

# Cat® Double Conversion UPS - Battery Reference Guide

60 Hz  
40 -130 kVA UPS



## Type G Battery Cabinets

Adjacent Battery Cabinet - Ride Through Time		1 Cabinet					2 Cabinets					3 Cabinets					4 Cabinets								
		40kVA	50kVA	60kVA	80kVA	100kVA	130kVA	40kVA	50kVA	60kVA	80kVA	100kVA	130kVA	40kVA	50kVA	60kVA	80kVA	100kVA	130kVA	40kVA	50kVA	60kVA	80kVA	100kVA	130kVA
347-8514	ADJ BAT CABINET TYPE 150	11'30"	9'30"				30'	22'																	

Remote Battery Cabinet - Ride Through Time		1 Cabinet					2 Cabinets					3 Cabinets					4 Cabinets								
		40kVA	50kVA	60kVA	80kVA	100kVA	130kVA	40kVA	50kVA	60kVA	80kVA	100kVA	130kVA	40kVA	50kVA	60kVA	80kVA	100kVA	130kVA	40kVA	50kVA	60kVA	80kVA	100kVA	130kVA
347-8518	SA BAT CABINET TYPE 150	11'30"	9'30"				30'	22'																	

Adjacent Battery Cabinet Physical Data		HEIGHT	WIDTH	LENGTH	Cabinet Weight	Shipping Weight	QF1 Rating
347-8514	ADJ BAT CABINET TYPE 150	75	26.24	32.75	1878	1948	175A

Remote Battery Cabinet Physical Data		HEIGHT	WIDTH	LENGTH	Cabinet Weight	Shipping Weight	QF1 Rating
347-8518	SA BAT CABINET TYPE 150	75	26.48	32.75	1830	1900	175A

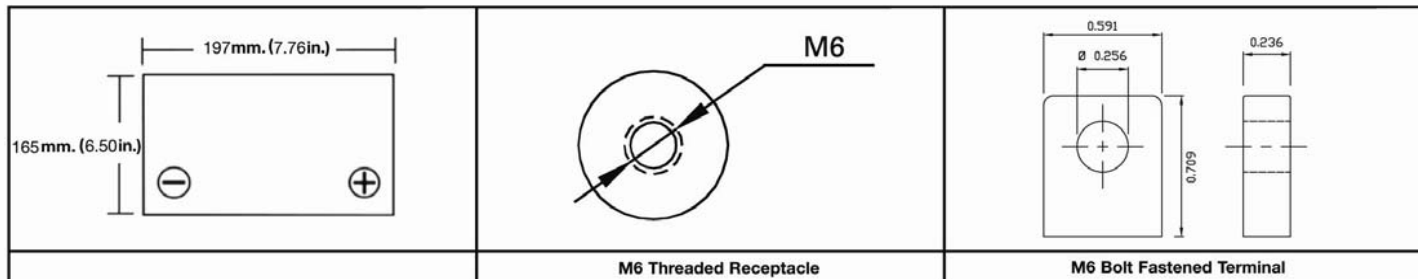
## Type G Battery Specifications

Operating Temperature Range with temperature compensation	Discharge: -4°F (-20°C) to 140°F (60°C) Charge: 5°F (-15°C) to 122°F (50°C)
Recommended Maximum Charging Current Limit	10.0A
Float Charging Voltage	13.50-13.80V
Shelf Discharge	Shelf life at 68°F (20°C) 1 month 97% 3 months 91% 6 months 85%
Terminal Hardware Initial Torque	M6 bolt - 44.31 lbf.in (5Nm) +/- 5% M6 receptacle - 65 lbf. in (6.8Nm) +/- 5%

## Type G Battery Features & Benefits

- Sealed construction - can be operated in any position without leakage
- Complies with non-spillable battery regulation, per IATA special provision A67 and 49CFR
- 50% more wattage available and a 30% reduction in size over conventional batteries
- Approved for shipping as non-hazardous, non-spillable
- UL-94 V0 rated, flame retardant plastic

## Type G Battery Details



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## Type B Battery Cabinets

Adjacent Battery Cabinet - Ride Through Time	1 Cabinet						2 Cabinets						3 Cabinets						4 Cabinets											
	40kVA	50kVA	60kVA	80kVA	100kVA	130kVA	40kVA	50kVA	60kVA	80kVA	100kVA	130kVA	40kVA	50kVA	60kVA	80kVA	100kVA	130kVA	40kVA	50kVA	60kVA	80kVA	100kVA	130kVA						
347-8515	ADJ BAT CABINET TYPE 300	30'	22'	17'	11'							30'																		
347-8516	ADJ BAT CABINET TYPE 400	44'	33'	26'	17'	12'	8'	90'	73'	59'	44'	34'	24'					90'												
347-8517	ADJ BAT CABINET TYPE 490	61'	46'	38'	25'	17'	11'	129'	103'	81'	61'	47'	34'					191'	162'	129'	95'	77'	55'		270'	207'	184'	129'	104'	79'

Remote Battery Cabinet - Ride Through Time	1 Cabinet						2 Cabinets						3 Cabinets						4 Cabinets												
	40kVA	50kVA	60kVA	80kVA	100kVA	130kVA	40kVA	50kVA	60kVA	80kVA	100kVA	130kVA	40kVA	50kVA	60kVA	80kVA	100kVA	130kVA	40kVA	50kVA	60kVA	80kVA	100kVA	130kVA							
347-8519	SA BAT CABINET TYPE 300	30'	22'	17'	11'							30'																			
347-8520	SA BAT CABINET TYPE 400	44'	33'	26'	17'	12'	8'	90'	73'	59'	44'	34'	24'					90'													
347-8521	SA BAT CABINET TYPE 490	61'	46'	38'	25'	17'	11'	129'	103'	81'	61'	47'	34'					191'	162'	129'	95'	77'	55'		270'	207'	184'	129'	104'	79'	

Adjacent Battery Cabinet Physical Data		HEIGHT	WIDTH	LENGTH	Cabinet Weight	Shipping Weight	QF1 Rating
347-8515	ADJ BAT CABINET TYPE 300	75	32.24	32.75	2950	3020	250A
347-8516	ADJ BAT CABINET TYPE 400	75	48.24	32.64	4120	4190	400A
347-8517	ADJ BAT CABINET TYPE 490	75	48.24	32.64	4120	4190	400A

Remote Battery Cabinet Physical Data		HEIGHT	WIDTH	LENGTH	Cabinet Weight	Shipping Weight	QF1 Rating
347-8519	SA BAT CABINET TYPE 300	75	33.48	32.75	2900	2970	250A
347-8520	SA BAT CABINET TYPE 400	75	48.48	32.64	4070	4140	400A
347-8521	SA BAT CABINET TYPE 490	75	48.48	32.64	4070	4140	400A

## Type B Battery Specifications

Operating Temperature Range with temperature compensation	Discharge: -40°F (-40°C) to +160°F (71°C) Charge: -10°F (-23°C) to +140°F (60°C)
Nominal Operating Temperature Range	+74°F (23°C) to +80°F (27°C)
Recommended Maximum Charging Current Limit	C/5 amperes @ 20hr rate
Float Charging Voltage	13.65 ± 0.15 VDC average per 12V unit (6.75 to 6.90 per 6V unit)
Maximum AC Ripple (Charger)	0.5% RMS or 1.5% P-P of float charge voltage recommended for best results. Max voltage allowed = 1.4% RMS (4% P-P) Max current allowed = c/20
Self Discharge	Battery can be stored up to 6 months at 77°F (25°C) before a freshening charge is required. Batteries stored at temperatures greater than 77°F (25°C) will require recharge sooner than batteries stored at lower temperatures.
Equalize charge and cycle service voltage	14.40 to 14.80 VDC average per 12V unit @ 77°F (25°C) (7.20 to 7.40 VDC per 6V unit.)
Terminal: Inserted	Threaded copper alloy insert terminal to accept 1/4-20 UNC bolt
Terminal Hardware Initial Torque: Inserted Terminal	110 in.-lbs. (12.4 N-m)

## Type B Battery Features & Benefits

- 10 year design life @ 25°C
- Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance.
- Patented Long Life Alloy having the lowest calcium levels in the industry - minimizing grid growth, reducing gassing, and extending battery life.
- Patented UL Recognized Flamearresting vents in each cell for safety and long life.
- Designed with the same recombination, thermal runaway prevention, gassing and flame retardant characteristics of the Bellcore 4228 compliant Dynasty Telecom products.
- Flame retardant polypropylene case and cover compliant with UL 1778
- 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.
- Thermally welded case-to-cover bond to eliminate leakage.
- Can be operated in any orientation. Upright, side or end mounting recommended.
- Not restricted for air transport - Complies with IATA/ICAO Special Provisions A67.
- Not restricted for surface transport - Classified as non-hazardous material as related to
- Not restricted for water transport - Classified as non-hazardous material per IMDG Ame

## Type B Battery Details

	Dimensions (inches)					
	A	B	C	D	E	F
UPS12-300MR	10.27 (260.9)	10.17 (258.4)	6.83 (173.4)	6.65 (168.9)	7.89 (200.3)	8.01 (203.5)
UPS12-400MR	13.42 (340.9)	12.75 (323.7)	6.80 (172.7)	6.54 (166.0)	8.40 (213.2)	8.52 (216.4)
UPS12-490MR	13.57 (344.7)	12.74 (323.6)	6.80 (172.7)	6.63 (168.4)	10.81 (274.5)	10.93 (277.7)

Battery Termination		
UPS 12-300MR	UPS12-400MR	UPS12-490MR

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