

#### 12347588 56778910 BATTERY SUPPLY CONFIG BOOST MAINS BACKUP Image: Supply Config Boost Mains Config Boost Mains Mains Image: Supply Config Boost Mains Mains Image: Supply Config Boost Mains

#### Order code: BC224V20BOB

# Datasheet

InteliCharger

480 24 20Ă

### **Product description**

The InteliCharger 480 24 20A is an advanced, automatic, multi-stage battery charger using "Switched mode technology" and "Battery care philosophy", suited to meet the most advanced requirements of battery manufacturers.

The battery care concept is based on algorithms that implement automatic battery charging, battery life optimization, flat batteries recovery and real time diagnosis. The real time auto-diagnostic system monitors battery faults such as cells in short circuit, accidental reverse polarity connection, disconnection of the battery.

These faults can be easily detected and fixed by help of blink code of diagnostic LED during the charger installation and operation. Charger is suited for all battery types. By jumper setting it is possible to change parameters of charging curve for: Open Lead Acid, Sealed Lead Acid, Gel, Ni-Cd and Li-ion battery type. A rugged casing with bracket for DIN rail mounting provides IP20 protection degree.

### **Key features**

- Suited for the following battery types: Open Lead Acid, Sealed Lead Acid, Lead Gel Li-Ion.
- Automatic battery status diagnosis.
- Four charging stages: Recovery, Boost, Absorption and Float. Switched mode power supply technology for battery charging.
- > Power Supply mode.

- > High efficiency (≥ 91 %).
- Protected against short circuit, reversed polarity, overload and over temperature.
- Signal output terminal (voltage free contact) for faulty battery state, for Main's power input fail signaling.
- > IP20 protection.
- > Temperature compensated charging.
- > MODBUS RTU communication.
- > DIN rail mounting.

### Standards and certifications

| EN 60950 (VDE 0805)          | EN IEC 62368-1     |
|------------------------------|--------------------|
| EN 50178 (VDE 0160)          | EN 61000-3-2       |
| SELV EN 60950-1              | EN60950/ UL60950-1 |
| PELV EN 60204-1              | EN 61000-4-3       |
| EN IEC 62368-1: 2014/AC:2015 | EN 61000-4-2       |
| EN IEC 62368-1               | CE                 |

## **Technical data**

### Input Data

| Nominal Input Voltage (2 x<br>Vac) | 115 – 230 – 277      |
|------------------------------------|----------------------|
| Input Voltage range (Vac)          | 90 - 135 / 180 - 305 |
| Frequency                          | 47 – 63 Hz           |
| Input Current (115 – 230<br>Vac)   | 9 – 4.5 A            |
| Internal Fuse                      | 10 A                 |
| External Fuse<br>(recommended)     | 16 A                 |

### **Output Data**

| Boost charge (25 °C)        | Lead Acid: 28.2 V<br>NiCd: 29 V |
|-----------------------------|---------------------------------|
|                             | Li-Ion: 29.2 V                  |
|                             | Open Lead Acid: 26.7 V          |
|                             | Sealed Lead Acid: 27 V          |
| Trickle charge (25 °C)      | Lead Gel: 27.6 V                |
|                             | NiCd: 28 V                      |
|                             | Li-Ion: 27.6 V                  |
| Recovery Charge             | 2 – 20 V DC                     |
| Charging. Max               | 20 A, 5 %                       |
| Efficiency (50% of nominal) | 91 %                            |
| Power Supply Mode           | Yes                             |

### **Operating Conditions**

| Ambient temperature<br>(operation)   | -25 ÷ +70 °C       |
|--------------------------------------|--------------------|
| De Rating Ta > 50 S°C                | -2.5%(In) / °C     |
| Ambient temperature<br>Storage       | -40 ÷ +85 °C       |
| Humidity at 25 °C no<br>condensation | 95% to 25 °C       |
| Cooling                              | Auto Convention    |
| Protection Class (EN/IEC 60529)      | IP20               |
| Pollution Degree<br>Environment      | 2                  |
| Dimensions (w-h-d)                   | 150 × 115 × 135 mm |
| Weight                               | 1.5 kg approx.     |

### Protections

| Detection of element in<br>short circuit | Yes |
|--|-----|
| Short-circuit protection                 | Yes |
| Overload protection                      | Yes |
| Over Voltage Output<br>protection        | Yes |

### **Dimensions**



Note: All dimensions are in mm.