# 12AL065 12ALZ065

#### AMARON QUANTA<sup>TM</sup>

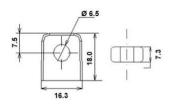
The industrial segment SMF-VRLA (Valve Regulated Lead UPS Acid) Battery applications is built to perform

In short, the lifeline to your UPS applications

AMARON QUANTA is a product of fail-safe, fool-proof battery technology, produced and tested in our premier manufacturing facility. Built to the highest technical competence in its class, the QUANTA is an example of Amara Raja's commitment to bringing the best of technology to your table

It features several firsts for the battery industry like the unique Radgrid<sup>TM</sup>

#### **TERMINAL LAYOUT**

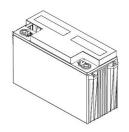


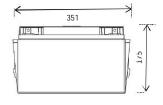
All dimensions are in mm

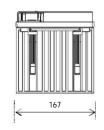


# **Specification**

Nominal Voltage		12V				
Rated Capacity		65 Ah / C <sub>20</sub> / 1.75VPC / 27°C				
Dimensions (±2mm)	Length Width Total Height	351mm (13.82 in.) 167mm (6.57 in.) 175mm (6.89 in.)				
Approx. Weight		20.0 Kg (44.09 lbs)				
Terminal		M6 x 20mm Bolted				
Capacity @ 27°C	55.9 Ah 51.4 Ah 36.3 Ah	(10hr, 5.59 A, 10.5 V/battery) (5hr, 10.29 A, 10.2 V/battery) (1hr, 36.3 A, 9.6 V/battery)				
Capacity affected (Temperature at C <sub>20</sub> hr rate)	40°C (104°F) 27°C (80.6°F) 0°C (32°F) -15°C (5°F)	110% 100% 80% 60%				
Case Material	Standard FR Version	PPCP (12AL065) UL 94-V0 (12ALZ065)				
Internal Resistance (As per IEC)	Approx. 9.4 mΩ for a fully charged battery (27°C)					
Short Circuit Current (As per IEC)		1382 A				
Operating Temp. range		-20°C to +50°C				
Nominal Operating Temp. range		27°C ± 3°C				
Standby use (27°C)	Charging Voltage Charging Current Temp. Compensation	13.5 V/battery Max. 25% of rated capacity ± 18mV/battery/°C				
Cyclic use (27°C)	Charging Voltage Charging Current Temp. Compensation	13.8 V/battery Max. 25% of rated capacity ± 18mV/battery/°C				
Self-Discharge		< 4% per month at 27°C				



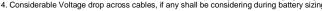




Constant power discharge rating (watts per battery) @ 27°C *											
ECV/ Time	10 min	15 min	20 min	30 min	60 min	2 hrs	3 hrs	5 hrs	8 hrs	10 hrs	20 hrs
1.60	1368	1120	898	682	412	248	172.0	118.0	77.0	67.0	31.0
1.65	1345	1101	887	671	408	245	171.0	117.0	76.5	66.5	30.5
1.70	1322	1081	876	660	403	242	170.0	116.0	76.0	66.0	30.0
1.75	1299	1041	848	640	392	239	169.0	115.0	75.0	65.0	29.5
1.80	1276	1000	820	620	380	236	168.0	114.0	74.0	64.0	29.0

Constant current discharge rating (amperes) @ 27°C *											
ECV/ Time	10 min	15 min	20 min	30 min	60 min	2 hr	3 hr	5 hr	8 hr	10 hr	20 hr
1.60	126.47	101.10	80.23	60.87	36.36	22.06	15.07	11.12	6.90	5.83	3.48
1.65	122.62	96.75	77.30	58.44	35.90	21.17	14.62	10.71	6.75	5.76	3.40
1.70	118.77	92.41	74.37	56.00	35.44	20.27	14.16	10.29	6.60	5.69	3.31
1.75	114.29	90.32	73.68	55.45	35.00	20.00	14.14	10.26	6.56	5.59	3.25
1.80	112.00	88.89	71.79	54.90	33.49	19.86	14.07	10.17	6.52	5.56	3.23

- 1. The above data are average values per battery and can be obtained within five charge/discharge cycle
- 2. A tolerance of ±5% is applicable for the above constant power discharge and constant current discharge values.
- 3. Recommended to follow IEEE -485 Standard for Battery sizing (In terms of Aging Margin, Design Margin) for Optimal Performance & Life. 4. Considerable Voltage drop across cables, if any shall be considering during battery sizing.

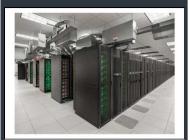






#### **CAUTION**

- Avoid short circuit
- Don't charge in a sealed container





**UPS BATTERY** 

THE LONG LIFE

#### **Performance**

A clutch of design features ensures that AMARON QUANTA<sup>TM</sup> batteries perform predictably and reliably everytime

- Proven AGM technology that ensures maintenance free characteristics
- A unique heavy duty corrosion-resistant alloy for positive grids to increase cyclic life in tropical environments
- Radgrid<sup>TM</sup> profile provides lower internal resistance and superior high-discharge performance
- ✓ Instacharge<sup>TM</sup> a patented paste recipe for excellent charge acceptance
- ✓ Low self-discharge rates for extended storage periods
- ✓ Design Float life of upto 10 years
- ✓ Clean and Sleek looks

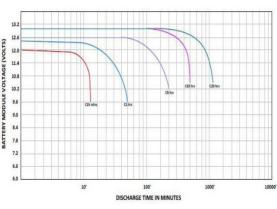
## **Standards**

- ✓ JIS C 8702 Certified
- ✓ UL (UL-1989) & CE Certified
- Complies to IEC 61056 & 60896 and EUROBAT
- ✓ Complies to IS 16220, IS 15549
- ✓ Manufactured in ISO 9001, ISO 14001, OHSAS 18001 certified facilities

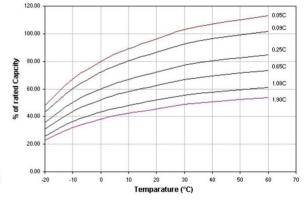
## **Applications**

- ✓ Data Centers
- ✓ Banks & Financial Markets
- ✓ Network Operations Centers
- ✓ Industrial Process Control Facilities
- ✓ Internet Housing Sites
- ✓ Semiconductor Manufacturing
- ✓ Power Generation Plants
- ✓ Hospital & Testing laboratories

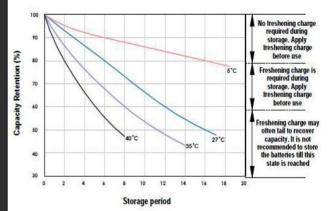
## **Discharge Characteristics**



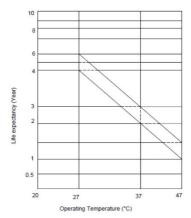
## **Temperature Effect on Capacity**



## **Shelf Life Characteristics**



## Float Service Life vs. Temperature



#### **AMARA RAJA BATTERIES LIMITED**

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