PowerSafe® OP

Battery Range Summary

The PowerSafe® OP range of flooded cells has been designed for use in standby power applications where high performance and long life are requirements of paramount importance. The special flat plate design offers various key benefits such as high energy density and low maintenance to provide cost effective and reliable battery solutions. In addition, PowerSafe OP cells offer excellent performance at high rate discharges.

This comprehensive range of cells, designed for operation in parallel or in series, ensures that your system requirements are perfectly matched. The specification of the PowerSafe OP cells make it ideal for a broad spectrum of applications including telecommunications, Uninterruptible Power Supply, power generation, transmission and distribution, emergency lighting and security systems.

Features and Benefits

- Capacity range: 146Ah – 292Ah
- High energy density
- Excellent high rate discharge performance
- Long design life
- Low maintenance
- Compliant with IEC 60896-11

Construction

- Positive electrodes – pasted flat plates with low antimony lead alloy for long life and enhanced performance
- Negative electrodes – pasted flat plates provide perfect balance with the positive plates to give maximum performance
- Separators – made from modified phenolic resin with integrated polyester fleece for minimum resistance
- Containers – injection-moulded from durable, transparent styrene acrylonitrile (SAN) to allow the electrolyte level and cell condition to be monitored visually
- Cell lids – moulded from durable, opaque SAN, sealed to the container by chemical bonding to ensure no electrolyte leakage
- Electrolyte – diluted sulphuric acid with a specific gravity of 1.250 to ensure optimum performance and longevity
- Vent plugs – designed to allow free exit of gasses, yet eliminate acid spray. Equipped with flame arrestors
- Terminals – lead alloy leak-proof safety pole with brass insert for OP 6/7/8/9 types and with copper insert for OP 10/11/12
- Connectors - specifically designed, rigid copper inter-cell connectors supplied with insulating shrouds

Installation & Operation

- Float charge voltage: 2.23Vpc at 20°C
- Permissible operating temperature range: -10°C to +45°C
- Topping-up intervals of up to three years in float mode
- Large selection of stands, including seismic stands, available upon request

Standards

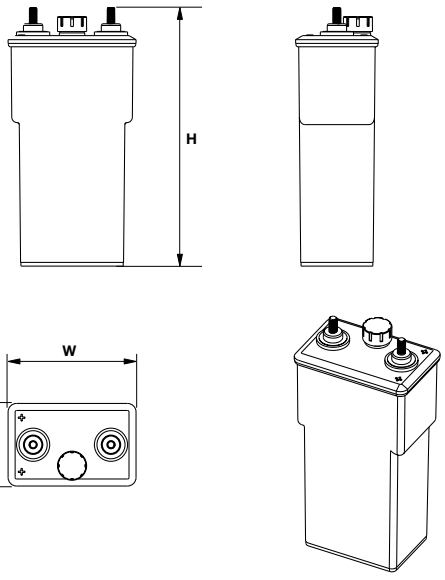
- Compliant with international standard IEC 60896-11 (2002)
- Batteries must be installed in accordance with safety standards IEC 62485-2, EN 50272-2 and national regulations

General Specifications

		Nominal Capacity (Ah)		Nominal Dimensions (mm)			Typical Weight			
Cell Type	Nominal Voltage (V)	10 hr rate to 1.80Vpc @ 20°C	8 hr rate to 1.75Vpc @ 77°F	Length [1]	Width [2]	Overall Height	Acid Filled (kg)	Electrolyte Volume (Litres)	Short Circuit Current (A) [3]	Internal Resistance (mΩ) [3]
OP 6	2	146	147	122	189	380	13.4	3.4	2846	0.74
OP 7	2	170	172	122	189	380	14.2	3.3	3150	0.67
OP 8	2	195	197	122	189	380	15.3	3.2	3437	0.60
OP 9	2	219	221	122	189	380	15.8	3.1	3800	0.55
OP 10	2	244	246	160	189	380	18.8	4.6	4000	0.52
OP 11	2	268	271	160	189	380	19.5	4.5	4355	0.48
OP 12	2	292	295	160	189	380	20.2	4.4	4625	0.45

Notes:
[1] The length of a cell is measured at tight angles to the plates
[2] The width of a cell is measured parallel to the plates
[3] Figures obtained via IEC 60896-11 method (±10%)

Outline Drawings



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AS-OP-RS-001 - July 2016