

Power Supply Series

LPS-SDR-240-48

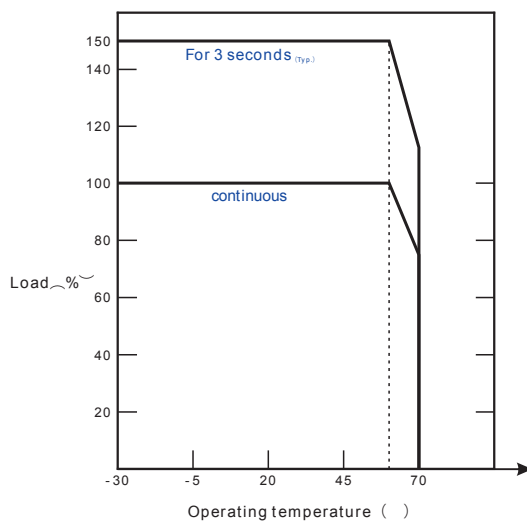


ELECTRICAL SPECIFICATIONS

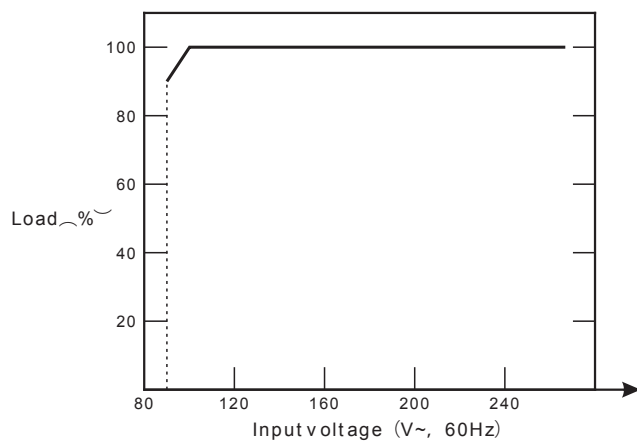
| Model category | | SDR-240-48 | | |
|--------------------------------------|-----------------------------------|--|----------------------|--|
| Output | DC voltage | 48V | | |
| | Rated current | 5.0A | | |
| | Peak current | 240.0W | | |
| | Rated power | 7.5A | | |
| | Peak power | 360.0W (3 seconds) | | |
| | Ripple and Noise (maximum) | 480mV _{p-p} | | |
| | Voltage adjustment range | 48.0-55.0V | | |
| | Voltage accuracy | ±1% | | |
| | Linear regulation | ±0.5% | | |
| | Load regulation | ±1% | | |
| | Start-up, rise time | 1500ms, 60ms/230V~ 3000ms, 60ms/115V~ (full load) | | |
| Hold time (Typ.) | 20ms/230V~ 20ms/115V~ (full load) | | | |
| Input | Voltage range | 90-264V~ | | |
| | Frequency range | 47-63Hz (50/60Hz) | | |
| | Power Factor (Typ.) | 0.93/230V~ 0.99/115V~ (full load) | | |
| | Efficiency (Typ.) | 93% | 93% | |
| | Alternating current | 2.6A/115V~ 1.3A/230V~ | | |
| | Inrush current | Cold start 33A/115V~ 65A/230V~ | | |
| | leakage current | <1mA/240V~ | | |
| Protect | Overload | When the rated output power is 110%~150%, the output voltage will be turned off after more than 3 seconds of normal operation and can be automatically restored When >150% of the rated output power, the constant current is limited within 2 seconds and automatically recovered, and the output voltage may be turned off after 2 seconds. | | |
| | Overvoltage | 29.0-33.0V | 56.0-65.0V | |
| | Short circuit | Protection mode: shut down the output voltage and recover automatically Hiccup mode, power re starts automatically | | |
| | Overheat | Detect the radiator of the power switch, turn off the output when the temperature reaches 100°C over-temperature point, and automatically restore when the temperature drops to 75°C | | |
| Function | DC OK relay contacts | 60VDC/0.3A、30VDC/1.0A、30VAC/0.5A resistive load | | |
| Environment | Operating temperature | -25 ~+70 | | |
| | Working humidity | 20%-95%RH, non-condensing | | |
| | Storage temperature, humidity | -40 ~+ 85 , 10%-95%RH, non-condensing | | |
| | Temperature coefficient | ±0.03%/ (0 - 50) | | |
| | Vibration resistance | 10~500Hz, 2G 10 minutes/period, X, Y, Z each 60 minutes; installation: conform to IEC60068-2-6 | | |
| Safety Electromagnetic Compatibility | Safety regulations | Design reference 4943、UL508、EN62368 | | |
| | Withstand voltage | I/P-O/P : 3KVAC、I/P-FG : 2KVAC、O/P-FG : 0.5KVAC、O/P-DC OK : 0.5KVAC | | |
| | Insulation resistance | I/P-O/P、I/P-FG、O/P-FG : >100M Ohms/500VDC/25 /70%RH | | |
| | EMC launch | BS EN/EN55032、BS EN/EN61000-3-2、BS EN/EN61000-3-3 | | |
| | EMC Immunity | BS EN/EN61000-6-2 | | |
| Other | MTBF | 100,000 hours (min) MIL-HDBK-217F (25°C) | MIL-HDBK-217F (25 °) | |
| | Dimensions | Height (H)* Depth (D)* Width (W) : 126.6*111.0*66.1mm | | |
| | Applicable guide rail | TS35/7.5 or TS35/15 DIN rail | | |

| | |
|--------|--|
| Remark | <ol style="list-style-type: none"> 1. Unless otherwise specified, all specifications are measured at an input of 230V~, rated load, and an ambient temperature of 25°C. 2. Ripple and noise measurement method: use a 12" twisted pair, and connect 0.1uF and 47uF capacitors in parallel at the terminal, and measure at a bandwidth of 20MHz. 3. Error: including setting error, linear adjustment rate and load adjustment rate . 4. The power supply is regarded as an independent component , but the final power supply still needs to be confirmed in conjunction with the terminal equipment for electromagnetic compatibility. 5. Installation distance: when the full power is permanently loaded, the recommended top distance is 40mm, the bottom distance is 20mm, and the distance between the left and right sides is 5mm. If the adjacent equipment is a heat source, the recommended space distance is 15mm. 6. The peak power lasts up to 3 seconds, and the average output power cannot exceed the rated power. 7. The actual output refers to the static characteristic curve (load-input voltage) and derating curve (load-ambient temperature). 8. When the altitude exceeds 2000 meters, the ambient temperature of the model will rise at 3.5°C/1000 meters. |
|--------|--|

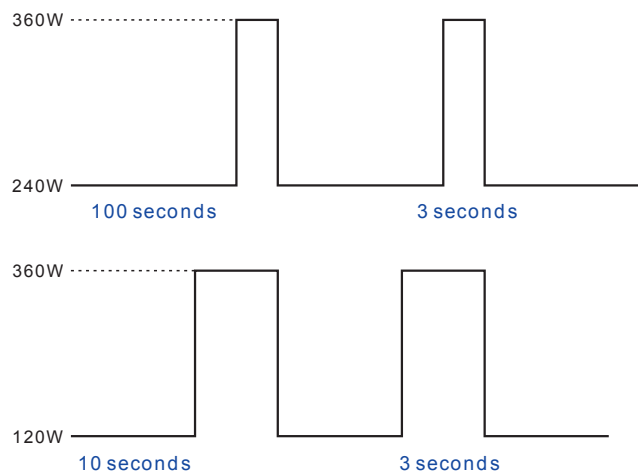
DERATING CURVE



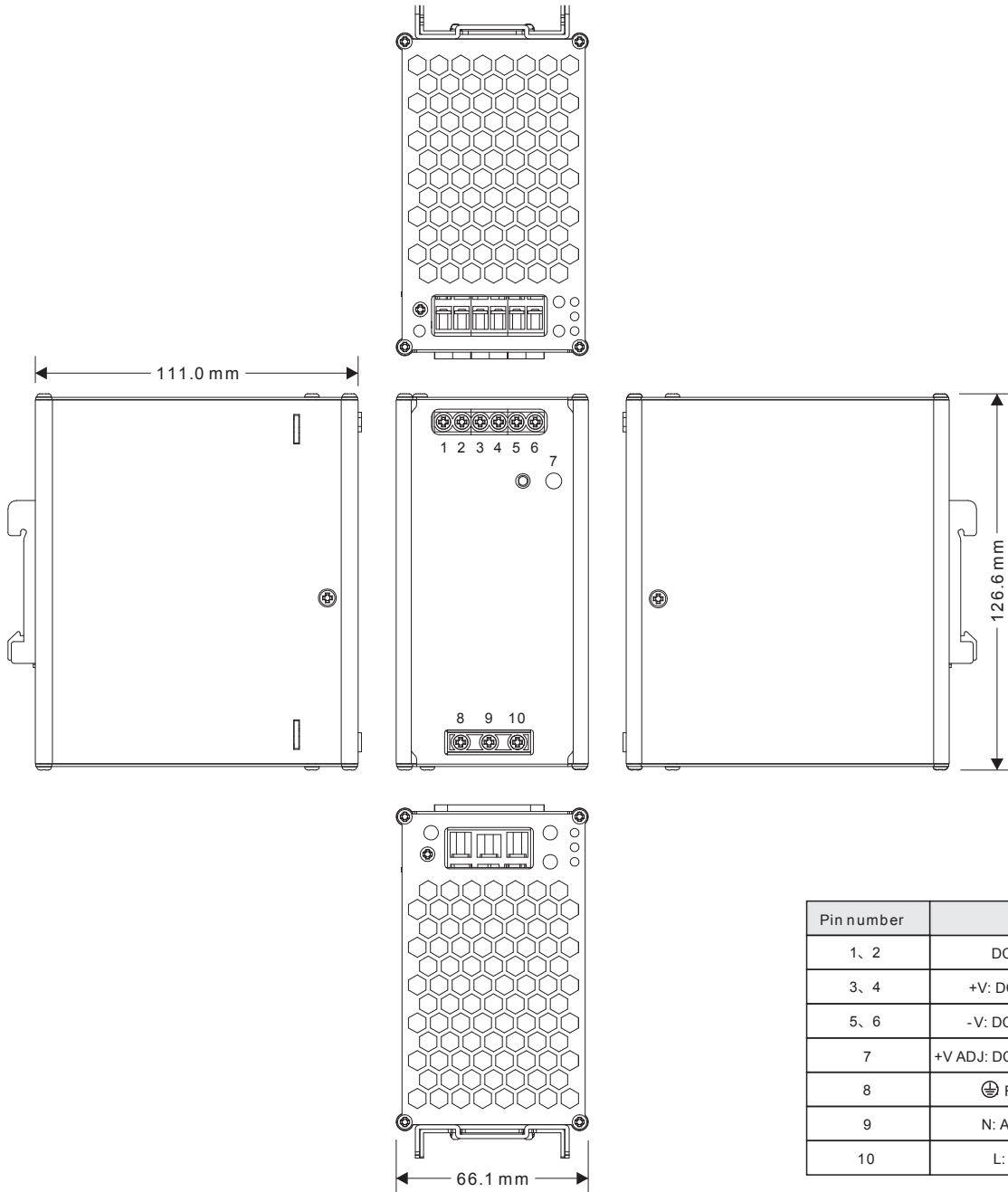
STATIC CHARACTERISTIC CURVE



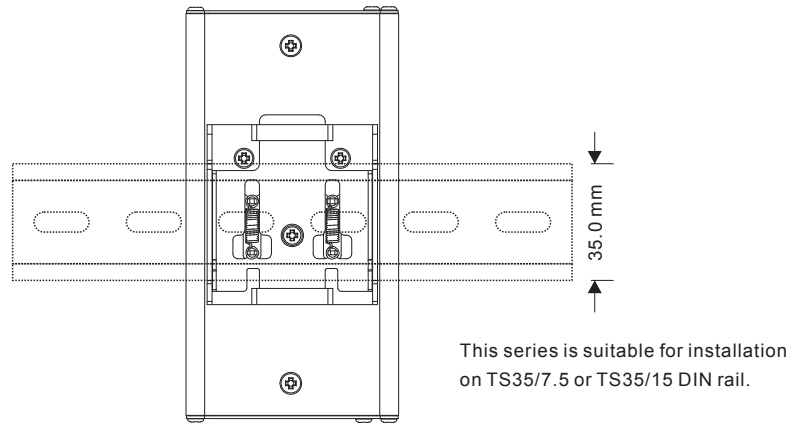
PEAK LOAD CURVE



POWER STRUCTURE SIZE



POWER SUPPLY INSTALLATION REFERENCE



DC OK RELAY TRIGGERS

| | |
|-----------------|------------------------|
| contact closed | Power On/DC OK |
| contact open | Power Shutdown/DC Fail |
| contacts (max.) | 30V1A resistive load |