 60896-21)Internal resistance18.22Short-Circuit current804AIMPEDANCEMeasured at 1 kHz7.5PERFORMANCE & CHARACTERISTICSRefer to the technical manualNPLDESIGN LIFEEUROBAT Classification: High performance10 to 12Yuasa design life @ 20°Cup to 10years	1 second	500	А	
(according to EN IEC 60896-21)Internal resistance18.22mShort-Circuit current804AIMPEDANCE804AMeasured at 1 kHz7.5mPERFORMANCE & CHARACTERISTICS7.5mRefer to the technical manualNPLDESIGN LIFEEUROBAT Classification: High performance10 to 12yearsYuasa design life @ 20°Cup to 10years	1 minute	200	А	
Internal resistance18.22mShort-Circuit current804AIMPEDANCE804AMeasured at 1 kHz7.5mPERFORMANCE & CHARACTERISTICS7.5mRefer to the technical manualNPL10DESIGN LIFE10 to 12yearsEUROBAT Classification: High performance10 to 12yearsYuasa design life @ 20°Cup to 10years	SHORT-CIRCUIT CURRENT & INTERNAL RESISTANCE			
Short-Circuit current804AIMPEDANCEMeasured at 1 kHz7.5mPERFORMANCE & CHARACTERISTICSRefer to the technical manualNPLDESIGN LIFEEUROBAT Classification: High performance10 to 12yearsYuasa design life @ 20°Cup to 10years	(according to EN IEC 60896-21)			
IMPEDANCEMeasured at 1 kHz7.5PERFORMANCE & CHARACTERISTICSRefer to the technical manualNPLDESIGN LIFEEUROBAT Classification: High performance10 to 12Yuasa design life @ 20°Cup to 10	Internal resistance	18.22	m	
Measured at 1 kHz7.5mPERFORMANCE & CHARACTERISTICSRefer to the technical manualNPLDESIGN LIFEEUROBAT Classification: High performance10 to 12yearsYuasa design life @ 20°Cup to 10years	Short-Circuit current	804	А	
PERFORMANCE & CHARACTERISTICS Refer to the technical manual NPL DESIGN LIFE EUROBAT Classification: High performance 10 to 12 years Yuasa design life @ 20°C up to 10 years	IMPEDANCE			
Refer to the technical manualNPLDESIGN LIFEEUROBAT Classification: High performance10 to 12yearsYuasa design life @ 20°Cup to 10years	Measured at 1 kHz	7.5	m	
DESIGN LIFEEUROBAT Classification: High performance10 to 12yearsYuasa design life @ 20°Cup to 10years	PERFORMANCE & CHARACTERISTICS			
DESIGN LIFEEUROBAT Classification: High performance10 to 12yearsYuasa design life @ 20°Cup to 10years	Refer to the technical manual	NPL		
Yuasa design life @ 20°C up to 10 years	DESIGN LIFE			
	EUROBAT Classification: High performance	10 to 12	years	
SAFETY	Yuasa design life @ 20°C	up to 10	years	
	SAFETY			





3RD PARTY CERTIFICATIONS

ISO 9001 - Quality Management Systems ISO 14001 - Environmental Management Systems EN 18001 - OHSAS Management Systems UNDERWRITERS LABORATORIES Inc.



STANDARDS

IEC61056 IEC60896-21/22







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 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







ALL DATA IS SUBJECT TO CHANGE WITHOUT NOTICE Issue No.: V.3 / Issue Date: September 2012



YUASA BATTERY SALES UK LTD. Unit 13, Hunts Rise South Marston Industrial Estate Swindon SN3 4TG UK

www.yuasaeurope.com	NPL	