BURNBRITE ISPSMK2 INTRINSICALLY SAFE POWER SUPPLY

PRODUCT BROCHURE





OVERVIEW

The Intrinsically Safe Power Supply (ISPS MK2) fully isolates electrical input and output voltages for Exzone 0, 1 and 2 applications. It is used for the safe operation of certified field devices, such as roof support controllers, lights and sensors in hazardous areas.

ISPS MK2 features a universal voltage range of 85 – 265VAC and an Ex ia rating, allowing it to supply devices operating in Zone 0 (delivery only), Zone 1 and Zone 2 environments and improve safety for personnel working in these areas.

The unit incorporates a number of efficiency features including efficient power conversion, low standby power and low temperature rise. The unit's compact, lightweight housing means the ISPS MK2 can be retrofitted to replace existing power supplies.

In terms of safety, the fully encapsulated ISPS MK2 provides active protection via triple independent protection circuits to protect against a wide range of faults including excessive current flow or voltage at the connected load.

Power is automatically restored once faults are cleared with output voltage restored approximately 0.6 seconds after the short circuit or over-voltage fault condition is rectified.

ISPS MK2 has a low output ripple or noise output (less than 100mV) for minimal electrical interference.

FEATURES

- Highest level of Intrinsic Safety (Ex ia)
- Wide operating temperature range (-20°C to 80°C)
- Universal operating voltage range (85 265VAC)
- High efficiency
- Low standby power (less than 6W)
- Low output ripple (less than 100mV)
- Automatic fault resetting
- Low temperature rise
- Encapsulated electronics (Ex mb)
- Compact and lightweight enclosure
- Backward compatible with Burn Brite ISPS MK1
- Improved EMC compliance





SPECIFICATIONS																				
Certificates / Approvals																				
IECEx Certificate Number	IECEx ITA 14.0005X																			
Protection	Ex mb ia I Mb IP66																			
Electrical (IS Parameters)																				
Input Voltage (Um)	265\	265V (AC mains input, all models)																		
DC Output (Different Models)																				
Output models	12V 1.OA				12V	12V 1.5A				12V 2.OA				12V 2.35A				12V 2.5A		
Output voltage (Uo)	12.4				12.4	12.4				12.4				12.4				12.5		
Output current (Io)	1.OA				1.5A				2.OA				2.4A				2.5A			
External capacitance (Co) μF	5.4	8	14.9	19.8	5.4	8	13	19.8	5.4	8	13	19.8	5.4	8	13	14.7	5.4	8	13	
External inductance (Io) µH	N/A	106.5	N/A	50.5	N/A	106.5	N/A	50.5	N/A	106.5	N/A	50.5	N/A	106.5	50	32.8	N/A	106.5	50	
External Inductance to resistance ratio (Lo/Ro) $\mu H/\Omega$	15.6	N/A	60	N/A	15.6	N/A	10	N/A	15.6	N/A	10	N/A	15.6	N/A	10	N/A	15.6	N/A	10	
					I	Mechar	nical a	nd Env	vironm	ental										
Dimensions (HxWxD)	122mm x 89mm x 100mm																			
Weight	1100g																			
Ingress protection	IP66	IP66																		
Temperature range	-20°	C to +80	O°C																	

ORDERING CODE	DESCRIPTION
BBL159104	Power supply 12.5V, 2.5A
BBL162089	Power supply 12.5V, 2.0A
BBL162088	Power supply 12.5V, 1.5A
BBL162087	Power supply 12.5V, 1.0A



