AMARA RAJA
Gotta be a better way

AMARON® QUANTA

LIFE UNINTERRUPTED

S-XEL TUBULAR SERIES

Power packed Tubular Battery for every UPS needs

INSTANT SUPPLY • QUICK RE-CHARGE

AMARON® QUANTA

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Engineering Excellence. Enduring Power Back Up.

Amara Raja yet again proves its passion for cutting edge technology, by introducing an advanced and smart performing battery Amaron Quanta S-XEL, a Tubular Power Packed Back Up Battery.

A source of 'Uninterrupted Power' for various core industries, this new generation Tubular battery is big in power storage and enduring in performance. As a company that is known for its obsession with technology, Amara Raja has been behind some of the best innovations in technology that India has seen.

S-XEL TUBULAR SERIES

Amaron Quanta S-XEL is a fail safe, fool proof battery, produced and tested in our state-of-the-art manufacturing facility. Built with the highest technical competence in its class, the Amaron Quanta S-XEL is an example of Amara Raja's commitment to bring the best of its technology. Amaron Quanta S-XEL is the industry's first product of acid circulation formation process technology among tubular batteries which enhances the life of the battery.

Truly, Amaron Quanta S-XEL, the Tubular battery is an innovative excellence that supplies instant power with consistent delivery and low self-discharge for uninterrupted power supply across every work segment.

Where Amaron Quanta S-XEL Finds Application

• Banks • IT Parks • Corporate Establishments
• Tele communications • Railways • Power Plants & Substation

Design Features	User Benefits
Hi-coerce™ spine cast	High pressure spine casting (> 100 bar) provides uni-directional grains orientation with micro hardness extradite superior life
Bountiful Boss™	Allows rapid charge & delivers high power. Optimized current dense & higher conductivity leading to last long
Panoptic Spine™	Mitigates corrosion prone zone, provides high life – Really long
Satiated wet paste™	Unique wet pasting process, lowers resistance to delivers consistent power & low self discharge
Endura cast™	Automated cast-on-strap delivers durability & performance
Unified TermiSeal™	Rigid & Integrated terminal connectivity provides sustainable strength
BIC™	Best in class vent design reduces acid spewing , built-in flame arrestor avoids acid mist exit
ACS	Industry first acid circulation formation process enhances battery life

Amaron Quanta S-Xel Tubular batteries Range

Model	Nominal Voltage (V) at 27°C	Capacity @C10hr at 1.80 ECV at 27°C (Ah)	Approx. Battery weight ±5% (Kgs) with acid	Overall Dimension (±3mm)			Constant potential limiting current (Amps)
				Length (L)	Width (W)	Height (H)*	
12ATL075	12	75	30.7	410	176	281	18.75
12ATL100	12	100	47.5	521	230	281	25
12ATL120	12	120	49	500	190	343	30
12ATL130	12	130	50	500	190	343	32.5
12ATL150	12	150	58	500	190	400	37.5
12ATL160	12	160	59	500	190	400	40
12ATL180	12	180	63	500	190	400	45

*H - Height up to terminal top for 75AH & 100Ah & up to top cover for other models.

Charging Parameters

Dual Mode Charge

The charging facility should have auto float change over and charge mode facilities with the recommended voltage settings

Charging current	Min. 10% of rated Ah capacity
Float Voltage	14.4 ± 0.1V /battery
Boost Voltage	15.0 ± 0.1V /battery
Over cutoff voltage	15.2V
Under cutoff voltage	10.8V

AMARA RAJA | Johnson Controls

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(An Amara Raja Johnson Controls Company)

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Email: mktg@amararaja.co.in,
www.amararaja.co.in, www.quanta.in

ISO 9001 : 2008 | ISO 14001 : 2004 | OHSAS 18001 : 2007

Authorised Dealer

12ATL075 (12V – 75Ah) Tubular Battery

Introduction:

After pioneering in VRLA technology, Amara Raja, now brought to you ultra low maintenance free tubular batteries with best in class design with advance manufacturing technology. With decades of experience we gain in battery technology, coupled with continuous research has helped us to bring this highest quality product.

Uniquely built Amaron Quanta Tubular batteries has covered all aspects in design, required to give high life beside it ensure fast charge with high efficiency & best in class vent design makes Amaron Quanta Tubular, a perfect choice for high cyclic back up requirements.

Design Features & Benefits:

- Hi-coerce™ spine cast – High pressure spine casting (> 100 bar) provides uni-directional grains orientation with micro hardness extradite superior life.
- Bountiful Boss™ – Allows rapid charge & delivers high power. Optimized current dense & higher conductivity leading to last long.
- Panoptic Spine™ – Mitigates corrosion prone zone, provides high life – Really long.
- Satiated wet paste™ – Higher active material integrity, lowers resistance to delivers consistent power & life.
- Endura cast™ – Automated cast-on-strap delivers durability & performance.
- Unified Termi Seal™ – Rigid & Integrated terminal connectivity provides sustainable strength.

Specifications:

Nominal Voltage	12V	
Rated capacity @C10 at 27°C at 1.80CV	75Ah	
Dimensions (±3 mm)	Length	410mm
	Width	176mm
	Height*	281mm
Weight with acid in Kg (±5%)	30.7	

*H - Height up to terminal top

Major Applications :

- Banks
- IT Parks
- Corporate Establishments
- Telecommunications
- Railways
- Power Plants & Substation
- Process Instrumentation & Control
- Other Cyclic Applications

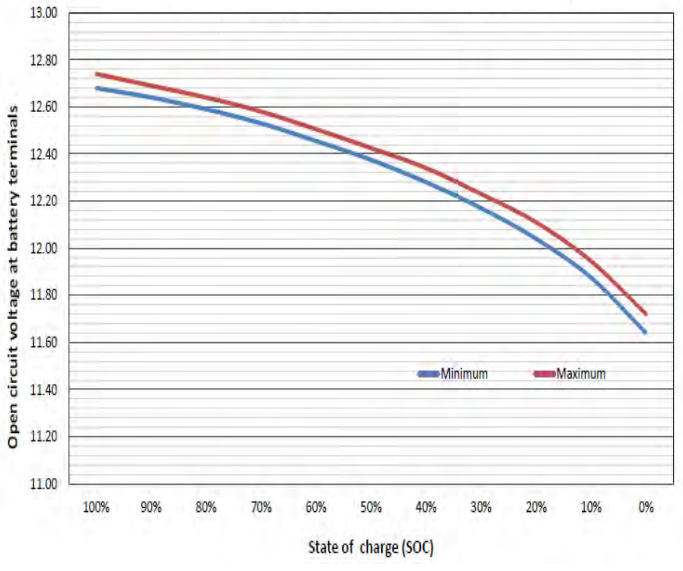
Applicable Standards

- Batteries Generally conforms to - IS 13369 spec.

Product Details:

Type of +ve plate	Tubular
Type of -ve plate	Flat Pasted
AH efficiency	> 90%
WH efficiency	>80%
Terminal Type	L-Terminal with Antimony Lead Alloy
Type of separator	PE
Type of container	PPCP
Operating temp. range of battery	-20°C to +60°C
Self-discharge for 28days	≤5% (As per IS13369 ≤10%)
Recommended Max period of storage	Max. 60days at 27°C
Electrolyte specific gravity of the end charge at 27°C	1.24
Electrolyte specific gravity of the end discharge	1.13

State of charge (SOC) Vs Open Circuit Voltage (V)



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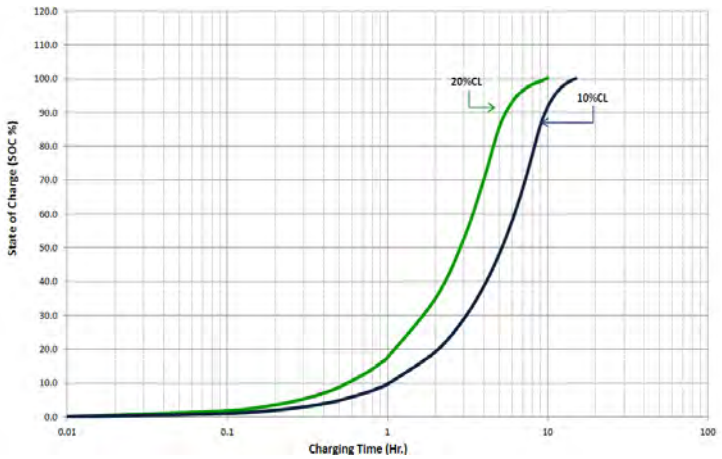
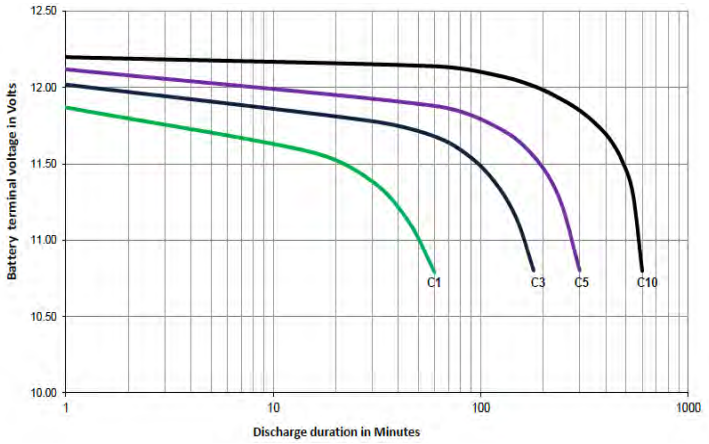
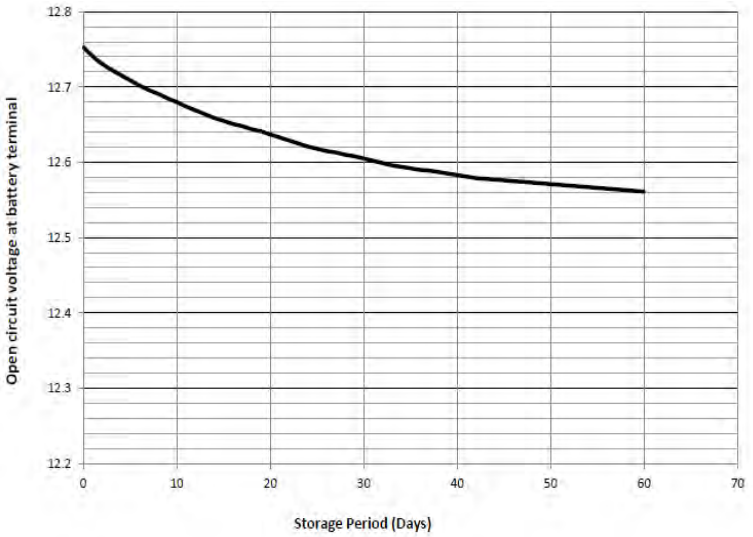
Constant voltage charging characteristics with 14.4V at 27°C



Discharge Characteristics



Shelf Life Characteristics at 27°C



Charging Parameters :

Constant Voltage charging at 27°C:

- Dual Mode Charge & the charging facility should have auto float change over and charge mode facilities with the recommended voltage settings
- Charging current - Min.10% of rated Ah capacity
- Float Voltage - 14.4 ± 0.1V /battery
- Boost Voltage - 15.0 ± 0.1V /battery
- Over cutoff voltage - 15.2V
- Under cutoff voltage - 10.8V

Test for Capacity:

On the first discharge the cell shall give not less than 85 percent of the rated capacity and the rated capacity shall be reached within 10 discharges subsequent to the initial charge.(Ref: IS13369 Clause No. : 11.5.4)

Glimpse of Advanced Manufacturing Technology :

Red Lead Mfg.

Pressure Die Casting

Acid Circulated formation

Reach us :

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Telangana – 500032, India

*Design Improvements are continuous process at Amara Raja, as result the contents may change without prior notice.
The given battery picture is indicative purpose only, actual may varies.

12ATL100 (12V – 100Ah) Tubular Battery

Introduction:

After pioneering in VRLA technology, Amara Raja, now brought to you ultra low maintenance free tubular batteries with best in class design with advance manufacturing technology. With decades of experience we gain in battery technology, coupled with continuous research has helped us to bring this highest quality product.

Uniquely built Amaron Quanta Tubular batteries has covered all aspects in design, required to give high life beside it ensure fast charge with high efficiency & best in class vent design makes Amaron Quanta Tubular, a perfect choice for high cyclic back up requirements.

Design Features & Benefits:

- Hi-coerce™ spine cast – High pressure spine casting (> 100 bar) provides uni-directional grains orientation with micro hardness extradite superior life.
- Bountiful Boss™ – Allows rapid charge & delivers high power. Optimized current dense & higher conductivi leading to last long.
- Panoptic Spine™ – Mitigates corrosion prone zone, provides high life – Really long.
- Satiated wet paste™ – Higher active material integrity, lowers resistance to delivers consistent power & life.
- Endura cast™ – Automated cast-on-strap delivers durability & performance.
- Unified Termi Seal™ – Rigid & Integrated terminal connectivity provides sustainable strength.

Specifications:

Nominal Voltage	12V	
Rated capacity @C10 at 27°C at 1.80CV	100Ah	
Dimensions (±3 mm)	Length	521mm
	Width	230mm
	Height*	281mm
Weight with acid in Kg (±5%)	47.5	

*H - Height up to terminal top

Major Applications :

- Banks
- IT Parks
- Corporate Establishments
- Telecommunications
- Railways
- Power Plants & Substation
- Process Instrumentation & Control
- Other Cyclic Applications

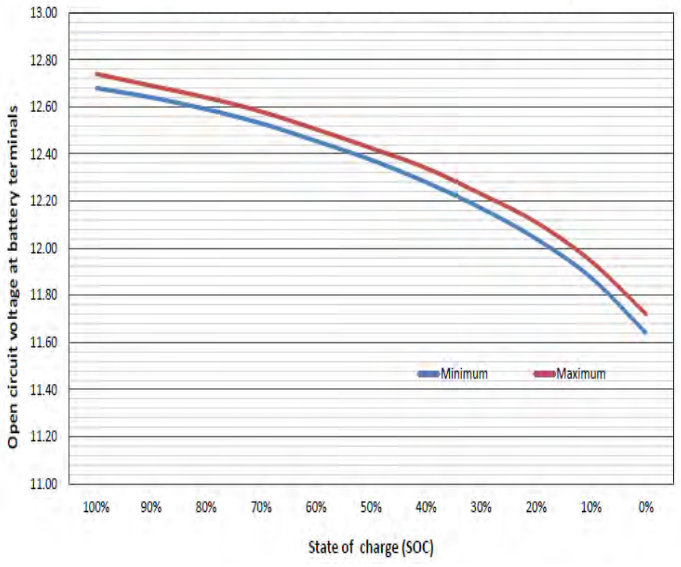
Applicable Standards

- Batteries Generally conforms to - IS 13369 spec.

Product Details:

Type of +ve plate	Tubular
Type of -ve plate	Flat Pasted
AH efficiency	> 90%
WH efficiency	>80%
Terminal Type	L-Terminal with Antimony Lead Alloy
Type of separator	PE
Type of container	PPCP
Operating temp. range of battery	-20°C to +60°C
Self-discharge for 28days	≤5% (As per IS13369 ≤10%)
Recommended Max period of storage	Max. 60days at 27°C
Electrolyte specific gravity of the end charge at 27°C	1.24
Electrolyte specific gravity of the end discharge	1.13

State of charge (SOC) Vs Open Circuit Voltage (V)



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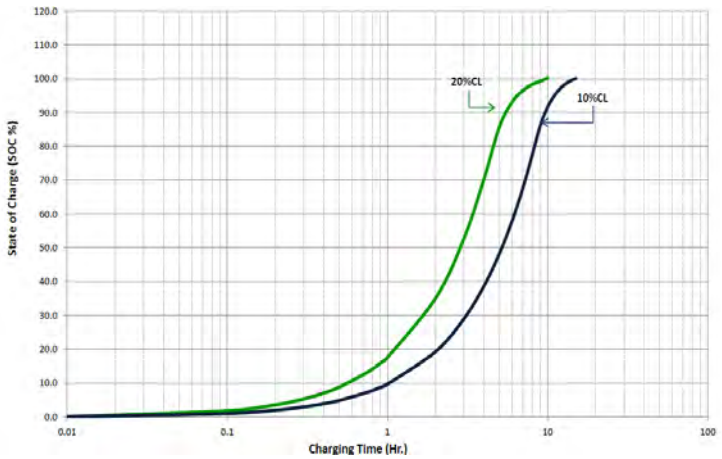
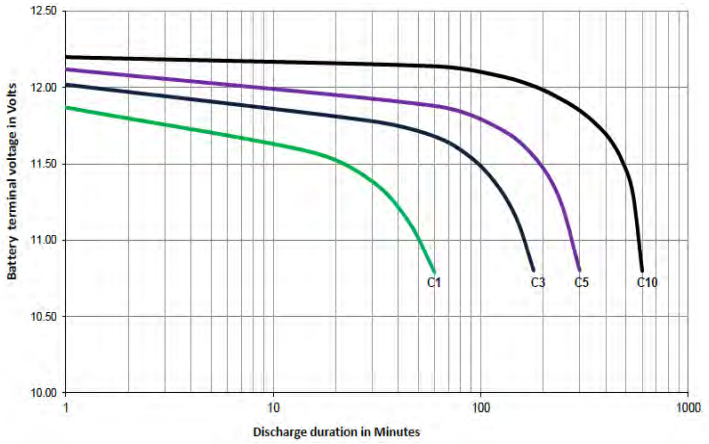
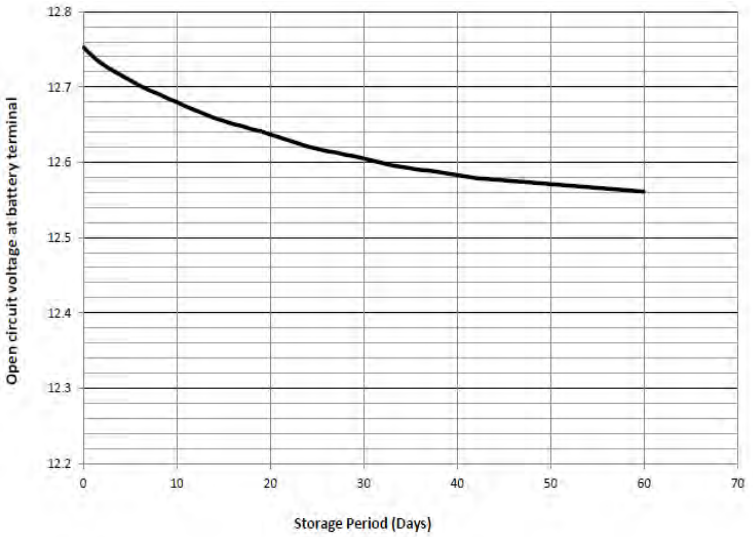
Constant voltage charging characteristics with 14.4V at 27°C



Discharge Characteristics



Shelf Life Characteristics at 27°C



Charging Parameters :

Constant Voltage charging at 27°C:

- Dual Mode Charge & the charging facility should have auto float change over and charge mode facilities with the recommended voltage settings
- Charging current - Min.10% of rated Ah capacity
- Float Voltage - 14.4 ± 0.1V /battery
- Boost Voltage - 15.0 ± 0.1V /battery
- Over cutoff voltage - 15.2V
- Under cutoff voltage - 10.8V

Test for Capacity:

On the first discharge the cell shall give not less than 85 percent of the rated capacity and the rated capacity shall be reached within 10 discharges subsequent to the initial charge.(Ref: IS13369 Clause No. : 11.5.4)

Glimpse of Advanced Manufacturing Technology :

Red Lead Mfg.

Pressure Die Casting

Acid Circulated formation

Reach us :

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Andhra Pradesh – 517 416, India

Corporate Office
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Telangana – 500032, India

*Design Improvements are continuous process at Amara Raja, as result the contents may change without prior notice.
The given battery picture is indicative purpose only, actual may varies.

12ATL120 (12V – 120Ah) Tubular Battery

Introduction:

After pioneering in VRLA technology, Amara Raja, now brought to you ultra low maintenance free tubular batteries with best in class design with advance manufacturing technology. With decades of experience we gain in battery technology, coupled with continuous research has helped us to bring this highest quality product.

Uniquely built Amaron Quanta Tubular batteries has covered all aspects in design, required to give high life beside it ensure fast charge with high efficiency & best in class vent design makes Amaron Quanta Tubular, a perfect choice for high cyclic back up requirements.

Design Features & Benefits:

- Hi-coerce™ spine cast – High pressure spine casting (> 100 bar) provides uni-directional grains orientation with micro hardness extradite superior life.
- Bountiful Boss™ – Allows rapid charge & delivers high power. Optimized current dense & higher conductivity leading to last long.
- Panoptic Spine™ – Mitigates corrosion prone zone, provides high life – Really long.
- Satiated wet paste™ – Higher active material integrity, lowers resistance to delivers consistent power & life.
- Endura cast™ – Automated cast-on-strap delivers durability & performance.
- Unified Termi Seal™ – Rigid & Integrated terminal connectivity provides sustainable strength.
- BIC™ – Best in class vent design reduces acid spewing, built-in flame arrestor avoids acid mist exit.

Specifications:

Nominal Voltage	12V	
Rated capacity @C10 at 27°C at 1.80CV	120Ah	
Dimensions (±3 mm)	Length	500mm
	Width	190mm
	Height*	343mm
Weight with acid in Kg (±5%)	49.0	

*H - Height up to top of cover

Major Applications :

- Banks
- IT Parks
- Corporate Establishments
- Telecommunications
- Railways
- Power Plants & Substation
- Process Instrumentation & Control
- Other Cyclic Applications

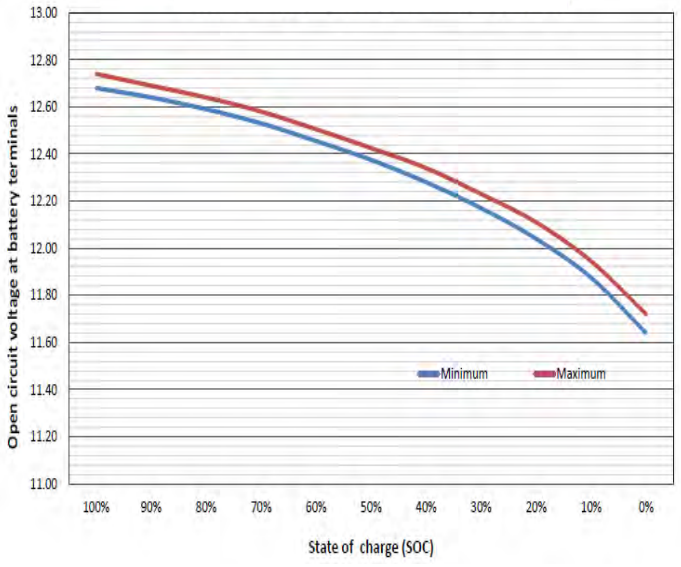
Applicable Standards

- Batteries Generally conforms to - IS 13369 spec.

Product Details:

Type of +ve plate	Tubular
Type of -ve plate	Flat Pasted
AH efficiency	> 90%
WH efficiency	>80%
Terminal Type	L-Terminal with Antimony Lead Alloy
Type of separator	PE
Type of container	PPCP
Operating temp. range of battery	-20°C to +60°C
Self-discharge for 28days	≤5% (As per IS13369 ≤10%)
Recommended Max period of storage	Max. 60days at 27°C
Electrolyte specific gravity of the end charge at 27°C	1.24
Electrolyte specific gravity of the end discharge	1.13

State of charge (SOC) Vs Open Circuit Voltage (V)



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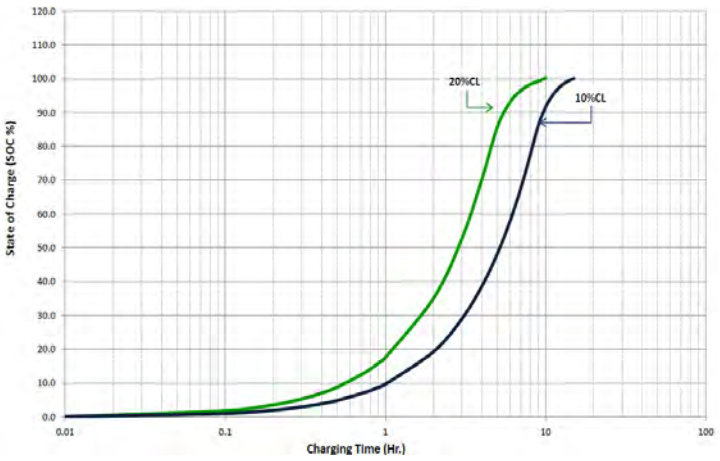
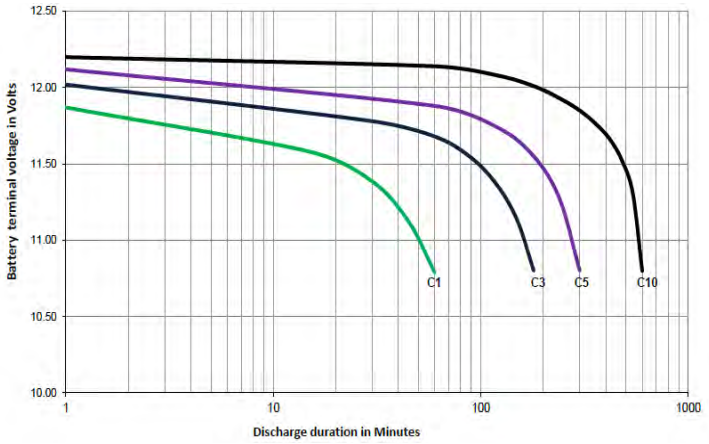
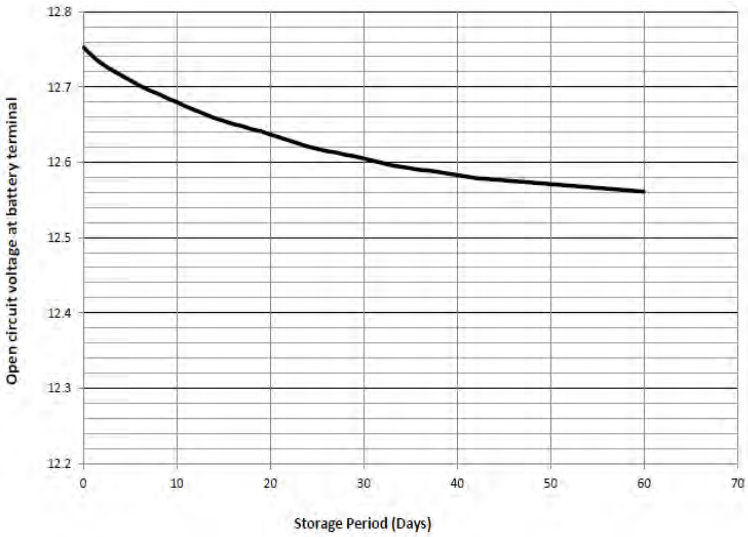
Constant voltage charging characteristics with 14.4V at 27°C



Discharge Characteristics



Shelf Life Characteristics at 27°C



Charging Parameters :

Constant Voltage charging at 27°C:

- Dual Mode Charge & the charging facility should have auto float change over and charge mode facilities with the recommended voltage settings
- Charging current - Min.10% of rated Ah capacity
- Float Voltage - 14.4 ± 0.1V /battery
- Boost Voltage - 15.0 ± 0.1V /battery
- Over cutoff voltage - 15.2V
- Under cutoff voltage - 10.8V

Test for Capacity:

On the first discharge the cell shall give not less than 85 percent of the rated capacity and the rated capacity shall be reached within 10 discharges subsequent to the initial charge.(Ref: IS13369 Clause No. : 11.5.4)

Glimpse of Advanced Manufacturing Technology :

Red Lead Mfg.

Pressure Die Casting

Acid Circulated formation

Reach us :

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Chittoor District,
Andhra Pradesh – 517 416, India

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Hyderabad
Telangana – 500032, India

12ATL130 (12V – 130Ah) Tubular Battery

Introduction:

After pioneering in VRLA technology, Amara Raja, now brought to you ultra low maintenance free tubular batteries with best in class design with advance manufacturing technology. With decades of experience we gain in battery technology, coupled with continuous research has helped us to bring this highest quality product.

Uniquely built Amaron Quanta Tubular batteries has covered all aspects in design, required to give high life beside it ensure fast charge with high efficiency & best in class vent design makes Amaron Quanta Tubular, a perfect choice for high cyclic back up requirements.

Design Features & Benefits:

- Hi-coerce™ spine cast – High pressure spine casting (> 100 bar) provides uni-directional grains orientation with micro hardness extradite superior life.
- Bountiful Boss™ – Allows rapid charge & delivers high power. Optimized current dense & higher conductivity leading to last long.
- Panoptic Spine™ – Mitigates corrosion prone zone, provides high life – Really long.
- Satiated wet paste™ – Higher active material integrity, lowers resistance to delivers consistent power & life.
- Endura cast™ – Automated cast-on-strap delivers durability & performance.
- Unified Termi Seal™ – Rigid & Integrated terminal connectivity provides sustainable strength.
- BIC™ – Best in class vent design reduces acid spewing, built-in flame arrestor avoids acid mist exit.

Specifications:

Nominal Voltage	12V	
Rated capacity @C10 at 27°C at 1.80CV	130Ah	
Dimensions (±3 mm)	Length	500mm
	Width	190mm
	Height*	343mm
Weight with acid in Kg (±5%)	50.0	

*H - Height up to top cover

Major Applications :

- Banks
- IT Parks
- Corporate Establishments
- Telecommunications
- Railways
- Power Plants & Substation
- Process Instrumentation & Control
- Other Cyclic Applications

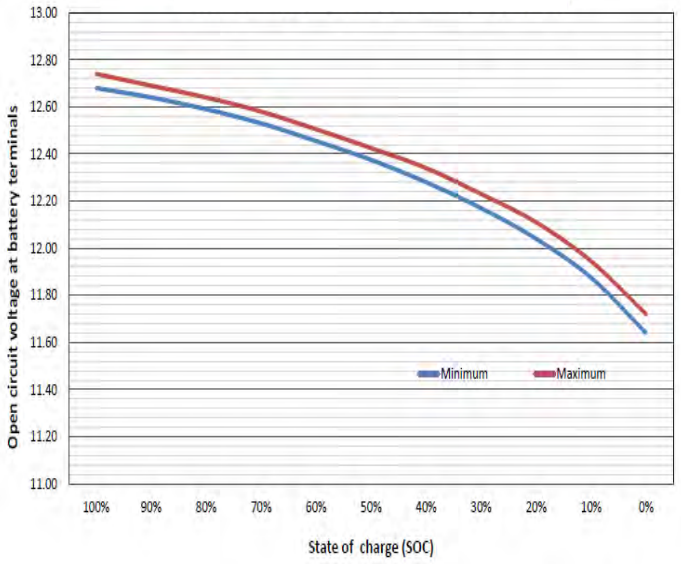
Applicable Standards

- Batteries Generally conforms to - IS 13369 spec.

Product Details:

Type of +ve plate	Tubular
Type of -ve plate	Flat Pasted
AH efficiency	> 90%
WH efficiency	>80%
Terminal Type	L-Terminal with Antimony Lead Alloy
Type of separator	PE
Type of container	PPCP
Operating temp. range of battery	-20°C to +60°C
Self-discharge for 28days	≤5% (As per IS13369 ≤10%)
Recommended Max period of storage	Max. 60days at 27°C
Electrolyte specific gravity of the end charge at 27°C	1.24
Electrolyte specific gravity of the end discharge	1.13

State of charge (SOC) Vs Open Circuit Voltage (V)



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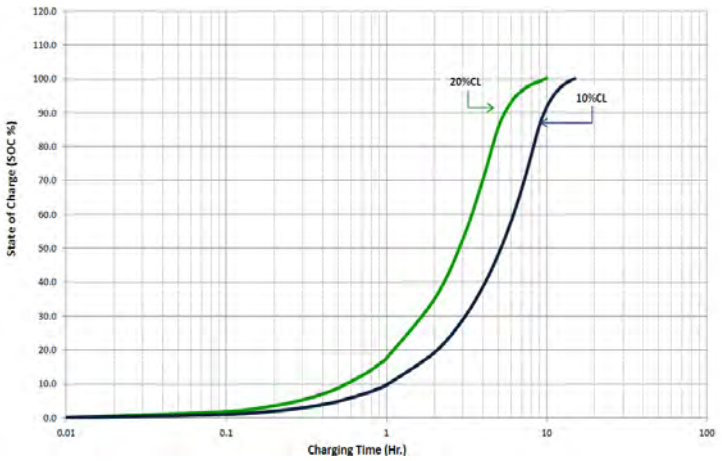
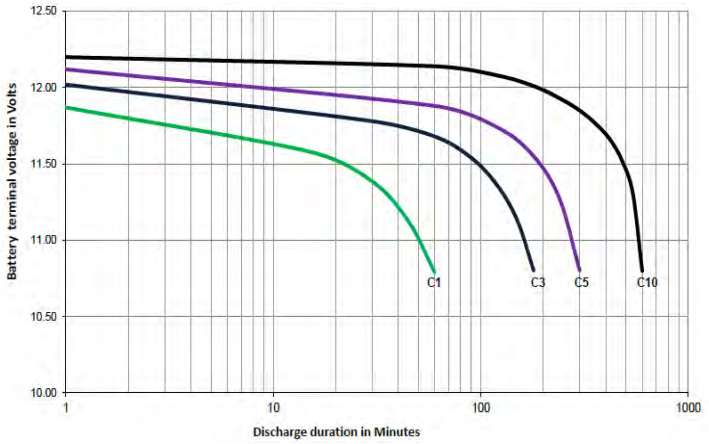
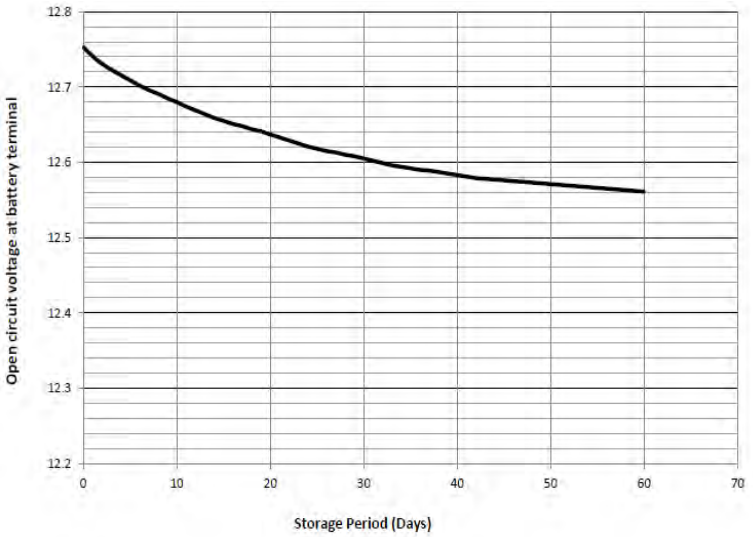
Constant voltage charging characteristics with 14.4V at 27°C



Discharge Characteristics



Shelf Life Characteristics at 27°C



Charging Parameters :

Constant Voltage charging at 27°C:

- Dual Mode Charge & the charging facility should have auto float change over and charge mode facilities with the recommended voltage settings
- Charging current - Min.10% of rated Ah capacity
- Float Voltage - 14.4 ± 0.1V /battery
- Boost Voltage - 15.0 ± 0.1V /battery
- Over cutoff voltage - 15.2V
- Under cutoff voltage - 10.8V

Test for Capacity:

On the first discharge the cell shall give not less than 85 percent of the rated capacity and the rated capacity shall be reached within 10 discharges subsequent to the initial charge.(Ref: IS13369 Clause No. : 11.5.4)

Glimpse of Advanced Manufacturing Technology :

Red Lead Mfg.

Pressure Die Casting

Acid Circulated formation

Reach us :

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Andhra Pradesh – 517 416, India.

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Tirupati.
Chittoor District,
Andhra Pradesh – 517 416, India

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12ATL150 (12V – 150Ah) Tubular Battery

Introduction:

After pioneering in VRLA technology, Amara Raja, now brought to you ultra low maintenance free tubular batteries with best in class design with advance manufacturing technology. With decades of experience we gain in battery technology, coupled with continuous research has helped us to bring this highest quality product.

Uniquely built Amaron Quanta Tubular batteries has covered all aspects in design, required to give high life beside it ensure fast charge with high efficiency & best in class vent design makes Amaron Quanta Tubular, a perfect choice for high cyclic back up requirements.

Design Features & Benefits:

- Hi-coerce™ spine cast – High pressure spine casting (> 100 bar) provides uni-directional grains orientation with micro hardness extradite superior life.
- Bountiful Boss™ – Allows rapid charge & delivers high power. Optimized current dense & higher conductivity leading to last long.
- Panoptic Spine™ – Mitigates corrosion prone zone, provides high life – Really long.
- Satiated wet paste™ – Higher active material integrity, lowers resistance to delivers consistent power & life.
- Endura cast™ – Automated cast-on-strap delivers durability & performance.
- Unified Termi Seal™ – Rigid & Integrated terminal connectivity provides sustainable strength.
- BIC™ – Best in class vent design reduces acid spewing, built-in flame arrestor avoids acid mist exit.

Specifications:

Nominal Voltage	12V	
Rated capacity @C10 at 27°C at 1.80CV	150Ah	
Dimensions (±3 mm)	Length	500mm
	Width	190mm
	Height*	400mm
Weight with acid in Kg (±5%)	58.0	

*H - Height up to top of cover

Major Applications :

- Banks
- IT Parks
- Corporate Establishments
- Telecommunications
- Railways
- Power Plants & Substation
- Process Instrumentation & Control
- Other Cyclic Applications

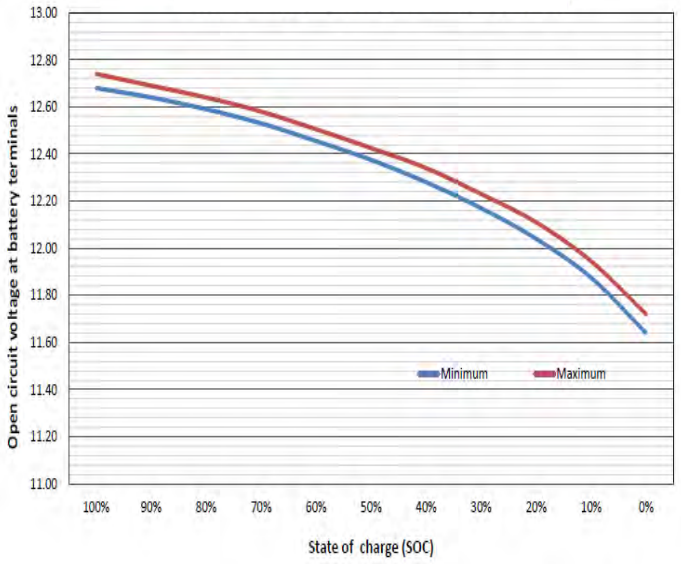
Applicable Standards

- Batteries Generally conforms to - IS 13369 spec.

Product Details:

Type of +ve plate	Tubular
Type of -ve plate	Flat Pasted
AH efficiency	> 90%
WH efficiency	>80%
Terminal Type	L-Terminal with Antimony Lead Alloy
Type of separator	PE
Type of container	PPCP
Operating temp. range of battery	-20°C to +60°C
Self-discharge for 28days	≤5% (As per IS13369 ≤10%)
Recommended Max period of storage	Max. 60days at 27°C
Electrolyte specific gravity of the end charge at 27°C	1.24
Electrolyte specific gravity of the end discharge	1.13

State of charge (SOC) Vs Open Circuit Voltage (V)



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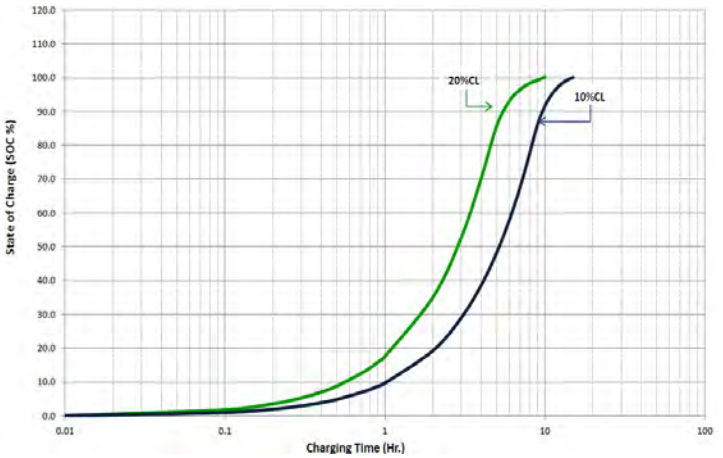
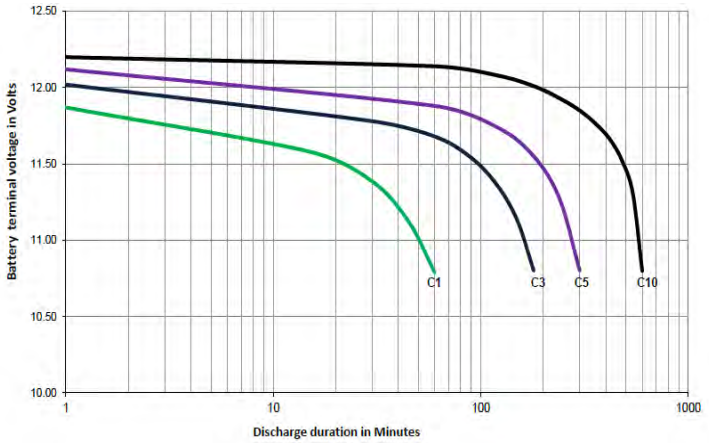
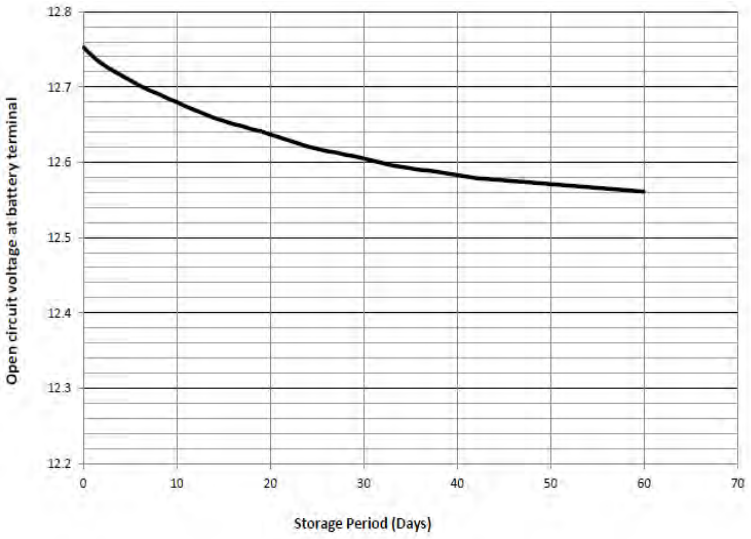
Constant voltage charging characteristics with 14.4V at 27°C



Discharge Characteristics



Shelf Life Characteristics at 27°C



Charging Parameters :

Constant Voltage charging at 27°C:

- Dual Mode Charge & the charging facility should have auto float change over and charge mode facilities with the recommended voltage settings
- Charging current - Min.10% of rated Ah capacity
- Float Voltage - 14.4 ± 0.1V /battery
- Boost Voltage - 15.0 ± 0.1V /battery
- Over cutoff voltage - 15.2V
- Under cutoff voltage - 10.8V

Test for Capacity:

On the first discharge the cell shall give not less than 85 percent of the rated capacity and the rated capacity shall be reached within 10 discharges subsequent to the initial charge.(Ref: IS13369 Clause No. : 11.5.4)

Glimpse of Advanced Manufacturing Technology :

Red Lead Mfg.

Pressure Die Casting

Acid Circulated formation

Reach us :

Amara Raja Batteries Limited

Manufacturing address
M/S. Amara Raja Batteries Ltd,
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Andhra Pradesh – 517 416, India.

Register Office
Renigunta, Cuddapa Road,
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Tirupati.
Chittoor District,
Andhra Pradesh – 517 416, India

Corporate Office
Terminal A, 1-18/1/AMR/NR,
Nanakramguda ,Gachibowli,
Hyderabad
Telangana – 500032, India

12ATL160 (12V – 160Ah) Tubular Battery

Introduction:

After pioneering in VRLA technology, Amara Raja, now brought to you ultra low maintenance free tubular batteries with best in class design with advance manufacturing technology. With decades of experience we gain in battery technology, coupled with continuous research has helped us to bring this highest quality product.

Uniquely built Amaron Quanta Tubular batteries has covered all aspects in design, required to give high life beside it ensure fast charge with high efficiency & best in class vent design makes Amaron Quanta Tubular, a perfect choice for high cyclic back up requirements.

Design Features & Benefits:

- Hi-coerce™ spine cast – High pressure spine casting (> 100 bar) provides uni-directional grains orientation with micro hardness extradite superior life.
- Bountiful Boss™ – Allows rapid charge & delivers high power. Optimized current dense & higher conductivity leading to last long.
- Panoptic Spine™ – Mitigates corrosion prone zone, provides high life – Really long.
- Satiated wet paste™ – Higher active material integrity, lowers resistance to delivers consistent power & life.
- Endura cast™ – Automated cast-on-strap delivers durability & performance.
- Unified Termi Seal™ – Rigid & Integrated terminal connectivity provides sustainable strength.
- BIC™ – Best in class vent design reduces acid spewing, built-in flame arrestor avoids acid mist exit.

Specifications:

Nominal Voltage	12V	
Rated capacity @C10 at 27°C at 1.80CV	160Ah	
Dimensions (±3 mm)	Length	500mm
	Width	190mm
	Height*	400mm
Weight with acid in Kg (±5%)	59.0	

*H - Height up to top of cover

Major Applications :

- Banks
- IT Parks
- Corporate Establishments
- Telecommunications
- Railways
- Power Plants & Substation
- Process Instrumentation & Control
- Other Cyclic Applications

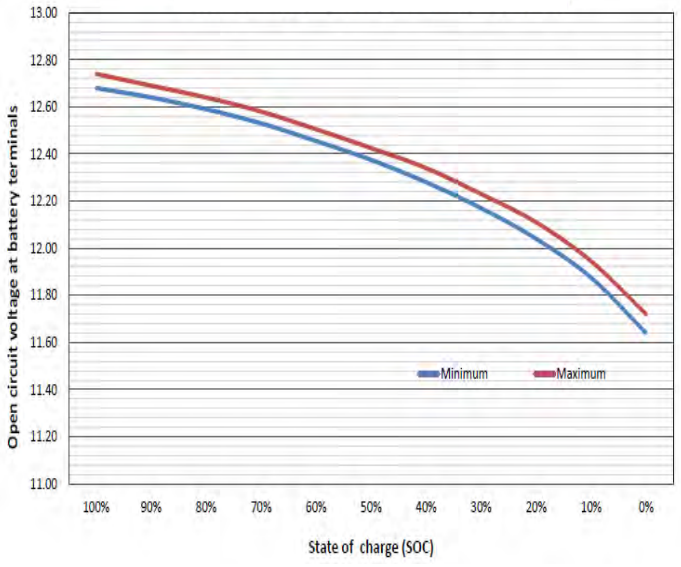
Applicable Standards

- Batteries Generally conforms to - IS 13369 spec.

Product Details:

Type of +ve plate	Tubular
Type of -ve plate	Flat Pasted
AH efficiency	> 90%
WH efficiency	>80%
Terminal Type	L-Terminal with Antimony Lead Alloy
Type of separator	PE
Type of container	PPCP
Operating temp. range of battery	-20°C to +60°C
Self-discharge for 28days	≤5% (As per IS13369 ≤10%)
Recommended Max period of storage	Max. 60days at 27°C
Electrolyte specific gravity of the end charge at 27°C	1.24
Electrolyte specific gravity of the end discharge	1.13

State of charge (SOC) Vs Open Circuit Voltage (V)



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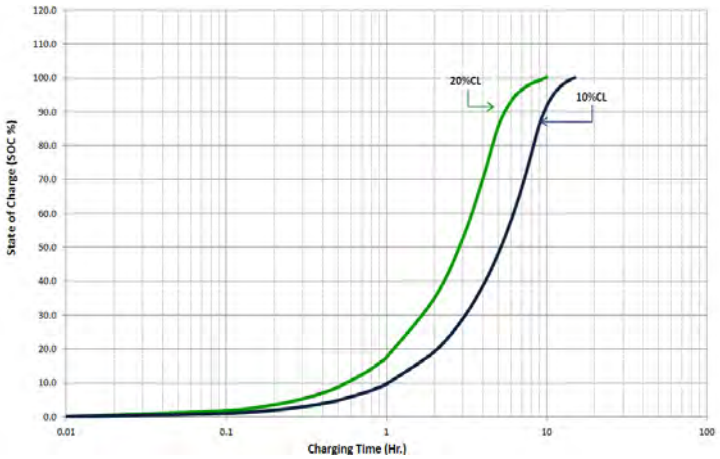
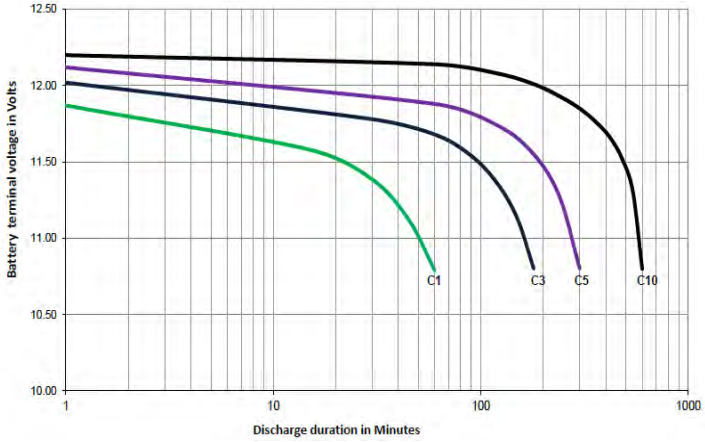
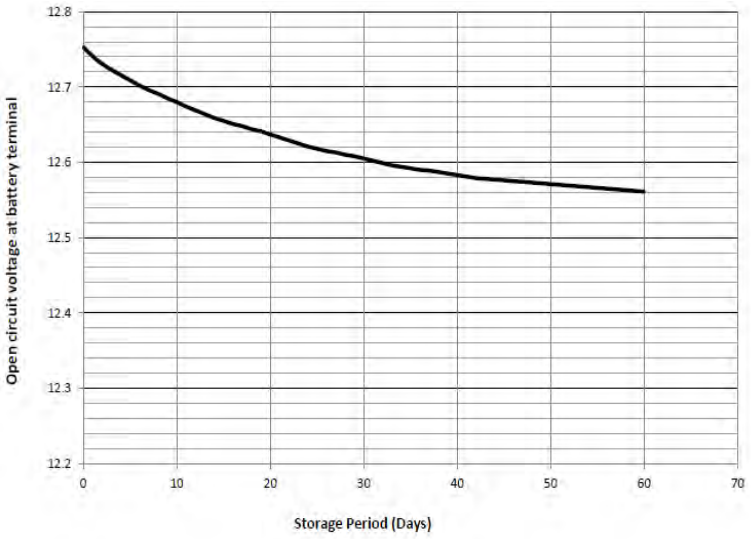
Constant voltage charging characteristics with 14.4V at 27°C



Discharge Characteristics



Shelf Life Characteristics at 27°C



Charging Parameters :

Constant Voltage charging at 27°C:

- Dual Mode Charge & the charging facility should have auto float change over and charge mode facilities with the recommended voltage settings
- Charging current - Min.10% of rated Ah capacity
- Float Voltage - 14.4 ± 0.1V /battery
- Boost Voltage - 15.0 ± 0.1V /battery
- Over cutoff voltage - 15.2V
- Under cutoff voltage - 10.8V

Test for Capacity:

On the first discharge the cell shall give not less than 85 percent of the rated capacity and the rated capacity shall be reached within 10 discharges subsequent to the initial charge.(Ref: IS13369 Clause No. : 11.5.4)

Glimpse of Advanced Manufacturing Technology :

Red Lead Mfg.

Pressure Die Casting

Acid Circulated formation

Reach us :

Amara Raja Batteries Limited

Manufacturing address
M/S. Amara Raja Batteries Ltd,
UNIT II, Nunegundla palle,
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Tirupati.
Chittoor District,
Andhra Pradesh – 517 416, India

Corporate Office
Terminal A, 1-18/1/AMR/NR,
Nanakramguda ,Gachibowli,
Hyderabad
Telangana – 500032, India

12ATL180 (12V – 180Ah) Tubular Battery

Introduction:

After pioneering in VRLA technology, Amara Raja, now brought to you ultra low maintenance free tubular batteries with best in class design with advance manufacturing technology. With decades of experience we gain in battery technology, coupled with continuous research has helped us to bring this highest quality product.

Uniquely built Amaron Quanta Tubular batteries has covered all aspects in design, required to give high life beside it ensure fast charge with high efficiency & best in class vent design makes Amaron Quanta Tubular, a perfect choice for high cyclic back up requirements.

Design Features & Benefits:

- Hi-coerce™ spine cast – High pressure spine casting (> 100 bar) provides uni-directional grains orientation with micro hardness extradite superior life.
- Bountiful Boss™ – Allows rapid charge & delivers high power. Optimized current dense & higher conductivity leading to last long.
- Panoptic Spine™ – Mitigates corrosion prone zone, provides high life – Really long.
- Satiated wet paste™ – Higher active material integrity, lowers resistance to delivers consistent power & life.
- Endura cast™ – Automated cast-on-strap delivers durability & performance.
- Unified Termi Seal™ – Rigid & Integrated terminal connectivity provides sustainable strength.
- BIC™ – Best in class vent design reduces acid spewing, built-in flame arrestor avoids acid mist exit.

Specifications:

Nominal Voltage	12V	
Rated capacity @C10 at 27°C at 1.80CV	180Ah	
Dimensions (±3 mm)	Length	500mm
	Width	190mm
	Height*	400mm
Weight with acid in Kg (±5%)	63.0	

*H - Height up to top cover

Major Applications :

- Banks
- IT Parks
- Corporate Establishments
- Telecommunications
- Railways
- Power Plants & Substation
- Process Instrumentation & Control
- Other Cyclic Applications

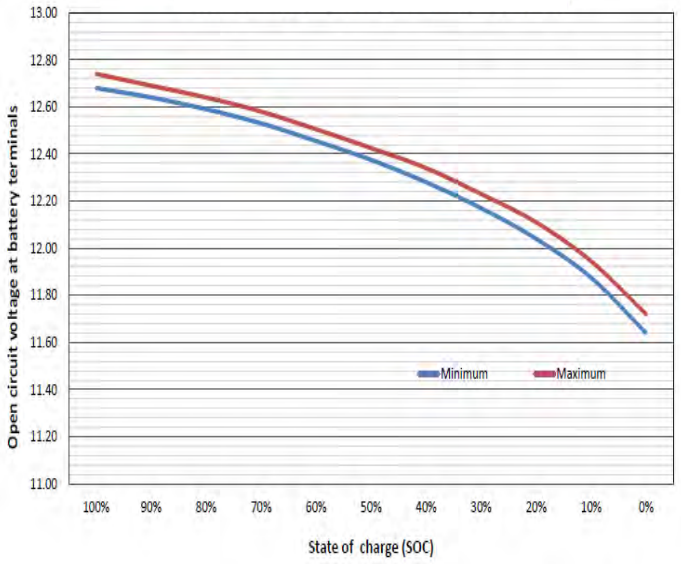
Applicable Standards

- Batteries Generally conforms to - IS 13369 spec.

Product Details:

Type of +ve plate	Tubular
Type of -ve plate	Flat Pasted
AH efficiency	> 90%
WH efficiency	>80%
Terminal Type	L-Terminal with Antimony Lead Alloy
Type of separator	PE
Type of container	PPCP
Operating temp. range of battery	-20°C to +60°C
Self-discharge for 28days	≤5% (As per IS13369 ≤10%)
Recommended Max period of storage	Max. 60days at 27°C
Electrolyte specific gravity of the end charge at 27°C	1.24
Electrolyte specific gravity of the end discharge	1.13

State of charge (SOC) Vs Open Circuit Voltage (V)



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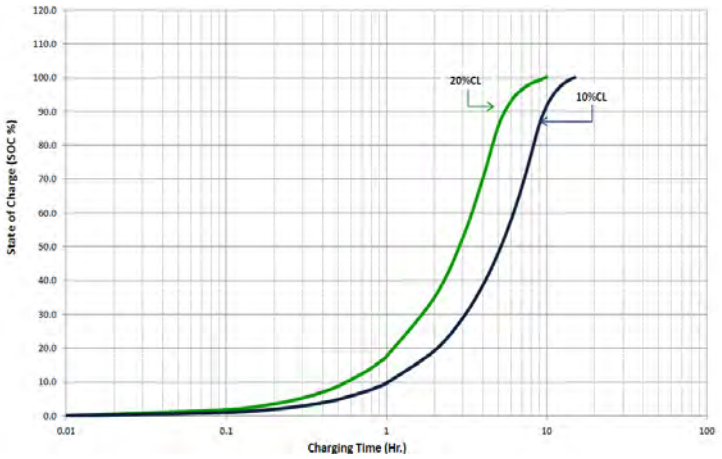
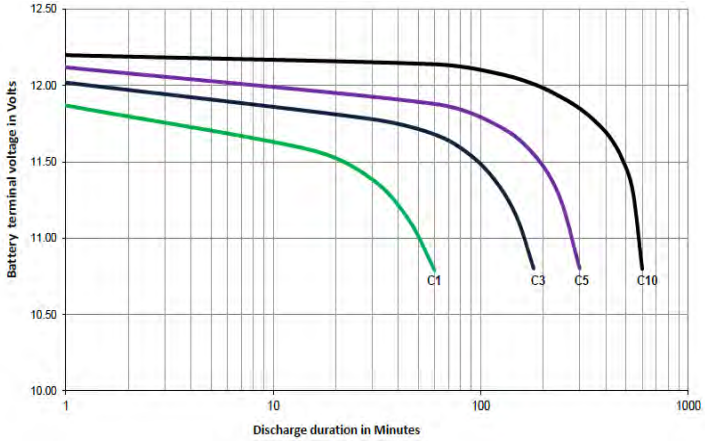
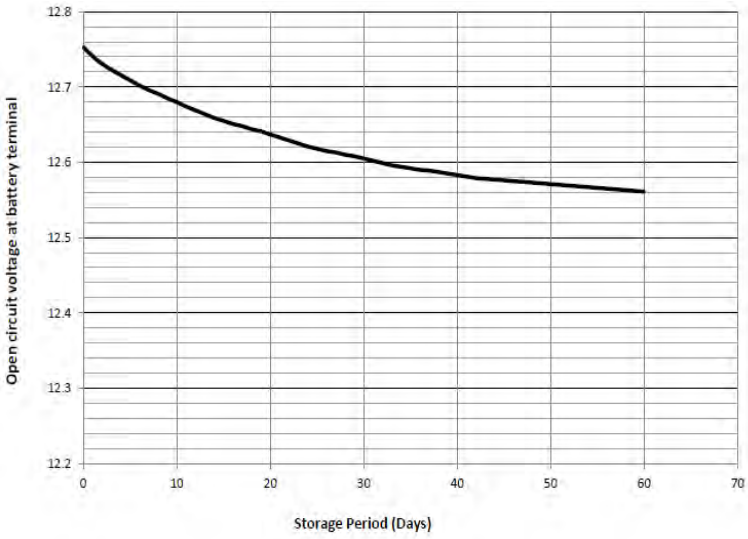
Constant voltage charging characteristics with 14.4V at 27°C



Discharge Characteristics



Shelf Life Characteristics at 27°C



Charging Parameters :

Constant Voltage charging at 27°C:

- Dual Mode Charge & the charging facility should have auto float change over and charge mode facilities with the recommended voltage settings
- Charging current - Min.10% of rated Ah capacity
- Float Voltage - 14.4 ± 0.1V /battery
- Boost Voltage - 15.0 ± 0.1V /battery
- Over cutoff voltage - 15.2V
- Under cutoff voltage - 10.8V

Test for Capacity:

On the first discharge the cell shall give not less than 85 percent of the rated capacity and the rated capacity shall be reached within 10 discharges subsequent to the initial charge.(Ref: IS13369 Clause No. : 11.5.4)

Glimpse of Advanced Manufacturing Technology :

Red Lead Mfg.

Pressure Die Casting

Acid Circulated formation

Reach us :

Amara Raja Batteries Limited

Manufacturing address
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