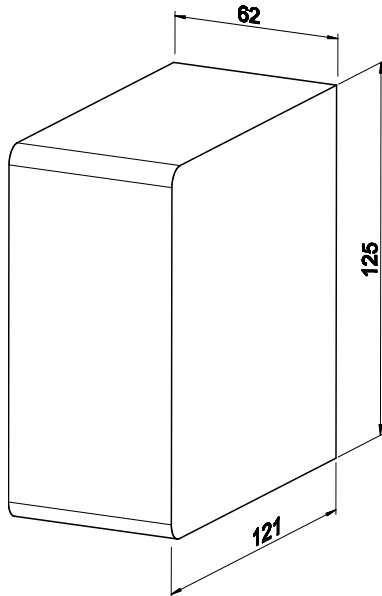


SERIES S01-X/500

AC/DC POWER SUPPLY - PRIMARY SWITCHED - SINGLE OUTPUT



- 480 watts output power
- Only 62mm wide
- Output DC: 22 - 29 V
54 - 80 V
- Powerboost up to 150%
- Input AC: 120 / 230 V
- Input with internal fuse
- Overtemperature protection
- Primary and secondary overvoltage protection
- Operation in any assembly position



Dimensions W x H x D (without connectors): 62 x 125 x 121 mm
Detailed dimension drawing please on request.

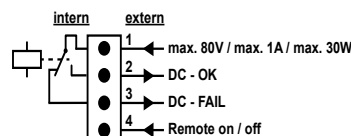


There should be a distance of at least 20 mm between the air inlets and outlets and the surrounding devices. Please ensure that the air extracted is not immediately sucked in again.

ORDERING INFORMATION			
Ua [V]	Ia [A]	Preset range Vo [V]	Item Order no.
24	0 - 20	22 - 29	S01-24/500 0150-2480
72	0 - 6,7	54 - 80	S01-72/500 0150-1874

SERIES S01-X/500

AC/DC POWER SUPPLY - PRIMARY SWITCHED · SINGLE OUTPUT

LinMot®

1. INPUT		6. EMC	
Input voltage range V_i	AC 90 - 132 V and 180 - 264V, 50/60 Hz automatical switchover	Mains feedback / PFC	EN 61000-3-2 Class A only with ext. PFC 12mH/4, 5A/230VAC
Efficiency	24V/48V: typ. 86%, 72V: typ. 88%	Flicker	EN 61000-3-3
Input current limitation	$\leq 70 A_{peak}$ typ. in cold state $\leq 150 A_{peak}$ typ. in hot state	Interference immunity	EN 61000-6-2 Industrial generic standard EN 61000-4-2 8/15KV EN 61000-4-3 noise level 10V/m (Krit. A)
Internal fuse	16ATH / 250Vac	Burst	EN 61000-4-4 4KV (Krit. A)
External branch circuit	16 A (IEC), 20 A (USA) necessary	Surge	EN 61000-4-5 4/2KV (Krit. A) EN 61000-4-6 noise level(Krit. A) EN 61000-4-11
2. OUTPUT		Interference emission	EN 61000-6-4 Industrial generic standard EN 55011 Class B Radiation depends on assembly
Preset range V_o	DC 22 - 29 V, 54 - 80 V V_o will be saved after 1s	7. OPERATING DATA	
Factory setting V_o	DC 24 V, 72 V +/- 0.5%	Temperature range	-25°C...70°C, integral, temperature-regulated fan, sucking in air from below
Max. Outputpower	480W - Powerboost 720W ($V_o \geq V_{o,nom}$)	Derating	3% / K at +60°C (see diagram)
Powerboost (only in boostmode)	Boost 500ms up to 150% I_{nom} possible, after that min. 500ms break necessary	Weigth	1kg
Operation indicator	green led for ok / red led for error	Due to the integrated fan, the power supply S01 can be installed in any position. The passage of air must not be obstructed by installation. The distance to the air vents must be at least 20 mm. Fire protection must be ensured via the outer casing system.	
Ripple	120mV _{ss} typ.	8. MECHANICS	
Noise voltage (20MHz)	200mV _{ss} typ.	Connection: mains input	4-pol terminal 1.5 - 4/6 mm ² strand / wire tightening torque 0.6 - 0.7 Nm
Temperature coefficient	$\leq 0.025\% / K$	Load output	4-pol terminal 1.5 - 4/6 mm ² strand / wire tightening torque 0.6 - 0.7 Nm
Switch on / switch off	No V_o overshoot (soft-start)	Control signals	4-pol terminal, pluggable 0.1 - 0.5 mm ² strand / wire
Start-up delay	< 1,5s typ. (at 230Vac)		
Rise time	< 40 / 50 / 80ms typ.	Assembly	All systems can be snapped onto a symmetrical 35mm DIN-rail according to EN 50022 with a diameter of 1 to 2.5 mm or directly be screwed onto the wall. Please notice the assembly conditions.
Back feeding voltage	24 V: up to 35 Vdc 72 V: up to 100 Vdc	9. EXPLANATION	
Serial connection	yes (max. 2 identical power supplies)	PE-Schutzkontakt 	Protective conductor Do not use supply without PE-connection!
Parallel connection	yes, only in parallel mode (max. 3 identical power supplies)	L1 / N	Mains phase / neutral conductor
Battery operation	after consulting LinMot possible	+ / -	Loadoutput (V_o)
3. REGULATION		Relay OK/FAIL	Monitoring connections
Line regulation	< 0.2% for V_o at $V_{i,min}$ - $V_{i,max}$	Control signal OFF	external on/off
Load regulation	< 0.5% for V_o at I_o 0 - 100% boost mode < 3.0% for V_o at I_o 0 - 100% parallel m.	DIP - switch	selection boost- and parallelmode
Response time	typ. 1ms at I_o 20 - 80%	UP / DOWN - switch	adjust the output voltage
4. PROTECTION AND CONTROLLING			
Overvoltage protection (OVP)	24 V: approx. 31 Vdc 72 V: approx. 88 Vdc	Please read the LinMot safety instructions on our homepage before use: www.linmot.com	
Undervoltage monitoring	24 V: approx. 18 Vdc 72 V: approx. 52 Vdc automatical repeating	Safety information	
Current limitation	105 - 140% I_{nom} (see diagram) output permanent short-circuit proof		
Overtemperature protection	Switches off if inside temperature is too high, reconnection with hysteresis		
Relay contact	Relay contact (max. 80V / 1A / 30W), changing at V_o < 18V / 35V / 52V or OVP from OK to FAIL (red LED)		
Remote OFF	external switch-off with with 4-60Vdc/5mA		
5. SAFETY / STANDARDS			
IEC60950, UL60950, UL508 CSA22.2-60950, CSA22.2-107.1 IP20, safety class 1 pollution degree 2			
Ensure fire protection by means of the surrounding housing system			

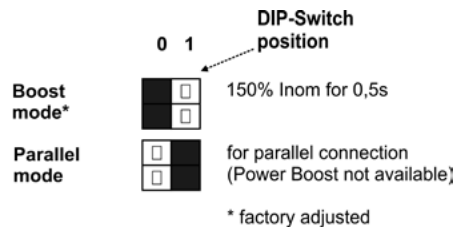
SERIES S01-X/500

AC/DC POWER SUPPLY - PRIMARY SWITCHED - SINGLE OUTPUT

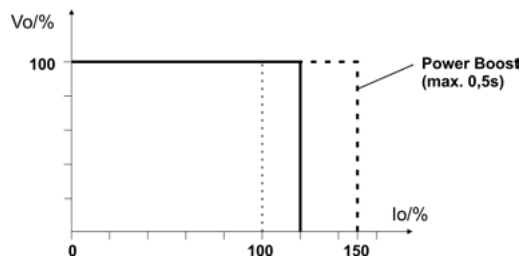


10. NOTES

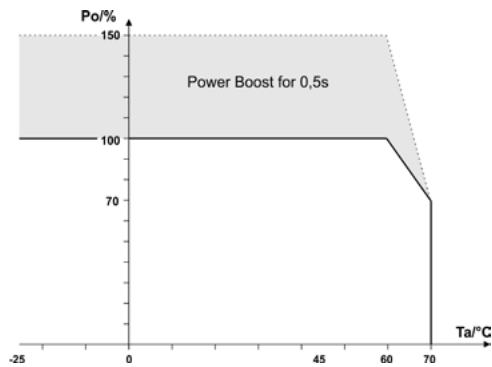
DIP-switch position



Current limiting characteristics (typ.)



Derating



Remote ON/OFF

Connecting an external DC source:

Connect positive pole of the DC source to pin 4. Connect negative pole (GND) of the DC source to the negative output connector of the S01 power supply. Adjust 5V.

