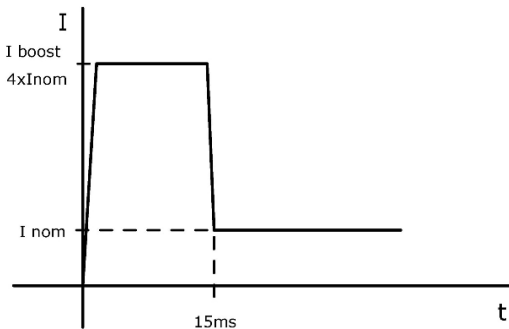


PW3400CM / BPW3400CM

Current Boost and Overload

(Inactive with Series BPW3400CM)

The converter disposes over a BOOST function, in order to blow up the output fuse. The current limit will be done step wise. In the first step the current limit is 3 times the nominal output current, for a time of 15ms. After this time the limit will be set to nominal current level. The current limit is set to $I_{nominal}$ level after approx. 20ms, if there is an overload between the $I_{nominal}$ and the I_{boost} level. In the range of I_{boost} and $I_{nominal}$ level, the Boost function is inactive. By decreasing the load, under the nominal current level, the Boost function is again active.



Over Voltage Protection (OVP)

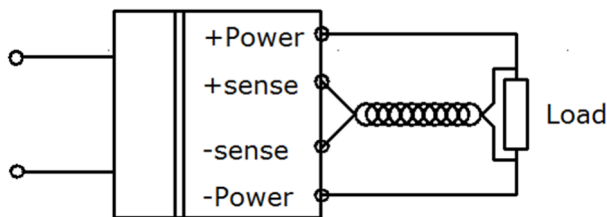
To protect the load and the internal circuits against excessive output voltage, an independent circuit turn off the primary control, without restart. For a restart the input must be switch off, and after 30s a restart can be done.

Important: the system used here does not provide protection against over voltage that comes from outside.

Remote Sensing

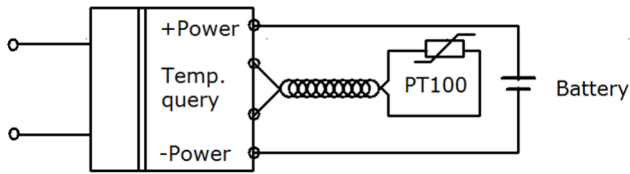
Optional: to compensate the voltage drop along the power leads, the voltage monitoring must be done close to the load. Therefore the sense wires must be connected like in the scheme below.

The placement of these wires must be separate from the power leads, to avoid interferences. The best way is to twist it.



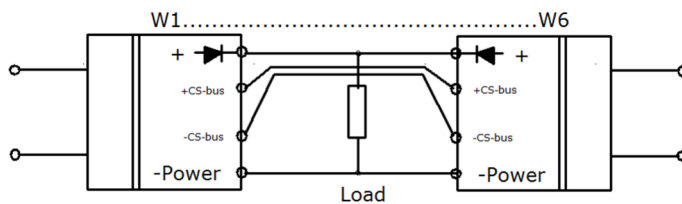
Charge Voltage depending on ambient temperature

It is possible with the Charger BP3600CM to adjust the charge voltage, depending on ambient temperature. For this purpose, a PT100 is attached near the battery and wired to the PT100 module.



Parallel Connection for Higher Power or Redundancy

In order to increase the output power, or for redundancy, up to 6 identical units can be connected in parallel. In order to achieve a good load sharing, the units are equipped with an active current share bus. The pairing is done by two wires. The placement of these wires must be separate from the power leads, to avoid interferences.



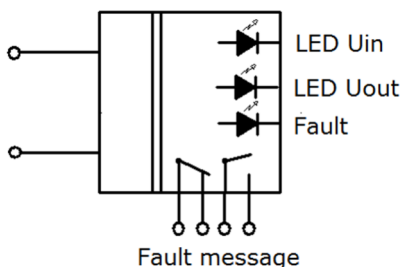
Alarm Signals and Visual Indications

LED Uin input voltage in tolerance

LED Uout output voltage in tolerance

LED fault

A collective fault, related to the output, is reported via floating relay contacts.



Inhibit

Primary Inhibit

For turn on the unit, contacts 3 and 4 on connector X1 must be closed by switch or wire.
(Connection is made by factory. For use primary inhibit, remove the connection and add for example a switch)

Attention

Galvanic isolation no, **connected with input voltage,**

Connector 1-wire

On / Off levels contacts 3 and 4 closed - unit "On" Charging voltage is normal
Contacts 3 and 4 open - unit "Off" Charging voltage 0VDC

Inhibit 24VDC

If the primary inhibit is active the unit can be switched on/off by signal 24VDC

Inhibit input Digital input, Unom. 24VDC
Galvanic isolated 750 VAC and 1000 VDC permanently

Connector 2-wire

On / Off levels Signal "0": 0-5VDC; Charging voltage is normal
Signal "1": 15-30VDC; Charging voltage 0VDC

Input impedance 1200Ω, input current max 25mA