The Charging Algorithms of the Program J519C

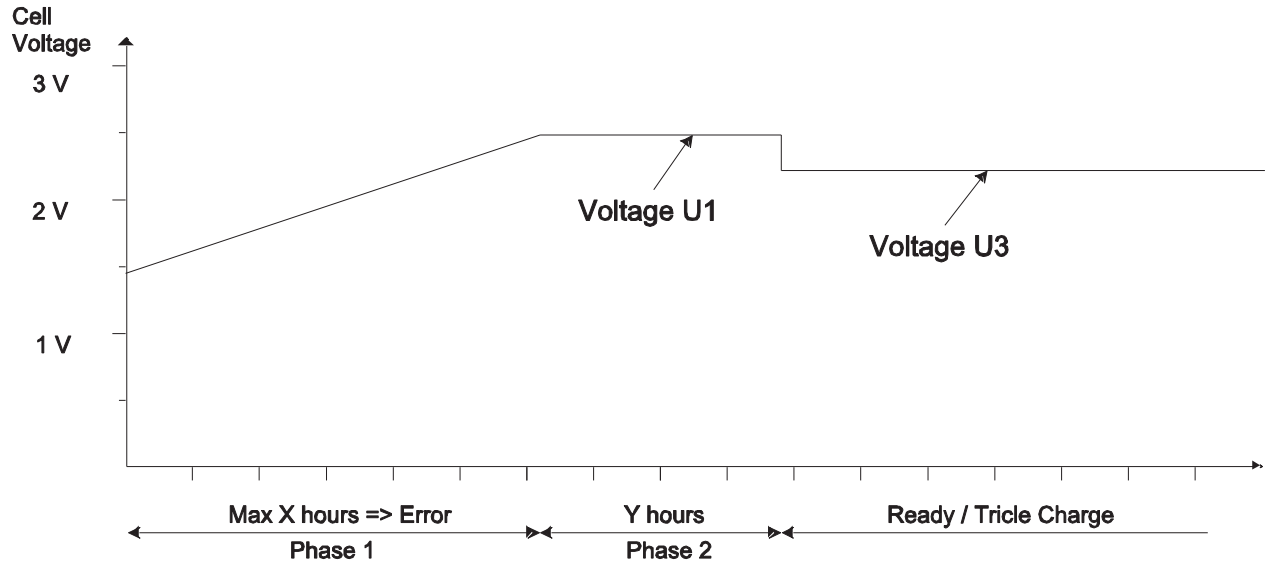
Status LED:

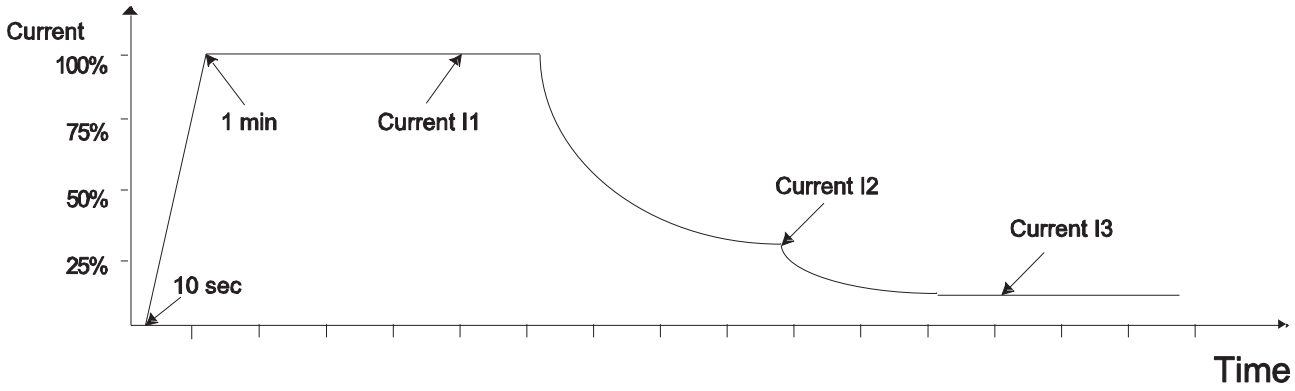
Whole main charging	=	orange
Ready/Trickle charge	=	green
Error	=	flashing red
Battery not connected	=	red
No Algorithm	=	red
Code switch test	=	flashing green

Charging algorithms for 12V, 50A PAC 800T:

Switch position	Battery Voltage	Battery type	Charging Current	Battery capacity	Charging curve
0	12 V	Unsealed	30 A	160-210 Ah	A
1	12 V	Unsealed	40 A	210-280 Ah	A
2	12 V	Unsealed	50 A	280-370 Ah	A
3	12 V	Unsealed	50 A	370-500 Ah	A
4	12 V	Unsealed	50 A	500-650 Ah	A
5	12 V	Sealed	30 A	160-210 Ah	B
6	12 V	Sealed	40 A	210-280 Ah	B
7	12 V	Sealed	50 A	280-370 Ah	B
8	12 V	Sealed	50 A	370-500 Ah	B
9	12 V	Sealed	50 A	500-650 Ah	B
10 = A	12 V	Sonnenschein	30 A	160-210 Ah	C
11 = B	12 V	Sonnenschein	40 A	210-280 Ah	C
12 = C	12 V	Sonnenschein	50 A	280-370 Ah	C
13 = D	12 V	Sonnenschein	50 A	370-500 Ah	C
14 = E	12 V	Sonnenschein	50 A	500-650 Ah	C
15 = F				No Algorithm	

Unsealed Battery

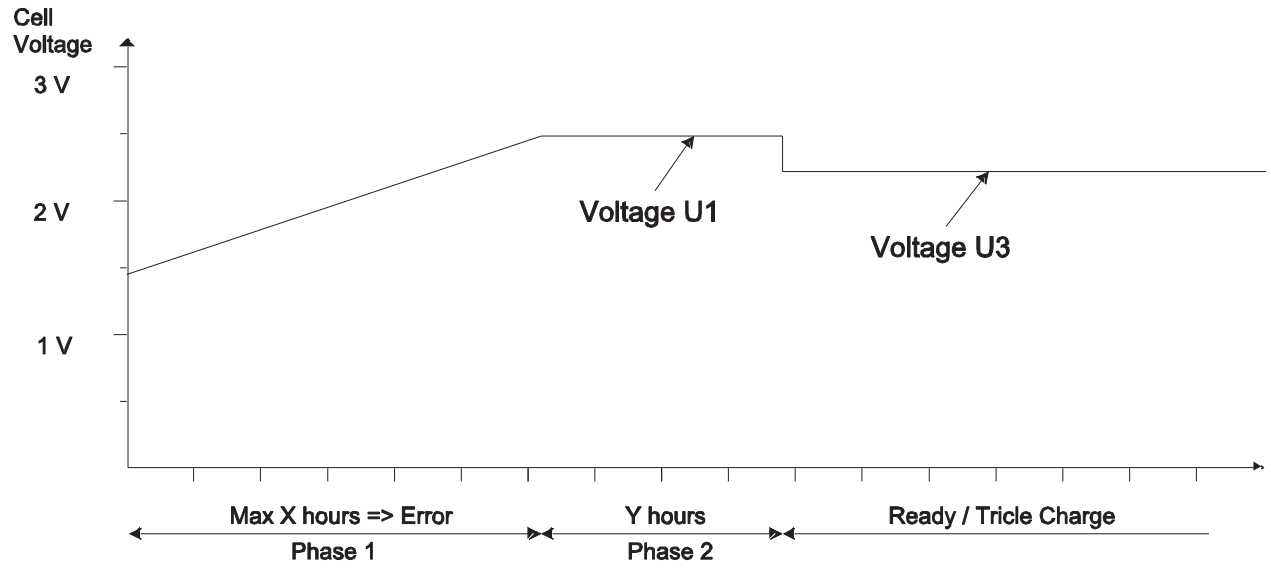


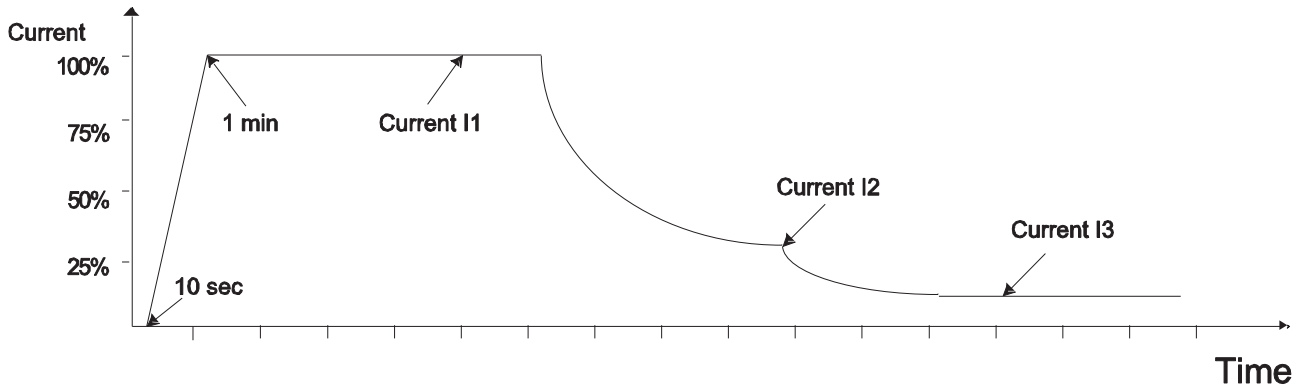


Charging Curve A for Unsealed batteries:

Switch position	Battery capacity	Voltage U1 V/Cell	Voltage U3 V/Cell	Current I1 and I3	Current I2	Max. Time X	Max. Time Y
0	160-210 Ah	2.4	2.25	30 A	3.6 A	7	8
1	210-280 Ah	2.4	2.25	40 A	4.8 A	7½	8½
2	280-370 Ah	2.4	2.25	50 A	6.4 A	8	9
3	370-500 Ah	2.4	2.25	50 A	8.4 A	10	2
4	500-650 Ah	2.4	2.25	50 A	12 A	13	14

Sealed Battery





Charging Curve B for sealed batteries:

Switch position	Battery capacity	Voltage U1 V/Cell	Voltage U3 V/Cell	Current I1 and I3	Current I2	Max. Time X	Max. Time Y
5	160-210 Ah	2.35	2.26	30 A	1.8 A	7	8
6	210-280 Ah	2.35	2.26	40 A	2.4 A	7½	8½
7	280-370 Ah	2.35	2.26	50 A	3.3 A	8	9
8	370-500 Ah	2.35	2.26	50 A	4.4 A	10	2
9	500-650 Ah	2.35	2.26	50 A	5.8 A	13	14

Din forhandler

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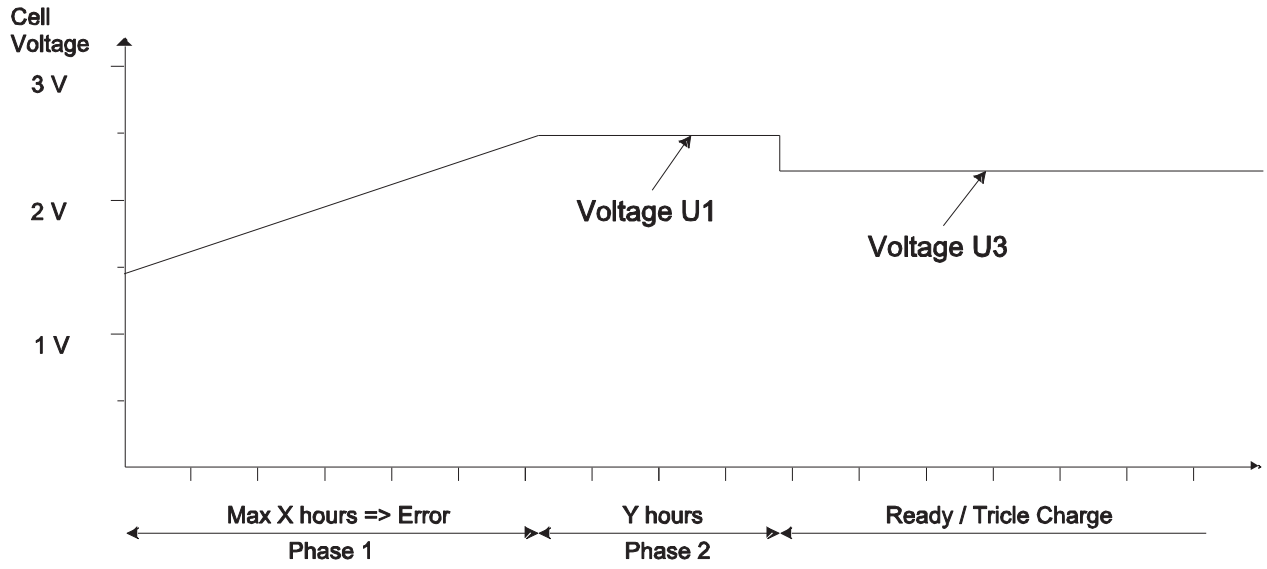
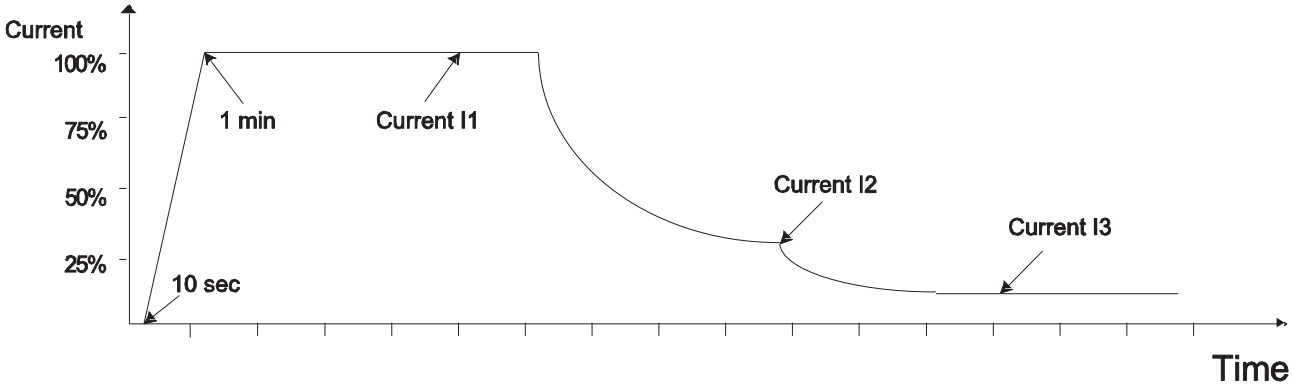
Sonnenschein Battery





Charging Curve C for Sonnenschein batteries:

Switch position	Battery capacity	Voltage U1 V/Cell	Voltage U3 V/Cell	Current I1 and I3	Current I2	Max. Time X	Max. Time Y
A = 10	160-210 Ah	2.4	2.25	30 A	1.8 A	7	8
B = 11	210-280 Ah	2.4	2.25	40 A	2.4 A	7½	8½
C = 12	280-370 Ah	2.4	2.25	50 A	3.3 A	8	9
D = 13	370-500 Ah	2.4	2.25	50 A	4.4 A	10	2
E = 14	500-650 Ah	2.4	2.25	50 A	5.8 A	13	14

Other rules:

- Charging voltage is compensated depending on battery's temperature if temperature sensor is connected.
  U = V-0.004*C*(T-25)

  Where:
  U = Output voltage
  V = Voltage on the table
  C = Cell amount
  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.

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