

DC power supplies

Switching power supplies - GAMMA series

- ▶ 100-240V wide range input
- ▶ Efficiency 85%
- ▶ Parallel operation
- ▶ Short circuit-, Overvoltage- and Overload protection
- ▶ Width 45mm
- ▶ Industrial design



Technical data

1. Functions

Switching power supply with 24V DC output.

2. Indicators

Green LED Power ON: Output voltage OK
 Red LED Overtemp. ON: indication of overtemperature (premonition)
 LED bar:
 Green LED >25% ON: output current >25%
 Green LED >50% ON: output current >50%
 Yellow LED >75% ON: output current >75%
 Red LED >100% ON: output current >100%

3. Mechanical design

Self-extinguishing plastic housing, IP rating IP40
 Mounted on DIN-Rail TS 35 according to EN 60715
 Mounting position: any
 Shockproof terminal connection according to VBG 4 (PZ1 required), IP rating IP20
 Tightening torque: max. 1Nm
 Terminal capacity:
 1 x 0.5 to 2.5mm² with/without multicore cable end
 1 x 4mm² without multicore cable end
 2 x 0.5 to 1.5mm² with/without multicore cable end
 2 x 2.5mm² flexible without multicore cable end

4. Input circuit

Rated voltage: 110V to 240V AC/DC
 Rated frequency: 47 to 63Hz
 Continuous operation:
 AC: 93V to 264V AC
 DC: 90V to 350V DC
 Rated current: 1,0A @ 110V AC
 0,5A @ 230V AC
 Efficiency: 85%
 External Fusing: for unit protection not necessary - internal fuse

5. Output circuit

Rated voltage: 24V DC
 Adjustment range: 24V to 28V DC
 Preset: 24V ±1%
 Accuracy of regulation: ±2%
 Ripple and noise:
 24V DC: 100mV_{PP}
 28V DC: 150mV_{PP}
 Turn-on time:
 resistive max. load
 or
 capacitive load 5500µF: 600ms @ 230V AC
 1200ms @ 110V AC
 Output power: 30W
 Overload capacity: 2,5A
 Current limitation: 3,5A

Overload / Short circuit characteristic:

Continuous operation without shutdown

Parallel operation:

possible - equal load sharing adjustable

Open-circuit operation:

allowed

6. General

Rated surge voltage:

6kV

Cooling:

Convection cooling - Leave sufficient space around the unit for cooling!

Installation clearances:

The distance between the devices should be min. 25mm!

Ambient temperature:

-25 to +55°C

Storage temperature:

-25 to +70°C

Transport temperature:

-25 to +70°C

Derating:

1.2W/°C from +45 to +55°C

Relative humidity:

15% to 85%

Pollution degree:

2 (in accordance with IEC 60721-3-3 class 3K3)

Vibration resistance:

10 to 55Hz 0.35mm
 (in accordance with IEC 60068-2-6)

Shock resistance:

15g 11ms
 (in accordance with IEC 60068-2-27)

► Functions

Parallel operation

The parallel operation can be used for power increase. To avoid unsymmetrical load distribution an equal load distribution can be achieved with the adjustment controller. The output current will be indicated by the LED bar on the front.

► Dimensions

