

# HIGH EFFICIENCY FOR TRACTION

### ABSOLUTE POWER

## High Efficiency Charging Systems for Traction...



#### **ENERGY EFFICIENCY**

- ▶ With a degree of efficiency of up to 96% and a cos  $\phi$  of up to ~1, the required mains power is reduced and therefore also the investment, installation and operating costs.
- ▶ The compact design allows for high-density installations in the smallest of spaces, reducing the amount of space required for the charging station
- ▶ Expansion of the reactive current compensation system is not necessary due to the sinusoidal current consumption and excellent power factor.

#### **ENVIRONMENT**

- ▶ The use of highly efficient charging technology can reduce CO<sub>2</sub> emissions to a minimum.
- ▶ The ideally smoothed charging current, combined with cutting-edge charging characteristics, allows uniform temperature charging, increases service intervals and prolongs the lifespan of the battery.
- ▶ Adherence to the electromagnetic compatibility (EMC) class A and B threshold values avoids any operation faults.

#### **FLEXIBILITY**

- ▶ The multi-voltage feature allows different types of batteries to be charged using a single BELATRON charging unit.
- Using a battery ID chip or a BATCOM digital battery controller, charging parameters can be individually adjusted at any time to suit all battery types and/or environmental conditions.
- ▶ The variably programmable charging curve allows for effective pulse charging, as well as future-proofed adaptation of the charging parameters for new battery types and future optimization of the charging process.

#### **BATTERY MONITOR**





#### **Special Features:**

- Current measurement using a Hall sensor in a flexibly attachable current measurement head
- ▶ Bidirectional data transfer using Bluetooth low energy technology
- ▶ Large programmable LED status indicator
- Digital display for voltage, current, temperature, etc.
- ► Software for system analysis (desktop/mobile)
- ▶ Compact dimensions for easy attachment
- One battery controller for all battery voltages and capacities

#### **Technical Features:**

- ► Integrated data logger for comprehensive battery use evaluation
- ► Integrated event logging for recording battery parameters
- ► Integrated statistics counter for the entire life cycle of the battery
- ▶ Detailed report with just one click

### **IHF CHARGER**

Settings and parameters can be adjusted using the 3.5" touch panel where devices and battery information can be called up.

Final charging values

Voltage 2.7 V/C

Current 10.5 A

Ah-sum 223 Ah

Final charging values

LP01 - IPUla Pulse

145 Ah charged

SOC = 29%

Touch panel changes colors to provide a visual status of the charger and battery status. Uses a series of green, yellow and red for quick identification.



#### **BIDIRECTIONAL COMMUNICATION**



Optionally, wireless data exchange enables two-way communication. Using the appropriate app for a range of devices and the Bluetooth® low energy technology, you can set up a quick and uncomplicated connection with the BatCom Digital battery controller. This allows optimal coordination for various things, such as:

- ▶ Adapting the charging behavior to the battery temperature. (e.q. in cold warehouses or where there is high ambient temperature)
- ▶ Transfer of battery data to configure optimal charging parameters.
- ▶ Optimization of fleet deployment.
- The graphics user interface allows up-to-date battery and device information to be retrieved quickly and easily.

#### **SPECIFICATIONS**

VACIn	AC Phase	Battery Voltage (V)	Maximum Charging Current(A)	Cabinet Type	PowerHouse IHF Charger Model Number
480	3	24	150	WT60	CR12IHF3-150
480	3	24	300	WT120	CR12IHF3-300
480	3	24	450	WT180	CR12IHF3-450
480	3	36	150	WT60	CR18IHF3-150
480	3	36	300	WT120	CR18IHF3-300
480	3	36	450	WT180	CR18IHF3-450
480	3	48	120	WT60	CR24IHF3-120
480	3	48	240	WT120	CR24IHF3-240
480	3	48	360	WT180	CR24IHF3-360
480	3	80	85	WT60	CR40IHF3-85
480	3	80	170	WT120	CR40IHF3-170
480	3	80	255	WT180	CR40IHF3-255
480	3	96	70	WT60	CR48IHF3-70
480	3	96	140	WT120	CR48IHF3-140
480	3	96	210	WT180	CR48IHF3-210
600	3	24	150	WT120	CR12IHF3-150
600	3	24	300	WT180	CR12IHF3-300
600	3	36	150	WT1820	CR18IHF3-150
600	3	36	300	WT180	CR18IHF3-300
600	3	48	120	WT120	CR24IHF3-120
600	3	48	240	WT180	CR24IHF3-240
600	3	80	85	WT120	CR40IHF3-85
600	3	80	170	WT180	CR40IHF3-170
600	3	96	70	WT120	CR48IHF3-70
600	3	96	140	WT180	CR48IHF3-140

#### **DIMENSIONS**

Cabinet Type	Н	W	D
WT60	23.70"	12.30"	7.90"
WT120	23.70"	12.30"	12.00"
WT180	23.70"	12.30"	16.10"
WT120T	23.70"	12.30"	12.01"
WT180T	23.70"	12.30"	24.10"



1445 Majestic Drive | P.O. Box 990 Fremont, OH 43420 USA +1.419.334.7181 | sales@crownbattery.com www.crownbattery.com