## **Product specification** Switch mode power supply 19" Twinvolt: MPS10024/12 Input range: 85 - 270 V<sub>AC</sub> or 100 - 400V<sub>DC</sub> 2 galvanically isolated outputs 111.0 Output range: 22.5 - 30.0 V<sub>DC</sub> / 10.0 - 15.5 V<sub>DC</sub> 6... 28,4 also adverse voltage possible Power: 120 W / 12 W 171.9 Operating status shown by LED Terminal versions 19" rack mounting (3HE 8 TE) MPS100/-1 MPS100-2 MPS100-3 different terminal dispositions Parallel operation possible, short circuit proof, overload and open ciruit protected Vibration proof, suitable for the tropics exposy resin casted Output separated according to VDE0570 Conforms to EMC and low voltage directive CE-konform Safety according to VDE, EN, UL, CSA

## Application

The switch-mode power supplies of the MPS100 series are powerful and robust devices to power sensitive loads in a hard industrial environment. These features result from the modern construction with a good radio shielding and high reliability integrated in a functional and stable casing.

The two short circuit proof output DC voltages of this model are independent from each other and can be adjusted.

This power supply is optimally suited for loads requiring high starting currents.

## **Functional principle**

In the power supplies of the series MPS100 a flyback converter operates to transform the energy in two steps.

During the conducting phase the diode is blocking, the inductor is energized and a magnetic field establishes. There is no electrical transmission; the consumer load is supplied with energy from the capacitor.

When the switching transistor opens, the blocking phase begins. The current in the inductor cannot change immediately, discharges through the diode and a negative voltage establishes at the inductor.

Now operating like a power source the inductor reloads the capacitor and supplies the consumer with energy.

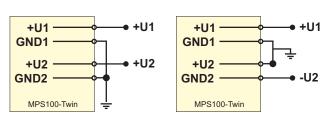
The energy flows from the inductor into the capacitor and the consumer and through the conducting diode back to the inductor.

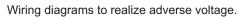
## Design

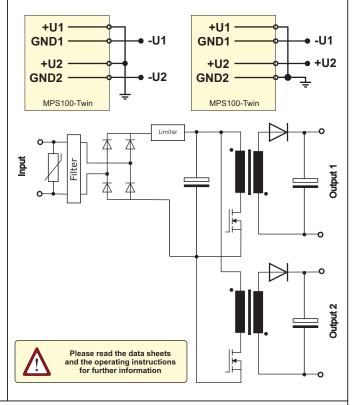
Completly embedded with resin in a metal cassette acc. to DIN 41494 for 19"-rack (3RU 8HP).



Postfach 1521 D - 22905 Ahrensburg







Phone: +49 4102 42082 Telefax: +49 4102 40930 E-Mail : sales@feas.com Internet: www.feas.com