

## RANGE SUMMARY

The EnerSys™ range of PowerSafe™ SBS batteries continues to offer unrivalled choice and performance in compact and energy dense configurations. PowerSafe™ SBS batteries are manufactured to the highest international standards and are ideal for reliable use in all wireless and fixed-line communication applications. PowerSafe™ SBS batteries are also widely used in cable TV, emergency lighting, power generation and offshore applications.

The PowerSafe™ SBS battery range is available in several configurations including the front terminal series which has become extremely popular in leading edge telecom applications. Smaller than the competition, the design of the front terminal series offers improved flexibility where space is limited and makes installation and maintenance easier and faster.

PowerSafe™ SBS batteries are designed to cope with raised temperatures and harsh environments. The advanced plate technology and manufacturing methods, used by EnerSys™, make PowerSafe™ SBS batteries the first choice for long and trouble-free service. The maximum operating temperature of the PowerSafe™ SBS J battery series can be extended to 80°C via an optional metal jacket.

### Features & Benefits

- Capacity range: 7Ah - 360Ah
- 2V, 6V, and 12V configurations
- Choice of top and front terminal designs
- High energy density
- Long design life
- Up to two year shelf life
- Wide operating temperature range:  
-40°C to +50°C



## 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
- Container and lids - UL94 V-0 rated flame retardant material, highly resistant to shock and vibration (J types are Noryl, all others are ABS)
- Electrolyte - high grade dilute sulphuric acid absorbed into separator material
- Terminal design - leak resistant patented dual seal terminal design

- Self-regulating pressure relief valves - prevent ingress of atmospheric oxygen
- Flame arrestors - built into each bloc for increased operational safety

## Installation and Operation

- 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
- PowerSafe™ SBS batteries can be mounted in any orientation except inverted
- Recommended float charge voltage: 2.29Vpc @ 20°C (68°F) or 2.27Vpc @ 25°C (77°F)
- Up to two year shelf life
- Low maintenance: no water addition required

- Several PowerSafe™ SBS battery types are also available for underwater applications

## Standards

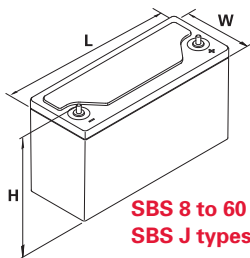
- Designed to be compliant with international standard IEC 60896/21 & 22 and BS 6290 Part 4 (1997)
- Classified as "Long Life" according to Eurobat guide 1999
- Conforms to Telcordia SR-4228
- Recognised by UL (UL Standard 1989)
- Approved as non-hazardous cargo for ground, sea and air transportation in accordance with US DOT Regulation 49 and ICAO & IATA Packing Instruction 806
- Manufactured in EnerSys™ production facilities certified to ISO 9001:2000 and ISO 14001

## General Specifications

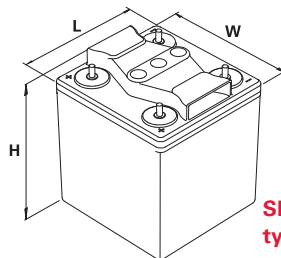
| Type                    | Number of Cells | Nominal Voltage (V) | Nominal Capacity (Ah)        |                             | Nominal Dimensions |           |          |          |           |           | Typical Weight |      | Short Circuit Current (A) <sup>(3)</sup> | Internal Resistance (mΩ) <sup>(3)</sup> | Terminals |
|-------------------------|-----------------|---------------------|------------------------------|-----------------------------|--------------------|-----------|----------|----------|-----------|-----------|----------------|------|--|---|-----------|
|                         |                 |                     | 10 hr rate to 1.80Vpc @ 20°C | 8 hr rate to 1.75Vpc @ 77°F | Length mm          | Length in | Width mm | Width in | Height mm | Height in | kg             | lbs  |  |   |           |
| SBS 8                   | 6               | 12                  | 7                            | 7                           | 138                | 5.4       | 86       | 3.4      | 101       | 4.0       | 2.7            | 5.9  | 455                                      | 27.1                                    | M4 F      |
| SBS 15                  | 6               | 12                  | 14                           | 14                          | 200                | 7.9       | 77       | 3.0      | 140       | 5.5       | 5.7            | 12.5 | 891                                      | 13.5                                    | M6 M      |
| SBS 30                  | 6               | 12                  | 26                           | 26                          | 250                | 9.8       | 97       | 3.8      | 156       | 6.1       | 9.5            | 20.9 | 1556                                     | 7.9                                     | M6 M      |
| SBS HB30 <sup>(1)</sup> | 6               | 12                  | 26                           | 26                          | 250                | 9.8       | 97       | 3.8      | 156       | 6.1       | 9.6            | 21.1 | 1556                                     | 7.9                                     | harness   |
| SBS 40                  | 6               | 12                  | 38                           | 38                          | 250                | 9.8       | 97       | 3.8      | 206       | 8.1       | 12.7           | 28.0 | 2184                                     | 5.6                                     | M6 M      |
| SBS 60                  | 6               | 12                  | 51                           | 51                          | 220                | 8.7       | 121      | 4.8      | 261       | 10.3      | 18.5           | 40.7 | 2618                                     | 4.4                                     | M6 M      |
| SBS 110                 | 3               | 6                   | 115                          | 116                         | 200                | 7.9       | 208      | 8.2      | 239       | 9.4       | 21.2           | 46.6 | 3804                                     | 1.7                                     | M8 M      |
| SBS 130                 | 3               | 6                   | 132                          | 133                         | 200                | 7.9       | 208      | 8.2      | 239       | 9.4       | 22.7           | 49.9 | 4111                                     | 1.4                                     | M8 M      |
| SBS 300                 | 1               | 2                   | 310                          | 307                         | 200                | 7.9       | 208      | 8.2      | 239       | 9.4       | 21.7           | 47.7 | 8700                                     | 0.23                                    | M8 M      |
| SBS 390                 | 1               | 2                   | 360                          | 361                         | 200                | 7.9       | 208      | 8.2      | 239       | 9.4       | 23.2           | 51.0 | 11101                                    | 0.18                                    | M8 M      |
| SBS J13                 | 6               | 12                  | 12                           | 12                          | 175                | 6.9       | 83       | 3.3      | 129       | 5.1       | 5.7            | 12.6 | 957                                      | 13.0                                    | M6 F      |
| SBS J16                 | 6               | 12                  | 15                           | 15                          | 181                | 7.1       | 76       | 3.0      | 167       | 6.6       | 6.7            | 14.8 | 1111                                     | 11.0                                    | M6 F      |
| SBS J30                 | 6               | 12                  | 26                           | 26                          | 166                | 6.5       | 175      | 6.9      | 125       | 4.9       | 11.8           | 26.0 | 1766                                     | 7.0                                     | M6 F      |
| SBS J40                 | 6               | 12                  | 39                           | 39                          | 196                | 7.7       | 165      | 6.5      | 170       | 6.7       | 17.4           | 38.2 | 2400                                     | 5.2                                     | M6 F      |
| SBS J70                 | 6               | 12                  | 64                           | 64                          | 329                | 12.9      | 166      | 6.5      | 174       | 6.9       | 27.6           | 60.9 | 3500                                     | 3.5                                     | M6 F      |
| SBS B8 <sup>(2)</sup>   | 6               | 12                  | 31                           | 31                          | 280                | 11.0      | 97       | 3.8      | 159       | 6.3       | 10.3           | 22.7 | 1584                                     | 7.7                                     | M8 F      |
| SBS B10 <sup>(2)</sup>  | 6               | 12                  | 38                           | 38                          | 280                | 11.0      | 97       | 3.8      | 184       | 7.2       | 12.8           | 28.2 | 1968                                     | 6.2                                     | M8 F      |
| SBS B14 <sup>(2)</sup>  | 6               | 12                  | 62                           | 62                          | 280                | 11.0      | 97       | 3.8      | 264       | 10.4      | 19.1           | 42.0 | 3210                                     | 3.8                                     | M8 F      |
| SBS C11 <sup>(2)</sup>  | 6               | 12                  | 92                           | 91                          | 395                | 15.6      | 105      | 4.1      | 264       | 10.4      | 28.0           | 61.6 | 3696                                     | 3.3                                     | M8 F      |
| SBS 145 <sup>(2)</sup>  | 6               | 12                  | 151                          | 148                         | 429                | 16.9      | 173      | 6.8      | 238       | 9.4       | 45.0           | 100  | 4100 <sup>(4)</sup>                      | 3.0 <sup>(4)</sup>                      | M8 F      |
| SBS 170F                | 6               | 12                  | 170                          | 170                         | 561                | 22.1      | 125      | 4.9      | 283       | 11.1      | 52.5           | 116  | 3400 <sup>(4)</sup>                      | 4.0 <sup>(4)</sup>                      | M6 M      |
| SBS 190F                | 6               | 12                  | 190                          | 190                         | 561                | 22.1      | 125      | 4.9      | 316       | 12.4      | 60.0           | 133  | 3800 <sup>(4)</sup>                      | 3.3 <sup>(4)</sup>                      | M6 M      |

### Notes

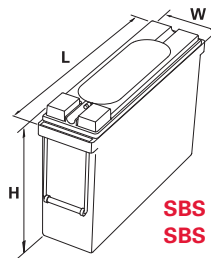
- <sup>(1)</sup> SBS HB30 battery is fitted with a 533mm/21 inch harness that terminates in a 2-pin polarised plug-in connector which is compatible with embedded power SLC systems.  
<sup>(2)</sup> SBS battery types B, C and 145 are available with terminals on the top face or on the front face. For front face terminals add 'FT Adapter' to the model number.  
<sup>(3)</sup> Figures obtained via BS6290 method.  
<sup>(4)</sup> Preliminary data.



**SBS 8 to 60 types  
SBS J types**



**SBS 110-390 types**



**SBS B & C types  
SBS 145, 170F & 190F types**



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