



P.O. Box 27  
4300 AA Zierikzee  
The Netherlands

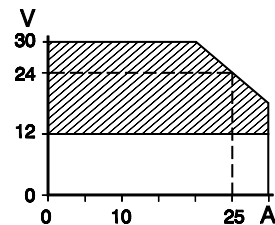
Tel. +31 111 413656  
Fax. +31 111 416919  
www.deltapowersupplies.com

**DELTA ELEKTRONIKA B.V.**



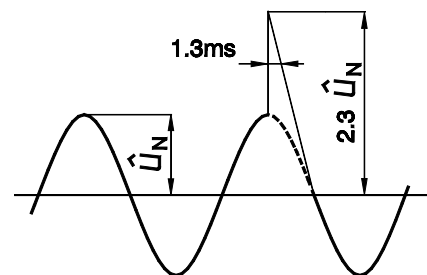
## 600 S - Series 600 W SWITCHED MODE DC POWER SUPPLY

Models	Voltage range	Current range
600 S 24	12 -15 V	30 A
	24 V	25 A
	30 V	20 A



### Features :

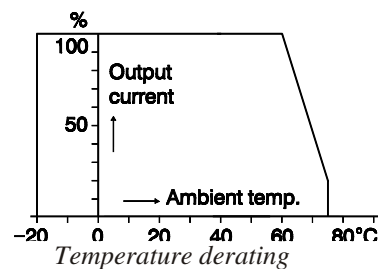
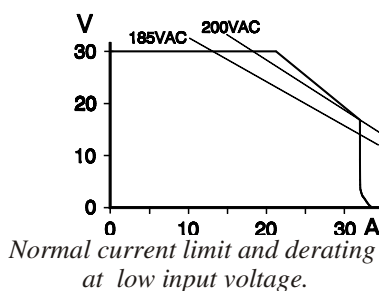
- Very high reliability, MTBF 1.000.000 hrs
- Natural convection cooling
- Thermally over-rated for high ambient temperature without derating
- Build-in diode for redundant parallel operating
- Under-voltage alarm contact
- Low output ripple, 7 mV rms
  
- Analog programmable
- Short circuit protected
- High efficiency 89%
- Low inrush current
- Meets EN 61000-3-2 and V DE 0160 class 2
- No RFI problems, RFI filters in output and input



**Specifications :**

- Input voltage : AC 198-264 V 48-62 Hz 3.8 Arms fuse 6.3 A T, crest factor 2.0  
: AC 99-132 V 48-62 Hz 7.6 Arms fuse 12.5 A T  
: DC contact factory
- Insulation
- Input / output : 3750 V rms (1min)
- Input / case : 2500 V rms (1min)
- Output / case : 500 V DC
- Inrush current : Limited by 47 Ohm (shorted after startup)
- Power factor : 0.76 at 230 V AC input and full load.
- EMC : EN 61204-3 Power Supply Standard  
: EN 61000-6-3 Emission (EN 55022B)  
: EN 61000-6-2 Immunity
- VDE0160 impulse test : Input with stands non periodic impulse 2.3  $\hat{U}_n$  1.3 ms of VDE0160 class 2
- Series operations : up to 500 V total voltage
- Parallel oper. : No restrictions
- Redundant parallel : Use R+ connection via build-in Schottky operation diode to separate the outputs. Do not use remote sensing.
- Line distortion : Harmonic current meets EN 61000-3-2
- Safety : EN 60950, EN 61010 SELV / PELV
- Output voltage : Screwdriver adjustable with 10-turn potmeter at the rear side. Factory set at 24.0 V Also analog programable by 2-5 V
- Efficiency : 89% at 230 V AC input and 600 W output (max. heat dissipation 74 W)
- Temp. coeff : 5.10-5 per °C
- Stability : 3.10-4 during, 8 hrs under constant conditions, after 1 hr warmup.
- Regulation  
Load 0 - 100% : Better than 10 mV  
line 198-264 V : Better than 5 mV
- Ripple + noise : Max 7 mV rms, 20 mV pp (BW = 20 MHz)
- Output imp. : Less than 0.05 Ohm up to 100 kHz
- Recovery time : 0.3 milliseconds to recover to within 100 mV after a 50 to 100% load step Max. deviation 300 mV
- Hold-up time : 30 ms at 155 or 230 V AC input and full load. 60 ms at half load.

- Under voltage alarm contact : Changes over when output voltage drops to 10% below the the set value. Gold contact, rating 100 mA/30 V.
- Remote control : Is possible with a 10 k $\Omega$  potmeter.
- Remote programming : Output voltage is programmable with 2-5 V, corresponding with 12-30 V. Programming speed is 100 ms from 12-30 V at max current. Programming input is not isolated (connected to - output).
- Remote sensing : max. 3 V per load lead. However the sum of the voltage across load + leads cannot exceed 30 V. With parallel operation remote sensing is not recommended.
- Remote on/off : By 5 V, optocoupler isolated.
- Overload Protection: Continuous overload and short circuit protection does not harm the unit. At short circuit the power supply produces an audible bleep.
- Voltage limit : For safety an extra regulation circuit limits the output voltage to about 31 V in case of malfunction of the normal regulation. This limit is internally adjustable 20-31 V (R111).
- Overtemp. protection : With insufficient cooling the shuts down.
- Led lamps : Green LEDs on front and rear panel indicate output voltage.



- Current limit : From 30 to 18 V the current limit follows more or less a constant power curve. Below 18 V it resembles a constant current curve.
- MTBF : 1.000.000 hrs

- Dim and weight : Height 88mm  
: Width 433 mm  
: Depth 385 mm  
: Weight 10.5 kg
- 19" rack mounting : With two brackets H88 with handle the unit can be 19" rack mounted (2U height)
- Wall mounting : Any position, as long as the air can flow freely along the unit for cooling.
- Ambient temperature  
Storage : -40 to + 85 °C  
Operating : -20 to + 60 °C  
Derate to 20% at 75 °C

