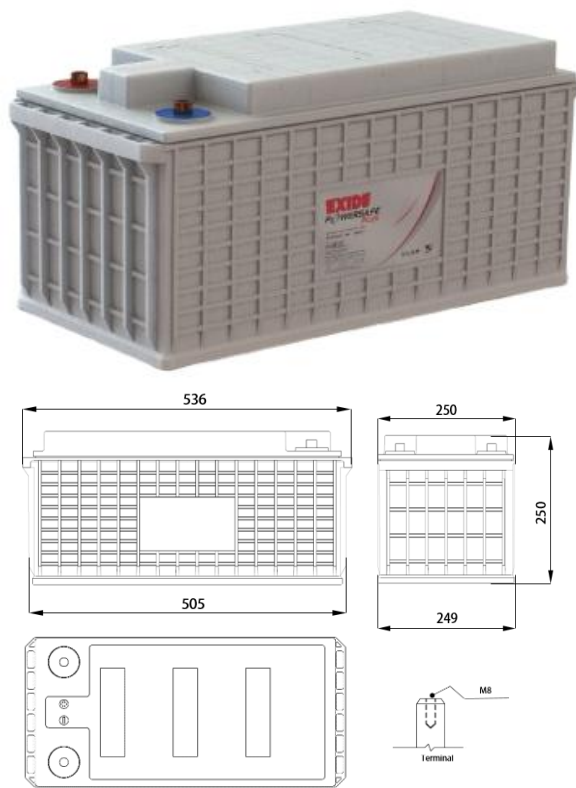


Product Outline

Product Details

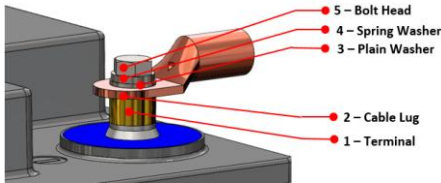


Battery Type	EP 200-12
Nominal voltage (V)	12
Rated Capacity @25°C 20 hour (up to 10.5V)	200
Dimension (L x W x H) (mm) ±3	536 x 250 x 250
Weight (kg) ± 5%	64.8
Internal Resistance (mΩ) @ 25°C Fully Charged Condition	3.5 max
Short Circuit Current (A)	4431
Ah Efficiency	>90%
Wh Efficiency	>80%
Plastic Material	PPCP-FR
Type of +ve & -ve plate	Flat Pasted
Terminal Torque (N-m)	12.3
Terminal Type	M8-Bolt
Operating Temperature Range	0°C to 45°C
Self-Discharge/Month @ 27°C	<3% of Rated Capacity

Features

- ❖ Non-spillable sealed maintenance free VRLA battery
- ❖ Absorptive Glass Mat Technology.
- ❖ Long Service Life
- ❖ Low Self-discharge
- ❖ Excellent Charge Retention.
- ❖ Superior High-Rate Discharge
- ❖ Internal Oxygen Recombination
- ❖ Design Float life of 10 years

Terminal Connection Sequence



Constant Power Discharge Rating (W) at 25°C

EMV	10 min	15 min	20 min	30 min	60 min	120 min	180 min	300 min	480 min	600 min
10.2	4832	4012	3166	2521	1448	876	636	420	288	240
10.5	4739	3822	3074	2478	1406	861	612	410	282	234
10.8	4646	3620	2982	2434	1364	846	588	400	276	228

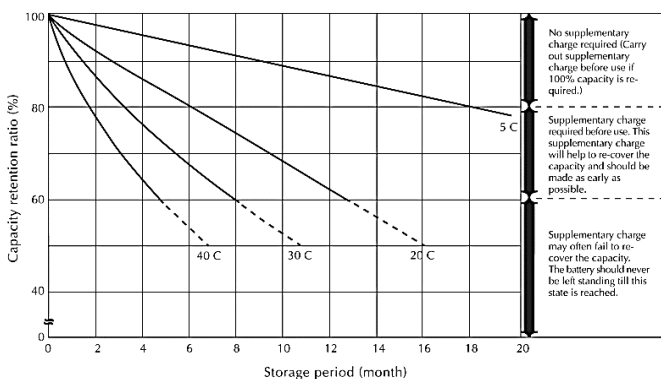
Constant Current Discharge Rating (A) at 25°C

EMV	10 min	15 min	20 min	30 min	60 min	120 min	180 min	300 min	480 min	600 min
10.2	460	360	300	250	134	80	58	38	26	21.6
10.5	428	344	290	225	131	75.8	55.9	35.9	23.8	19.6
10.8	400	330	280	220	128	72	54	34	22	18

** Please note, the above discharge values are average and can be achieved within 5 charge/discharge cycles

Capacity Retention & Supplementary Charge

Service Life Characteristics



Supplementary Charge Guideline for 3 -6 Months of Storage

Charging Method	Voltage Setting	Current Setting	Duration for upto 3 months storage	Duration for upto 6 months storage	Temperature
Constant Voltage	14.5V per battery	15% limit current	6 hours	12 hours	5°C-35°C
Constant Current	NA	5% Current	6 hours	12 hours	

Charge Characteristics

Recharge voltages: Batteries to be charged in CC-CV mode only

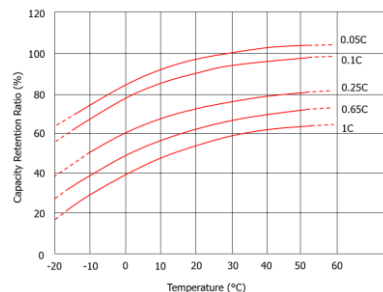
Recharge Voltage Type	Voltage settings per 12 V unit for ambient temperature 20°C-30°C
Float	13.7 ± 0.1 V
Boost	14.1 ± 0.1 V
Cycle	14.7 ± 0.1 V
Temperature compensation (Ref. 25°C)	
-18 mV/ °C increase / 12 V unit	

Current setting

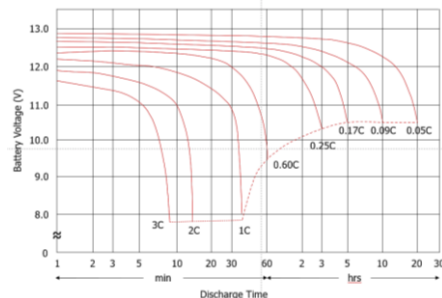
Maximum	0.3C A
Minimum	0.1C A
Recommended	0.15C A

Effect of Temperature on Capacity

Charge Voltage = 2.275 V/cell



Discharge Characteristics



Installation – Best Practices

Gas Evolution & Heat Generation

Considering the wide variation in the operating condition, in a worst-case scenario, Hydrogen gas evolved per hour per battery may be estimated as = 0.00108 m^3 at NTP
Heat Generation per battery = 5.4W

Sizing Calculator – Online

