

This document must be retained for future reference.

It is the responsibility of the person installing the electrical equipment to ensure that the installation meets the requirements of the IET wiring regulations and is therefore 'fit for purpose'. Factors such as correct selection of components, cable sizing, protective devices and Earth bonding are all critical and should be checked prior to full testing and power-up. Any other regulations applicable to the equipment being installed such as the Machinery Directive and current health and safety legislation must also be adhered to.

All connections (including factory made) must be checked for the correct tightness prior to commissioning of the electrical installation.  
All connections should also be inspected periodically to ensure correct tightness.

DO NOT USE POWER TOOLS ON THESE PRODUCTS



## Single Output Switch Mode Power Supplies 24V DC Output



<b>Features:</b>						
Universal AC input / Full range						
Protections: Short circuit / Overload / Over Voltage / Over temperature ZCSIZVS technology to reduce power dissipation						
Cooling by free air convection						
Can be installed on DIN rail TS-3517.5 OR 15						
DC OK LED or relay contact						
No load power consumption < 1W LED indicator for power on 100% full load burn-in test						
Specification	Model	SMP-20-24	SMP-60-24	SMP-100-24	SMP-120-24	SMP-240-24
DC Output , current		1A 24VDC	2.5A 24VDC	4A 24VDC	5A 24VDC	10A 24VDC
Input voltage range		84-264VAC - 120-370VDC				
Ripple, Noise		150mV p-p	150mV p-p	150mV p-p	85mV p-p	80mV p-p
Line regulation		±1%	±1%	±1%	±0.5%	±0.5%
Load regulation		±1%	±1%	±1%	±0.5%	±0.5%
Efficiency		84%	81%	81%	84%	84%
Adjustable voltage range		10%	10%	10%	10%	10%
Inrush current 115/230V		20/40A	30/60A	30/60A	20/40A	27/45A
Power Factor (typ)		≥0.6@230vAC	≥0.6@230vAC	≥0.95@230vAC	≥0.6@230vAC	≥0.95@230vAC
Overload Protection		105-150% Output disconnected, Auto recovery				
Over Voltage Protection		31.2-36V re-power on to recover				
Setup time ms		500	500	300	500	800
Rise time ms		30	30	50	70	40
Hold up time ms		30	30	50	30	20
Withstand voltage		I/P-OP:3KAC I/P-FG:1.5KVO/P-FG:0.5KV				
Isolation Resistance		I/P-O/P,I/P-FG,O/P-FG:> 100M Ω /500VDC/25oC/70%RH				
Working Temperature		- 10 - + 50°C				
Dimensions (H X W X D)		90x22.5x100mm	90x40x100mm	90x55x100mm	125.5x65.5x100mm	125.5x125.5x100mm
Weight		0.19Kg	0.33Kg	0.42Kg	0.8Kg	1.2Kg
EMC Conduction & Radiation		Compliance to EN55011, EN55022 (CISPR22), EN61204-3 Class B				
Harmonic Current		Compliance to EN61000-3-2, -3				
EMC Immunity		Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, ENV50204, EN55024, EN61000-6-2, EN61204-3, heavy industry level, criteria A				
Cooling		Ventilation/cooling is by natural convection and all sides should have a minimum of 25mm free space				
Note:		All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.				
		Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. Tolerance: includes set up tolerance, line regulation and load regulation.				
		The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives.				
		Length of set up time is measured at first cold start. Turning ON / OFF the power supply may lead to increase of the set up time. Derating maybe needed under low input voltages, please check the derating curve for more detail.				