





Order code: ICHG-65-12-AF

# **Automatic Battery Charger**

# **Datasheet**

## **Product description**

Automatic battery chargers provide a cost effective solution to most industrial battery charging requirements. The two stage constant current — constant voltage characteristic ensures accurate and efficient battery charging and is designed for permanent connection to the batteries maintaining them in a fully charged condition without overcharging. Device can be also set as power supply.

# **Key features**

- Cost effective
- Micro-processor control
- Compact size DIN rail mounting
- Sealed electronic construction
- Robust & high reliability
- Fully automatic operation
- Power supply mode
- Universal AC input ranges
- Low ripple output
- Passive cooling
- Fail alarm contact set

#### **Certifications and standards**

- ► EN 62368-1
- ► EN 61000-6-2
- EN 61000-6-4
- ▶ UL1236 Edition 8
- CSA C22.2 No. 107.2-01
- RoHS 3 Directive (EU 2015/863)

CE



# **Technical data**

### **Operating conditions**

Working Temperature	-10 °C to +50 °C
Working Humidity	20 to 90 % RH
Storage Temperature	-20 °C to +85 °C
Storage Humidity	10 to 95 % RH
Unpacked Weight	400 g
Withstand Voltage	Input – Output 1.5 kV AC
Isolation Resistance	Input – Output 500 V DC / 100M Ω

#### **Protections**

Overload Protection	Constant Current Limit/Fold back
Over Voltage Protection	105 % - 125 % Shutdown. Recycle I/P to restart
Over Temp. Protection	Output shutdown with automatic recovery
Reversed Battery Protection	Automatic protection. Disabled when in PSU mode

### **Input Specification**

Voltage Range, V <sub>IN</sub>	90 to 264 V AC
Frequency	47 to 63 Hz
Input Current	1.5 A rms max.
Leakage Current	None

### **Output Specification**

Voltage/Current	12.0 V Nominal 6.0 Apk
Ripple & Noise	±0.5 %
Line Regulation	±1.0 %
Load Regulation	±1.5 %0
Efficiency	Up to 90 %

### Fault Relay is active, if

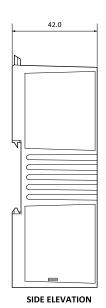
- DC short circuit
- ▶ Battery voltage lower than 95 % of nominal voltage
- Charger is switched OFF (\* in case of DC connected, it takes longer time to switch to NC status)

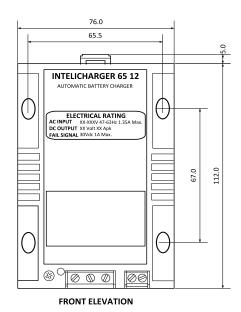
#### **Alarms and Levels**

DC Output Voltages	Float = Factory set to 13.8 V
	Boost = Float Voltage +4 V
AC / Charger Fail	Loss of AC input or DC output voltage ctrl
Low DC Voltage Alarm	Float Voltage -12 % Alarm, -8 % Reset
High DC Voltage Alarm	Float Voltage +7 % Alarm, +5 % Reset
Over Voltage Protection	Float Voltage +10 %, instant SD
Battery Disconnected	Open circuit on DC output

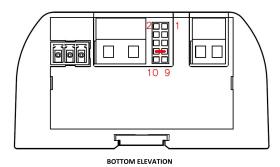


# Dimensions, terminals and mounting





### Power supply mode



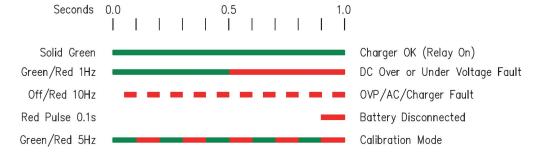
To activate Power supply mode connect pin 7 and 8.

No connection = Default = Charger mode

Note: Dimensions are in mm.

#### **Calibration**

- 1. Disconnect the battery. Connect a DC voltmeter to the ± output terminals.
- 2. Turn the "CAL" potentiometer fully anti-clockwise. When the status LED flashes green/red @5 Hz, adjust the "CAL" potentiometer and set the desired float voltage level.
- 3. When the LED red/green @5 Hz flash sequence ends, the unit is calibrated.





Manufacturer

ComAp a.s. Czech Republic Phone: +420 246 012 111

E-mail: info@comap-control.com Web: www.comap-control.com

