switching power supplies alternating current 1000

design	**78 x 93 x 67mm up to 227 x 125.2 x 100mm**	
switching power supply	DC output voltage	**24V DC**

- ✓ **wide AC input voltage range**
- ✓ **protected against short-circuit, overcurrent, overvoltage and overheating**
- ✓ **mountable on 35mm-DIN-rail**
- ✓ **LED-display for power on**

compact and light
UL homologated

description

Due to the high power density which is achieved, switching power supply units are especially used, in order to cut down on bulk and material.
Furthermore, when compared to conventional power supply units, they offer better output voltage stability with a degree of efficiency which is the same or higher.
In a way wich is different from conventional power supply units with a small output power, switching power supplies with a small output power have high degree of efficiency.
Conventional, linear controlled power supply units which contain a heavy transformer with an iron core cause additional losses in the linear regulator.
The output voltage can be controlled using the “+V Adj” potentiometer.

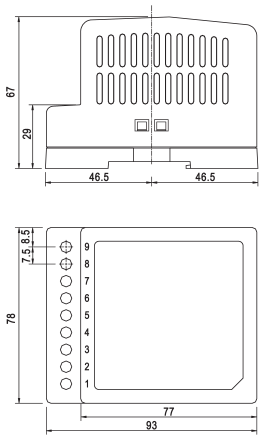
application examples

- DC voltage supply from the mains
- power supply units for diode lasers
- arc-welding devices
- charging devices for larger accumulators
- power supply devices for the pump light sources for solid-state lasers (flash lamps and arc lamps)

power supplies

1000 switching power supplies alternating current

article-no.	**NG780201**
output DC voltage	**24V DC ±1%**
output nominal current	**2A**
output power	**48W**

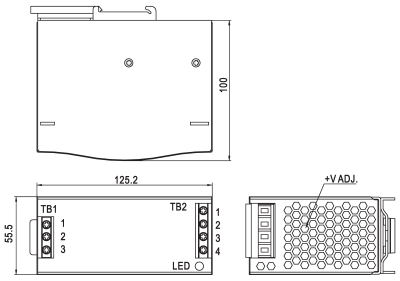


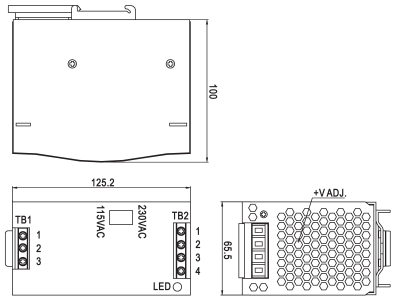
TECHNICAL DATA

output DC voltage	24V DC
adjustment range	21.6 ... 26.4V DC
output nominal current	2A
output power	48W
input voltage range AC	85 ... 264V
frequency	47 ... 63Hz
input nominal current at 230V AC	0.75A
leakage current at 240V AC	< 1mA
input voltage range DC	120 ... 370V
operating mode display	1x LED green
overload protection	105 ... 150% of the output power
overvolatge protection	115 ... 135% of the output DC voltage
over-temperature protection	135°C, cut-off switching power supply
design (LxWxH)	78x93x67mm
housing material	plastic
weight	0.4kg
temperature (operating / storage)	-10 ... +50°C / -20 ... +85°C
temperature coefficient	± 0.03% / °C (0 ... 50)
air humidity (operating / storage)	20 ... 90% / 10 ... 95%
system of protection (EN 60529)	IP20
standards	UL 508, EN 60950
EMC	EN 55022 (CISPR22) Class B, EN 610000-4-2,3,4,5,6,8,11, ENV 50204, EN 61000-6-2, EN 50082-2
connection	connecting terminal
mounting	35mm DIN-rail

switching power supplies alternating current 1000

article-no.	**NG550301**	**NG650501**
output DC voltage	**24V DC ±1%**	**24V DC ±1%**
output nominal current	**3.2A**	**5A**
output power	**77W**	**120W**





change-over switch 115V AC / 230V AC

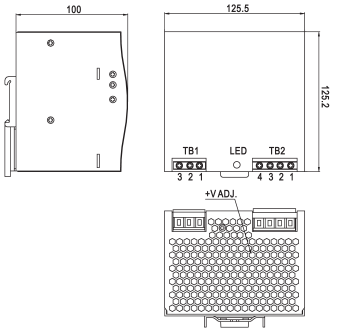
TECHNICAL DATA

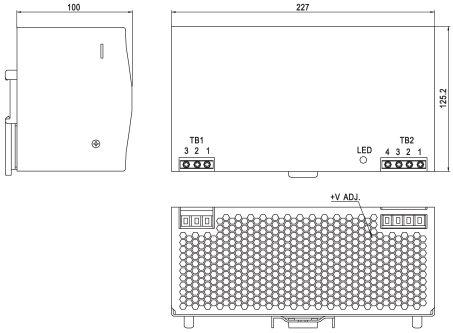
output DC voltage	24V DC	24V DC
adjustment range	24 ... 28V DC	24 ... 28V DC
output nominal current	3.2A	5A
output power	77W	120W
input voltage range AC	85 ... 264V AC	88 ... 132V AC / 176 ... 264V AC
frequency	47 ... 63Hz	47 ... 63Hz
input nominal current at 230V AC	0.96A	1.6A
leakage current at 240V AC	< 1.0mA	< 3.5mA
input voltage range DC	120 ... 370V DC	248 ... 370V DC
operating mode display	LED green	LED green
overload protection	105% ... 150% of the output power	105% ... 150% of the output power
overvolatge protection	29 ... 34V DC	29 ... 34V DC
over-temperature protection	85°C ±5%, cut-off switching power supply	85°C ±5%, cut-off switching power supply
design (LxWxH)	55.5x125.2x100mm	65.5x125.2x100mm
housing material	aluminium	aluminium
weight	0.55kg	0.8kg
temperature (operating / storage)	-10 ... +60°C / -20 ... +85°C	-10 ... +60°C / -20 ... +85°C
temperature coefficient	± 0.03% / °C (0 ... 50°C)	± 0.03% / °C (0 ... 50°C)
air humidity (operating / storage)	20 ... 90% / 10 ... 95%	20 ... 90% / 10 ... 95%
system of protection (EN 60529)	IP20	IP20
standards	UL 508, EN 60950	UL 508, EN 60950
EMC	EN 55022 (CISPR22) Class B, EN 610000-4-2,3,4,5,6,8,11, ENV 50204, EN 61000-6-2, EN 50082-2	EN 55022 (CISPR22) Class B, EN 610000-4-2,3,4,5,6,8,11, ENV 50204, EN 61000-6-2, EN 50082-2
connection	connecting terminal	connecting terminal
mounting	35mm DIN-rail	35mm DIN-rail

power supplies

1000 switching power supplies alternating current

article-no.	NGKB1001	NGLB2001
output DC voltage	24V DC	24V DC
output nominal current	10A	20A
output power	240W	480W



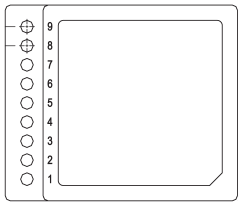


TECHNICAL DATA

output DC voltage	24V DC	24V DC
output nominal current	10A	20A
output power	240W	480W
adjustment range	24 ... 28V DC	24 ... 28V DC
input voltage range AC	85 ... 264V AC	180 ... 264V AC
frequency	47 ... 63Hz	47 ... 63Hz
input nominal current at 230V AC	1.4A	4.0A
leakage current at 240V AC	< 3.5mA	< 3.5mA
input voltage range DC	120 ... 370V	250 ... 370V
operating mode display	LED green	LED green
overload protection	105 ... 150% of the output power	106 ... 150% of the output power
overvolatge protection	30 ... 36V DC	30 ... 36V DC
over-temperature protection	100°C ± 5%, cut-off switching power supply	100°C ± 5%, cut-off switching power supply
design (LxWxH)	125.5x125.2x100mm	227x125.2x100mm
housing material	aluminium	aluminium
weight	1.2kg	2.1kg
temperature (operating / storage)	-10 ... +70°C / -20 ... +85°C	-20 ... +70°C / -20 ... +85°C
temperature coefficient	± 0.03% / °C (0 ... 50°C)	± 0.03% / °C (0 ... 50°C)
air humidity (operating / storage)	20 ... 90% / 10 ... 95%	20 ... 90% / 10 ... 95%
system of protection (EN 60529)	IP20	IP20
standards	UL 508, EN 60950	UL 508, EN 60950
EMC	EN 55022 (CISPR22) Class B, EN 610000-4-2,3,4,5,6,8,11, ENV 50204, EN 61000-6-2, EN 50082-2	EN 55022 (CISPR22) Class B, EN 610000-4-2,3,4,5,6,8,11, ENV 50204, EN 61000-6-2, EN 50082-2
connection	connection terminal	connection terminal
mounting	35mm DIN-rail	35mm DIN-rail

connection NG780201

terminal 1:	input AC
terminal 2:	input AC
terminal 3:	PE
terminal 4:	output DC (0V)
terminal 5:	output DC (0V)
terminal 6:	output DC (+24V)
terminal 7:	output DC (+24V)
terminal 8:	LED operating mode display
terminal 9:	potentiometer adjustment range



connection NG550301, NG650501

terminals TB1

terminal 1:	PE
terminal 2:	input AC
terminal 3:	input AC

terminals TB2

terminal 1:	output DC (+24V)
terminal 2:	output DC (+24V)
terminal 3:	output DC (0V)
terminal 4:	output DC (0V)

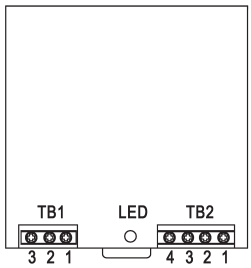
connection NGKB1001, NGLB2001

terminals TB1

terminal 1:	PE
terminal 2:	input AC
terminal 3:	input AC

terminals TB2

terminal 1:	output DC (+24V)
terminal 2:	output DC (+24V)
terminal 3:	output DC (0V)
terminal 4:	output DC (0V)



Warning: Never use these devices in applications where the safety of a person depends on their functionality.

notes

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