



EverExceed® Patented Robust AGM Technology

# ST-6100

## VALVE REGULATED LEAD ACID BATTERY

### FOR TELECOM / ELECTRIC UTILITY APPLICATIONS

6V 100 AH @ 10 HR to 1.80VPC

6V 112 AH @ 20 HR to 1.75VPC

# LONG DURATION

# HIGH PERFORMANCE



#### Innovative Features

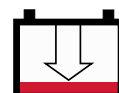
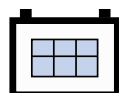
- ◆ Thick positive plate design for maximum service float life 12 years design life @ 20°C(68°F).
- ◆ Valve regulated lead acid battery (VRLA).
- ◆ High-Compression Absorbed Glass Mat technology (AGM) for greater than 99% recombination efficiency.
- ◆ Proprietary Fixed Orifice Plate Pasting technology applying active materials on both sides of the grid for consistent cell-to-cell performance, higher capacity and uniform grid protection.
- ◆ 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.
- ◆ 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.
- ◆ **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%.

6 VOLTS - 100 AMPERE HOUR @ 10 HOUR RATE

AH Capacity to 1.80VPC @ 68°F (20°C)

End Point Volts/Cell	60min	1.5hr	2hr	3hr	4hr	5hr	8hr	10hr	12hr	20hr
1.80	64.6	72.3	76.6	78.3	85.8	89.1	96.6	100	102	110

**For Telecom / Electric Utility Applications**



# Standard Range VRLA

**EverExceed®**  
power your applications

Electrical Specifications						
Cells Per Unit	Voltage Per Unit	Weight	Electrolyte	Maximum Discharge Current@5s	Short Circuit Current	Internal Resistance (mΩ)
3	6.42	35.2lbs 16.0kg	SG = 1.300	1200 Amps	2800 Amps	4.5

Capacity	100 Ah @ 10 hr. rate to 1.80 volts per cell @ 68°F (20°C). 112 Ah @ 20 hr. rate to 1.75 volts per cell @ 68°F (20°C).
Dimension	Length x Width x Height: 281 x 128 x 203 mm.
Applicable Operating Temperature Range	-40°F (-40°C) to +158°F (70°C).
Ideal Operating Temperature Range	+68°F (+20°C) to +82.4°F (28°C).
Floating Charging Voltage	6.75 to 6.90 VDC/unit Average at 68°F~77°F (20°C~25°C).
Recommended Maximum Charging Current Limit	25.0 Amperes ( 0.25C10 Amperes )
Equalization and Cycle Service Charging Voltage	7.05 to 7.20 VDC/unit Average at 68°F~77°F (20°C~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 = 0.50 amperes RMS (C/10).
Self Discharge	EverExceed Standard Range batteries may be stored for up to 12 months at 68°F~77°F (20°C~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	9 N-m

Constant Power Discharging Ratings - Watts Per Cell @ 20°C (68°F)												
End Point Volts/Cell	15min	30min	60min	1.5hr	2hr	3hr	4hr	5hr	8hr	10hr	12hr	20hr
1.85	296	196	129	86.6	69.9	48.1	40.0	33.7	23.1	19.3	17.3	10.9
1.80	302	200	132	91.6	73.3	50.7	41.7	34.7	23.9	19.7	18.6	11.2
1.75	320	207	136	94.1	75.1	51.6	42.4	35.4	24.2	20.2	18.8	11.3

Constant Current Discharging Ratings - Amperes Per Cell @ 20°C (68°F)												
End Point Volts/Cell	15min	30min	60min	1.5hr	2hr	3hr	4hr	5hr	8hr	10hr	12hr	20hr
1.85	159	104	63.3	44.9	36.1	24.7	20.3	17.0	11.7	9.66	8.21	5.31
1.80	162	106	64.6	48.1	38.2	26.1	21.3	17.7	12.0	10.0	8.50	5.50
1.75	177	109	67.0	49.7	39.2	26.8	22.0	18.3	12.4	10.2	8.67	5.61

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

