

Maintenance-Free Lead Batteries AB...



- Maintenance free sealed lead battery
- Low self-discharge rate
- Operational in any orientation
- Low internal resistance
- High long-term stability
- High capacity
- 100% recyclable





Description

Application

The maintenance free, sealed lead battery of the AB... Series are suitable for protection systems. They can be used for intrusion, fire and access control systems to guarantee their continuous operation in case of a power failure.

Features

The capacity of the maintenance free lead batteries are the product of the discharge current (A) and the discharge time (h) specified in ampere hour (Ah), whereas the capacity and the discharge voltage curve depend directly on the discharge current (see Fig. 1).

Several batteries can be connected in parallel to increase the total capacity, but it is required to use batteries with the same nominal capacity and voltage.

Several batteries can be connected in series to increase the closed circuit voltage, but it is required to use batteries with the same nominal capacity and voltage.

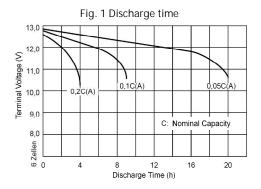
If possible the correct size of battery should be chosen for the load of the system.

The operation of the battery below the end-point voltage will lead to a deep discharge of the battery. Deep discharged batteries cannot provide the initial capacity until they are fully recharged. The batteries of the AB... Series are protected against a deep discharge, which means they can be charged up to their nominal capacity again after a deep discharge, without any degradation of the capacity. Deep discharge situations should be avoided to help protect the life of the battery (see Fig. 4).

The operating temperature needs to be considered, when calculating the required capacity of a power supply system. The available capacity decreases with the operating temperature, e.g. at 0°C the capacity drops to 85% of its nominal value (see Fig. 2).

To charge batteries of the AB... Series a battery charger is required, which limits the charging voltage based on the WU or I/U characteristics. If the battery charging facility is likely to be in an area with unstable temperature, then a temperature compensated battery charger needs to be provided.

The local national standards relating to approvals, changeover time in case of a power failure, maintenance and replacement period have to be considered, when using the batteries in an intrusion alarm, fire alarm and/or access control system.





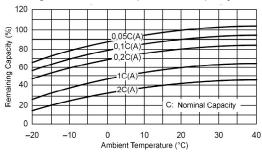


Fig. 3 Self-discharge

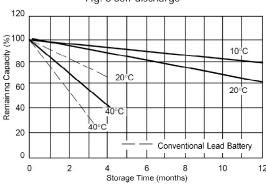


Fig. 4 Cyclic operation

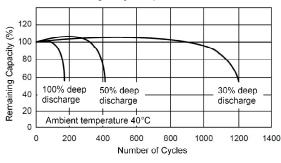


Fig. 5 Stand-by conditions

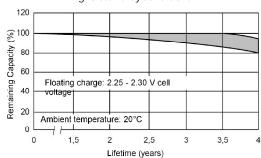


Fig. 6 Stand-by conditions

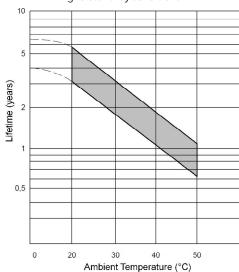
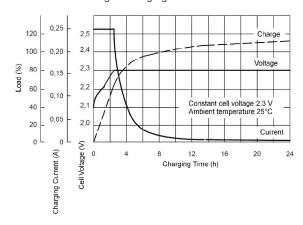
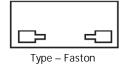


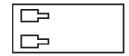
Fig. 7 Charging features



■ Battery Terminal Types and Locations



AB1202-0 - 4.8mm



Type – Faston

AB1201-2 – 4.8mm AB1207-2 – 4.8 / 6.3mm AB1212-0 – 4.8 / 6.3mm



Type - Nut and Bolt

AB1215-0 – diameter 5.5mm AB1227-0 – diameter 5.5mm AB1242-0 – diameter 6.5mm AB1265-0 – diameter 6.5mm

■ Technical Specifications

Nominal voltage	12 V	
Material	Thick walled ABS	
Transportation	Non-hazardous (air / sea / rail / road)	
Operating temperature		
- Discharge	-20°C +50°C	
- Recharge	0°C +40°C	
Live span	up to 5 years at +20°C	
Shelf life procedure	Please consider that batteries lose part of their capacity during storage, due	
	to self discharge (see Fig. 3)	
VdS- approvals		
- AB1201-2	G196050	
- AB1202-0	G196051	
- AB1207-2	G196052	
- AB1212-0	G196053	
- AB1215-0	G196054	
- AB1227-0	G196055	
- AB1242-0	G196056	
- AB1265-0	none	
Dimensions (L x W x H)		
- AB1201-2	97 x 49 x 51 mm	
- AB1202-0	178 x 35 x 60 mm	
- AB1207-2	151 x 65 x 94 mm	
- AB1212-0	151 x 98 x 95 mm	
- AB1215-0	181 x 76 x 167 mm	
- AB1227-0	166 x 175 x 125 mm	
- AB1242-0	197 x 165 x 170 mm	
- AB1265-0	271 x 166 x 190 mm	

Ordering Information

Туре	ArtNo.	Description	Weight
AB1201-2	S54545-Z120-A100	Battery 12 V / 1.2 Ah	0.570 kg
AB1202-0	S54545-Z121-A100	Battery 12 V / 2 Ah	0.800 kg
AB1207-2	S54545-Z122-A100	Battery 12 V / 7.2 Ah	2.430 kg
AB1212-0	S54545-Z123-A100	Battery 12 V / 12 Ah	3.730 kg
AB1215-0	S54545-Z124-A100	Battery 12 V / 15 Ah	5.900 kg
AB1227-0	S54545-Z125-A100	Battery 12 V / 27 Ah	9.000 kg
AB1242-0	S54545-Z126-A100	Battery 12 V / 42 Ah	13.800 kg
AB1265-0	S54545-Z127-A100	Battery 12 V / 65 Ah	23.200 kg

The information in this document includes general descriptions of the technical possibilities, which need not be installed in each individual case. The desired performance characteristics must therefore be specified for the individual case when the contract is concluded.

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