

## RANGE SUMMARY

The PowerSafe™ VX range comprises of front and top terminal models so they are suitable for installation in cabinets and equipment racks and on stands. The unique combination of pure lead and thick plate technologies, together with the selection of high grade materials, give PowerSafe VX products a design life of 10 years at 104°F (40°C), a claim unmatched by any other VRLA lead acid battery.

Additionally, PowerSafe VX offers a very long life at normal operating temperatures (20+ years at 77°F/25°C), hence making this range the best value solution in the market in terms of total cost of ownership.

EnerSys™ has earned an international reputation for quality and reliability based on more than 100 years experience in the manufacture of batteries, and is at the forefront of new product design to meet customers' increasing technical requirements.

The revolutionary VX series has taken sealed lead acid batteries into a new era. Originally designed for the telecommunications market, the PowerSafe VX range, with its unique specification, is also suitable for other applications such as electric utilities, UPS systems and railroad signalling.

### Features & Benefits

- Designed for applications in extreme environments
- 10 year design life at 104°F/40°C
- Low total cost of ownership
- UL94 V-0 flame retardant container and lid (halogen free)
- Lifting handles for easy installation
- Wide operating temperature range:  
-22°F to +122°F (-30°C to +50°C)
- Easy to recycle in standard facilities worldwide  
(no cadmium)



## Construction

- Positive plates - thick pure lead grids are designed to enhance corrosion resistance and prolong life
- Negative plates - positive to negative ratio is designed to ensure optimum recombination efficiency
- Separators - the electrolyte is completely absorbed within a low-resistance, microporous, glass-fiber material, preventing acid spills in case of accidental damage
- Containers, lids and covers - molded from halogen-free, polycarbonate ABS material, to ensure resistance to very high temperatures, shocks and vibrations
- Flame arrestors - built into the manifold of each bloc for increased operational safety
- Terminals - threaded brass insert for maximum conductivity
- Inter-bloc connectors - heavy straight-bar design to minimize voltage loss and to withstand high currents

- Post seals - high quality and integrity materials allow for longer life. Compression grommet is designed for long life
- Self-sealing relief valves - low pressure non-return valve prevents ingress of atmospheric oxygen
- Terminal insulating covers or lid covers - fitted as standard

- Up to one year shelf life
- Recommended float charge voltage  
2.280Vpc at 68°F/20°C  
2.265Vpc at 77°F/25°C
- Reduced maintenance: no water addition required

## Operation & Installation

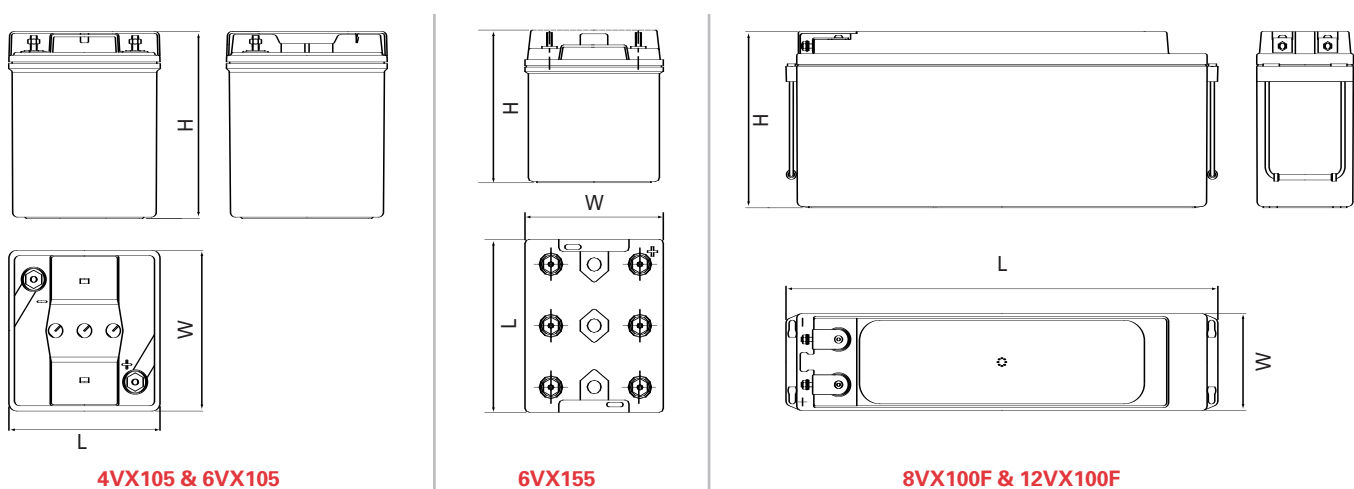
- The PowerSafe VX range of batteries is designed for installation in cabinets or on stands
- PowerSafe 4VX105 and 6VX105 can be mounted on their base or on their side with the plates in a vertical orientation, as shown in the diagram below
- PowerSafe 6VX155 can be mounted in any orientation except inverted
- It is recommended that PowerSafe 8VX100F and 12VX100F front terminal monoblocs are installed on their base

## Standards

- Tested according to international standard IEC 60896-21 and compliant to defined requirements of IEC 60896-22
- Designed to meet Telcordia SR-4228 requirements
- UL recognized (UL standard 1989)
- Approved to be shipped as non-hazardous cargo in accordance with the requirements of IMDG (International Maritime Code for Dangerous Goods) and OICA (Organization of International Civil Aviation)
- All EnerSys production facilities worldwide are certified to ISO 9001

## General Specifications

Type	Number of Cells	Nominal Voltage (V)	Nominal Capacity (Ah)		Nominal Dimensions						Typical Weight kg	lbs	Short Circuit Current (A)	Internal Resistance (mΩ)	Terminals
			10 hr rate to 1.80Vpc @ 20°C	8 hr rate to 1.75Vpc @ 77°F	Length mm	in	Width mm	in	Overall Height mm	in					
4VX105	2	4	103	103	191	7.5	202	8.0	235	9.3	16.5	36.4	3560	1.1	2 x M8 Male
6VX105	3	6	103	103	191	7.5	202	8.0	235	9.3	22.0	48.5	3560	1.7	2 x M8 Male
6VX155	3	6	154	155	292	11.5	202	7.9	228	9.0	33.0	72.8	4800	1.2	6 x M8 Male
8VX100F	4	8	100	100	384	15.1	125	4.9	228	9.0	32.0	70.5	3636	2.2	2 x M6 Male
12VX100F	6	12	100	100	558	22.0	125	4.9	228	9.0	47.5	104.7	3636	3.3	2 x M6 Male



www.enersys.com

**EnerSys**  
P.O. Box 14145  
Reading, PA 19612-4145  
USA  
Tel: +1-610-208-1991  
+1-800-538-3627  
Fax: +1-610-372-8613

**EnerSys EMEA**  
Brussels, Belgium  
Tel: +32 (0)2 247 94 47

**EnerSys Asia**  
Guangdong, China  
Tel: +86-755-2689 3639

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