



Current is now orange! Power supplies made by ifm.



24 V DC switched-mode power supplies with an "intelligent power reserve".

- Two designs for different applications.
- Wide-range input, single phase 100...240 V AC $\pm 10\%$.
- Robust metal housing or compact plastic housing.
- Low power loss due to high efficiency.
- Operating status indicated by means of LEDs and DCok output.

Wide-range power supply
←→

cULus approval

High excess gain

Vibration and shock resistant

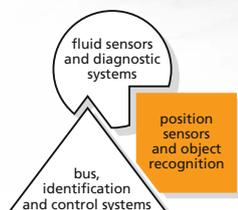
Primary switched-mode power supplies

are an economic solution to supply sensors, actuators and sensitive electronic components. They are distinguished by their compact, light weight, slim design ensuring reliable installation on the rail.

A stable output voltage, under different loads and at fluctuating input voltages, ensures operational reliability and plant uptime.

Two LEDs and a DCok output indicate and signal operating states.

The units can be used worldwide due to their wide-range input and cULus approval.



Advantages and customer benefits

- Power reserve:**
50 % for min. 5 s, without voltage dip
- Mains buffering time (e.g. DN3011):**
up to 450 ms at 230 V nominal voltage
- High efficiency:**
up to 90 % guarantees less power loss
- Wide-range input:**
input voltage 100...240 V AC \pm 10 %
- Protection:**
with common circuit-breakers,
10 A, type B
- Output response:**
short-circuit proof
overload protected
no-load protected
- Indication:**
LED green: DCok
LED red: DC overload
- Signalling:**
switching output, DCok
- Temperature conditions:**
operating temperature 0 (-10)...70 °C,
depending on the type
storage temperature -25...85 °C
derating from 60 °C
- Protection:**
IP 20, I
- Designs:**
PSA: robust metal housing
screw terminals
PSB: compact plastic housing
cage clamps
- PFC**
passive according to EN 61000-3-2
- EMC**
according to 2004/108/EC
radiation of interference class B
- Approval to UL60950/UL508**

Power supplies single phase, 24 V DC		Order no.
Nominal voltage	Output	
Type PSA: metal housing		
100...240 V AC	24 V DC / 2.5 A	DN3011
100...240 V AC	24 V DC / 5.0 A	DN3012
Type PSB: plastic housing		
100...240 V AC	24 V DC / 1.2 A	DN1030
100...240 V AC	24 V DC / 2.5 A	DN1031

Output response

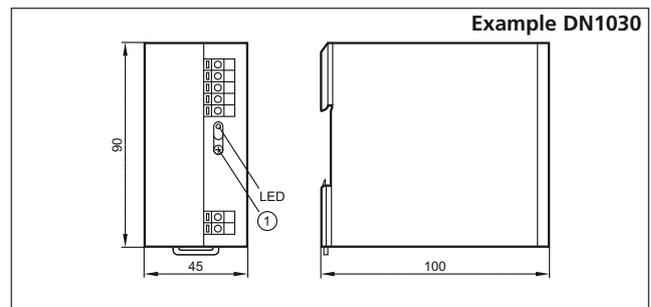
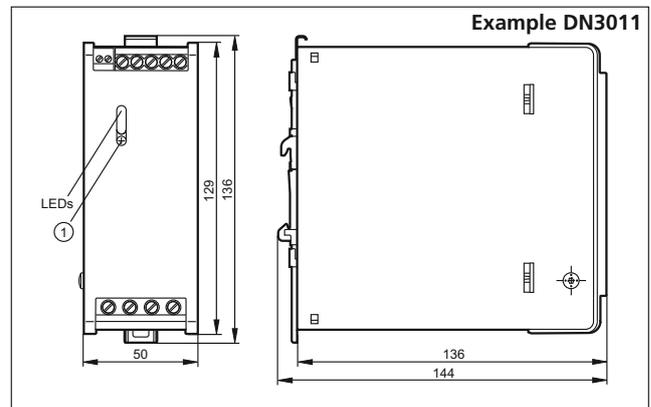
After power on, the power supplies start, even without minimum load, and are, of course, short-circuit proof and overload protected. Whereas the compact power supplies DN1030 and DN1031 operate in the Hiccup mode in case of overload or short circuit, the power supplies in the metal housing feature an "intelligent power reserve". At a 1.5-fold nominal load the power supplies can provide "extra current" for 5 s, for a longer time, in case of lower overload. This additional power allows difficult loads to start (motors, DC/DC converters).

In case of a short circuit the output voltage dips and the output current is limited to the nominal current.

Parallel operation

Two identical power supplies can be operated in parallel. To do so, the power supplies should be set to the same output voltage before (24...28 V).

Dimensions



1) with pot.