



The future belongs to those who stake a claim for it here and now. This axiom has been our guiding principle at Amara Raja, helping us ceaselessly innovate and explore the new and never-before.

Amara Raja has put its vision into practice by striding forward in the power management industry and consolidating its position as one of the leading players in the Asia-Pacific region. With Johnson Controls Inc., a world leader, as an equity alliance partner (26%), Amara Raja Pioneered the next generation battery technology in India. This partnership facilitates sharing of knowledge and innovations to accelerate and expand development efforts in the global battery market. It also enables harnessing technology that acclimatized batteries to operate in harsh tropical conditions.

AMARA RAJA
Gotta be a better way



Working together with alliance partner Johnson Controls, Amara Raja set up India's finest battery plant, the first such facility for Johnson Controls in the last decade. This facility is backed by one of the finest Research & Development centers on site. A center that constantly and unceasingly thinks out-of-the-box and develops products and services that match world-class standards, and sets industry benchmarks.

Amara Raja's Battery Excellence Center is another first for the region. Here, products are put through rigorous tests to ensure that they comply with international standards and design requirements. With the latest testing equipment, the center evaluates battery performance, design and longevity. Apart from this, there are facilities for application engineering, vehicle system study, simulations and computer-aided design, including a full calibration laboratory. Amara Raja's quality commitment has ensured that it conforms to International quality standards.

Amara Raja today has the distinction of being a prime player in the Johnson Controls led global alliance and is forging ahead in to new market - powered by innovation.

Quality Edge

- Produced in state-of-the-art ISO 9001, certified facility
- OHSAS 18001
- Continuous improvement through Internationally acclaimed tools like TQM, Kaizen, Six Sigma, 5S



Quality Systems certified to
ISO 9001: 2015
ISO 14001: 2015
OHSAS 18001: 2007

PERFORMANCE EDGE

- Design Float life of 12+ years in accordance with Eurobat Classification of Long Life battery
- Designed to perform in harsh tropical conditions
- Front Terminal Batteries
- Integral Dual handles for easy handling & installation
- Suitable for standard 23" rack
- High Volumetric Energy Density for maximum power in minimal foot print area
- Short Recharge Time owing to Lower Internal resistance
- Patented Lead Oxide Paste Recipe offering excellent charge acceptance and low self-discharge rate
- Innovative plate design offers low internal resistance and superior high rate discharge performance
- Advanced AGM separator offering a longer service life and enhanced high rate discharge performance
- Automated, state-of-the-art cast-on strap process ensures consistent, high-quality, low electrical resistance welds
- Automated InterCell Welding offering low Internal resistance
- Threaded Post Copper Insert Terminals offering high conductivity and torque retention
- Lip & Tongue type Heat Sealing to ensure a leak-proof seal
- 100% charged when shipped from factory



INTERNATIONAL COMPLIANCE

- ISO 9001, ISO 14001, OHSAS 18001 certified facilities
- CE Marking for Conformité Européene, ratified by Underwriters Laboratories
- Compliance to IEC 60896-21 / 22:2004 standards
- Classified as Non Hazardous Cargo and complies to requirements of IMDG (International Maritime code for Dangerous Goods)
- Complies to Air Transport Requirement - IATA/ICAO special provision A67
- Completely recyclable - Lead, Plastic and Sulphuric acid can be recycled and reused
- UL Approved



TECHNICAL SPECIFICATIONS

Product:

- **Container & Cover** - Thick Reinforced Wall in Fire Retardant Polypropylene Co-polymer (UL 94 - V0)
- **Separator** - High Weight Basis AGM
- **Positive Plate** - Radial Grid Flat Pasted Type
- **Positive Plate Alloy** - Hybrid Alloy with Long Life Characteristics
- **Negative Plate** - Radial Grid Flat Pasted Type
- **Negative Plate Alloy** - Lead Calcium Alloy with Maintenance Free Characteristics
- **Threaded Post Copper Insert Terminals** offering high conductivity and torque retention
- **Safety Valve** -Self Resealing, Pressure Regulated, Explosion Proof with Integral Flame Arrestor

Backed by its unflinching commitment to offer the best of technology and quality, Amara Raja offers you Amaron SLEEK, the compact power house.

APPLICATION SPECTRUM

Amaron SLEEK provides robust backup power solutions for varied applications.

MAJOR APPLICATION AREAS INCLUDE

→ **Wireless Telecommunications**

→ **Broadband Network**

→ **Microwave**

→ **In-building Solutions**

→ **Wi-Max**

→ **Solar Power Micro BTS**

→ **Optical Fiber Network**

PERFORMANCE:

- **Self-discharge:** Less than 1% per week
- **Shelf life without re-charge:** Upto 6 Months*
- **Operating conditions:** -20° C to + 60° C
- **Design Float Life:** 12+ years at 27°C classified as Long Life as per Eurobat Classification
- **Recombination Efficiency:** >98%

Note:

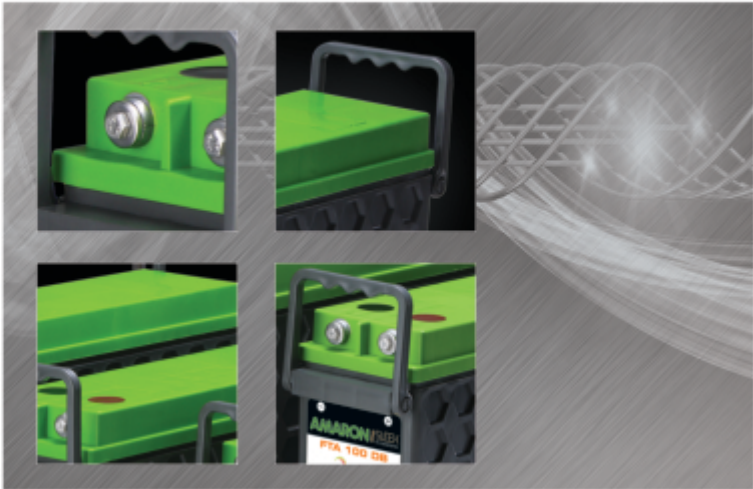
- All values are rated at 27°C.

Method: Constant Potential Current Limited

Charge Provision	Charging Voltage for Module	Maximum Charging Current (Amps)
Float charge	13.5 V	0.3 C
Boost charge	13.8 V	0.3 C

C is the rated capacity @ 10 hour
Charging parameters at 27°C

**Please refer to operating manual for storage instructions*



MODULE SPECIFICATION

Sl. No.	Model	Nominal Ah Capacity @ C10 to 10.5 EMV at 27°C	Nominal Voltage (V)	Dimensions (mm) ± 3mm			Weight (Kg) ± 3%	Terminal
				W	D	H		
1	FTA 100 DB	100	12	128	556	224	36.0	M6
2	FTA 125 DB	125	12	128	556	257	43.0	M6
3	FTA 150 DB	150	12	128	556	296	50.0	M6
4	FTA 170 DB*	170	12	129	559	327	57.0	M8
5	FTA 190 DB*	190	12	129	559	327	58.5	M8

** UL Approval and CE Marking for FTA-170 & 190Ah models is under progress*



RANGE

SPECIFICATIONS

WATTS PER CELL FOR 1.75 ECV @ 27°C

Sl. No.	Cell Type	Nominal Ah Capacity @ C10 at 27°C	Discharge Power in Watts															
			5 Min	10 Min	15 Min	30 Min	60 Min	2 Hrs	3 Hrs	4 Hrs	5 Hrs	6 Hrs	7 Hrs	8 Hrs	10 Hrs	12 Hrs	20 Hrs	24 Hrs
1	FTA 100 DB	100	502.8	355.5	285.0	177.7	112.3	67.1	51.1	40.8	33.4	29.0	26.1	23.1	18.9	16.1	10.0	8.5
2	FTA 125 DB	125	628.6	444.4	356.2	222.1	140.4	83.9	63.8	51.0	41.7	36.3	32.6	28.9	23.6	20.1	12.5	10.7
3	FTA 150 DB	150	754.3	533.3	427.5	266.6	168.5	100.7	76.6	61.2	50.2	43.5	39.1	34.7	28.4	24.1	15.0	12.8
4	FTA 170 DB	170	777.8	550.0	440.9	280.9	181.4	108.4	85.1	68.0	55.6	48.3	43.5	38.5	31.5	26.8	16.7	14.2
5	FTA 190 DB	190	859.8	607.9	487.4	314.0	202.7	121.1	95.1	76.0	62.2	54.0	48.6	43.0	35.2	30.0	18.6	15.8

WATTS PER CELL FOR 1.80 ECV @ 27°C

Sl. No.	Cell Type	Nominal Ah Capacity @ C10 at 27°C	Discharge Power in Watts															
			5 Min	10 Min	15 Min	30 Min	60 Min	2 Hrs	3 Hrs	4 Hrs	5 Hrs	6 Hrs	7 Hrs	8 Hrs	10 Hrs	12 Hrs	20 Hrs	24 Hrs
1	FTA 100 DB	100	484.7	344.8	273.7	170.8	106.2	65.0	48.0	38.3	31.8	27.5	24.7	21.9	18.9	15.9	9.7	8.0
2	FTA 125 DB	125	605.9	431.0	342.1	213.5	132.8	81.2	60.1	47.9	39.7	34.4	30.9	27.3	23.6	19.9	12.2	10.1
3	FTA 150 DB	150	727.1	517.1	410.6	256.3	159.3	97.5	72.0	57.5	47.6	41.4	37.0	32.8	28.4	23.8	14.6	12.1
4	FTA 170 DB	170	749.8	533.4	423.4	270.0	171.5	105.0	80.0	63.8	53.0	45.8	41.2	36.5	31.5	26.5	16.2	13.3
5	FTA 190 DB	190	828.8	589.6	468.0	301.8	191.7	117.3	89.4	71.3	59.2	51.2	46.0	40.8	35.2	29.6	18.1	14.9

WATTS PER CELL FOR 1.85 ECV @ 27°C

Sl. No.	Cell Type	Nominal Ah Capacity @ C10 at 27°C	Discharge Power in Watts															
			5 Min	10 Min	15 Min	30 Min	60 Min	2 Hrs	3 Hrs	4 Hrs	5 Hrs	6 Hrs	7 Hrs	8 Hrs	10 Hrs	12 Hrs	20 Hrs	24 Hrs
1	FTA 100 DB	100	461.7	327.1	258.3	164.8	104.7	62.5	46.1	37.0	31.4	26.8	23.9	21.1	17.3	15.2	9.1	7.5
2	FTA 125 DB	125	577.1	409.0	322.9	206.1	130.8	78.1	57.6	46.3	39.2	33.4	29.9	26.4	21.7	19.0	11.4	9.4
3	FTA 150 DB	150	692.6	490.7	387.5	247.3	157.0	93.7	69.1	55.5	47.0	40.2	35.9	31.7	26.1	22.8	13.7	11.3
4	FTA 170 DB	170	714.2	506.0	399.6	260.5	169.1	100.9	76.8	61.6	52.3	44.6	39.8	35.2	28.8	25.3	15.2	12.5
5	FTA 190 DB	190	789.5	559.3	441.7	291.2	189.0	112.8	85.8	68.9	58.5	49.9	44.5	39.3	32.2	28.3	16.9	14.0

WATTS PER CELL FOR 1.90 ECV @ 27°C

Sl. No.	Cell Type	Nominal Ah Capacity @ C10 at 27°C	Discharge Power in Watts															
			5 Min	10 Min	15 Min	30 Min	60 Min	2 Hrs	3 Hrs	4 Hrs	5 Hrs	6 Hrs	7 Hrs	8 Hrs	10 Hrs	12 Hrs	20 Hrs	24 Hrs
1	FTA 100 DB	100	419.3	301.0	236.1	144.4	97.4	60.0	44.1	35.7	28.7	24.8	22.2	19.6	16.0	13.7	8.2	7.1
2	FTA 125 DB	125	524.2	376.2	295.1	180.4	121.8	75.0	55.2	44.6	35.9	31.0	27.8	24.5	20.0	17.2	10.3	8.8
3	FTA 150 DB	150	629.1	451.5	354.2	216.6	146.1	90.0	66.2	53.5	43.1	37.2	33.4	29.4	24.0	20.6	12.3	10.6
4	FTA 170 DB	170	648.7	465.6	365.2	228.3	157.3	96.9	73.5	59.5	47.8	41.3	37.0	32.7	26.7	22.8	13.7	11.8
5	FTA 190 DB	190	717.0	514.7	403.7	255.2	175.8	108.3	82.1	66.5	53.4	46.2	41.3	36.5	29.8	25.5	15.3	13.2

NOTE: The values declared may be subject to change with respect to ongoing continuous product improvement without any notice

RANGE

SPECIFICATIONS

AMPERES FOR 1.75 ECV @ 27°C

Sl. No.	Cell Type	Nominal Ah Capacity @ C10 at 27°C	Discharge Current in Amps															
			5 Min	10 Min	15 Min	30 Min	60 Min	2 Hrs	3 Hrs	4 Hrs	5 Hrs	6 Hrs	7 Hrs	8 Hrs	10 Hrs	12 Hrs	20 Hrs	24 Hrs
1	FTA 100 DB	100	280.0	196.0	155.5	96.0	59.8	35.1	26.5	21.1	17.2	14.9	13.2	11.9	10.0	8.4	5.4	4.7
2	FTA 125 DB	125	350.0	245.0	194.4	120.1	74.7	43.9	33.1	26.4	21.5	18.6	16.6	14.8	12.5	10.6	6.8	5.9
3	FTA 150 DB	150	420.0	294.0	233.3	144.2	89.7	52.7	39.7	31.7	25.8	22.3	19.9	17.8	15.0	12.6	8.0	7.0
4	FTA 170 DB	170	428.4	299.9	237.9	153.0	96.0	56.7	43.0	35.2	28.5	24.8	22.0	19.6	17.0	14.0	9.0	7.8
5	FTA 190 DB	190	478.8	335.2	265.9	170.0	108.0	63.4	50.0	39.3	33.0	27.7	24.6	23.0	19.0	15.6	10.1	8.8

AMPERES FOR 1.80 ECV @ 27°C

Sl. No.	Cell Type	Nominal Ah Capacity @ C10 at 27°C	Discharge Current in Amps															
			5 Min	10 Min	15 Min	30 Min	60 Min	2 Hrs	3 Hrs	4 Hrs	5 Hrs	6 Hrs	7 Hrs	8 Hrs	10 Hrs	12 Hrs	20 Hrs	24 Hrs
1	FTA 100 DB	100	272.2	192.2	150.7	94.3	58.3	35.0	25.6	20.4	16.9	14.6	12.9	11.8	10.0	8.3	5.2	4.4
2	FTA 125 DB	125	340.3	240.2	188.5	117.8	72.9	43.7	31.9	25.5	21.1	18.2	16.3	14.7	12.5	10.4	6.6	5.6
3	FTA 150 DB	150	408.4	288.2	226.2	141.3	87.5	52.5	38.4	30.6	25.3	22.0	19.5	17.6	15.0	12.4	7.8	6.7
4	FTA 170 DB	170	416.5	294.1	230.6	150.0	93.6	56.5	41.6	34.0	27.9	24.3	21.5	19.3	17.0	13.8	8.7	7.3
5	FTA 190 DB	190	465.5	328.7	257.7	167.0	105.0	63.2	48.0	38.0	32.0	27.2	24.0	22.0	19.0	15.5	9.7	8.2

AMPERES FOR 1.85 ECV @ 27°C

Sl. No.	Cell Type	Nominal Ah Capacity @ C10 at 27°C	Discharge Current in Amps															
			5 Min	10 Min	15 Min	30 Min	60 Min	2 Hrs	3 Hrs	4 Hrs	5 Hrs	6 Hrs	7 Hrs	8 Hrs	10 Hrs	12 Hrs	20 Hrs	24 Hrs
1	FTA 100 DB	100	245.0	175.0	142.0	87.5	55.4	34.0	24.8	19.8	16.1	13.8	12.3	10.9	9.0	7.9	4.9	4.3
2	FTA 125 DB	125	306.3	218.7	177.6	109.4	69.2	42.5	31.0	24.8	20.1	17.3	15.3	13.6	11.3	9.9	6.2	5.4
3	FTA 150 DB	150	367.5	262.5	213.1	131.2	83.0	51.1	37.2	29.7	24.0	20.8	18.4	16.4	13.4	11.9	7.4	6.5
4	FTA 170 DB	170	374.9	267.8	217.3	138.3	89.5	54.9	41.3	33.0	26.8	23.0	20.5	18.2	15.0	13.2	8.2	7.2
5	FTA 190 DB	190	419.0	299.3	242.8	154.6	100.0	61.4	46.2	36.9	30.0	25.7	22.9	20.3	16.8	14.7	9.1	8.0

AMPERES FOR 1.90 ECV @ 27°C

Sl. No.	Cell Type	Nominal Ah Capacity @ C10 at 27°C	Discharge Current in Amps															
			5 Min	10 Min	15 Min	30 Min	60 Min	2 Hrs	3 Hrs	4 Hrs	5 Hrs	6 Hrs	7 Hrs	8 Hrs	10 Hrs	12 Hrs	20 Hrs	24 Hrs
1	FTA 100 DB	100	217.8	158.1	130.6	76.0	51.1	31.1	22.8	18.3	14.7	12.7	11.4	10.1	8.2	7.3	4.4	3.8
2	FTA 125 DB	125	272.2	197.6	163.4	95.0	63.8	38.9	28.5	22.9	18.3	16.0	14.2	12.5	10.3	9.1	5.5	4.8
3	FTA 150 DB	150	326.6	237.1	196.0	114.0	76.5	46.6	34.2	27.4	22.1	19.2	17.1	15.1	12.3	10.9	6.6	5.8
4	FTA 170 DB	170	333.2	241.9	199.8	120.2	82.5	50.2	38.0	30.5	24.5	21.2	19.0	16.8	13.7	12.2	7.3	6.3
5	FTA 190 DB	190	372.4	270.4	223.3	134.3	92.2	56.1	42.5	34.1	27.4	23.6	21.2	18.8	15.3	13.6	8.2	7.1

NOTE: The values declared may be subject to change with respect to ongoing continuous product improvement without any notice



AMARA RAJA

**Johnson
Controls**



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Read
Instructions

