PowerSafe® SBS

EON® TECHNOLOGY

Battery Range Summary

EnerSys® outstanding EON Technology® further extends the technical leadership of PowerSafe® SBS® batteries: not only do PowerSafe® SBS EON Technology cells and monoblocs retain the benefits typically associated with EnerSys' Thin Plate Pure Lead Technology (long life, high energy density, superior shelf life, etc.), they also deliver exceptional cyclic performance in both float and fast charge applications, even in the hottest and harshest operating environments.

Where conventional VRLA AGM batteries struggle to cope with harsh conditions and frequent power outages, EON Technology makes PowerSafe SBS 2V and 12V batteries the perfect solution for the challenging operating conditions of today's telecommunication networks. The specification of PowerSafe SBS EON Technology also makes SBS B14 - 900 suitable for large-scale UPS and off-grid energy storage applications.

The PowerSafe SBS EON Technology battery range is available in several configurations: the front terminal SBS B14 - 190F designs which make installation and inspection quick and easy, the classic top terminal SBS 410 design and the SBS 320 - 900 series which offers industry-leading capacities (up to 900Ah) in OPzV's DIN container sizes.

For superior energy and power, high performance and proven reliability, there is no substitute to PowerSafe SBS EON Technology batteries.

Features and Benefits

- Capacity range: 62 - 900Ah
- Superior cyclic performance
- Exceptional fast charge acceptance ability
- High energy density
- Resilient to harsh environments
- Long design life
- Up to two year shelf life

Construction

- Positive plates - pure lead grids manufactured using a unique process
- Negative plates - provide perfect balance with the positive plates to ensure optimum recombination efficiency
- Separators - superior quality microporous glass mat separator with high absorption and stability
- Containers and lids - UL94 V-0 rated flame retardant ABS material, highly resistant to shock and vibration
- Electrolyte - high grade dilute sulphuric acid absorbed into separator material
- Terminal design - proven, high integrity leak resistant terminal seal design
- Self-regulating pressure relief valves - prevent ingress of atmospheric oxygen
- Flame arrestors - built into each bloc/cell for increased operational safety

Installation & Operation

- Designed for operation in traditional float applications and cyclic/hybrid applications
- PowerSafe® SBS® batteries are designed for use in cabinets or on stands, close to the point of use. A separate battery room is not required
- SBS EON Technology® models can be mounted in any orientation except inverted. In cyclic/hybrid applications, EnerSys® recommend to install SBS 320 - 900 cells in horizontal orientation
- Up to two year shelf life
- Low maintenance: no water addition required
- Wide operating temperature range: -40°C to +50°C

Standards

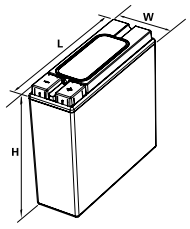
- Designed to be compliant with international standard IEC 60896/21 & 22
- Classified as "Very Long Life" (>12 years) according to Eurobat guide 2015
- UL recognised component
- Approved as non-hazardous cargo for ground, sea and air transportation in accordance with US DOT Regulation 49 and ICAO & IATA Packing Instruction 872
- The management systems governing the manufacture of PowerSafe SBS products are ISO 9001:2008 and ISO 14001:2004 certified

General Specifications

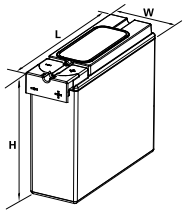
		Nominal Capacity (Ah)		Nominal Dimensions (mm)						
Battery Type	Nominal Voltage (V)	10 hr rate to 1.80Vpc @ 20°C	8 hr rate to 1.75Vpc @ 77°F	Length	Width	Height (over insulation)	Typical Weight (kg)	Short Circuit Current (A)(1)	Internal Resistance (mΩ)(1)	Terminals
SBS B14	12	62	62	280	97	264	19.1	1800	7.0	2 x M8 F
SBS B14F	12	62	62	303	97	264	19.1	1800	7.0	2 x M6 M
SBS C11 (2)	12	92	91	395	105	264	28.0	2300	5.5	2 x M8 F
SBS C11F (2)	12	92	91	417	105	256	28.0	2300	5.5	2 x M6 M
SBS 100 (2)	12	100	100	395	108	287	32.6	2210	5.6	2 x M8 F
SBS 100F (2)	12	100	100	395	108	287	32.6	2210	5.6	2 x M6 M
SBS 170F (2)	12	170	170	561	125	283	52.5	3500	3.5	2 x M6 M
SBS 190F (2)	12	190	190	561	125	316	60.0	3990	3.2	2 x M6 M
SBS 410 (2)	2	410	410	200	208	239	23.2	4725	1.3	2 x M8 M
SBS 320 (3)	2	320	320	103	206	403	20.0	6320	0.33	2 x M10 F
SBS 400 (3)	2	400	400	124	206	403	24.0	7320	0.28	2 x M10 F
SBS 480 (3)	2	480	480	145	206	403	28.0	8050	0.25	2 x M10 F
SBS 580 (3)	2	580	580	124	206	520	33.0	7470	0.28	2 x M10 F
SBS 680 (3)	2	680	680	145	206	520	38.5	8800	0.24	2 x M10 F
SBS 780 (3)	2	780	780	166	206	520	44.0	9000	0.23	2 x M10 F
SBS 900 (3)	2	900	900	145	206	695	50.0	8110	0.26	2 x M10 F

Notes:
(1) Figures obtained via IEC method.
(2) With integral or rope handles.
(3) In horizontal orientation, the above indicated heights become the lengths, lengths become widths and widths become heights.

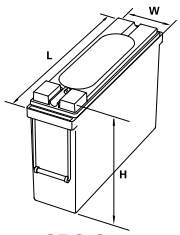
Outline Drawings



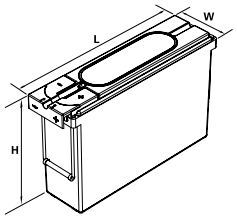
SBS B14



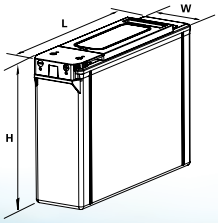
SBS B14F



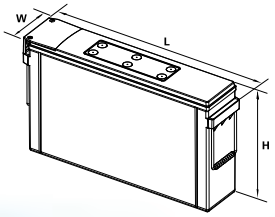
SBS C11



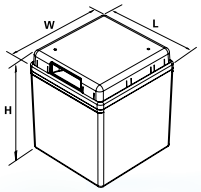
SBS C11F



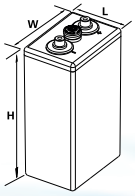
SBS 100 & 100F



SBS 170F & 190F



SBS 410



SBS 320 - 900

EnerSys® Power/Full Solutions

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