/ POWER SUPPLIES 24 V AND 72 V /

Power Supplies 24 V and 72 V









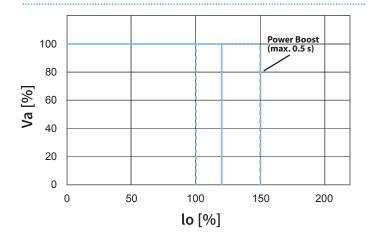






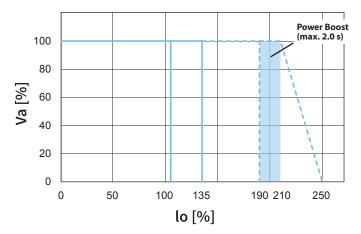
			8.	
Power Supplies	\$01-24/500	S01-72/500	501-72/1000	
Input				
Input voltage range	90132VAC / 180264VAC automatical switchover		AC 3 x 340-550V	
Power frequency	50/60Hz		50/60Hz	
Efficiency	typ. 86%	typ. 88%	typ. 91,5%	
Input current limitation	≤ 70A _{peak} typ. cold,	$\leq 150 A_{peak factory setting}$	< 35A _{peak} typ. cold, < 70A _{peak} hot	
Internal fuse	16ATH/250VAC			
External fuse			16A (IEC), 20A (USA) required	
Output	22 20//50	54 - 80VDC.		
Preset range Vo	22 - 29VDC, factory setting 24VDC ± 0.5% (Vo will be saved after 1s)	factory setting 72VDC ± 0.5% (Vo will be saved after 1s)	72V: 56 - 80VDC factory setting Vo _{nom} ± 0,15/0,2V	
Max. Ouputpower	480W - Powerboost	720W at (Vo≥ Vo _{nenn})	1000W	
Powerboost (only in Boostmode)	up to 150% (see chart)		up to 190 - 210% (see chart)	
Ripple	120mV _{ss} typ.		72V: 40mV _{ss} typ.	
Noise voltage (20MHz)	200mV _{ss} typ.		200mV _{ss} typ.	
Temperature coefficient	≤ 0,025% / K		≤ 0,025% / K	
Start-up delay	< 1,5s (a	: 230VAC)	250 ms typ.	
Rise time	40 ms typ.	80 ms typ.	72V:20ms typ./155ms typ.at 50.000 μF load	
Back feeding voltage	up to 35Vdc	up to 100 Vdc	up to 100 Vdc	
Parallel connection	·	ax. 3 identical power supplies)	yes, max. 3 identical power supplies	
	yes - only in paratier mode (ii	ax. 3 Identical power supplies)	yes, max. 3 identical power supplies	
Regulation				
Line regulation	< 0.2% for Vo at Vi _{min} - Vi _{max}		< 0.3% for Vo at Vi _{min} - Vi _{max}	
Load regulation	< 0.5% for Vo at Io 0 - 100% Boost-M. < 3.0% for Vo at Io 0 - 100% Parallel-M.		< 0.5% for Vo at Io 0 - 100% single operation < 3% for Vo at Io 0 - 100% parallel operat.	
Response time	typ. 1ms at Io 20 - 80%		typ. 1ms at lo 20 - 80%	
Protection and Controlling				
Overtemperature protection	Switches off if inside temperature becomes to high, reconnection with hysteresis		Switches off if inside temperature becomes to high, reconnection with hysteresis	
Safety/Standards	IEC60950 / UL60950 / UL508 / CSA22.2-60950 / CSA22.2-107.1 / IP20, safety class 1 / pollution degree 2		EN 60950-1 / IEC 60950-1 / VDE 0160 safety class I / VDE 0100 / IP20 / CSA-C22.2 No 107 / CSA-C22.2 No. 60950-1-03 / UL Std. 60950-1 / UL Std. 508 (Operation in Delta mains only for UL508) / SELV-output according EN60950-1 at 48V / pollution degree 2	
EMV				
Mains feedback / PFC	EN 61000-3-2 Class A only with ext. PFC 12mH/4,5A/230VAC			
Flicker	EN 61000-3-3		EN 61000-3-3	
Interference immunity	EN 61000-6-2 Industrial generic standard		EN 61000-6-2	
ESD	EN 61000-4-2 8/15KV		EN 61000-4-2 8/15 kV	
Electrical fields	EN 61000-4-3 noise level 10V/m (Krit. A)		EN 61000-4-3 noise level 10V/m	
Burst	EN 61000-4-4 4KV (Krit.A)		Input: EN 61000-4-4 4kV / Output: EN 61000-4-4 2kV	
Surge	EN 61000-4-5 4/2KV (Krit.A)		Input: EN 61000-4-5 2/4kV / Output: EN 61000-4-5 0,5kV	
•			EN 61000-4-6 noise level 10V	
HF Immunity	EN 61000-4-6 noise level 10V (Krit.A)			
Voltage drop	EN 61000-4-11		EN 61000-4-11	
Interference emission	EN 61000-6-4 Industrial generic standard EN 55011 class B, Radiation depends on assembly		EN 61000-6-3 / EN 61204-3	
Operating Data				
Temperature range	-25°C70°C integral, temperature regulated fan, sucking in air from below		-25+70°C, integral, temperature controlled fan, air intake bottom-up (fan swichted on/off in two steps dependent on temperature)	
Derating	3% / K ab +60°C		2% / K at +60°C	
Weight	1.0	l kg	2.0 kg	
Mechanics				
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.		All devices can be attached to a back wall using the mounting tabs.	

CURRENT LIMITING CHARACTERISTICS (TYP.) S01-24/500 AND S01-72/500



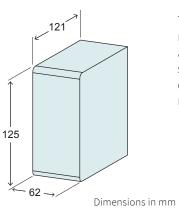
Up to 150% $\rm I_{nom}$ possible for 500ms, then the power boost is min. 500ms not available. (Indications for boost mode only).

CURRENT LIMITING CHARACTERISTICS (TYP.) S01-72/1000

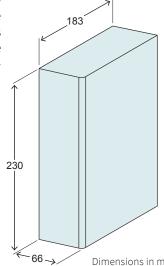


Start-up takes place with power boost between 190% and 210% of the nominal current for a period of approx. 2s. You can use power boost also in running operation.

DIMENSIONS S01-24/500 AND S01-72/500



The distance between the surrounding components and the air admission and air exit holes should be at least 20 mm. Please ensure that exhaust air is not immediately sucked in again.



Dimensions in mm

DIMENSIONS S01-72/1000

Operation in any assembly position possible. The distance between the surrounding components and the air admission and air exit holes should be at least 50 mm. Please ensure that exhaust air is not immediately sucked in again.

ORDERING INFORMATION

Item	Description	Item-No.
S01-24/500	Power Supply 24V/500W, 1x120/230VAC	<u>0150-2480</u>
S01-72/500	Power Supply 72V/500W	<u>0150-1874</u>
S01-72/1000	Power Supply 72V/1000W	0150-1872