

SUNLIGHT AccuForce 12V-45Ah S

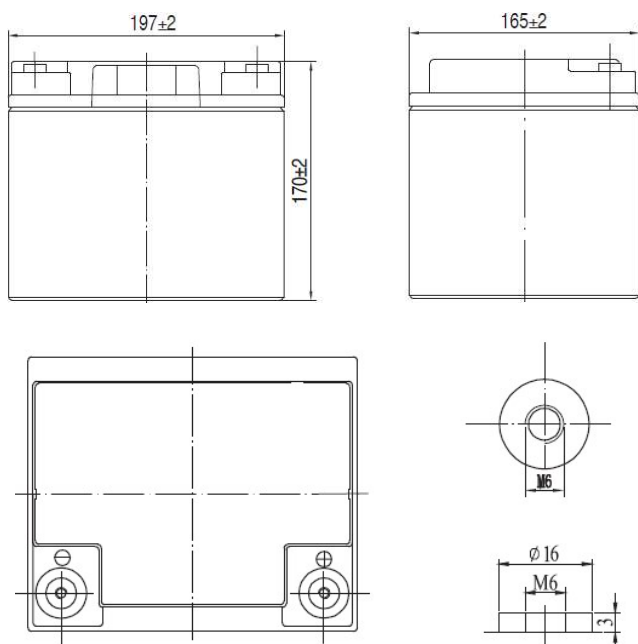
AGM VRLA Battery

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 197 mm
	Width 165 mm
	Height 170 mm
	Total Height 170 mm
Weight	12.5 kg
	120 hours rate (1.85Vpc) 44.40 Ah
Nominal Capacity (25°C)	100 hours rate (1.85Vpc) 45.00 Ah
	48 hours rate (1.80Vpc) 44.16 Ah
	10 hour rate (1.80Vpc) 40.40 Ah
	Internal Resistance (fully charged, 25°C) 8.5 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	12 A
Maximum discharge current	400 A (5 sec.)
Short circuit current	600 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	67.4	40.8	25.2	14.7	10.30	8.44	7.22	6.26	4.93	4.12	2.16	----	----	----	----
1.65 V	65.8	40.0	24.9	14.6	10.30	8.39	7.14	6.18	4.93	4.12	2.15	----	----	----	----
1.70 V	63.4	38.7	24.2	14.5	10.20	8.31	7.10	6.18	4.89	4.08	2.15	0.94	----	----	----
1.75 V	60.9	37.7	23.8	14.3	10.10	8.27	7.06	6.13	4.85	4.08	2.14	0.93	0.67	----	----
1.80 V	57.7	36.4	23.0	13.9	9.81	8.03	6.86	5.93	4.69	4.04	2.12	0.92	0.62	----	----
1.85 V	54.8	34.6	21.9	13.2	9.31	7.63	6.52	5.63	4.45	3.84	2.02	0.88	0.59	0.45	0.37

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	123	75.5	47.8	28.3	20.0	16.3	14.1	12.2	9.76	8.15	4.31	----	----	----	----
1.65 V	120	74.3	47.3	28.1	19.8	16.3	14.0	12.1	9.76	8.15	4.31	----	----	----	----
1.70 V	116	72.1	46.1	27.9	19.8	16.1	13.9	12.1	9.70	8.08	4.29	1.87	----	----	----
1.75 V	112	70.5	45.2	27.6	19.7	16.1	13.8	12.0	9.63	8.08	4.28	1.87	1.26	----	----
1.80 V	106	68.1	43.9	26.9	19.2	15.7	13.5	11.7	9.29	8.01	4.24	1.85	1.25	----	----
1.85 V	101	64.7	41.7	25.6	18.2	15.0	12.8	11.1	8.82	7.61	4.02	1.75	1.18	0.88	0.75

SYSTEMS SUNLIGHT S.A.

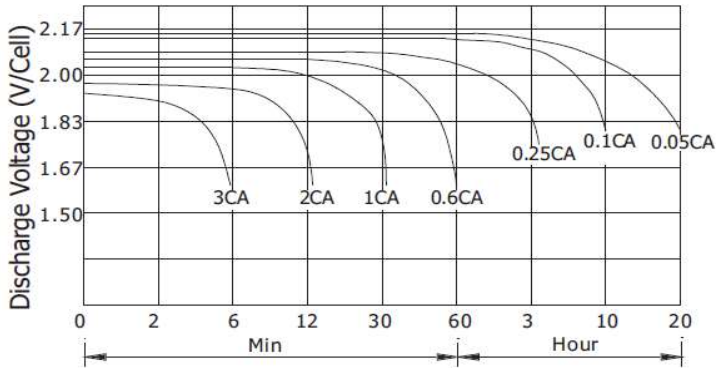
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 Manufacturing Plant Neo Olvio | 672 00 Xanthi | Greece
 Recycling Plant Industrial Area of Komotini | 691 00 Komotini | Greece
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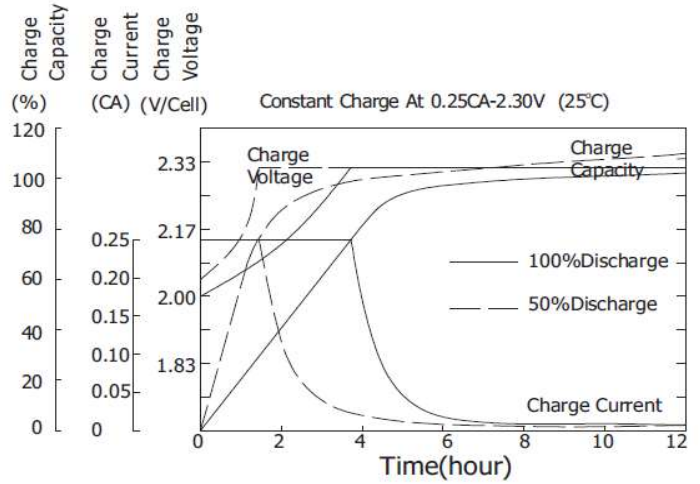
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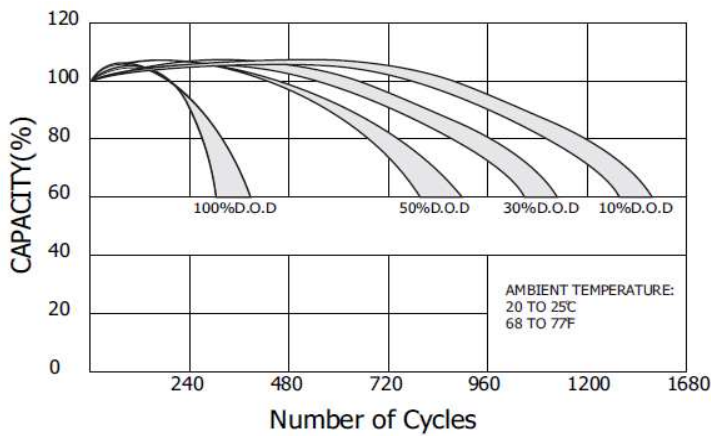
Discharge Characteristics (25°C)



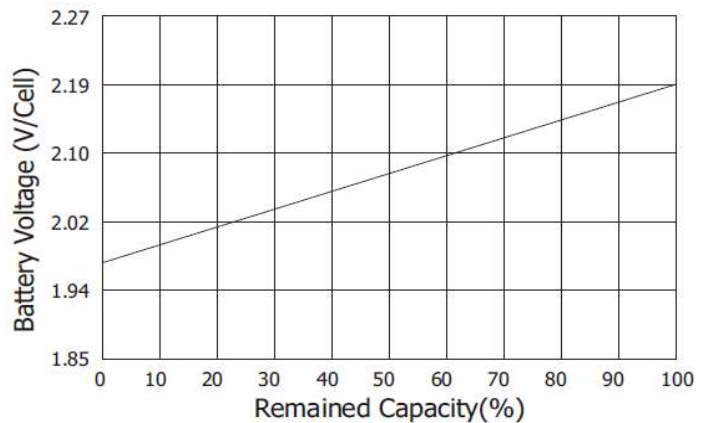
Charging Characteristics (25°C)



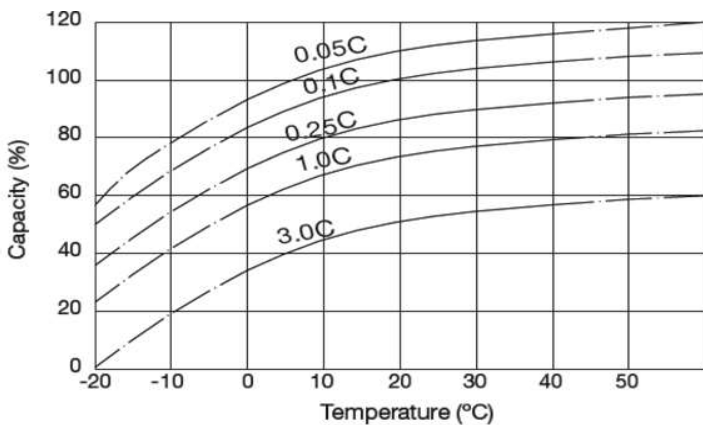
Cycle Service Life in Relation to Depth of Discharge



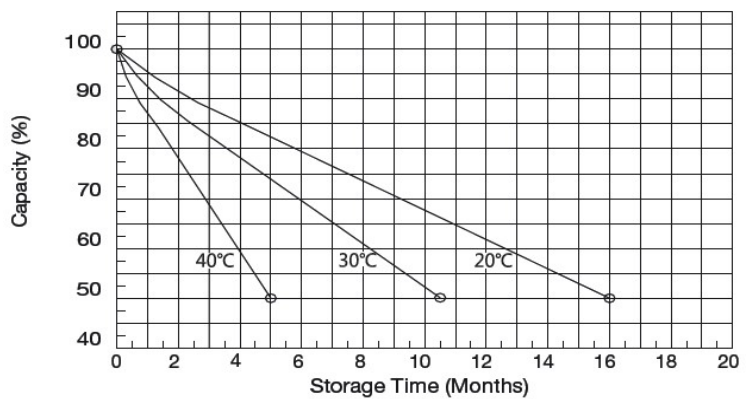
Relationship Between OCV and Residual Capacity (25°C)



Temperature Effects on Capacity



Self Discharge Characteristics



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