



Battery Range Summary

Features & Benefits

- **Designed for use in unreliable grid and renewable energy applications**
- **Wide Ampere-hour range: 92 to 1870Ah**
- **Choice of 2V DIN-size cells and 12V front terminal blocs**
- **Excellent cyclic performance**
- **Exceptional fast charge acceptance ability**
- **Deep discharge recovery**
- **Resilient to harsh environments**
- **TPPL Technology – high energy density**
- **Up to 2-year shelf life**
- **Low total cost of ownership**

The EnerSys® PowerSafe® SBS® XC range of valve regulated lead acid cells and monoblocs is designed to meet the challenging demands of unreliable grid and renewable energy applications.

PowerSafe SBS XC benefits from EnerSys' state-of-the art Thin Plate Pure Lead (TPPL) technology platform. The fast recharge and high cyclic performance of PowerSafe SBS XC make it the perfect solution for challenging operating conditions in poor grid environments where there is a high risk of uncontrolled partial state of charge (PSoC) operation. It has the benefit of resilience against deep discharge.

The high cyclability of PowerSafe SBS XC and its ability to operate in uncontrolled PSoC conditions, where ambient temperature can often be high, provides the operator significant benefits in terms of total cost of ownership (TCO).

Construction

- Thin Plate Pure Lead (TPPL) grid technology for high cycle life and fast charging capability
- Negative plates provide a balance with the positive plates to ensure optimum recombination efficiency
- Low resistance microporous glass fibre mat separator with high absorption and stability
- Containers and lids in UL94 V-0 rated flame retardant ABS material, highly resistant to shock and vibration
- High grade dilute sulphuric acid fully absorbed into the separator to prevent spillage in case of accidental damage
- Dual-seal terminal design to prevent leakage over the product life
- Self-regulating pressure relief valves prevent the ingress of atmospheric oxygen
- Flame arrestors built into each bloc/cell for operational safety

Installation & Operation

- Designed for operation in unreliable grid and renewable energy applications
- Monoblocs and cells can be installed in cabinets or on stands close to the point of use. A separate battery room is not necessary
- Products can be mounted in any orientation except inverted. EnerSys® recommends to install SBS XC 320-1800 cells in horizontal orientation
- Recommended float charge voltage: 2.29Vpc at 20°C (2.27Vpc at 25°C)
- Wide operating temperature range: -40°C to +50°C
- Up to 24 months shelf life at 20°C
- Low maintenance: no water addition required

Standards

- Designed to be compliant with IEC 60896-21/22 and IEC 61427-1
- Classified as "Very Long Life" (>12 years) according to Eurobat guide 2015
- UL recognised component (approval pending for SBS XC 150F-FT)
- Batteries must be installed in accordance with IEC 62485-2 and local/national regulations
- Classified as non-spillable battery and approved as non-hazardous cargo for land, sea and air transportation in accordance with the requirements of ADR / RID, IMDG and IATA respectively
- The management systems governing the manufacture of PowerSafe SBS XC products are ISO 9001, ISO 14001 and OHSAS 18001 certified

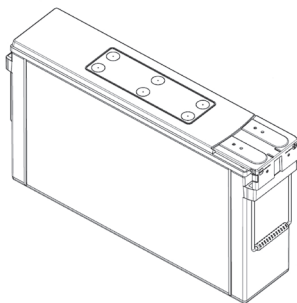
General Specifications

Battery Type	Nominal Voltage (V)	Nominal Capacity (Ah)		Nominal Dimensions (mm)						
		C ₁₀ /1.80Vpc @ 20°C	C ₁₂₀ /1.85Vpc @ 25°C	Length	Width	Height (over insulation)	Typical Weight (Kg)	Short Circuit Current (A) ⁽¹⁾	Internal Resistance (mΩ) ⁽¹⁾	Terminals
SBS XC 92F ⁽²⁾⁽³⁾	12	92	99	395	105	264	28.0	2300	5.5	2 x M8 F
SBS XC 92F-FT ⁽²⁾⁽³⁾	12	92	99	417	105	256	28.0	2300	5.5	2 x M6 M
SBS XC 150F-FT ⁽²⁾⁽⁴⁾⁽⁵⁾	12	151	154	561	125	283	49.0	3330	3.8	2 x M6 M
SBS XC 190F-FT ⁽²⁾⁽⁴⁾	12	190	201	561	125	316	60.0	3990	3.3	2 x M6 M
SBS XC 320	2	320	374	103	206	403	20.0	6320	0.33	2 x M10 F
SBS XC 400	2	400	467	124	206	403	24.0	7320	0.28	2 x M10 F
SBS XC 580	2	580	678	124	206	520	33.0	7470	0.28	2 x M10 F
SBS XC 680	2	680	795	145	206	520	38.5	8800	0.24	2 x M10 F
SBS XC 780	2	780	912	166	206	520	44.0	9000	0.23	2 x M10 F
SBS XC 900	2	900	1052	145	206	695	50.0	8110	0.26	2 x M10 F
SBS XC 970 ⁽⁵⁾	2	970	1132	145	206	695	56.5	9100	0.23	2 x M10 F
SBS XC 1200 ⁽⁵⁾	2	1260	1465	210	191	695	78.0	11300	0.19	4 x M10 F
SBS XC 1500 ⁽⁵⁾	2	1560	1814	210	233	695	93.5	14100	0.15	4 x M10 F
SBS XC 1800 ⁽⁵⁾	2	1870	2174	210	275	695	112.0	16900	0.12	4 x M10 F

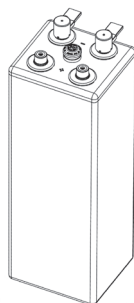
Notes:

(1) Figures obtained via IEC method. (2) With integral or rope handles. (3) Manifold built-in as standard. (4) Manifold available as an option (increases product height by 12mm). (5) Specification are preliminary and subject to change.

Typical Outline Drawings



12V blocs



2V cells



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