

USA Battery Charger

Universal Source Active Battery Charger
 Contact Cooled

USABC7-65: 750V 60A 45kW

USABC6-110: 650V A 110KW

Higher power units are available

(See your Sales Rep for specific ordering information)

Product Description

The Universal Source Active (USA) Battery Charger converts 3-phase AC voltage input to a controlled DC charging power source. Its novel control algorithm regulates the input current, output current, and output voltage to either preset programmable limits or to “on-the-fly” limits received from the Battery Management System.



Features

- Accepts wide range of 3-phase AC sources with multi-tap auto-transformer
- Smart OV and Temperature Power Limiting
- Up to 15 chargers on one CAN control bus
- Built-in DC bus voltage pre-charge circuitry
- Battery Select parameter for selection between multiple manufacturer communication protocols
- 50+ programmable parameters via CAN for advanced users
- 10 slot fault log with time stamp information

Hardware Description

- Double-isolation between power components and user control interface
- Dual Range DC Current Sensor for full-load and precision trickle current measurements mounted externally to isolate battery current from other loads
- Enable and HV interlock 24V digital Inputs
- RS-232 Serial Interface for programming and troubleshooting
- CAN bus control and diagnostics
- Universal control power (120/240VAC, 150-300VDC)

Specifications

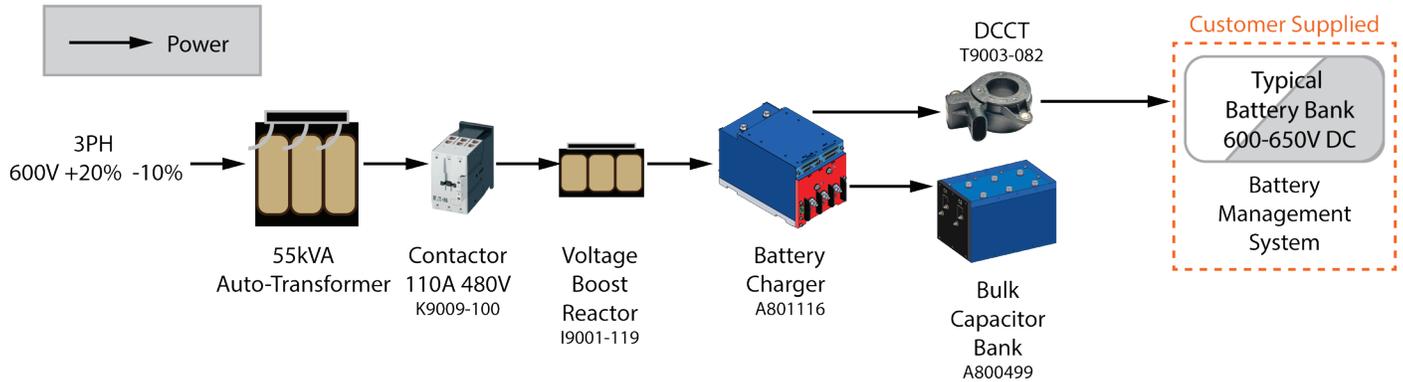
	Minimum	Nominal	Maximum
DC Bus Voltage (V)	VAC in * 1.5 ¹	750	800
Continuous Output Current (A)	-	60	-
Continuous Input Current (A _{RMS})	-	85	-
Rated Output Power (kW) @ 750VDC	-	45	-
Ambient Operating Temperature (°C)	-20	-	60
Weight	14.5kg (31 lbs)		
Dimensions (H x W x L)	210mm (8.3") x 203mm (8") x 356mm (14")		

The values above are typical and are dependent on the charger cooling, battery characteristics, and application.

¹Example: For 220VAC input minimum output would be 330VDC.

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Sample Block Diagram

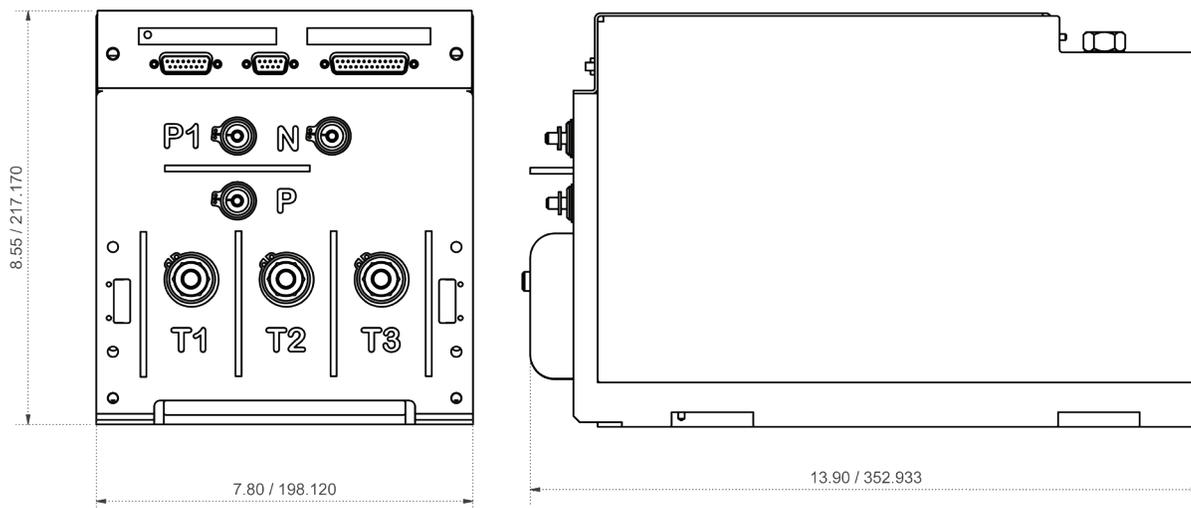


Transformer Input Supply Taps

(other voltage ratings available)

Voltage (50 Hz)	Voltage (60 Hz)
550	600
525	570
500	540
475	510
450	480
425	450
400	420
375	390

Dimensional Drawing



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