DATASHEET NM12-40

Introduction

Anda NM (31Ah-250Ah) series is designed for standby use with 10-year design life in float service. The series battery is featured of high consistency, excellent performance and reliable standby service life. It is widely applied in float service, UPS/EPS, medical equipment, telecom, photovoltaic, control system and security system.

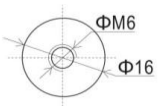
Battery Features

- ○ Increase durability and deep cycle ability for heavy demand applications
- ○ Low self-discharge
- ○ Fully tank formed plates
- ○ Low impurity electrolyte
- ○ Spill proof / leak proof
- ○ Multi-position usage
- ○ ABS case and cover VO upon request
- ○ Very high purity lead

Battery Picture & Terminal Layout



Terminal Type: T12



Electrical Specification

Design floating Life @ 25°C (77°F)	10 years
Nominal Capacity @ 25°C /77°F	
20 hour rate 2.12A to 1.75Vpc	42.4 Ah
10 hour rate 4.14A to 1.75Vpc	41.4 Ah
Internal Resistance	
(Fully charged battery @ 25°C /77°F)	10mΩ
Max. Discharge Current @ 25°C /77°F	400 A (5S)
Charge Methods: Constant voltage charge @ 25°C /77°F	
Cycle Use	14.7 ~ 14.9V
Max. Current	10 A
Standby Use	13.6 - 13.8V
Operating Temperature Range	-30 ~ 50°C

Notes: battery voltage must be adjusted according to temperature. Please refer to our recommendation.

Self-Discharge

3% of capacity declined per month @ 25°C (77°F).

Dimension & Weight

Dimension (± 2mm)				Weight (± 2%)
Length	Width	Height	Total Height	
197 mm	166 mm	176 mm	176 mm	12.4 kg
7.8 inch	6.5 inch	6.9 inch	6.9 inch	27.3 lbs

Typical Applications

○ Telecommunications ○ Power Utility ○ Data Center ○ UPS & EPS

Certificates

Constant Current Discharge (Amperes @ 25°C /77°F)

V/cell	10min	15min	20min	25min	30min	35min	40min	45min	50min	55min	1hr	2hr	3hr	4hr	5hr	10hr	20hr
1.60	99.06	75.62	65.32	55.03	47.44	41.91	39.08	36.25	33.82	31.89	30.27	16.48	11.67	9.70	7.93	4.24	2.14
1.65	94.06	71.80	62.37	52.93	46.19	40.80	38.11	35.42	33.13	31.34	29.85	16.16	11.45	9.50	7.75	4.22	2.14
1.70	90.18	68.84	59.90	50.97	44.73	39.45	36.87	34.28	32.10	30.41	29.03	15.62	11.19	9.28	7.57	4.18	2.14
1.75	86.02	65.66	57.23	48.80	43.07	37.96	35.55	33.14	31.13	29.62	28.41	15.19	10.94	9.07	7.41	4.14	2.12
1.80	81.58	62.27	54.42	46.56	41.40	36.43	34.17	31.90	30.03	28.66	27.59	14.64	10.68	8.85	7.22	4.03	2.10

Constant Power Discharge (Watts/cell @ 25°C /77°F)

V/cell	10min	15min	20min	25min	30min	35min	40min	45min	50min	55min	1hr	2hr	3hr	4hr	5hr	10hr	20hr
1.60	172.03	131.32	115.57	99.82	87.17	78.49	72.91	67.33	62.25	58.27	54.59	29.54	21.57	18.33	15.10	8.46	4.46
1.65	165.93	126.66	111.70	96.74	84.88	76.41	71.04	65.67	60.80	57.03	53.57	28.92	21.36	18.13	14.89	8.38	4.46
1.70	159.55	121.79	107.55	93.31	82.17	73.98	68.89	63.80	59.22	55.73	52.54	28.21	20.95	17.81	14.67	8.21	4.40
1.75	152.61	116.50	103.05	89.60	79.26	71.35	66.54	61.73	57.42	54.21	51.30	27.28	20.34	17.37	14.40	8.15	4.32
1.80	145.12	110.78	98.20	85.62	76.14	68.51	63.98	59.45	55.42	52.49	49.86	26.29	19.80	16.94	14.08	8.07	4.28

ANDA-OLSEN AS
Blindheim Industrivei 2E

NO-6020 Aalesund
Norway

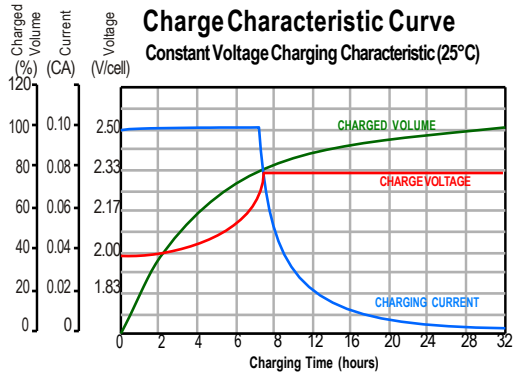
Tel +47 70 17 89 70
Fax +47 70 17 89 71

post@anda-olsen.no
www.anda-olsen.no

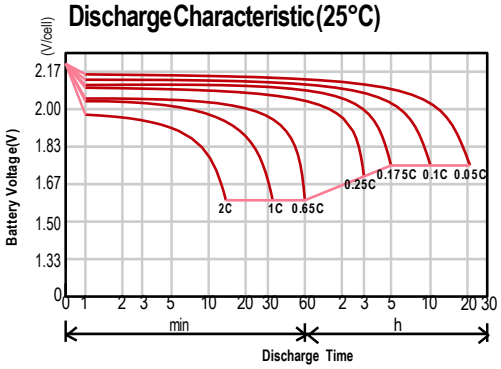
Org.nr.
NO 935692113 MVA

Graphs

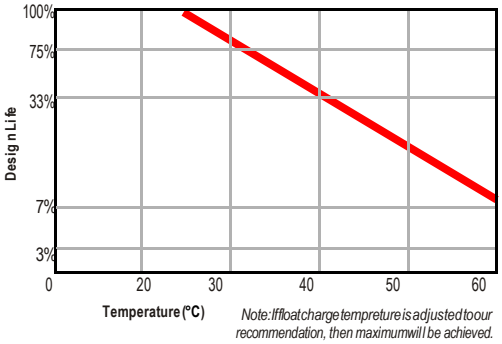
Charge Characteristic Curve



Discharge Characteristic (25°C)

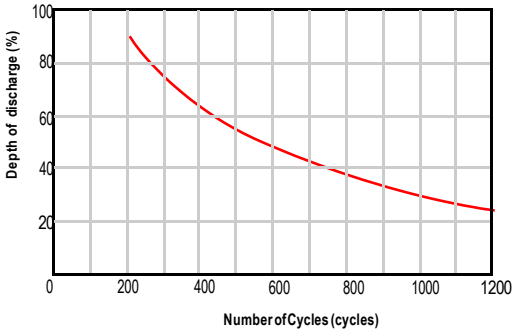


Temperature Effects On Float Life

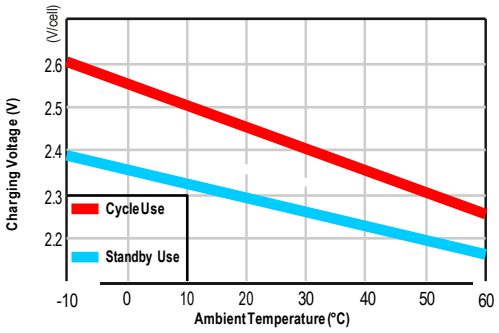


Note: If float charge tempreture is adjusted to our recommendation, then maximum will be achieved.

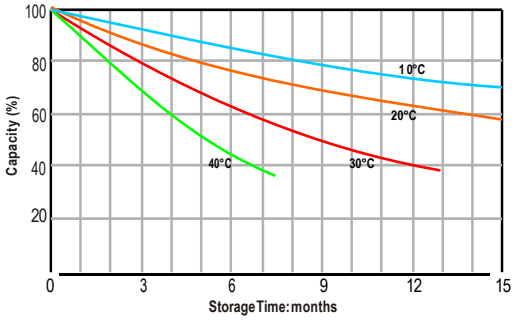
Cycle Service Life V.S. Depth Of Discharge



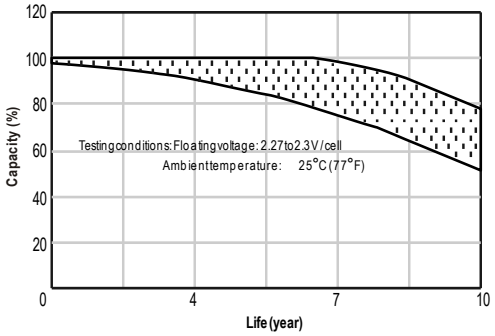
Charging Voltage V.S. Temperature



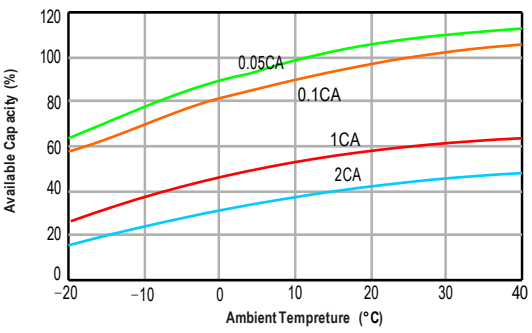
Self-Discharge Characteristic



Life Characteristics Of Standby Use



Temperature Effects On Capacity



ANDA-OLSEN AS
Blindheim Industrivei 2E
NO-6020 Aalesund
Norway
Tel +47 70 17 89 70
Fax +47 70 17 89 71
post@anda-olsen.no
www.anda-olsen.no
Org.nr.
NO 935692113 MVA