

### RANGE SUMMARY

The PowerSafe V Front Terminal range of valve regulated lead acid batteries has been designed specifically for use in applications which demand the highest levels of security and reliability. With proven compliance to the most rigorous international standards, PowerSafe V is recognised worldwide as the premium battery for Telecom applications. PowerSafe V's reputation for long service life, together with excellent high rate performance, also makes it the number one choice for high integrity, high specification UPS systems.

PowerSafe V delivers superior performance while occupying less space than conventional standby power batteries. The PowerSafe V Front Terminal monobloc's compact design, suitable for 19", 23" and ETSI racking, provides users with the benefit of increased energy density. With all electrical connections at the front, installation and inspection are both quicker and easier.

PowerSafe V batteries are designed using proven gas recombination technology which removes the need for regular water addition by controlling the evolution of hydrogen and oxygen during charging. Oxygen evolved at the positive plates diffuses through microporous separators to the negative plates, and, by a series of chemical reactions within the cell, recombines to form water. Each cell incorporates its own safety valve that allows the controlled release of gas when pressure builds up within the cell.

The use of gas recombination technology for lead acid batteries has totally changed the concept of standby power. This technology provides the user with the freedom to use lead acid batteries in a wide range of applications.

#### Features & Benefits

- Capacity range: 31Ah - 155Ah
- Front terminal connections for fast and easy installation and maintenance
- Suitable for 19", 23" and ETSI racking
- UL94 V-0 flame retardant case and lid
- High reliability
- Proven long service life



## Construction

- Positive and negative plates in lead-tin-calcium for all types of 100Ah or more. All others in lead-tin alloy
- Separators in low resistance microporous glass fibre. The electrolyte is absorbed within this material, preventing acid spills in case of accidental damage
- Case and lid in flame retardant ABS material, highly resistant to shock and vibration
- Terminal with brass insert for maximum conductivity and with high compression grommet for long life
- Self-regulating pressure relief valve prevents ingress of atmospheric oxygen

## Installation & Operation

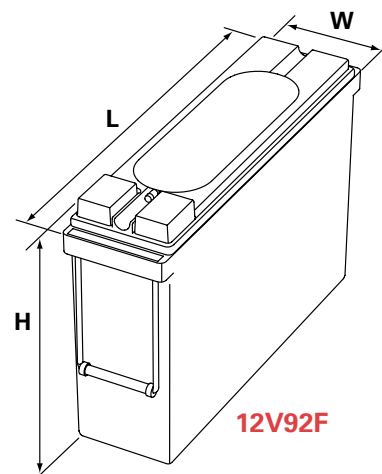
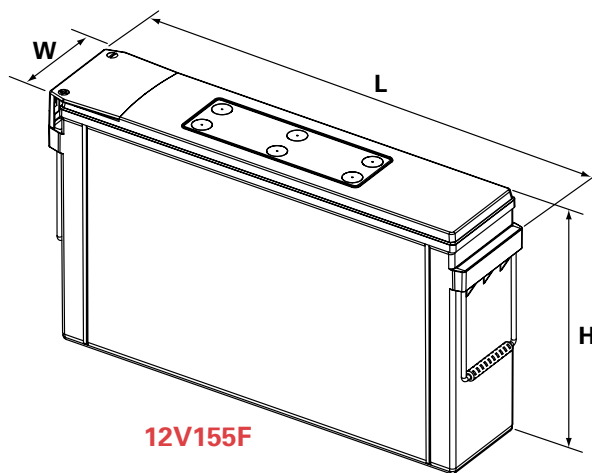
- The PowerSafe V Front Terminal range is designed for installation in cabinets or on stands, close to the point of use. A separate battery room is not necessary
- It is recommended that PowerSafe V Front Terminal monoblocs are installed on their base
- Recommended float charge voltage 2.280Vpc at 20°C (68°F) or 2.265Vpc at 25°C (77°F)
- Six months shelf life at 20°C
- Reduced maintenance: no water addition required

## Standards

- Compliant with BS 6290 Part 4 and IEC 60896-2
- Classified as “Long Life” according to the Eurobat Guide 1999
- Designed to be compliant with Telcordia SR-4228
- Recognised by UL (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 (Organisation of International Civil Aviation)
- Manufactured in EnerSys production facilities certified to ISO 9001

## General Specifications

Type	Number of Cells	Nominal Voltage (V)	Nominal Capacity (Ah)		Nominal Dimensions						Typical Weight kg	Typical Weight 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	Length in	Width mm	Width in	Height mm	Height in					
12V30F	6	12	31	31	280	11.0	97	3.8	159	6.3	10.8	23.8	1327	9.87	M8 F
12V38F	6	12	38	38	280	11.0	97	3.8	184	7.2	12.5	27.6	1500	8.53	M8 F
12V62F	6	12	62	62	280	11.0	97	3.8	264	10.4	19.7	43.5	2100	5.87	M8 F
12V92F	6	12	92	92	395	15.6	105	4.1	264	10.4	28.0	61.7	2500	5.05	M8 F
8V100F	4	8	100	100	384	15.1	125	4.9	228	9.0	32.0	70.5	3636	2.20	M6 M
12V100F	6	12	100	100	558	22.0	125	4.9	228	9.0	47.5	104.7	3636	3.30	M6 M
12V105F	6	12	105	107	561	22.1	125	4.9	235	9.3	46.0	101.4	3500	3.60	M6 M
12V125F	6	12	125	126	561	22.1	105	4.1	316	12.4	56.0	123.5	3818	3.30	M6 M
12V155F	6	12	155	158	561	22.1	125	4.9	316	12.4	67.0	147.7	4065	3.10	M6 M



www.enersysinc.com

**Global Headquarters**  
 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

**EnerSys Limited**  
 Rake Lane,  
 Clifton Junction,  
 Swinton, Manchester  
 M27 8LR, UK  
 Tel: +44 (0)161 794 4611  
 Fax: +44 (0)161 727 3809

Contact: