# trak<sup>®</sup> power mini

HF battery charger for small traction applications



Motive Power Systems Reserve Power Systems Special Power Systems Service

### Your benefits with HOPPECKE trak<sup>®</sup> power mini

- High-frequency (HF) charging technology
- Cost reduction through energy saving of around 12% as compared with conventional chargers with every charging operation
- **Great flexibility in operation** modular charger design
- **Optimal use of space in the charging station** compact and lightweight design



## Typical applications of HOPPECKE trak<sup>®</sup> power mini

- Electric lift trucks
- Order pickers
- Cleaning machines
- Lifting and work platforms





## trak<sup>®</sup> power mini

The unique HOPPECKE HF battery charger for small traction applications

Traction batteries are designed for special applications and form a system together with their charger. The operation of your vehicle and maximum life of your battery can be ensured only when this system is working in perfect harmony.

So that you may always be offered the very best system, HOPPECKE has designed and developed the trak<sup>®</sup> power mini range in the modern facilities of HOPPECKE Technologies in Germany.

The trak<sup>®</sup> power mini HF charger range has been specially developed for smaller industrial trucks, electric lift trucks, order pickers, lifting and work platforms, and cleaning machines. This range may be used with all traction batteries currently on the market and guarantees optimal charging every time. Thanks to HOPPECKE HF technology, the trak<sup>®</sup> power mini has the lowest energy consumption with minimal losses when compared with conventional systems, and therefore gives the best energy efficiency. These especially energy-saving chargers merit a top spot on the rating scale for energy consumption, namely efficiency class 1A.

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### **LED display**





Features and customer benefits

trak<sup>®</sup> power mini

- modular charger design, good flexibility: the charger may be adapted at any time to the circumstances in operation on site
- maximum possible operating reliability as compared with standard chargers – faults do not lead to failure

The trak<sup>®</sup> power mini comprises one to four power modules, which may be retrofitted at any time, to increase the rating of the charger (12V to 24V and 5 to 60A).

Fast and clear information in the charging station Power LEDs make it possible to read the state of charge of the battery from a greater distance

#### Optimal use of space in the charging station

This single-phase charger has a **compact** and **lightweight** design. The lower volume and weight make wall mounting possible. Rack installation is also an option. The bracket for rack mounting and the rear panel holes for wall mounting are available as standard features.

### Enhanced operating safety

All chargers in the range have been tested to the current EMC standard. Each individual module is given additional protection by primary and secondary fuses.

#### Standard equipment

- PFC function
- programmable external chip
- · complete plug-in mains and charging cable
- · fixture for wall and rack mounting
- large LED display
- stop button

### Accessories

- charging plug connector
- steel underframe for easy and rapid installation and reduction of contamination
- special charging characteristic to reduce charging times
- · air filter for operation in dusty environments



Parallel connected power modules, charger open



<sup>r®</sup> power mini

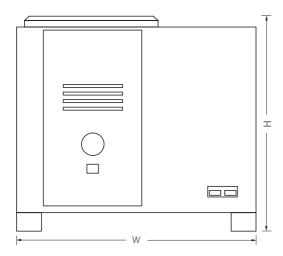
## Type list

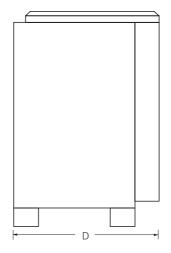
trak<sup>®</sup> power mini

PzS batteries Vented (Ah C <sub>5</sub> ) HOPP 3/IUola		GEL-AGM system Sealed (Ah C <sub>5</sub> )	Charger type	Mains output	Mains current	Mains fuse rating
approx. 8h	approx. 12h	approx. 10h		[VA]	[A]	[A]
38 - 115	60 - 180	60 - 100	E 12/15 HOHF mini	245	1.2	10A
77 - 250	121 - 360	100 - 260	E 12/30 HOHF mini	450	2.2	10A
114 - 345	180 - 525	150 - 390	E 12/45 HOHF mini	720	3.5	10A
154 - 465	242 - 690	201 - 520	E 12/60 HOHF mini	960	4.6	10A
38 - 115	60 - 180	60 - 100	E 24/15 HOHF mini	450	2.2	10A
77 - 250	121 - 360	100 - 260	E 24/30 HOHF mini	890	4.3	10A
114 - 345	180 - 525	150 - 390	E 24/45 HOHF mini	1335	6.5	10A
154 - 465	242 - 690	242 - 520	E 24/60 HOHF mini	1780	8.6	10A

Casing dimensions (W x H x D): 300 x 336 x 296 mm

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Features and customer benefits

trak<sup>®</sup> power mini

- Enhanced operating reliability
- Gentle and optimal charging of the battery

The regulated HF charging system with automatic correction of possible mains power fluctuations of +/- 15% rules out insufficient charging or damage (or overcharging) due to mains power fluctuations.

- Lower electrical installation costs
- Lower energy costs, since there are no additional costs for power factor correction

Thanks to the HF technology with controlled power factor correction – integrated PFC function – only effective power is drawn from the mains (cos  $\phi \approx 0.98$ ).

### Energy saving and reduction of costs by around 12% at each charging operation as compared with conventional chargers

The primary-cycled high-frequency charging system leads to an improvement of electrical efficiency to over 92%.

### May be used with all types of battery

Freedom to decide on type of battery purchased.

### High level of flexibility in operation

trak<sup>®</sup> power mini may be used to charge all types of battery: lead-acid, AGM/lead gel, nickel-cadmium, nickel-metal hydride. Just change the chip installed in the front panel or program new charging parameters.

### Perfect harmonisation with all battery types

The ampere-hour balanced charging process allows charging with different characteristics as for example PUIoU, IUIa, IUoU or Ia.

More reliable operation without monitoring

Thanks to the charging electronics used, after mains power failure the charging curve is automatically adapted to the actual state of charge of the battery.

Easy to operate - automatic start and stop

With its regulated automatic charging feature, the charger starts and stops automatically. If required, the charging process may be interrupted by using the stop button on the front panel.

Constant ease of updating

#### No specialist skills required on site

The microprocessor-controlled charging electronics of the trak<sup>®</sup> power mini may be programmed by plugging in an external chip.

Safer in operation, even at high ambient temperatures

Equipment cooling is ensured through a temperature- and output-controlled fan.









Service

Motive Power Systems

Reserve Power Systems

**Special Power Systems** 



### Industrial batteries - Complete energy systems - Full Service

- $\boldsymbol{\cdot}$  Low-maintenance and no-maintenance batteries
- $\boldsymbol{\cdot}$  Innovative battery chargers based on the latest technology
- Battery accessories
- Battery management systems and software
- Battery changeover systems
- Battery/charger servicing

- Battery recycling
- $\boldsymbol{\cdot}$  Applications engineering and technology
- Battery room design
- $\boldsymbol{\cdot}$  Technical training and seminars
- Leasing
- Power by the hour

### Your partner for sustainable energy solutions!

Further information on www.hoppecke.com

### HOPPECKE Batterien GmbH & Co. KG

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