Dinel®

UNIVERSAL STABILIZED POWER SUPPLIES

- For reliable power supply of electronic devices in industrial applications
- Current overload and short circuit protection
- LED state indications of power and short-circuit, (according to the type)
- Safety requirements according to ČSN 332000-4-41
- Suited in polycarbonate enclosures
- High quality terminal box
- Mounting on DIN rail 35 mm



Stabilized power supplies are designed for reliable power supplying of sensors of non-electric values (level, flow rate, temperature, pressure) or as the sources for various circuits, indicators, converters, switch and control units etc. Power supplies fulfil the standards of electric safety and electromagnetic compatibility.

VARIANTS OF UNITS

• SPSU-1200-20	A	Universal stabilized power supply with load indication , output voltage 12V DC, maximum load 2A. Electronic protection against short circuit and current overload on the output side, thermal fuse. Optical state, overload indication (LED) and load indication (LED bargraph).
• SPSU-2400-18	A	Universal stabilized power supply with load indication , output voltage 24V DC, maximum load 1.8A. Electronic protection against short circuit and current overload on the output side, thermal fuse. Optical state, overload indication (LED) and load indication (LED bargraph).
• PSU-2400	B	Single-channel stabilized power supply , output voltage 24V DC, maximum load 150mA. Electronic protection against short circuit on the output side. Optical state indication (LED).
• DSU-2420	B	Dual-channel stabilized power supply, output voltage 2x24VDC (galvanically separated), maximum load 2x50mA. Electronic protection against short circuit on the output side. Optical state indication (LED) of individual outputs.
• PSU-1200-S	©	Miniature stabilized power supply , output voltage 12V DC, maximum load 160 mA. Electronic protection against short circuit on the output side. Optical state indication (LED).
• PSU-2400-S	Ô	Miniature stabilized power supply, output voltage 24V DC , maximum load 80mA. Electronic protection against short circuit on the output side. Optical state indication (LED).

DIMENSIONAL DRAWINGS

SPSU-1200-20, SPSU-2400-18







DSU-2420, PSU-2400

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PSU-1200-S, PSU-2400-S

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TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATIONS							
			SPSU-2400-18	DSU-2420	PSU-2400	PSU-1200-S	PSU-2400-S
Nominal supply voltag	je	230 V AC (±10%), 50 Hz					
Nominal power dema	nd	60 VA		5 VA	9 VA	4 VA	
Output voltage		12 V DC	24 V DC	2x 24 V DC	24 V DC	12 V DC	24 V DC
Output voltage tolerar	nce	±2%	±2%	± 5%	±5%	± 10%	± 10%
Output voltage ripple	at I _o = Max.	max. 1	00 mV	5 mV	5 mV	80 mV	40 mV
Max. output current		2,0 A	1,8 A	2x 50 mA	150 mA	160 mA	80 mA
Output short circuit cu	urrent	max. 2,5 A	max. 2,5 A	max. 80 mA *	max. 170 mA	max. 300 mA	max. 200 mA
Max. duration of outpo	ut short-circuit	Unlimited					
Electric strength input – output		4 KV					
Ambient temperature		-20 +60 °C -20 +50 °C					
Protection class of	Box Terminal	IP: IP:	30 20	IP40 IP20			
Material	Box Terminal			polycarbonate CuBe			
Conductor size		Recommended 0,5 1 mm ² / max. 4 mm ²					
Internal protection on 2	230V side by fuse	T 500 mA		T 80 mA		T 500 mA	
Reversible thermal fus	e	130	C°C	-			-
Weight		1,15	1,15 kg 0,4 kg 0,5 kg 0,15 kg			5 kg	

* For one channel

FRONT PANELS AND TERMINAL BOXES

SPSU-1200-20, SPSU-2400-18

1 2	3 4 5 6 +	3 7	9 10	11 12 1	3 14 15
POWER 230 V 50 Hz 50 VA N L 16 17	Dine SPSU-xxxx- stabilized power Dinel, sz.o. Czech Republic www.dineLcz dinel@dineLcz	xx supply unit	e <u>ت</u>		LOAD 100 % () 80 % () 60 % () 40 % () 20 % ()

Terminal box No.	Series SPSU	DSU-2420	PSU-2400	Series PSU-N
1	positive pole (+)	positive pole 1 (+)	positive pole (+)	negative pole (-)
2	positive pole (+)		positive pole (+)	negative pole (-)
3	positive pole (+)	negative pole 1 (-)	positive pole (+)	negative pole (-)
4	positive pole (+)		positive pole (+)	negative pole (-)
5	positive pole (+)		negative pole (-)	positive pole (+)
6	positive pole (+)	positive pole 2 (+)	negative pole (-)	positive pole (+)
7	positive pole (+)		negative pole (-)	positive pole (+)
8		negative pole 2 (-)	negative pole (-)	positive pole (+)
9	negative pole (-)	230 V AC (L)	230 V AC (L)	230 V AC (L)
10	negative pole (-)	230 V AC (N)	230 V AC (N)	
11	negative pole (-)			
12	negative pole (-)			
13	negative pole (-)			230 V AC (N)
14	negative pole (-)			
15	negative pole (-)			
16	230 V AC (N)			
17	230 V AC (L)			



PSU-2400



PSU-1200-S

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Dinel*

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POWER

PSU-1200-S

PSU-2400-S



FUNCTION AND STATUS INDICATION

LED indicators	Colour	For the type	LED Function
"OVEROLAD"	Red	SPSU series	Shines – Short circuit or overload on the output terminal Dark – Correct function
"LOAD"	Yellow	SPSU series	Shines – Load indication on the output terminal (20, 40, 60, 80, 100%) Dark – Load on the output terminal is lower than 20%
"OUTPUT I, II"	Green	DSU-2420	Shines (both) – Device connected to supply voltage, correct function Dimmed – Short circuit or overload on the output terminal of the respective section * Dark – Internal defect of the respective section, power loss (both off)
"POWER"	Green	All types	Shines – Device connected to supply voltage, correct function Dimmed – Short circuit or overload on the output terminal (only DSU–2420) * Dark – Power loss or internal failure, short circuit on the output terminal or internal defect

* It is necessary to remove the short circuit and break the mains for a short time to start up the unit again.

All power supplies are equipped with protection against current overload and short circuit on the output terminal. Electrical equipment of protection class II.

Connection to the mains 230V only through a fuse or a circuit breaker

Safety requirements according to EN 61010-1.

Electromagnetic compatibility according to EN 55022 and EN 61000-4-2, -3, -4, -5, -6 -11.

PACKING, SHIPPING AND STORAGE

The device is supplied packaged in a cardboard box that protects it against mechanical damage.

When handling and during transport, it is necessary to prevent impacts and falls.

The electrical device must be stored in dry enclosed areas with humidity up to 85%, free of aggressive vapours at temperatures between -10°C and 50°C, and must be protected against the effects of weather.

