

ECO970 Series Charger Technical Data Sheet

The ECO970 is a series of modular battery chargers intended for motive power charging applications. Three cabinets are available:

- **ECO973:** this cabinet holds between one and three charger modules, with a single SB350 output connector, and is capable of up to 300A_{DC} output.
- **ECO974:** this cabinet holds between one and six charger modules, with a single SB350 output connector, and is capable of up to 400A_{DC} output.
- **ECO976:** this cabinet holds between one and six charger modules, with dual SB350 output connectors, and is capable of up to 600A_{DC} output.

Charger Cabinet Specifications

	ECO973	ECO974	ECO976
Charger Module Models Supported	E240, E480 and E600 1 to 3 modules	E480 and E600 1 to 6 modules	E480 and E600 1 to 6 modules
DC Output Type	Detachable output cable, up to 300A _{DC}	Captive output cable, up to 400A _{DC}	Two detachable output cables, up to 600A _{DC}
Size	12.4W x 14.3D x 11.1H in 314W x 363D x 282H mm	12.4W x 14.3D x 20.5H in 314W x 363D x 520H mm	12.4W x 14.3D x 20.5H in 314W x 363D x 520H mm
Weight	37.4 lbs 17 kg (three modules loaded)	71.5 lbs 32.5 kg (six modules loaded)	71.5 lbs 32.5 kg (six modules loaded)

The ECO970 series has three models of charger module, the E240, E480 and E600. Each of these modules are compatible with a different AC supply voltage range.

Charger Module AC Input Parameters

	E240	E480	E600
Nominal Voltage Range (three phase, phase to phase)	200 to 240V _{AC}	380 to 480V _{AC}	480 to 600V _{AC}
Frequency Range	45 to 65Hz	45 to 65Hz	45 to 65Hz
Maximum Efficiency	97%	97%	97%

All three ECO970 charger module models have the same DC output ratings.

Charger Module DC Output Parameters

	E240, E480, E600	
Battery Voltage	24, 36, 48, 72, 80 and 96V	
Maximum Output Current	100A _{DC} @ 24V	50A _{DC} @ 72V
	100A _{DC} @ 36V	50A _{DC} @ 80V
	85A _{DC} @ 48V	42.5A _{DC} @ 96V
Short Circuit Coordination	Current Foldback Protection	

The ECO970 series can communicate with other devices through the following interfaces:

Communication Interfaces

Interface	Purpose	Optional / Standard
USB, Ethernet and Wi-Fi	Used to configure, monitor and download logs from the charger. Compatible with most laptops, desktops and tablets that support a web browser.	Standard
Advanced Battery Interface	Adds a CAN bus and pilot interface to charger. Used to perform charges that are controlled over CAN bus by the BMS of a battery.	Optional (one per charger)
IO Expansion	Adds three non-isolated general purpose inputs and outputs to the charger. Used to support accessories such as tower lights, remotes controls and auto-watering solenoids. Can also be used to drive relays for use with basic automation systems.	Optional (up to two per charger)

The model number, part number and serial number of the ECO970 is made up as shown:

Charger Model Number Structure

A111 **B** - **2** **3**

Where:

- A111** is the cabinet type, options are E973, E974 and E976.
- B** is the optional interfaces installed, options are blank (no optional interfaces installed) or C (CAN bus interface installed).
- 2** is the module type, options are 2 (E240), 4 (E480) and 6 (E600).
- 3** is the number of modules installed, options are 1 to 3 for the E973, and 1 to 6 for the E974 or E976.

Charger Part Number Structure

A11A - **22** **33** - **BB44**

Where:

- A11A** is the cabinet type, options are E03U (E973), E04U (E974) and E06U (E976).
- 22** is the module type, options are 40 (no modules installed), 42 (E240), 44 (E480) and 46 (E600).
- 33** is the number of modules installed, options are 00 to 03 for the E973, and 00 to 06 for the E974 and E976.
- BB44** is the charger variant and includes what optional interfaces are fitted.

Charger Serial Number Structure

11 **22** **333333**

Where:

- 11** is the last two digits of the year of manufacture.
- 22** is the month of manufacture.
- 333333** is the serial number of the charger within that year and month.

The ECO970 series chargers have the following certifications:



ANSI/UL 1564: Industrial Battery Chargers
CAN/CSA-C22.2 N° 107.2: Battery Chargers



Charger Modules are a recognised component of ANSI/UL 1564 and CAN/CSA-C22.2 N° 107.2



CEC-400: California Energy Commission 2016 Appliance Efficiency Regulations – Large Battery Charger Systems

Charger Ratings – ECO973 Three Module Chargers

Model Number and Part Number	Modules Fitted	Maximum DC Output Current		AC Input Voltage and Maximum Current
E973-21 E03U-4201	E240 x 1	100A _{DC} at 24V 100A _{DC} at 36V 85A _{DC} at 48V	50A _{DC} at 72V 50A _{DC} at 80V 42A _{DC} at 96V	208V _{AC} , 240V _{AC} 15.1A _{AC} at 208V _{AC} 13.1A _{AC} at 240V _{AC}
E973-22 E03U-4202	E240 x 2	200A _{DC} at 24V 200A _{DC} at 36V 170A _{DC} at 48V	100A _{DC} at 72V 100A _{DC} at 80V 85A _{DC} at 96V	208V _{AC} , 240V _{AC} 30.1A _{AC} at 208V _{AC} 26.1A _{AC} at 240V _{AC}
E973-23 E03U-4203	E240 x 3	300A _{DC} at 24V 300A _{DC} at 36V 255A _{DC} at 48V	150A _{DC} at 72V 150A _{DC} at 80V 127A _{DC} at 96V	208V _{AC} , 240V _{AC} 45.0A _{AC} at 208V _{AC} 39.0A _{AC} at 240V _{AC}
E973-41 E03U-4401	E480 x 1	100A _{DC} at 24V 100A _{DC} at 36V 85A _{DC} at 48V	50A _{DC} at 72V 50A _{DC} at 80V 42A _{DC} at 96V	480V _{AC} 6.6A _{AC} at 480V _{AC}
E973-42 E03U-4402	E480 x 2	200A _{DC} at 24V 200A _{DC} at 36V 170A _{DC} at 48V	100A _{DC} at 72V 100A _{DC} at 80V 85A _{DC} at 96V	480V _{AC} 13.1A _{AC} at 480V _{AC}
E973-43 E03U-4403	E480 x 3	300A _{DC} at 24V 300A _{DC} at 36V 255A _{DC} at 48V	150A _{DC} at 72V 150A _{DC} at 80V 127A _{DC} at 96V	480V _{AC} 19.6A _{AC} at 480V _{AC}
E973-61 E03U-4601	E600 x 1	100A _{DC} at 24V 100A _{DC} at 36V 85A _{DC} at 48V	50A _{DC} at 72V 50A _{DC} at 80V 42A _{DC} at 96V	480V _{AC} , 600V _{AC} 6.6A _{AC} at 480V _{AC} 5.3A _{AC} at 600V _{AC}
E973-62 E03U-4602	E600 x 2	200A _{DC} at 24V 200A _{DC} at 36V 170A _{DC} at 48V	100A _{DC} at 72V 100A _{DC} at 80V 85A _{DC} at 96V	480V _{AC} , 600V _{AC} 13.1A _{AC} at 480V _{AC} 10.5A _{AC} at 600V _{AC}
E973-63 E03U-4603	E600 x 3	300A _{DC} at 24V 300A _{DC} at 36V 255A _{DC} at 48V	150A _{DC} at 72V 150A _{DC} at 80V 127A _{DC} at 96V	480V _{AC} , 600V _{AC} 19.6A _{AC} at 480V _{AC} 15.7A _{AC} at 600V _{AC}

Charger Ratings – ECO974 Six Module Chargers

Model Number and Part Number	Modules Fitted	Maximum DC Output Current		AC Input Voltage and Maximum Current
E974-41 E04U-4401	E480 x 1	100A _{DC} at 24V 100A _{DC} at 36V 85A _{DC} at 48V	50A _{DC} at 72V 50A _{DC} at 80V 42A _{DC} at 96V	480V _{AC} 6.6A _{AC} at 480V _{AC}
E974-42 E04U-4402	E480 x 2	200A _{DC} at 24V 200A _{DC} at 36V 170A _{DC} at 48V	100A _{DC} at 72V 100A _{DC} at 80V 85A _{DC} at 96V	480V _{AC} 13.1A _{AC} at 480V _{AC}
E974-43 E04U-4403	E480 x 3	300A _{DC} at 24V 300A _{DC} at 36V 255A _{DC} at 48V	150A _{DC} at 72V 150A _{DC} at 80V 127A _{DC} at 96V	480V _{AC} 19.6A _{AC} at 480V _{AC}
E974-44 E04U-4404	E480 x 4	400A _{DC} at 24V 400A _{DC} at 36V 340A _{DC} at 48V	200A _{DC} at 72V 200A _{DC} at 80V 170A _{DC} at 96V	480V _{AC} 26.1A _{AC} at 480V _{AC}
E974-45 E04U-4405	E480 x 5	400A _{DC} at 24V 400A _{DC} at 36V 400A _{DC} at 48V	250A _{DC} at 72V 250A _{DC} at 80V 212A _{DC} at 96V	480V _{AC} 32.6A _{AC} at 480V _{AC}
E974-46 E04U-4406	E480 x 6	400A _{DC} at 24V 400A _{DC} at 36V 400A _{DC} at 48V	300A _{DC} at 72V 300A _{DC} at 80V 255A _{DC} at 96V	480V _{AC} 39.0A _{AC} at 480V _{AC}
E974-61 E04U-4601	E600 x 1	100A _{DC} at 24V 100A _{DC} at 36V 85A _{DC} at 48V	50A _{DC} at 72V 50A _{DC} at 80V 42A _{DC} at 96V	480V _{AC} , 600V _{AC} 6.6A _{AC} at 480V _{AC} 5.3A _{AC} at 600V _{AC}
E974-62 E04U-4602	E600 x 2	200A _{DC} at 24V 200A _{DC} at 36V 170A _{DC} at 48V	100A _{DC} at 72V 100A _{DC} at 80V 85A _{DC} at 96V	480V _{AC} , 600V _{AC} 13.1A _{AC} at 480V _{AC} 10.5A _{AC} at 600V _{AC}
E974-63 E04U-4603	E600 x 3	300A _{DC} at 24V 300A _{DC} at 36V 255A _{DC} at 48V	150A _{DC} at 72V 150A _{DC} at 80V 127A _{DC} at 96V	480V _{AC} , 600V _{AC} 19.6A _{AC} at 480V _{AC} 15.7A _{AC} at 600V _{AC}
E974-64 E04U-4604	E600 x 4	400A _{DC} at 24V 400A _{DC} at 36V 340A _{DC} at 48V	200A _{DC} at 72V 200A _{DC} at 80V 170A _{DC} at 96V	480V _{AC} , 600V _{AC} 26.1A _{AC} at 480V _{AC} 20.9A _{AC} at 600V _{AC}
E974-65 E04U-4605	E600 x 5	400A _{DC} at 24V 400A _{DC} at 36V 400A _{DC} at 48V	250A _{DC} at 72V 250A _{DC} at 80V 212A _{DC} at 96V	480V _{AC} , 600V _{AC} 32.6A _{AC} at 480V _{AC} 26.1A _{AC} at 600V _{AC}
E974-66 E04U-4606	E600 x 6	400A _{DC} at 24V 400A _{DC} at 36V 400A _{DC} at 48V	300A _{DC} at 72V 300A _{DC} at 80V 255A _{DC} at 96V	480V _{AC} , 600V _{AC} 39.0A _{AC} at 480V _{AC} 31.3A _{AC} at 600V _{AC}

Charger Ratings – ECO976 Six Module Chargers

Model Number and Part Number	Modules Fitted	Maximum DC Output Current		AC Input Voltage and Maximum Current
E976-41 E06U-4401	E480 x 1	100A _{DC} at 24V 100A _{DC} at 36V 85A _{DC} at 48V	50A _{DC} at 72V 50A _{DC} at 80V 42A _{DC} at 96V	480V _{AC} 6.6A _{AC} at 480V _{AC}
E976-42 E06U-4402	E480 x 2	200A _{DC} at 24V 200A _{DC} at 36V 170A _{DC} at 48V	100A _{DC} at 72V 100A _{DC} at 80V 85A _{DC} at 96V	480V _{AC} 13.1A _{AC} at 480V _{AC}
E976-43 E06U-4403	E480 x 3	300A _{DC} at 24V 300A _{DC} at 36V 255A _{DC} at 48V	150A _{DC} at 72V 150A _{DC} at 80V 127A _{DC} at 96V	480V _{AC} 19.6A _{AC} at 480V _{AC}
E976-44 E06U-4404	E480 x 4	400A _{DC} at 24V 400A _{DC} at 36V 340A _{DC} at 48V	200A _{DC} at 72V 200A _{DC} at 80V 170A _{DC} at 96V	480V _{AC} 26.1A _{AC} at 480V _{AC}
E976-45 E06U-4405	E480 x 5	500A _{DC} at 24V 500A _{DC} at 36V 425A _{DC} at 48V	250A _{DC} at 72V 250A _{DC} at 80V 212A _{DC} at 96V	480V _{AC} 32.6A _{AC} at 480V _{AC}
E976-46 E06U-4406	E480 x 6	600A _{DC} at 24V 600A _{DC} at 36V 510A _{DC} at 48V	300A _{DC} at 72V 300A _{DC} at 80V 255A _{DC} at 96V	480V _{AC} 39.0A _{AC} at 480V _{AC}
E976-61 E06U-4601	E600 x 1	100A _{DC} at 24V 100A _{DC} at 36V 85A _{DC} at 48V	50A _{DC} at 72V 50A _{DC} at 80V 42A _{DC} at 96V	480V _{AC} , 600V _{AC} 6.6A _{AC} at 480V _{AC} 5.3A _{AC} at 600V _{AC}
E976-62 E06U-4602	E600 x 2	200A _{DC} at 24V 200A _{DC} at 36V 170A _{DC} at 48V	100A _{DC} at 72V 100A _{DC} at 80V 85A _{DC} at 96V	480V _{AC} , 600V _{AC} 13.1A _{AC} at 480V _{AC} 10.5A _{AC} at 600V _{AC}
E976-63 E06U-4603	E600 x 3	300A _{DC} at 24V 300A _{DC} at 36V 255A _{DC} at 48V	150A _{DC} at 72V 150A _{DC} at 80V 127A _{DC} at 96V	480V _{AC} , 600V _{AC} 19.6A _{AC} at 480V _{AC} 15.7A _{AC} at 600V _{AC}
E976-64 E06U-4604	E600 x 4	400A _{DC} at 24V 400A _{DC} at 36V 340A _{DC} at 48V	200A _{DC} at 72V 200A _{DC} at 80V 170A _{DC} at 96V	480V _{AC} , 600V _{AC} 26.1A _{AC} at 480V _{AC} 20.9A _{AC} at 600V _{AC}
E976-65 E06U-4605	E600 x 5	500A _{DC} at 24V 500A _{DC} at 36V 425A _{DC} at 48V	250A _{DC} at 72V 250A _{DC} at 80V 212A _{DC} at 96V	480V _{AC} , 600V _{AC} 32.6A _{AC} at 480V _{AC} 26.1A _{AC} at 600V _{AC}
E976-66 E06U-4606	E600 x 6	600A _{DC} at 24V 600A _{DC} at 36V 510A _{DC} at 48V	300A _{DC} at 72V 300A _{DC} at 80V 255A _{DC} at 96V	480V _{AC} , 600V _{AC} 39.0A _{AC} at 480V _{AC} 31.3A _{AC} at 600V _{AC}

Battery Voltage and Capacity versus AC Supply Current – 24V Batteries

DC Output Current (A _{DC})	Battery Size (Ah)			Module Count	AC Supply Input Current (A _{AC})			
	16%	25%	40%		208V _{AC}	240V _{AC}	480V _{AC}	600V _{AC}
50	300	200	125	1	4.5	3.9	2.0	1.6
60	375	225	150	1	5.4	4.7	2.4	1.9
70	425	275	175	1	6.3	5.4	2.8	2.2
80	500	300	200	1	7.1	6.2	3.2	2.5
85	525	325	200	1	7.6	6.6	3.3	2.7
90	550	350	225	1	8.0	7.0	3.5	2.8
100	625	400	250	1	8.9	7.7	3.9	3.2
110	675	425	275	2	9.8	8.5	4.3	3.5
120	750	475	300	2	10.7	9.3	4.7	3.8
130	800	500	325	2	11.6	10.0	5.1	4.1
140	875	550	350	2	12.4	10.8	5.4	4.4
150	925	600	375	2	13.3	11.6	5.8	4.7
160	1000	625	400	2	14.2	12.3	6.2	5.0
170	1050	675	425	2	15.1	13.1	6.6	5.3
180	1125	700	450	2	16.0	13.8	7.0	5.6
190	1175	750	475	2	16.8	14.6	7.4	5.9
200	1250	800	500	2	17.7	15.4	7.7	6.2
210	1300	825	525	3	18.6	16.1	8.1	6.5
220	1375	875	550	3	19.5	16.9	8.5	6.8
230	1425	900	575	3	20.4	17.7	8.9	7.1
240	1500	950	600	3	21.2	18.4	9.3	7.4
250	1550	1000	625	3	22.1	19.2	9.6	7.7
255	1575	1000	625	3	22.6	19.6	9.8	7.9
260	1625	1025	650	3	23.0	20.0	10.0	8.0
270	1675	1075	675	3	23.9	20.7	10.4	8.3
280	1750	1100	700	3	24.8	21.5	10.8	8.7
290	1800	1150	725	3	25.7	22.2	11.2	9.0
300	1875	1200	750	3	26.5	23.0	11.6	9.3
310	1925	1225	775	4	-	-	11.9	9.6
320	2000	1275	800	4	-	-	12.3	9.9
330	-	1300	825	4	-	-	12.7	10.2
340	-	1350	850	4	-	-	13.1	10.5
350	-	1400	875	4	-	-	13.5	10.8
360	-	1425	900	4	-	-	13.8	11.1
370	-	1475	925	4	-	-	14.2	11.4
380	-	1500	950	4	-	-	14.6	11.7
390	-	1550	975	4	-	-	15.0	12.0
400	-	1600	1000	4	-	-	15.4	12.3
410	-	1625	1025	5	-	-	15.8	12.6
420	-	1675	1050	5	-	-	16.1	12.9
425	-	1700	1050	5	-	-	16.3	13.1
430	-	1700	1075	5	-	-	16.5	13.2
440	-	1750	1100	5	-	-	16.9	13.5
450	-	1800	1125	5	-	-	17.3	13.8
460	-	1825	1150	5	-	-	17.7	14.2
470	-	1875	1175	5	-	-	18.0	14.5
480	-	1900	1200	5	-	-	18.4	14.8
490	-	1950	1225	5	-	-	18.8	15.1
500	-	2000	1250	5	-	-	19.2	15.4
510	-	-	1275	6	-	-	19.6	15.7
520	-	-	1300	6	-	-	20.0	16.0
530	-	-	1325	6	-	-	20.3	16.3
540	-	-	1350	6	-	-	20.7	16.6
550	-	-	1375	6	-	-	21.1	16.9
560	-	-	1400	6	-	-	21.5	17.2
570	-	-	1425	6	-	-	21.9	17.5
580	-	-	1450	6	-	-	22.2	17.8
590	-	-	1475	6	-	-	22.6	18.1
600	-	-	1500	6	-	-	23.0	18.4

Battery Voltage and Capacity versus AC Supply Current – 36V Batteries

DC Output Current (A _{DC})	Battery Size (Ah)			Module Count	AC Supply Input Current (A _{AC})			
	16%	25%	40%		208V _{AC}	240V _{AC}	480V _{AC}	600V _{AC}
50	300	200	125	1	6.7	5.8	3.0	2.4
60	375	225	150	1	8.0	7.0	3.5	2.8
70	425	275	175	1	9.4	8.1	4.1	3.3
80	500	300	200	1	10.7	9.3	4.7	3.8
85	525	325	200	1	11.3	9.8	5.0	4.0
90	550	350	225	1	12.0	10.4	5.3	4.2
100	625	400	250	1	13.3	11.6	5.8	4.7
110	675	425	275	2	14.6	12.7	6.4	5.1
120	750	475	300	2	16.0	13.8	7.0	5.6
130	800	500	325	2	17.3	15.0	7.5	6.1
140	875	550	350	2	18.6	16.1	8.1	6.5
150	925	600	375	2	19.9	17.3	8.7	7.0
160	1000	625	400	2	21.2	18.4	9.3	7.4
170	1050	675	425	2	22.6	19.6	9.8	7.9
180	1125	700	450	2	23.9	20.7	10.4	8.3
190	1175	750	475	2	25.2	21.9	11.0	8.8
200	1250	800	500	2	26.5	23.0	11.6	9.3
210	1300	825	525	3	27.9	24.2	12.1	9.7
220	1375	875	550	3	29.2	25.3	12.7	10.2
230	1425	900	575	3	30.5	26.4	13.3	10.6
240	1500	950	600	3	31.8	27.6	13.8	11.1
250	1550	1000	625	3	33.1	28.7	14.4	11.6
255	1575	1000	625	3	33.8	29.3	14.7	11.8
260	1625	1025	650	3	34.5	29.9	15.0	12.0
270	1675	1075	675	3	35.8	31.0	15.6	12.5
280	1750	1100	700	3	37.1	32.2	16.1	12.9
290	1800	1150	725	3	38.4	33.3	16.7	13.4
300	1875	1200	750	3	39.8	34.5	17.3	13.8
310	1925	1225	775	4	-	-	17.9	14.3
320	2000	1275	800	4	-	-	18.4	14.8
330	-	1300	825	4	-	-	19.0	15.2
340	-	1350	850	4	-	-	19.6	15.7
350	-	1400	875	4	-	-	20.1	16.1
360	-	1425	900	4	-	-	20.7	16.6
370	-	1475	925	4	-	-	21.3	17.1
380	-	1500	950	4	-	-	21.9	17.5
390	-	1550	975	4	-	-	22.4	18.0
400	-	1600	1000	4	-	-	23.0	18.4
410	-	1625	1025	5	-	-	23.6	18.9
420	-	1675	1050	5	-	-	24.2	19.3
425	-	1700	1050	5	-	-	24.4	19.6
430	-	1700	1075	5	-	-	24.7	19.8
440	-	1750	1100	5	-	-	25.3	20.3
450	-	1800	1125	5	-	-	25.9	20.7
460	-	1825	1150	5	-	-	26.4	21.2
470	-	1875	1175	5	-	-	27.0	21.6
480	-	1900	1200	5	-	-	27.6	22.1
490	-	1950	1225	5	-	-	28.2	22.6
500	-	2000	1250	5	-	-	28.7	23.0
510	-	-	1275	6	-	-	29.3	23.5
520	-	-	1300	6	-	-	29.9	23.9
530	-	-	1325	6	-	-	30.5	24.4
540	-	-	1350	6	-	-	31.0	24.8
550	-	-	1375	6	-	-	31.6	25.3
560	-	-	1400	6	-	-	32.2	25.8
570	-	-	1425	6	-	-	32.7	26.2
580	-	-	1450	6	-	-	33.3	26.7
590	-	-	1475	6	-	-	33.9	27.1
600	-	-	1500	6	-	-	34.5	27.6

Battery Voltage and Capacity versus AC Supply Current – 48V Batteries

DC Output Current (A _{DC})	Battery Size (Ah)			Module Count	AC Supply Input Current (A _{AC})			
	16%	25%	40%		208V _{AC}	240V _{AC}	480V _{AC}	600V _{AC}
50	300	200	125	1	8.9	7.7	3.9	3.2
60	375	225	150	1	10.7	9.3	4.7	3.8
70	425	275	175	1	12.4	10.8	5.4	4.4
80	500	300	200	1	14.2	12.3	6.2	5.0
85	525	325	200	1	15.1	13.1	6.6	5.3
90	550	350	225	2	16.0	13.8	7.0	5.6
100	625	400	250	2	17.7	15.4	7.7	6.2
110	675	425	275	2	19.5	16.9	8.5	6.8
120	750	475	300	2	21.2	18.4	9.3	7.4
130	800	500	325	2	23.0	20.0	10.0	8.0
140	875	550	350	2	24.8	21.5	10.8	8.7
150	925	600	375	2	26.5	23.0	11.6	9.3
160	1000	625	400	2	28.3	24.5	12.3	9.9
170	1050	675	425	2	30.1	26.1	13.1	10.5
180	1125	700	450	3	31.8	27.6	13.8	11.1
190	1175	750	475	3	33.6	29.1	14.6	11.7
200	1250	800	500	3	35.3	30.6	15.4	12.3
210	1300	825	525	3	37.1	32.2	16.1	12.9
220	1375	875	550	3	38.9	33.7	16.9	13.5
230	1425	900	575	3	40.6	35.2	17.7	14.2
240	1500	950	600	3	42.4	36.8	18.4	14.8
250	1550	1000	625	3	44.2	38.3	19.2	15.4
255	1575	1000	625	3	45.0	39.0	19.6	15.7
260	1625	1025	650	4	-	-	20.0	16.0
270	1675	1075	675	4	-	-	20.7	16.6
280	1750	1100	700	4	-	-	21.5	17.2
290	1800	1150	725	4	-	-	22.2	17.8
300	1875	1200	750	4	-	-	23.0	18.4
310	1925	1225	775	4	-	-	23.8	19.0
320	2000	1275	800	4	-	-	24.5	19.6
330	-	1300	825	4	-	-	25.3	20.3
340	-	1350	850	4	-	-	26.1	20.9
350	-	1400	875	5	-	-	26.8	21.5
360	-	1425	900	5	-	-	27.6	22.1
370	-	1475	925	5	-	-	28.4	22.7
380	-	1500	950	5	-	-	29.1	23.3
390	-	1550	975	5	-	-	29.9	23.9
400	-	1600	1000	5	-	-	30.6	24.5
410	-	1625	1025	5	-	-	31.4	25.1
420	-	1675	1050	5	-	-	32.2	25.8
425	-	1700	1050	5	-	-	32.6	26.1
430	-	1700	1075	6	-	-	32.9	26.4
440	-	1750	1100	6	-	-	33.7	27.0
450	-	1800	1125	6	-	-	34.5	27.6
460	-	1825	1150	6	-	-	35.2	28.2
470	-	1875	1175	6	-	-	36.0	28.8
480	-	1900	1200	6	-	-	36.8	29.4
490	-	1950	1225	6	-	-	37.5	30.0
500	-	2000	1250	6	-	-	38.3	30.6
510	-	-	1275	6	-	-	39.0	31.3

Battery Voltage and Capacity versus AC Supply Current – 72V Batteries

DC Output Current (A _{DC})	Battery Size (Ah)			Module Count	AC Supply Input Current (A _{AC})			
	16%	25%	40%		208V _{AC}	240V _{AC}	480V _{AC}	600V _{AC}
50	300	200	125	1	13.3	11.6	5.8	4.7
60	375	225	150	2	16.0	13.8	7.0	5.6
70	425	275	175	2	18.6	16.1	8.1	6.5
80	500	300	200	2	21.2	18.4	9.3	7.4
85	525	325	200	2	22.6	19.6	9.8	7.9
90	550	350	225	2	23.9	20.7	10.4	8.3
100	625	400	250	2	26.5	23.0	11.6	9.3
110	675	425	275	3	29.2	25.3	12.7	10.2
120	750	475	300	3	31.8	27.6	13.8	11.1
130	800	500	325	3	34.5	29.9	15.0	12.0
140	875	550	350	3	37.1	32.2	16.1	12.9
150	925	600	375	3	39.8	34.5	17.3	13.8
160	1000	625	400	4	-	-	18.4	14.8
170	1050	675	425	4	-	-	19.6	15.7
180	1125	700	450	4	-	-	20.7	16.6
190	1175	750	475	4	-	-	21.9	17.5
200	1250	800	500	4	-	-	23.0	18.4
210	1300	825	525	5	-	-	24.2	19.3
220	1375	875	550	5	-	-	25.3	20.3
230	1425	900	575	5	-	-	26.4	21.2
240	1500	950	600	5	-	-	27.6	22.1
250	1550	1000	625	5	-	-	28.7	23.0
255	1575	1000	625	6	-	-	29.3	23.5
260	1625	1025	650	6	-	-	29.9	23.9
270	1675	1075	675	6	-	-	31.0	24.8
280	1750	1100	700	6	-	-	32.2	25.8
290	1800	1150	725	6	-	-	33.3	26.7
300	1875	1200	750	6	-	-	34.5	27.6

Battery Voltage and Capacity versus AC Supply Current – 80V Batteries

DC Output Current (A _{DC})	Battery Size (Ah)			Module Count	AC Supply Input Current (A _{AC})			
	16%	25%	40%		208V _{AC}	240V _{AC}	480V _{AC}	600V _{AC}
50	300	200	125	1	14.8	12.8	6.5	5.2
60	375	225	150	2	17.7	15.4	7.7	6.2
70	425	275	175	2	20.7	17.9	9.0	7.2
80	500	300	200	2	23.6	20.5	10.3	8.2
85	525	325	200	2	25.1	21.7	10.9	8.8
90	550	350	225	2	26.5	23.0	11.6	9.3
100	625	400	250	2	29.5	25.6	12.8	10.3
110	675	425	275	3	32.4	28.1	14.1	11.3
120	750	475	300	3	35.3	30.6	15.4	12.3
130	800	500	325	3	38.3	33.2	16.6	13.3
140	875	550	350	3	41.2	35.7	17.9	14.4
150	925	600	375	3	44.2	38.3	19.2	15.4
160	1000	625	400	4	-	-	20.5	16.4
170	1050	675	425	4	-	-	21.7	17.4
180	1125	700	450	4	-	-	23.0	18.4
190	1175	750	475	4	-	-	24.3	19.4
200	1250	800	500	4	-	-	25.6	20.5
210	1300	825	525	5	-	-	26.8	21.5
220	1375	875	550	5	-	-	28.1	22.5
230	1425	900	575	5	-	-	29.4	23.5
240	1500	950	600	5	-	-	30.6	24.5
250	1550	1000	625	5	-	-	31.9	25.6
255	1575	1000	625	6	-	-	32.6	26.1
260	1625	1025	650	6	-	-	33.2	26.6
270	1675	1075	675	6	-	-	34.5	27.6
280	1750	1100	700	6	-	-	35.7	28.6
290	1800	1150	725	6	-	-	37.0	29.6
300	1875	1200	750	6	-	-	38.3	30.6

Battery Voltage and Capacity versus AC Supply Current – 96V Batteries

DC Output Current (A _{DC})	Battery Size (Ah)			Module Count	AC Supply Input Current (A _{AC})			
	16%	25%	40%		208V _{AC}	240V _{AC}	480V _{AC}	600V _{AC}
50	300	200	125	2	17.7	15.4	7.7	6.2
60	375	225	150	2	21.2	18.4	9.3	7.4
70	425	275	175	2	24.8	21.5	10.8	8.7
80	500	300	200	2	28.3	24.5	12.3	9.9
85	525	325	200	2	30.1	26.1	13.1	10.5
90	550	350	225	3	31.8	27.6	13.8	11.1
100	625	400	250	3	35.3	30.6	15.4	12.3
110	675	425	275	3	38.9	33.7	16.9	13.5
120	750	475	300	3	42.4	36.8	18.4	14.8
130	800	500	325	4	-	-	20.0	16.0
140	875	550	350	4	-	-	21.5	17.2
150	925	600	375	4	-	-	23.0	18.4
160	1000	625	400	4	-	-	24.5	19.6
170	1050	675	425	4	-	-	26.1	20.9
180	1125	700	450	5	-	-	27.6	22.1
190	1175	750	475	5	-	-	29.1	23.3
200	1250	800	500	5	-	-	30.6	24.5
210	1300	825	525	5	-	-	32.2	25.8
220	1375	875	550	6	-	-	33.7	27.0
230	1425	900	575	6	-	-	35.2	28.2
240	1500	950	600	6	-	-	36.8	29.4
250	1550	1000	625	6	-	-	38.3	30.6
255	1575	1000	625	6	-	-	39.0	31.3