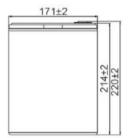


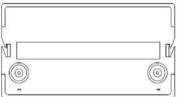
AccuForce 12V - 115Ah S

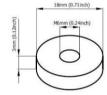
APPLICATIONS

- Solar / Wind power systems
- Residential installations
- Golf carts and electric powered vehicles
- Marine equipment
- Electric wheelchairs
- Traffic systems (signaling and lighting)
- Remote monitoring and controlling
- Power tools and cleaning machines
- Uninterruptible power supply (UPS)









SPECIFICATIONS

Number of cells 6 Cycle life Approx. 800 cycles at 50% DOD Length 330 mm Width 171 mm Height 214 mm Total Height 220 mm Weight 27.5 kg 120 hours rate (1.85) 119 Ah 48 hours rate (1.85) 117 Ah 48 hours rate (1.80) 99.8 Ah Internal Resistance 4.50 mOhm (fully charged, 25°C) 3% per month at 25°C Self Discharge approx. 3% per month at 25°C Nominal Operating 25°C Temperature Discharge -15°C to 45°C Operating Temperature Charge 0°C to 40°C Storage -15°C to 45°C Float Charging Voltage 2.27 to 2.30 V/cell at 25°C Temperature compensation -18mV/°C Cyclic Charging Voltage 2.40 to 2.47 V/cell at 25°C Temperature compensation -30mV/°C Maximum charging current 30.0 A Maximum discharge current (25°C) 850 A (5 sec.)	Naminal Valtana		12 V
Cycle life Approx. 800 cycles at 50% DOD Dimensions Length 330 mm Width 171 mm 171 mm Height 214 mm 220 mm Weight 27.5 kg 120 hours rate (1.85) 119 Ah Nominal Capacity (25°C) 120 hours rate (1.85) 117 Ah 48 hours rate (1.80) 110 Ah 10 hours rate (1.80) 99.8 Ah Internal Resistance 4.50 mOhm 4.50 mOhm (fully charged, 25°C) 3% per month at 25°C Self Discharge approx. 3% per month at 25°C Nominal Operating Temperature 25°C Operating Temperature Charge 0°C to 40°C Charge 0°C to 40°C Storage -15°C to 45°C Temperature compensation -18mV/°C Cyclic Charging Voltage 2.40 to 2.47 V/cell at 25°C Temperature compensation -30mV/°C Maximum charging current 30.0 A Maximum discharge current (25°C) 850 A (5 sec.)	_		
Length 330 mm			
Dimensions Width	Cycle life		prox. 800 cycles at 50% DOD
Dimensions Height 214 mm Total Height 220 mm Weight 27.5 kg 120 hours rate (1.85) 119 Ah 100 hours rate (1.80) 110 Ah 10 hours rate (1.80) 99.8 Ah Internal Resistance 4.50 mOhm (fully charged, 25°C) 4.50 mOhm Self Discharge approx. 3% per month at 25°C Nominal Operating 25°C Nominal Operating 25°C Operating Temperature Charge 0°C to 40°C Float Charging Voltage 2.27 to 2.30 V/cell at 25°C Float Charging Voltage 2.27 to 2.30 V/cell at 25°C Temperature compensation -18mV/°C Cyclic Charging Voltage 2.40 to 2.47 V/cell at 25°C Temperature compensation -30mV/°C Maximum charging current 30.0 A Maximum discharge current (25°C) 850 A (5 sec.)		Length	330 mm
Total Height 220 mm	Dimensions	Width	171 mm
Weight 27.5 kg Nominal Capacity (25°C) 120 hours rate (1.85) 119 Ah 100 hours rate (1.85) 117 Ah 48 hours rate (1.80) 110 Ah 10 hours rate (1.80) 99.8 Ah Internal Resistance 4.50 mOhm (fully charged, 25°C) approx. 3% per month at 25°C Nominal Operating 25°C Temperature Discharge -15°C to 45°C Operating Temperature range Charge 0°C to 40°C Storage -15°C to 40°C Float Charging Voltage 2.27 to 2.30 V/cell at 25°C Temperature compensation -18mV/°C Cyclic Charging Voltage 2.40 to 2.47 V/cell at 25°C Temperature compensation -30mV/°C Maximum charging current 30.0 A Maximum discharge current (25°C) 850 A (5 sec.)		Height	214 mm
120 hours rate (1.85) 119 Ah		Total Height	220 mm
Nominal Capacity (25°C) 100 hours rate (1.85) 117 Ah 48 hours rate (1.80) 110 Ah 10 hours rate (1.80) 99.8 Ah Internal Resistance (fully charged, 25°C) Self Discharge Approx. 3% per month at 25°C Nominal Operating Temperature Discharge Charge Operating Temperature range Discharge Charge O°C to 40°C Storage Temperature compensation -18mV/°C Cyclic Charging Voltage Temperature compensation Amazimum charging current Maximum discharge current (25°C) 117 Ah 48 hours rate (1.85) 117 Ah 48 hours rate (1.80) 110 Ah 10 hours rate (1.85) 117 Ah 48 hours rate (1.80) 110 Ah 11	Weight		27.5 kg
Nominal Capacity (25°C) 48 hours rate (1.80) 110 Ah 10 hours rate (1.80) 99.8 Ah Internal Resistance (fully charged, 25°C) Self Discharge Nominal Operating Temperature Discharge Charge Charge Storage 1-15°C to 45°C Charge Storage 1-15°C to 40°C Float Charging Voltage Temperature compensation -18mV/°C Cyclic Charging Voltage Temperature compensation Amaximum charging current Maximum discharge current (25°C) 110 Ah 110 A		120 hours rate (1.85)	119 Ah
48 hours rate (1.80) 110 Ah 10 hours rate (1.80) 99.8 Ah Internal Resistance (fully charged, 25°C) Self Discharge approx. 3% per month at 25°C Nominal Operating Temperature Discharge -15°C to 45°C Operating Temperature range Charge 0°C to 40°C Storage -15°C to 40°C Storage 2.27 to 2.30 V/cell at 25°C Temperature compensation -18mV/°C Cyclic Charging Voltage 2.40 to 2.47 V/cell at 25°C Maximum charging current 30.0 A Maximum discharge current (25°C) 850 A (5 sec.)	Nominal Canacity (25°C)	100 hours rate (1.85)	117 Ah
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(fully charged, 25°C) Self Discharge approx. 3% per month at 25°C Nominal Operating Temperature Operating Temperature Charge 0°C to 40°C Storage -15°C to 40°C Float Charging Voltage 2.27 to 2.30 V/cell at 25°C Temperature compensation -18mV/°C Cyclic Charging Voltage 2.40 to 2.47 V/cell at 25°C Temperature compensation -30mV/°C Maximum charging current 30.0 A Maximum discharge current (25°C) 850 A (5 sec.)		10 hours rate (1.80)	99.8 Ah
(fully charged, 25°C) Self Discharge approx. 3% per month at 25°C Nominal Operating Temperature 25°C Operating Temperature range Discharge -15°C to 45°C Charge 0°C to 40°C Storage -15°C to 40°C Float Charging Voltage 2.27 to 2.30 V/cell at 25°C Temperature compensation -18mV/°C Cyclic Charging Voltage 2.40 to 2.47 V/cell at 25°C Temperature compensation -30mV/°C Maximum charging current 30.0 A Maximum discharge current (25°C) 850 A (5 sec.)	Internal Resistance		4 F0 m0hm
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Temperature Discharge Charge Charge Storage Charge Charge Storage Charge Char	Self Discharge	ар	prox. 3% per month at 25°C
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range Charge 0°C to 40°C Storage -15°C to 40°C Float Charging Voltage 2.27 to 2.30 V/cell at 25°C Temperature compensation -18mV/°C Cyclic Charging Voltage 2.40 to 2.47 V/cell at 25°C Temperature compensation -30mV/°C Maximum charging current 30.0 A Maximum discharge current (25°C) 850 A (5 sec.)	On another Tanana and the	Discharge	-15°C to 45°C
Float Charging Voltage 2.27 to 2.30 V/cell at 25°C Temperature compensation -18mV/°C Cyclic Charging Voltage 2.40 to 2.47 V/cell at 25°C Temperature compensation -30mV/°C Maximum charging current 30.0 A Maximum discharge current (25°C) 850 A (5 sec.)		Charge	0°C to 40°C
Temperature compensation -18mV/°C Cyclic Charging Voltage 2.40 to 2.47 V/cell at 25°C Temperature compensation -30mV/°C Maximum charging current 30.0 A Maximum discharge current (25°C) 850 A (5 sec.)	J	Storage	-15°C to 40°C
Cyclic Charging Voltage 2.40 to 2.47 V/cell at 25°C Temperature compensation -30mV/°C Maximum charging current 30.0 A Maximum discharge current (25°C) 850 A (5 sec.)	Float Charging Voltage		2.27 to 2.30 V/cell at 25°C
Temperature compensation -30mV/°C Maximum charging current 30.0 A Maximum discharge current (25°C) 850 A (5 sec.)	Temperature compensation		-18mV/°C
Maximum charging current 30.0 A Maximum discharge current (25°C) 850 A (5 sec.)	Cyclic Charging Voltage		2.40 to 2.47 V/cell at 25°C
Maximum discharge current (25°C) 850 A (5 sec.)	Temperature compensation		-30mV/°C
	Maximum charging current		30.0 A
Short Circuit Current (25°C) 1300 A	Maximum discharge current (25°C)		850 A (5 sec.)
	Short Circuit Current (25°C)		1300 A

PERFORMANCE DATA

Discharge Constant Current at 25°C (Amperes)

End Voltage (V/cell)	15min	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h	48h	72h	100h	120h
1.60V	158	96.9	60.0	35.7	24.9	20.5	17.7	15.3	12.1	10.2	5.33				
1.65V	154	94.9	59.2	35.5	24.8	20.4	17.5	15.0	12.1	10.2	5.32				
1.70V	148	92.0	57.6	35.2	24.6	20.2	17.4	15.0	12.0	10.1	5.31	2.33			
1.75V	144	89.8	56.5	34.7	24.5	20.1	17.4	15.2	11.9	10.1	5.28	2.32	1.56		
1.80V	136	86.5	54.7	33.9	23.8	19.5	16.9	14.7	11.5	9.98	5.24	2.30	1.55		
1.85V	128	81.2	51.4	31.9	22.4	18.3	15.8	13.7	10.8	9.38	4.93	2.16	1.46	1.17	0.99

Discharge Constant Power at 25°C (Watts/Cell)

End Voltage (V/cell)	15min	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h	48h	72h	100h	120h
1.60V	289	181	114	68.9	48.9	40.2	34.8	30.2	23.9	20.3	10.7				
1.65V	283	178	112	68.6	48.6	39.9	34.6	30.0	23.9	20.2	10.7				
1.70V	272	172	110	67.9	48.3	39.7	34.3	29.8	23.7	20.2	10.6	4.67			
1.75V	263	168	107	67.1	47.9	39.4	34.1	29.5	23.5	20.0	10.6	4.64	3.12		
1.80V	249	162	104	65.2	46.4	38.2	33.1	28.6	22.7	19.8	10.5	4.60	3.11		
1.85V	234	152	97.5	61.4	43.7	35.8	31.1	26.7	21.3	18.6	9.84	4.33	2.91	2.32	1.98

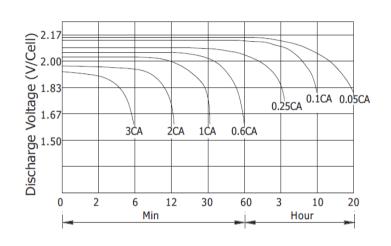
Note: The above characteristics data can be obtained within three charge/discharge cycles.



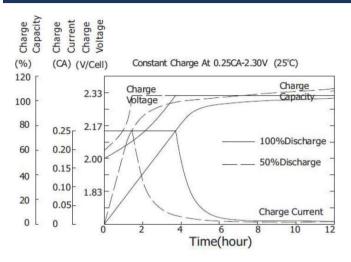


AccuForce 12V - 115Ah S

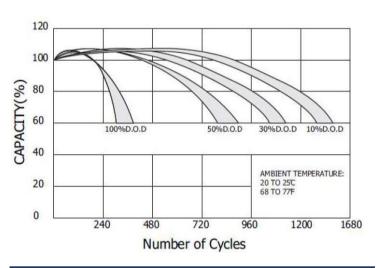
Discharge Characteristics (25°C)



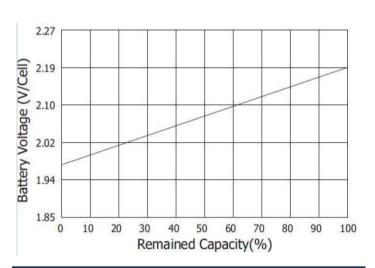
Charging Characteristics (25°C)



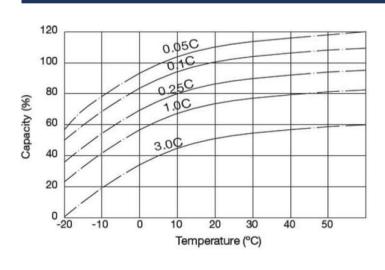
Cycle Service Life in Relation to Depth of Discharge



Relationship Between OCV and Residual Capacity (25°C)



Temperature Effects on Capacity



Self Discharge characteristics

