The Charging Algorithms of the Program BJ115Aa6

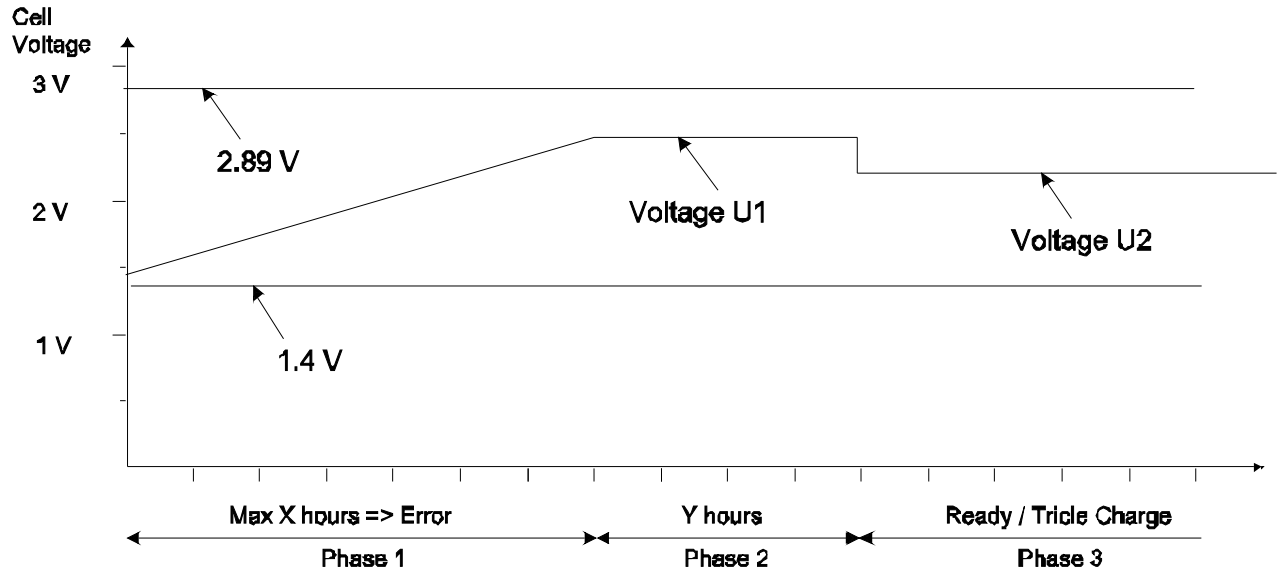
Status LED:

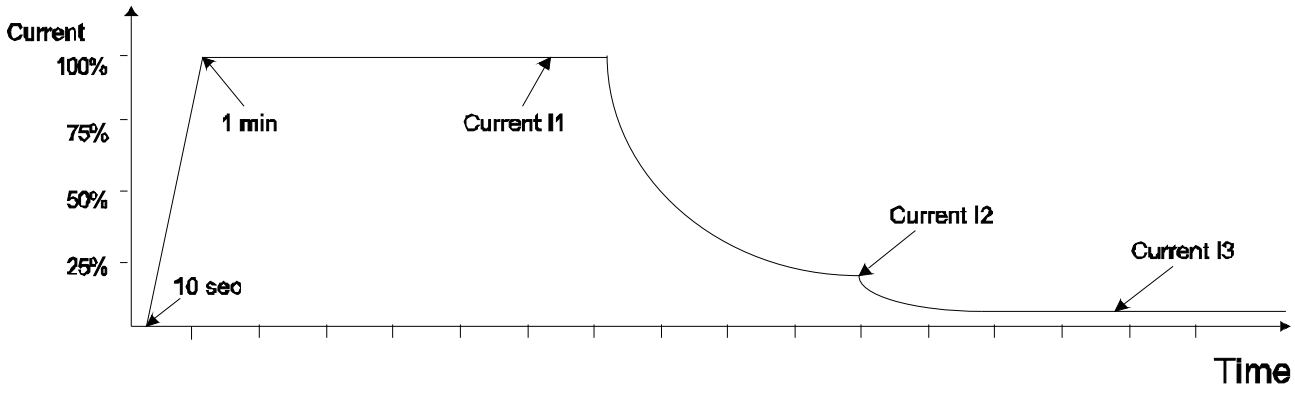
Whole main charging	=	orange
Ready/Trickle charge	=	green
Error	=	flashing red
No Algorithm	=	red
Code switch test	=	flashing green

Charging algorithms for 24V, 60A PAC 1600N:

Switch position	Battery Voltage	Battery type	Charging Current	Battery capacity	Charging curve
0	24 V	Unsealed	50 A	150 - 200 Ah	A
1	24 V	Unsealed	60 A	200 - 280 Ah	A
2	24 V	Unsealed	60 A	280 - 380 Ah	A
3	24 V	Unsealed	60 A	380 – 500 Ah	A
4	24 V	Unsealed	60 A	500 – 600 Ah	A
5	24 V	Sealed	50 A	150 – 200 Ah	B
6	24 V	Sealed	60 A	200 – 280 Ah	B
7	24 V	Sealed	60 A	280 - 380 Ah	B
8	24 V	Sealed	60 A	380 – 500 Ah	B
9	24 V	Sealed	60 A	500 - 600 Ah	B
10 = A	24 V	Sonnenschein	50 A	150 - 200 Ah	C
11 = B	24 V	Sonnenschein	60 A	200 – 280 Ah	C
12 = C	24 V	Sonnenschein	60 A	280 - 380 Ah	C
13 = D	24 V	Sonnenschein	60 A	380 – 500 Ah	C
14 = E	24 V	Sonnenschein	60 A	500 - 600 Ah	C
15 = F				No algorithm(Service)	

Unsealed Battery

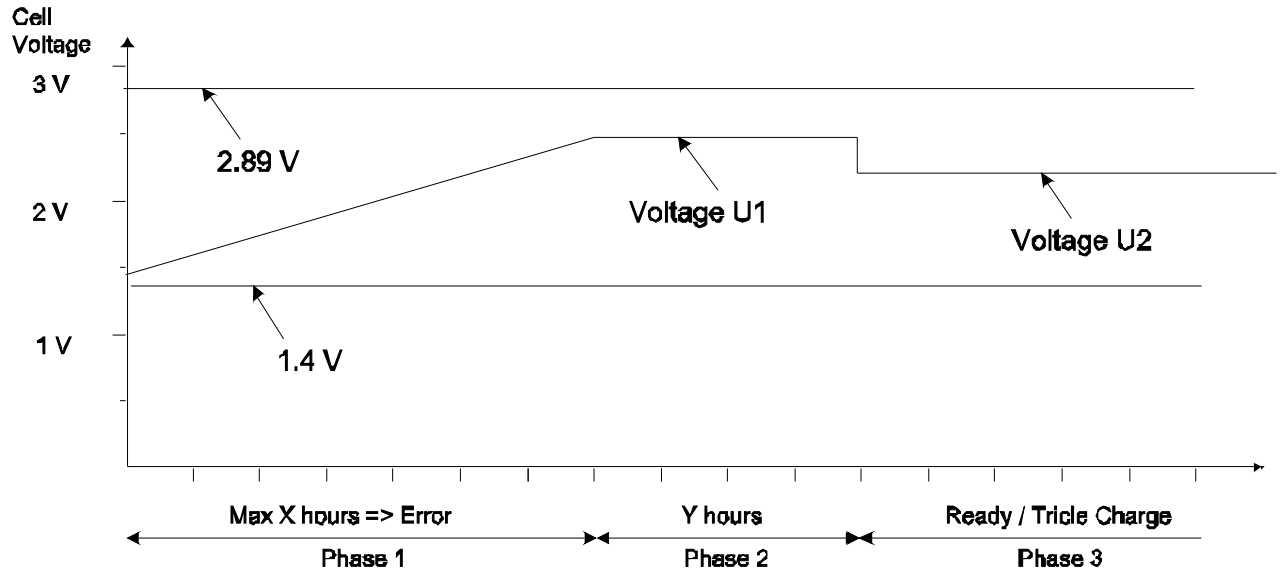


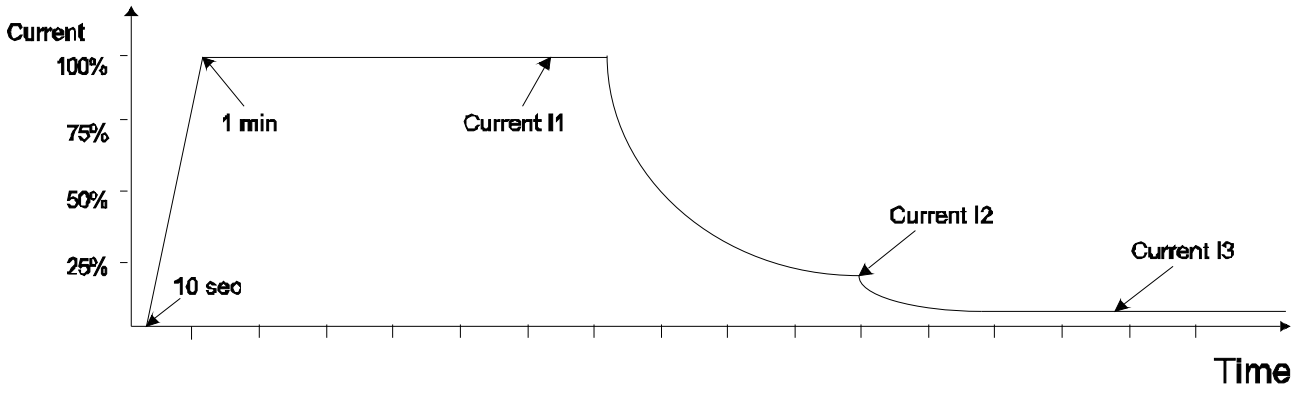


Charging Curve A for unsealed batteries:

Switch position	Battery capacity	Voltage U1 V/Cell	Voltage U2 V/Cell	Current I1	Current I2	Current I3	Max. Time X	Max. Time Y
0	150-200 Ah	2.4	2.25	50 A	3,6 A	50 A	5	6
1	200-280 Ah	2.4	2.25	60 A	4,8 A	60 A	6	7
2	280-380 Ah	2.4	2.25	60 A	6,6 A	60 A	8	9
3	380-500 Ah	2.4	2.25	60 A	8,8 A	60 A	11	2
4	500-600 Ah	2.4	2.25	60 A	11,0 A	60 A	11	12

Sealed Battery

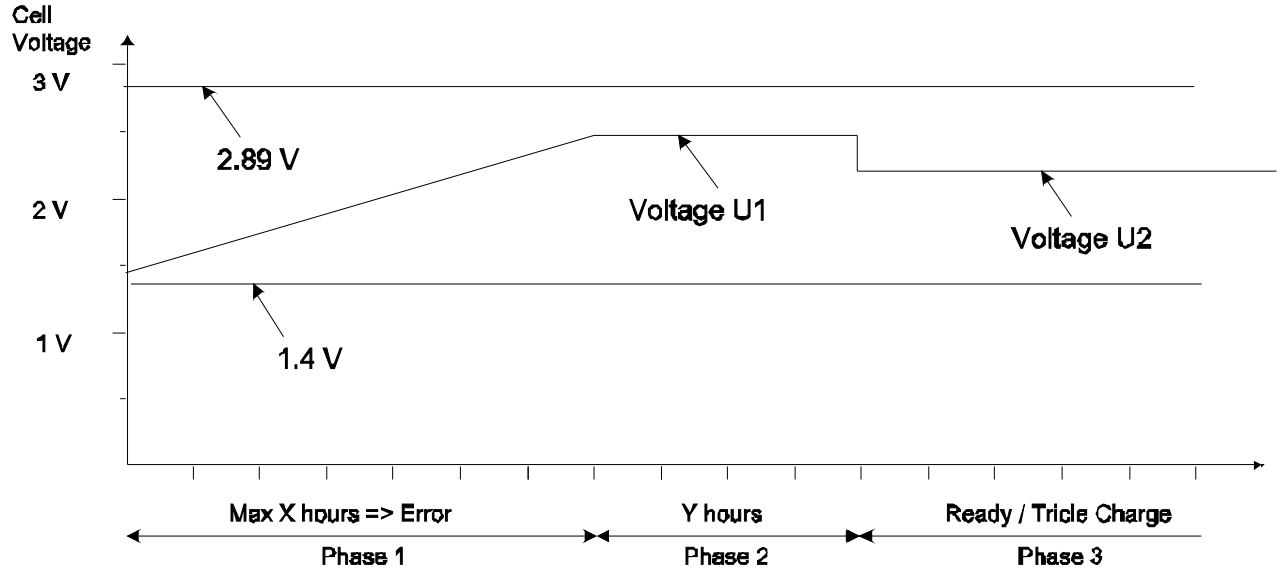


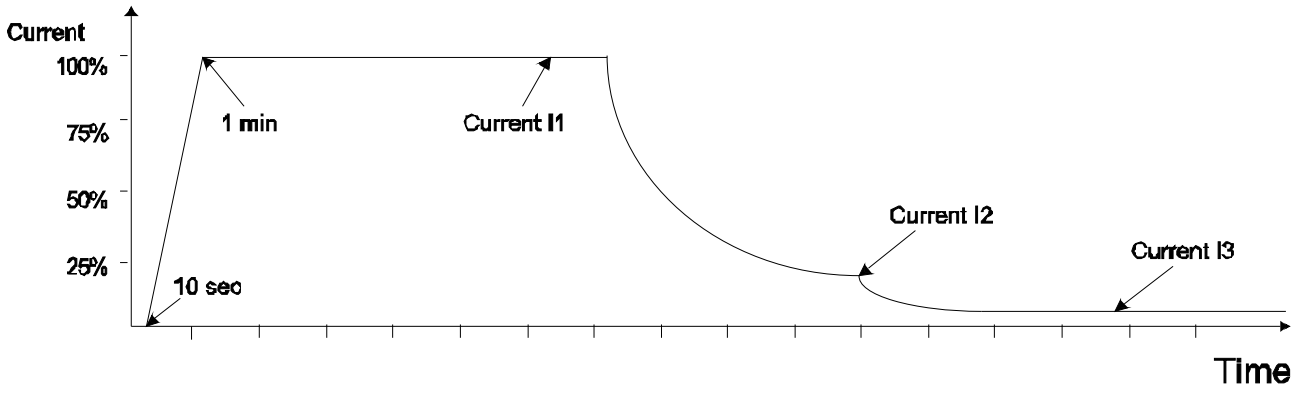


Charging Curve B for Sealed battery:

Switch position	Battery capacity	Voltage U1 V/Cell	Voltage U2 V/Cell	Current I1	Current I2	Current I3	Max. Time X	Max. Time Y
5	150 - 200 Ah	2.35	2.27	50 A	1,8 A	50 A	5	6
6	200-280 Ah	2.35	2.27	60 A	2,4 A	60 A	6	7
7	280-380 Ah	2.35	2.27	60 A	3,4 A	60 A	8	9
8	380-500 Ah	2.35	2.27	60 A	4,4 A	60 A	11	2
9	500-600 Ah	2.35	2.27	60 A	5,6 A	60 A	11	12

Sonnenschein Battery





Charging Curve C for Sonnenschein battery:

Switch position	Battery capacity	Voltage U1 V/Cell	Voltage U2 V/Cell	Current I1	Current I2	Current I3	Max. Time X	Max. Time Y
A = 10	150-200 Ah	2.4	2.3	50 A	1,8 A	50 A	5	6
B = 11	200-280 Ah	2.4	2.3	60 A	2,4 A	60 A	6	7
C = 12	280-380 Ah	2.4	2.3	60 A	3,4 A	60 A	8	9
D = 13	380-500 Ah	2.4	2.3	60 A	4,4 A	60 A	11	2
E = 14	500-600 Ah	2.4	2.3	60 A	5,6 A	60 A	11	12

Other rules:

- Charging voltage is compensated depending on battery's temperature.
  U = V-0.004 C*(T-25)
  Where:
  U = Output voltage
  V = Voltage on the table
  C = Cell number
  T = Battery's temperature in Celsius

- If battery temperature is 45 C output current decreases to 50% of nominal value. When decreased to 40 C output current is 100%.

- If battery temperature is 50 C charging momentary turns off. When decreased to 45 C the charger starts with 50% output current.