Switchmode power supply

2222

- 230 or 115 VAC primary voltage
- 24 VDC output voltage
- Double isolation by 3.75 kVAC
- 48 Watt output power, short circuit-protected
- Thermal protection against overload

Advanced features
- The power supply is based on primary switchmode technology to achieve a high efficiency.
- An internally mounted potentiometer allows for a ±5% adjustment of the output voltage.

Application
- General 24 VDC supply for equipment that requires a stabilised DC voltage.
- Two units can be connected in series to achieve a plus / minus supply or a higher output voltage.
- Separation of circuits in safety installations according to the PELV/SELV norm.
- Galvanic isolation between the primary and the secondary voltage is achieved through the double-isolated safety transformer.

Technical characteristics
- A green LED in the front of the module indicates an active primary voltage.
- Input circuit protected with a thermal fuse.
- DC output short circuit protection with current limiter.
- Mounting for a standard 11-pole socket which can be adapted for DIN rail or plate use with PR’s 7023 adaptor and 7024 mounting keying.
Environmental Conditions
Operating temperature............................... -20°C to +60°C
Relative humidity........................................ < 95% RH (non-cond.)
Protection degree...................................... IP30

Mechanical specifications
Dimensions (HxWxD)........................................ 80.5 x 35.5 x 84.5 mm (D is without pins)
Weight approx............................................ 210 g

Common specifications
Supply
Fuse............................................................ 1 A SB / 250 VAC
Max. required power..................................... 60 VA
Isolation voltage
Isolation voltage, test / working.......................... 3.75 kVAC / 250 VAC
PELV/SELV.................................................. IEC 61140
Effect of supply voltage change......................... < 1% (±10%)
Efficiency.................................................. ≥ 80%
Thermal overload protection........................... 100°C
Power derating............................................. 1% / °Camb. (Tamb. > 40°C)
Transient stability (10%-max. load)..................... < 500 mV
Temperature coefficient................................ 0.05% / °C
EMC immunity influence................................ < ±0.5%

Input specifications
Supply voltage............................................. 207...253 VAC
Supply voltage............................................. 102.4...132.2 VAC
Frequency.................................................. 50...60 Hz

Output specifications
Current output
Current limit.................................................... Nom. 2.5 A (electronic)
Output voltage.................................................. 24 VDC
Adjustment..................................................... ±5%
Output power............................................... 48 W (max.)
Output current.............................................. 2 A / 24 VDC
Load effect, (0-max. load)............................... < 1.5% / A
Output ripple............................................... 40 mVRMS (100 kHz)

Observed authority requirements
EMC............................................................ 2014/30/EU
LVD............................................................ 2014/35/EU
EAC............................................................. TR-CU 020/2011