

stored energy solutions for a demanding world

Narada

Model: **12NDF125**

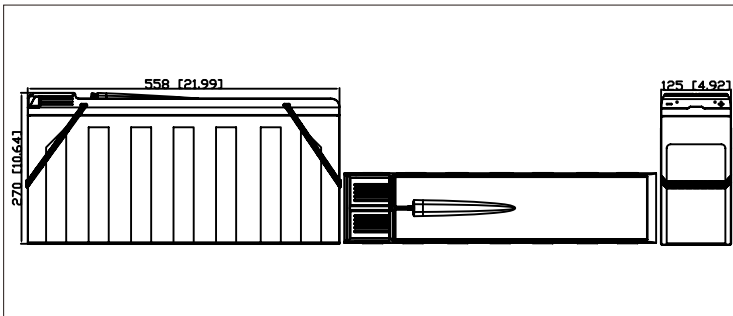
Acme-F

The Acme F range of front access VRLA batteries has been specifically designed for applications using 19" and 23" cabinets, especially telecoms. Reliability is assured with the patented post seal and a state-of-the-art AGM design developed to comply with the latest IEC, British and Telcordia standards. A 12+ years design life and centralised venting system add to the suitability and flexibility of this superior range.

IEEE/UL Battery
Sizing by
MooreU
610-952-6067
www.mooreu.com




Dimensions—mm [inch]



Specifications

Battery Model	12NDF125
Nominal Voltage	12V
Rated Capacity	125Ah (10 hour rate) to 1.80V/cell @25°C(77°F)
Typical Weight	45kg
Internal Resistance	Approx 5.7mΩ
Temperature Ranges	Operation (maximum): -40°C to 50°C(-40°F to 122°F) Operation (recommended): 15°C to 25°C(59°F to 77°F) Storage: -20°C to 40°C(-4°F to 104°F)
Float Voltage	2.25V/cell@25°C(77°F)
Recommended Maximum Charging Current Limit	31.25A
Equalize and Cycle Service	2.35V~2.40V/cell@25°C(77°F)
Self Discharge	The residual capacity is above 90% after 90 days storage(25°C/77°F)
Terminal	M6 Female
Terminal Hardware Torque	8 ± 1.0Nm
Container Material	ABS (V0 optional)

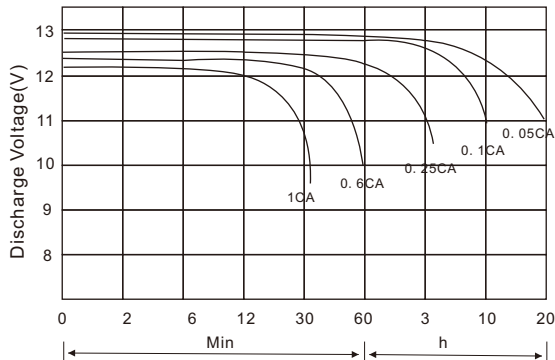
Constant Current Discharge Characteristics Units: Amperes (25°C, 77°F)

End voltage per cell	5MIN	15MIN	30MIN	45MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR	12HR	20HR	24HR
1.60V	410	220	133	96.7	78.2	44.8	32.5	26.9	23.5	20.3	15.8	13.0	11.0	6.85	5.73
1.67V	385	212	131	96.0	77.7	44.6	31.9	26.8	23.3	20.2	15.6	12.8	10.9	6.79	5.67
1.70V	381	209	129	95.3	77.1	44.2	31.8	26.6	23.8	20.2	15.6	12.8	10.8	6.78	5.67
1.75V	350	202	128	94.6	76.0	43.1	31.4	26.3	23.4	20.1	15.4	12.7	10.8	6.76	5.67
1.80V	314	188	123	90.7	74.0	42.7	31.2	26.3	22.8	19.7	15.3	12.6	10.7	6.70	5.66
1.83V	299	173	120	87.7	70.8	42.2	30.1	25.0	22.1	19.0	15.0	12.1	10.2	6.68	5.57
1.85V	281	167	112	84.2	68.6	40.6	29.3	24.7	21.5	18.6	14.5	12.0	10.2	6.55	5.52

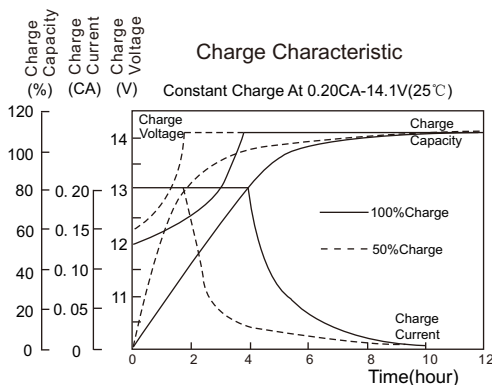
Discharge Data with Constant Power Units: Watts per cell (25°C, 77°F)

End voltage per cell	5MIN	15MIN	30MIN	45MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR	12HR	20HR	24HR
1.60V	685	387	241	181	147	84.6	61.8	51.7	45.1	39.0	30.6	25.2	21.3	13.6	11.4
1.67V	659	380	239	180	146	84.4	61.0	51.6	45.0	39.0	30.3	25.0	21.2	13.5	11.4
1.70V	655	376	239	180	146	84.0	61.0	51.4	46.0	39.0	30.2	24.8	21.0	13.5	11.3
1.75V	612	373	238	180	144	83.6	60.3	51.4	45.5	38.9	29.9	24.7	21.0	13.5	11.3
1.80V	561	352	233	175	143	83.3	60.2	51.2	44.4	38.5	29.9	24.6	20.9	13.5	11.3
1.83V	536	323	230	170	137	82.3	58.8	49.3	43.5	37.4	29.6	24.0	20.3	13.4	11.2
1.85V	501	315	213	163	133	79.6	57.2	48.7	42.4	36.6	28.7	23.8	20.4	13.2	11.1

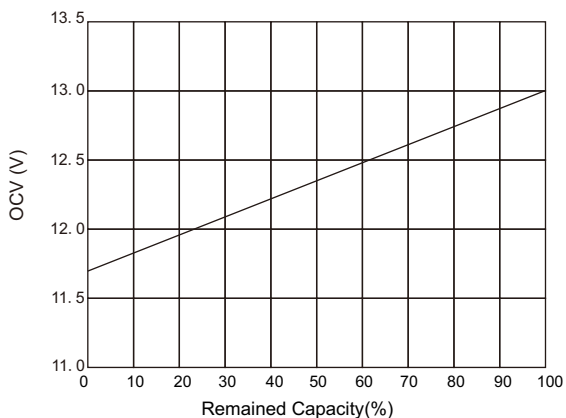
Terminal Voltage(V) Vs. Discharge Time (25°C, 77°F)



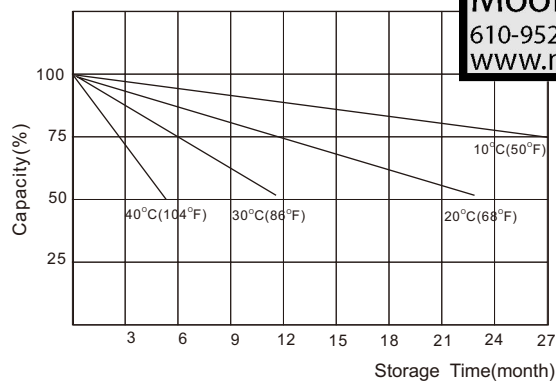
Battery Voltage Vs. Charge Time



Relationship of OCV Vs. State of Charge



Capacity Retention Characteristic



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Charging Procedures

Application	Charge Voltage (V/Cell)			Max. Charge Current
	Temperature	Set Point	Allowable Range	
Cycle	25°C	2.40	2.35~2.40	0.25C
Standby	25°C	2.25	2.23~2.27	

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/Cell	1.80	1.70	1.55	1.30
Discharge Current (A)	0.2C ≥ (A)	0.2C < (A) < 0.5C	0.5C < (A) < 1.0C	(A) > 1.0C

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