

SUNLIGHT AccuForce 12V-140Ah S

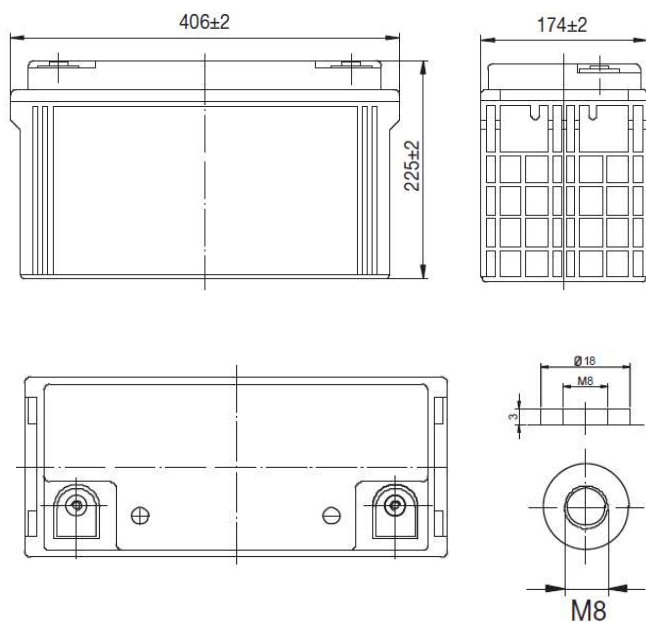
AGM VRLA Battery

Features & Benefits

- Solar / Wind power systems
- Residential installations
- Golf carts and electric powered vehicles
- Marine equipment
- Electric wheelchairs
- Traffic systems (signaling and lighting)
- Remote monitoring and controlling
- Power tools and cleaning machines
- Uninterruptible power supply (UPS)

Specifications

Nominal Voltage	12 V	
Number of cells	6	
Cycle Life	Approx. 800 cycles at 50% DOD	
Dimensions	Length	406 mm
	Width	174 mm
	Height	225 mm
	Total Height	225 mm
Weight		33.5 kg
	120 hours rate (1.85Vpc)	141.60 Ah
Nominal Capacity (25°C)	100 hours rate (1.85Vpc)	141.00 Ah
	48 hours rate (1.80Vpc)	133.92 Ah
	10 hour rate (1.80Vpc)	121.00 Ah
	Internal Resistance (fully charged, 25°C)	4.0 mOhm
Self Discharge	less than 3% per month at 25°C	
Nominal Operating Temperature	25°C	
Operating Temperature range	Discharge	-15°C to 45°C
	Charge	0°C to 40°C
	Storage	-15°C to 40°C
Float Charging Voltage	2.27 to 2.30 V/cell at 25°C	
	Temperature compensation	-18mV/°C
Cyclic Charging Voltage	2.40 to 2.47 V/cell at 25°C	
	Temperature compensation	-30mV/°C
Maximum charging current	36 A	
Maximum discharge current	1200 A (5 sec.)	
Short circuit current	1800 A	



Performance Data

Discharge Constant Current at 25°C (Amperes)

End Voltage V/cell	15min	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h	48h	72h	100h	120h
1.60 V	203	122	75.8	44.2	30.9	25.4	21.7	18.8	14.8	12.4	6.47	---	---	---	---
1.65 V	197	120	74.8	43.9	30.8	25.1	21.5	18.4	14.7	12.3	6.45	---	---	---	---
1.70 V	191	116	72.9	43.6	30.6	25.0	21.4	18.4	14.6	12.2	6.43	2.84	---	---	---
1.75 V	184	113	71.4	43.0	30.3	24.8	21.2	18.5	14.5	12.2	6.41	2.66	1.90	---	---
1.80 V	173	109	69.3	42.0	29.4	24.1	20.6	17.9	14.0	12.1	6.36	2.79	1.88	---	---
1.85 V	163	103	65.0	39.4	27.6	22.6	19.4	16.9	13.2	11.4	5.99	2.63	1.78	1.41	1.18

Discharge Constant Power at 25°C (Watts/cell)

End Voltage V/cell	15min	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h	48h	72h	100h	120h
1.60 V	370	227	144	84.8	60.2	49.0	42.5	37.2	29.7	24.7	12.9	----	----	----	----
1.65 V	361	223	142	84.3	60.0	48.8	42.2	36.5	29.3	24.5	12.9	----	----	----	----
1.70 V	348	217	139	83.8	59.5	48.5	41.8	36.4	29.2	24.3	12.9	5.65	----	----	----
1.75 V	336	212	136	82.8	59.2	48.3	41.3	35.8	28.8	24.2	12.8	5.63	3.78	----	----
1.80 V	318	205	132	80.8	57.3	47.3	40.7	35.2	27.8	24.0	12.7	5.58	3.77	----	----
1.85 V	299	192	124	75.8	53.8	44.3	38.2	32.9	26.2	22.5	12.0	5.25	3.53	2.83	2.37

SYSTEMS SUNLIGHT S.A.

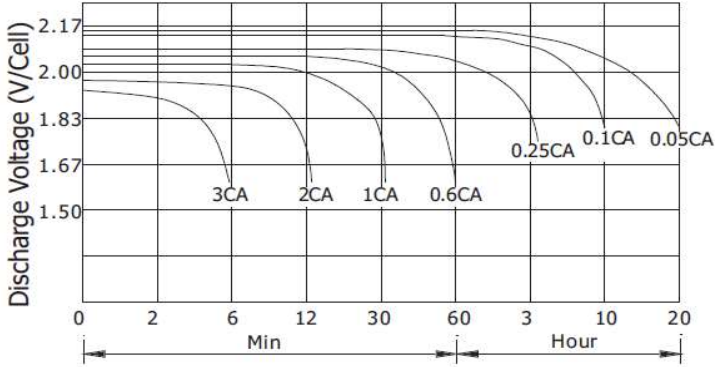
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 Manufacturing Plant Neo Olvio | 672 00 Xanthi | Greece
 Recycling Plant Industrial Area of Komotini | 691 00 Komotini | Greece
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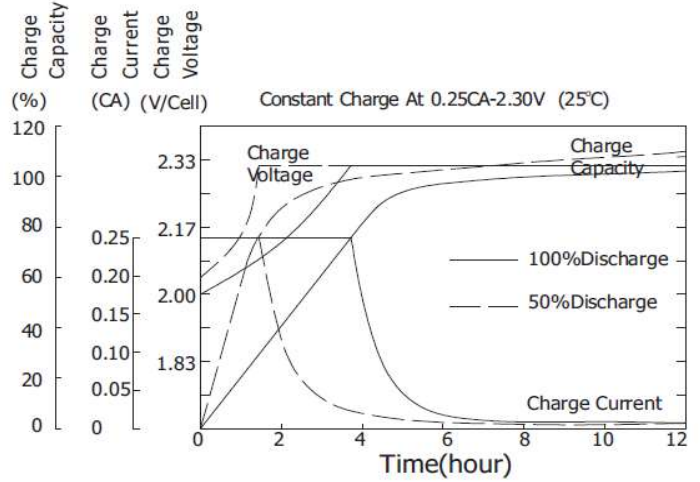
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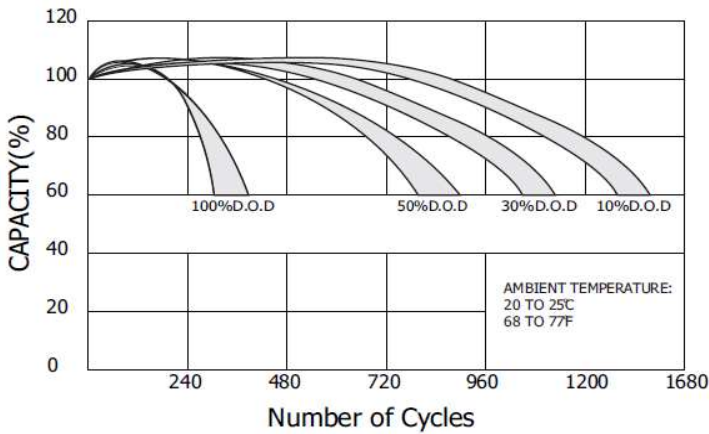
Discharge Characteristics (25°C)



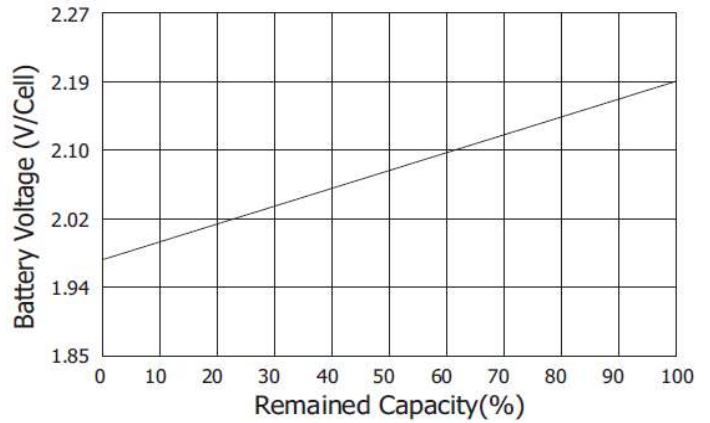
Charging Characteristics (25°C)



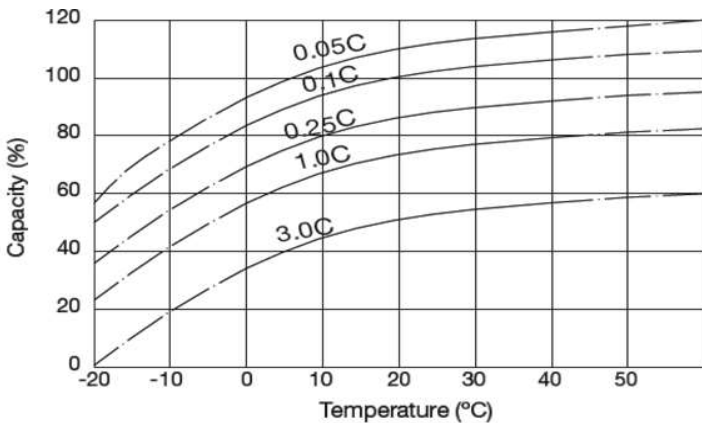
Cycle Service Life in Relation to Depth of Discharge



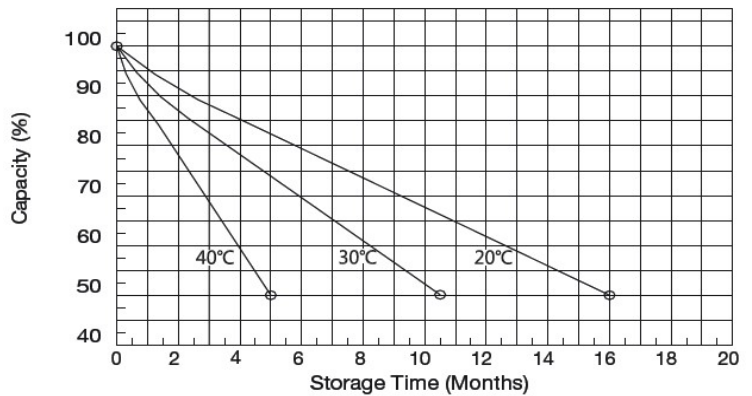
Relationship Between OCV and Residual Capacity (25°C)



Temperature Effects on Capacity



Self Discharge Characteristics



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