

APW00803

Box Module

Made in Germany

80 Watts Enclosed Switching Power Supply Input 173..265Vac 3 Outputs and Power Fail

Short Specification:

- AC-Input 173..265Vac
- Compact closed box design
- Screw terminal plugs
- High efficiency up to 84%
- Continuous short circuit protected
- Minimum load = 0A
- High reliability
- Minimum heat emission
- Free air convection
- Power-fail logic signal

• Power-Mosfets & SMD-technology

- Input/output galvanic insulated
- Hold up time >30ms
- Overload protected
- Series operation mode
- Parallel operation mode
- EMI/EMS EN61000-6-2,3, EN55022 class B
- Safety : cUL60950/16950 IEC(EN)60950-1
- 24 hours burn in test
- Softstart & auto-recovery

<u>The Camtec High Reliability Design</u>: This power supply has been built for high reliability control scopes.









AC-Input	173265Vac , 4763Hz , 240375Vdc							
Input Rating	230Vac <1.0A							
Rated DC-Voltage	U1 +24V	U2 +5V	U3 +9V	U1 +12V	U2 +5V	U3 +9V		
Rated DC-Current	2.5A	3.0A	500mA	5.0A	3.0A	500mA		
Ripple [mVpp] 230Vac	50 (20MHz)	20 (20MHz)	30 (20MHz)	25 (20MHz)	20 (20MHz)	30 (20MHz)		
Output adj. range	2428V	4,95,25V	fix	11.413.2V	4,95,25V	fix		
Order code: APW00803.V	other combinations are upon request							

Tolerance	U1,2 ± 1% ; U3 ± 5%	I/A Derating at +60°C		
Stability at Load Switch	< ± 0.1% 10-100%, 100-10%	100%		
Switching Frequency		75%	\geq	
Minimum Load	0 A			
Efficiency (in average over all outputs)	Up to 84%			
Overload Protection	1,1x I _{rated} , auto recovery			
Over Voltage Protection	140% of U _{out} , auto recovery			
Short Circuit Protection	Continuous	0%	°c	
Temperature Control	Yes, auto recovery	30 40 50 60	70 80	
Hold Up Time	> 30ms at 230Vac full load			
Inrush Current	< 32A (230Vac)	Screw Terminal Plugs	Ordering	g Codes:
Softstart	50ms typ.			
Cooling	Free air convection	SK1 1 = L	SK1	3520053 10pcs
Environment Temp.	- 20°C …+70°C	2 = L	SK3,4	3520037 10pcs
Storage Temperature	- 40°C+85°C	3 = N	SK6	Lumberg MICA
EMI	EN55022 class B / EN61000-3-2	4 = N		
EMS	EN61000-6-2,3	5 = GND		
Safety	cUL60950/1950 (IEC)EN60950-1	SK3 1 = U1 DC-		
Safety class 1(A)	VDE0805, VDE0100	2 = 01 DC-		
Air & Surface Leakage Paths	> 8mm			
Input/Output	Galv. insulated	2 = 01 DC+		
Power Fail Signal	Yes, maximum load = 50 mA	$6 = 1/2 DC_{-}$		
MTBF at full load	400000h	7 = Power Fail		
Dimensions (HxWxD)	46(54)x132x164mm	8 = not used		
Weight	600g	9 = U3 DC+		
Connectors (AC & DC)	Screw Terminal Plugs & Lumberg MICS-Connectors	10 = U3 DC-		

The Camtec High Reliability Design:

You can shortcut the 24V installation with no effect on the 5V controlunit output. The power supply has a built in thinking MOSFET technology that protects its outputs from rude transient peaks. This power supply has been made for extreme long cable lengths to protect very difficult installations like lifts in high building facilities etc. It allows you some more features like going through control signals that

can be used for example to start up a diesel-generator or a stand-by unit or an emergency lighting.

Power Fail Signal





How the Power Fail Signal works the power fail signal will be activated after 20ms of a continued AC power failure. It provides a low +5V signal. The holdup time of the power supply will remain another 10ms to allow security activities of your control units. The pull-up restistor is fixed at 1.2K. Make sure the low +5V-signal has a maximum load of 50mA.