



Battery Range Summary

As the increased need for digital information continues, both telecom and cable suppliers need to keep up. They have responded by adding additional equipment in central offices and data centers – adding heat to an already fragile environment. Cooling costs continue to rise and are escalated by the density of communication equipment. These extra costs have led to the development of a new battery designed to operate at higher temperatures, allowing end users to raise the AC set points and reduce their maintenance costs.

The next generation of front terminal batteries from EnerSys®. The PowerSafe SBS XL series comes from a respected lineage, the industry leading, PowerSafe SBS Thin Plate Pure Lead (TPPL) battery. PowerSafe SBS XL takes the SBS to the next level. The PowerSafe SBS XL battery is designed to provide 10 years of life at 95°F (35°C) in back up applications at high operating temperatures. The value of this innovative new line is a true cost savings to the operator for both cooling and maintenance.

Product Characteristics

- Wide operating temperature range -40°F (-40°C) to 149°F (65°C)
- Front terminal design
- UL 94 V-0 Plastic
- Designed for operation in accordance with Telcordia® GR-4228 Level III, NEBS™ GR-63
- Designed to comply with the requirements of the international IEC 60896-21/22 standard
- 20 year design life @ 77°F (20°C)
- 10 year design life @ 95°F (35°C)



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Construction

- Positive Plates - utilize TPPL technology
- Negative Plates - provide perfect balance with the positive plate to ensure optimum recombination efficiency
- Separators - superior quality microporous glass mat separators with high absorption and stability
- Containers and Lids - UL94 V-0 rated flame retardant Polycarbonate (PC) - ABS material, highly resistant to elevated temperatures, shocks and vibrations
- Electrolyte - high grade dilute sulphuric acid absorbed into separator material
- Terminals - high integrity leak resistant terminal seal design
- Terminals - 2 X M6 Male
- Self-regulating Pressure Relief Valves - prevent ingress of atmospheric oxygen
- Flame Arrestors - built into each bloc for increased operational safety

Installation & Operation

- Designed for operation at high temperatures in float applications
- Wide operating temperature: -40°F (-40°C) to 149°F (65°C)
- Classic industry container footprint
- Designed for use in cabinets or on stands, close to the point of use; separate battery room is not required
- Blocs should be installed on their base or horizontally on their longest sides
- Up to two year shelf life due to low rate of self-discharge
- Low maintenance; no water addition required

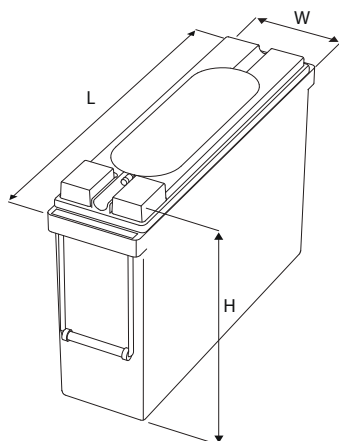
Standards

- Approved as non-hazardous cargo for ground, sea and air transportation in accordance with US DOT Regulation 49 and ICAO & IATA Packing instruction 806
- Designed to be compliant with international standard IEC 60896/21 and 22
- Designed to be compliant with Telcordia® GR-4228
- The management systems governing the manufacture of this product are ISO 9001:2008, ISO 14001:2004 and OHSAS 18001 certified.

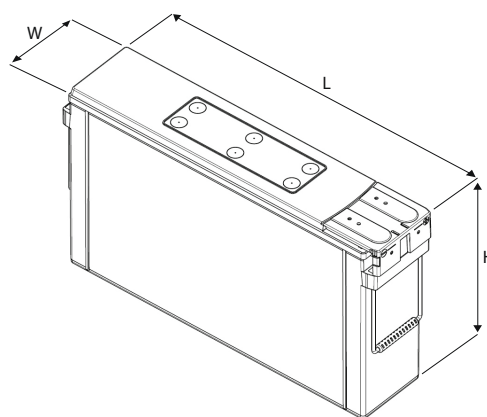
General Specifications

PowerSafe Battery Type	Nominal Voltage (V)	Nominal Ah				Nominal Dimensions						Typical Weight		Short Circuit Current (Amps)	Internal Resistance Milli-Ohms	Electrolyte 1.33SG Weight (per bloc)		Lead Weight (per bloc)		Pure Acid (H ₂ SO ₄) Volume (per bloc)	
		8hr. Rate 1.75Vpc @ 77°F*	8hr. Rate 1.75Vpc @ 95°F*	10hr. Rate 1.75Vpc @ 68°F*	10hr. Rate 1.75Vpc @ 95°F*	Lenght		Width		Height						lbs	kg	lbs	kg	gal	L
		in	mm	in	mm	in	mm	lbs	kg												
SBSXL 80F-FT	12	78.4	80	80	82.5	16.4	417	4.1	105	10.1	256	58.8	26.7	1700	7.7	11.46	5.2	41.4	18.8	0.32	1.23
SBSXL 150F-FT	12	147.2	150.4	150	155	22.1	561	4.9	125	11.1	283	111.7	50.7	2950	4.4	21.82	9.9	78.2	35.5	0.62	2.35
SBSXL 170F-FT	12	167.2	170.4	170	175	22.1	561	4.9	125	12.4	316	127.8	58	4100	3	25.57	11.6	89.5	40.6	0.73	2.75

Outline Drawings



SBS XL 80F



SBS XL 150F-FT and SBS XL 170F-FT

Discharge Currents (Amperes) 77°F (25°C)

PowerSafe Battery Type	Standby Time (Minutes)					Standby Time (Hours)										
	V _{pc}	30	35	40	45	1	2	3	4	5	6	7	8	9	10	20
SBSXL 80F-FT	1.75	89.98	80.79	73.46	67.45	54.48	31.88	22.88	17.89	14.77	12.63	11.05	9.83	8.87	8.08	4.33
	1.80	82.56	74.51	68.06	62.68	51.05	30.45	22.15	17.52	14.56	12.5	10.97	9.79	8.852	8.084	4.33
	1.85	71.25	54.73	59.39	54.97	45.6	27.81	20.44	16.28	13.59	11.7	10.29	9.2	8.33	7.6	4.13
SBSXL 150F-FT	1.75	168.1	150.9	137.3	126.1	101.9	59.68	42.85	33.52	27.69	23.66	20.71	18.43	16.63	15.16	7.98
	1.80	154.3	139.2	127.2	117.2	95.49	57	41.49	32.82	27.29	23.42	20.56	18.35	16.6	15.16	7.98
	1.85	133.2	121	111.1	102.8	85.31	52.07	38.29	30.51	25.46	21.93	19.29	17.25	15.62	14.24	7.59
SBSXL 170F-FT	1.75	192.9	173.1	157.3	144.3	116.4	67.98	48.73	38.08	31.43	26.85	23.49	20.9	18.85	17.18	9.21
	1.80	176.9	159.5	145.6	134.1	109.1	64.92	47.18	37.29	30.98	26.58	23.32	20.81	18.81	17.18	9.21
	1.85	152.5	138.5	127	117.5	97.37	59.28	43.53	34.65	28.9	24.88	21.88	19.55	17.7	16.16	8.76

Discharge Currents (Amperes) 95°F (35°C)

PowerSafe Battery Type	Standby Time (Minutes)					Standby Time (Hours)										
	V _{pc}	30	35	40	45	1	2	3	4	5	6	7	8	9	10	20
SBSXL 80F-FT	1.75	94.2	84.4	76.6	70.2	56.5	32.7	23.5	18.3	15.1	12.9	11.3	10	9.05	8.25	4.43
	1.80	86	77.5	70.7	65.1	52.7	31.2	22.7	17.9	14.8	12.7	11.2	9.99	9.03	8.25	4.43
	1.85	73.7	67	61.4	56.7	46.9	28.5	20.9	16.6	13.8	11.9	10.5	9.38	8.5	7.76	4.22
SBSXL 150F-FT	1.75	176	158	143	131	106	61.3	44	34.3	28.3	24.1	21.1	18.8	17	15.5	8.16
	1.80	161	145	132	122	98.6	58.5	42.5	33.5	27.8	23.9	21	18.7	16.9	15.5	8.16
	1.85	138	125	115	106	87.7	53.3	39.2	31.1	25.9	22.4	19.7	17.6	15.9	14.5	7.76
SBSXL 170F-FT	1.75	202	181	164	150	121	69.8	50	38.9	32.1	27.4	24	21.3	19.2	17.5	9.41
	1.80	184	166	151	139	113	66.6	48.4	38.1	31.6	27.1	23.8	21.2	19.2	17.5	9.41
	1.85	158	143	131	121	100	60.7	44.5	35.3	29.5	25.4	22.3	19.9	18.1	16.5	8.98



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