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With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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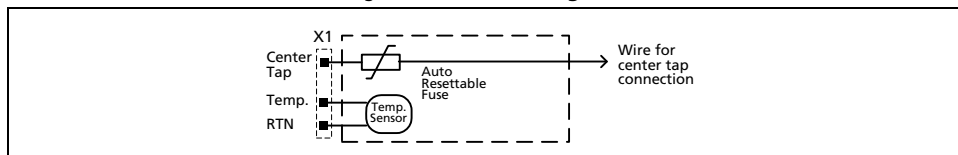
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SENSOR BOARD FOR BATTERY MODULES

- Suitable for most of the PULS DC-UPS Control Units
- Includes a PT1000 Temperature Sensor
- Includes an Auto-Resettable Fuse for the Center-Tap Connection

1. PRODUCT DESCRIPTION

This sensor board contains a PT1000 temperature sensor and an auto-resettable fuse, which is suitable for charging currents up to 3.5A. The fuse protects the center-tap wire between the battery module and the DC-UPS control unit. The UZS24.100 is compatible with most of the PULS DC-UPS control units and enables all the benefits of the PULS 1-Battery-Concept. This makes the use of matched replacement batteries unnecessary and allows a precise battery charging and testing which results in the longest possible battery life.

2. FUNCTIONAL DIAGRAM

Fig. 2-1 **Functional diagram**

ORDER NUMBER

UZS24.100   Sensor board comprising a PT1000 temperature sensor and an auto-resettable center-tap fuse

Feb. 2013 / Rev. 1.0 DS-UZS24.100-EN
All parameters are specified at 25°C ambient unless otherwise noted.

3. INSTALLATION AND WIRING

The sensor board shall be installed close to the batteries in order for a precise temperature measurement of the batteries.

A Temperature Sensor
Connect pin 11 (Temp.) and pin 12 (RTN) to the corresponding pins on the DC-UPS control unit.
The temperature sensor is a PT1000 sensor with SMD technology, which is placed close to the terminal block.

B Center-tap
Connect pin 13 (Center-Tap) to the corresponding pin on the DC-UPS control unit. Connecting the center-tap wire to the DC-UPS control unit enables all the benefits of the PULS 1-Battery-Concept. This makes the use of matched replacement batteries unnecessary and allows a precise battery charging and testing which results in the longest possible battery life. Using the center tap connection is optional. Without this connection, the DC-UPS will function like a traditional UPS system without the above mentioned benefits.

C Battery wire
Connect the blue wire (AWG18, length 0.5m) to the interconnection between the two batteries. Shorten the wire to the required length. Between pin 13 (center-tap) and this wire is an auto-resettable fuse included in order to protect the wire between the sensor board and the DC-UPS control unit. The maximal allowed charging current is 3.5A.
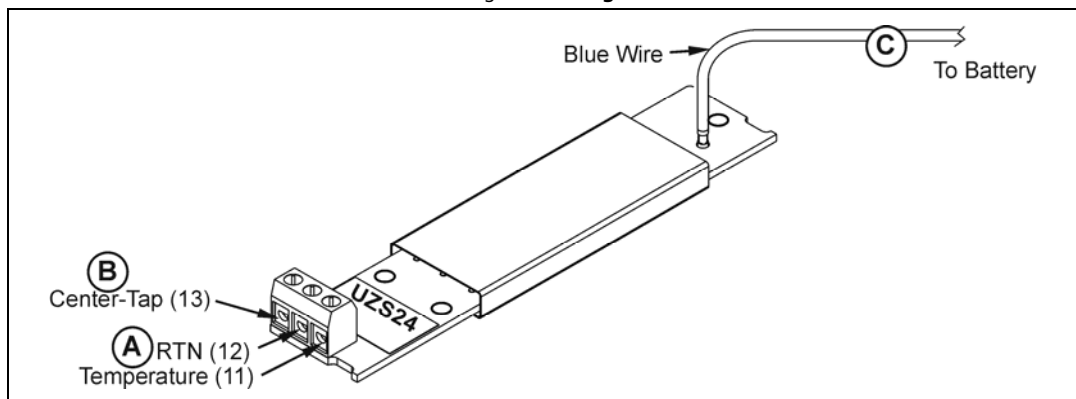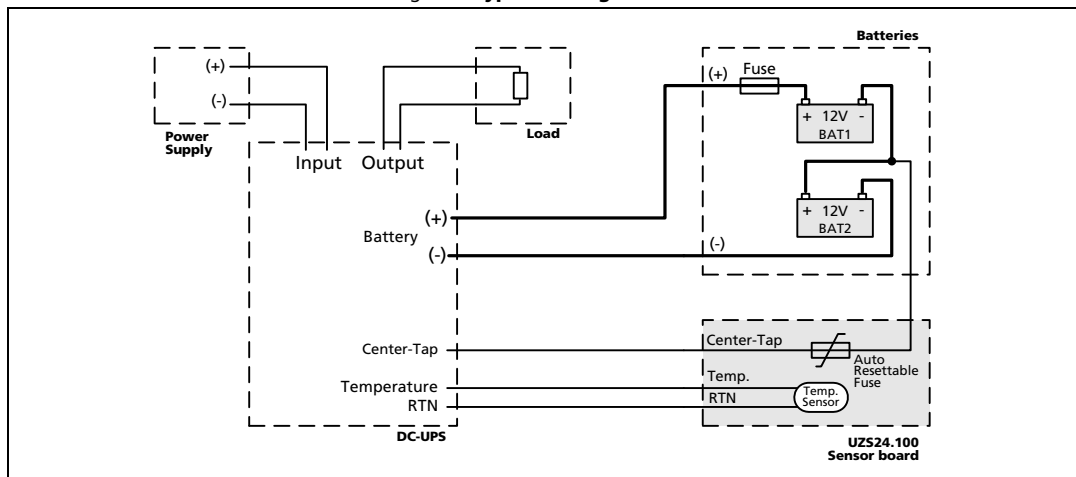
Fig. 3-1 **Wiring**

Fig. 3-2 **Typical wiring scheme**

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All parameters are specified at 25°C ambient unless otherwise noted.

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4. TERMINALS

The screw terminals are IP20 Finger safe constructed and suitable for field and factory wiring.

Solid wire	0.5-1.5mm^2
Stranded wire	0.5-1.5mm^2
American Wire Gauge	AWG 20-12
Max. wire diameter	1.5mm (including ferrules)
Wire stripping length	6mm / 0.25inch
Screwdriver	3 x 0.5mm slotted
Recommended tightening torque	0.5Nm / 4lb-in

5. APPROVALS

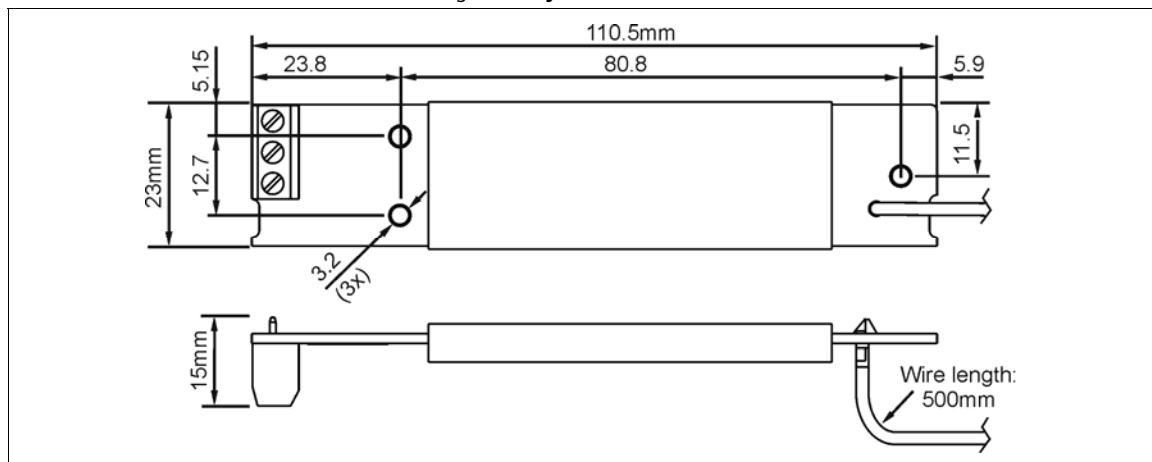|		
EC Declaration of Conformity	CE	The CE mark indicates conformance with the - Low-voltage directive (LVD) 2006/95/EC and - RoHS directive 2011/65/EU.

6. PHYSICAL DIMENSIONS AND WEIGHT

Dimensions	110.5 x 23 x 15mm
Wire length	500mm
Weight	30g / 0.07lb

Fig. 6-1 **Physical Dimensions**

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