



RoHS

Key features

- Universal input :85~ 265 VAC, 50/60 Hz
- Low ripple and noise
- Output overload protection ,short circuit protection; Remote control turn-off function
- High efficiency, high density, fine quality and low price
- Industrial product design, standard track installation
- Lower power, RoHS , no-load loss < 0.75W
- 100% test and work
- 3 years product warranty

SD60 series --- is a guide rail type switching power supply offered by Zhongyiguang. The output power of this series module power supply is 60W, with extremely low no-load loss (< 0.75W), low leakage current, which is only 1mA, small size (92.3*76.3*60.5mm) and isolation voltage up to 1.5kv, etc. The product is safe and reliable, which has a good EMC. EMC and Safety specifications meet many related standards, such as IEC/EN61000-4, CISPR22/EN55022, UL60950/EN60950/EN60601. The series products are commonly used in industrial control and railway industry industries. If applied to a relatively harsh environment electromagnetic compatibility, it must be referenced the application circuit.

Electrical specifications

| Model | Input voltage | Output Power(W) | Output voltage(V) | Output current(A) | Ripple(mv) | Efficiency (%) |
|----------|---------------|-----------------|-------------------|-------------------|------------|----------------|
| SD60-S05 | 85-265Vac | 40 | 5.0 | 8 | 50 | 75 |
| SD60-S12 | 85-265Vac | 54 | 12 | 4.5 | 50 | 85 |
| SD60-S24 | 85-265Vac | 60 | 24 | 2.5 | 50 | 86 |
| SD60-S48 | 85-265Vac | 60 | 48 | 1.25 | 50 | 87 |

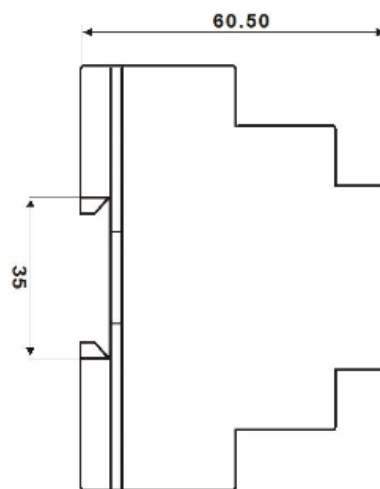
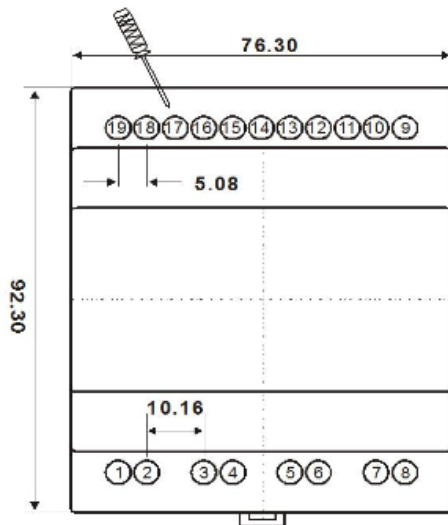
General features

| | | | |
|------------|---|--------------------------|--------------------------|
| Output | Output voltage accuracy | ±2.0% | |
| | Source effect | ±1.0% | |
| | Load effect | ±1.0% | |
| | Starting time (TYP) | 10ms/230VAC | 30ms/115VAC at full load |
| | Output hold time(TYP) | 40ms/230VAC | 15ms/115VAC at full load |
| Input | Input voltage range | 85 ~ 265VAC | 100 ~ 370VDC |
| | Input frequency range | 47 ~ 63Hz | |
| | Input current (TYP) | 1.9 A / 115VAC | 0.96 A / 230VAC |
| | Inrush current(TYP) | Cold boot 30 A / 115 VAC | 60 A / 230 VAC |
| | Leakage current (TYP) | < 1mA at 230VAC/50Hz | |
| Protection | Over-current and short circuit protection, automatic recovery after troubleshooting | | |

| | | |
|-------------------------|--|---|
| Work environment | Operating Temperature | -40 ~ +70 °C (≥50°C, According to 0.75W/°C derating) |
| | Humidity | 85% .RH max |
| | Storage Temperature | -40 ~ +85, 10 ~ 95% RH |
| | Temperature coefficient | 0.03%/ (0~ 50°C) |
| | Vibration coefficient | 10~500Hz,2G10min./1cycle, 60min.each along X,Y,Z axes |
| Safety and EMC (Note:3) | Safety Standard | Conform to UL1012 |
| | I/O-Isolation voltage | I/P-O/P:1.5KVAC(min) |
| | Isolation resistance | I/P-O/P>100M Ohms/500VDC 25°C 70% RH |
| | EMI / RFI conducted | Conform to EN55011, EN55022 (CISPR22) |
| | ESD | IEC/EN 61000-4-2 level 4 8kV/15kV (Note: See the application circuit for details) |
| | RF | IEC/EN 61000-4-3 (Note: See the application circuit for details) |
| | EFT | IEC/EN 61000-4-4 level 4 4kV (Note: See the application circuit for details) |
| Others | SURGE | IEC/EN 61000-4-5 level 4 2kV |
| | MTBF | 200K hrs min. MIL-HDBK-217F(25) |
| Notes | Dimension | 92.3*76.3*60.5mm |
| | <ol style="list-style-type: none"> All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25 of ambient temperature Ripple & noise are measured at 20MHz of bandwidth by using a 300mm twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor 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 | |

Dimension

Use a screwdriver to adjust voltage



| Pin | Definition | |
|----------|------------|------------------|
| 1 | AC(L) | AC input |
| 2 | AC(N) | AC input |
| 9/10/11 | +V | Output(+) |
| 12/13/14 | -V | Output(-) |
| 15 | +Ctr | Telecontrol(+) |
| 16 | -Ctr | Telecontrol(-) |
| 17 | ADJ | Voltage regulate |
| 19 | LED | Indicate |

Block diagram

