# Standard Range VRLA

EverExceed®
power your applications

Long Duration and High Performance

For Telecommunication
/ Electric Utility Applications



# ST-6160 VALVE REGULATED LEAD ACID BATTERY FOR TELECOM / ELECTRIC UTILITY APPLICATIONS 6V 160 AH @ 10 HR RATE 6V 183 AH @ 20 HR RATE



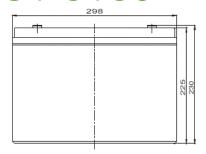
### **FEATURES**

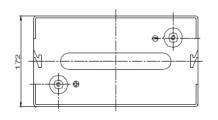
- Thick positive plate design for maximum service float life 10 year design life @ 25°C(77°F).
- UL Recognized component .
- Valve regulated lead acid battery (VRLA).
- High-Compression Absorbed Glass Mat technology (AGM) for greater than 99% recombination efficiency.
- Operates at a low internal pressure.
- Heavy duty insert copper alloy terminals for ease of assembly, reduced maintenance and increased safety.
- Advanced lead tin calcium alloy, reduces grid corrosion and promotes long battery life.
- Standard: Reinforced ABS (UL 94HB) container and cover Optional: Flame-retardant reinforced ABS container and cover compliant with U.L.94 V-0 with an Oxygen limiting Index of greater than 28%.
- Over-sized, through the partition inter-cell welds provide low resistance connections, with minimal power loss.
- Flame arresting, low pressure safety release venting system for individual cells, recognized per U.L. 924.
- Multicell design for ease of installation and maintenance.
- Horizontal or vertical operation.

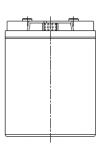
### 6 VOLTS - 160 AMPERE HOUR @ 10 HOUR RATE

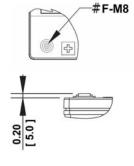
AH Capacity to 1.80VPC @ 77°F (25°C)											
End Point Volts/Cell 1.5hr 2hr 3hr 4hr 5hr 8hr 10hr 12hr									20hr		
1.80	115	122	131	136	141	153	160	163	179		

# ST-6160









ST-6160	ST-6160 – Specifications  Cells Voltage Weight Electrolyte CCA at -18°C (0°F) Short Circuit Ohms Imped									
Cells Per Unit	Voltage Per Unit	Weight	Electrolyte	CCA at -18°C (0°F)	Short Circuit Current	Ohms Imped 60 Hz (Ω)				
3	6.42	57.3 lbs 26.0 kg	Absorbed $H_2SO_4$ SG = 1.300	1080 Amps	4700 Amps	0.0024				

Capacity	183 Ah @ 20 hr. rate to 1.75 volts per cell @ 77°F (25°C). 160 Ah @ 10 hr. rate to 1.80 volts per cell @ 25°C (77°F).
Applicable Operating Temperature Range	-40°F (-40°C) to +140°F (60°C).
Ideal Operating Temperature Range	+68°F (+20°C) to +77°F (25°C).
Floating Charging Voltage	6.75 to 6.9 VDC/unit Average at 77°F (25°C).
Recommended Maximum Charging Current Limit	0.25C20 amperes (45.75 amperes @ 100% depth of discharge) @ 20 hr. rate.
Equalization and Cycle Service Charging Voltage	7.2 to 7.4 VDC/unit Average at 77°F (25°C).
Maximum AC Ripple (Charger)	0.5% RMS or 1.5% P-P of float charge voltage recommended for best results.  Maximum voltage allowed = 1.4% RMS (4% P-P).  Maximum current allowed = 9.15 amperes RMS (C/20).
Self Discharge	EverExceed Standard Range batteries may be stored for up to 6 months at 77°F (25°C) and then a freshening charge is required. For higher temperatures the time interval will be shorter.
Accessories	Inter unit connectors racks and cabinet systems are available.
Terminal: Inserted	Threaded copper alloy insert terminal
Terminal Hardware Initial Torque: Inserted Terminal	11 N-m

## Constant Power Discharge Ratings – Watts Per Cell @ 77°F (25°C)

Operating Time to End Point Voltage (in hour)										
End Point Volts/Cell	1.5	2	3	4	5	8	10	12	20	24
1.85	138	111	81.0	64.3	53.2	36.5	30.4	25.8	17.2	14.4
1.80	147	118	84.2	66.5	55.3	38.1	31.6	27.1	17.7	15.0
1.75	150	120	86.4	68.1	56.5	38.7	32.3	27.5	18.1	15.3

Constant Current Discharge Ratings – Amperes @ 77°F (25°C)											
Operating Time to End Point Voltage (in hour)											
End Point Volts/Cell	1.5	2	3	4	5	8	10	12	20	24	
1.85	71.6	57.5	41.4	32.5	27.0	18.2	15.0	12.7	8.36	7.06	
1.80	76.7	61.0	43.5	34.2	28.2	19.3	16.0	13.6	8.90	7.52	
1.75	77.9	62.7	45.0	35.2	29.1	19.9	16.4	14.0	9.14	7.72	

Note: Batteries to be mounted with 0.5 in (1.25 cm) spacing minimum and free air ventilation. Specifications subject to change without notification.