



Features:

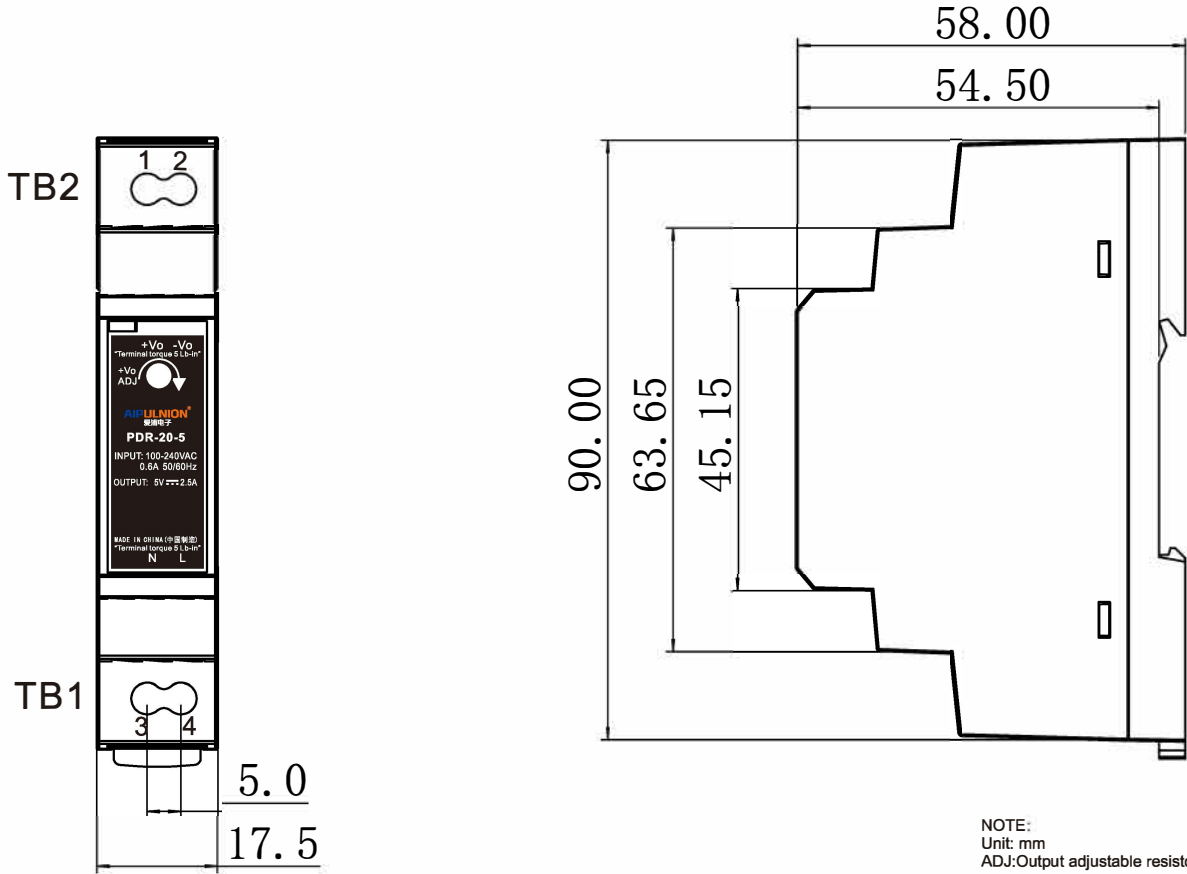
- Universal AC input 85~264VAC
- Protections: Short circuit / Overload / Over voltage
- Can be installed on DIN rail TS-35/7.5 or 15
- The body width is only 17.5mm
- Isolation class II
- LED indicator for power on
- High reliability
- 3 years warranty
- Compliance to IEC/EN/UL 62368-1

Specification

| MODEL | | PDR-20-5 | PDR-20-12 | PDR-20-24 | PDR-20-48 |
|-------------|------------------------|--------------------------------------------------------------------------------------------------------------------|------------|------------|------------|
| INPUT | VOLTAGE RANGE | 85~264VAC 120-370VDC (Refer to "Static characteristics") | | | |
| | FREQUENCY RANGE | 47~63Hz | | | |
| | EFFICIENCY(Typ.) | 80% | 85% | 86% | 87% |
| | AC CURRENT(Typ.) | 0.5A/115VAC 0.3A/230VAC | | | |
| | INRUSH CURRENT(Typ.) | 25A/115VAC 45A/230VAC (cold start) | | | |
| OUTPUT | DC VOLTAGE | 5V | 12V | 24V | 48V |
| | RATED CURRENT | 2.5A | 1.5A | 0.84A | 0.42A |
| | CURRENT RANGE | 0~2.5A | 0~1.5A | 0~0.84A | 0~0.42A |
| | RATED POWER | 12.5W | 18W | 20.16W | 20.16W |
| | RIPPLE&NOISE(max.) | 80mVp-p | 100mVp-p | 100mVp-p | 100mVp-p |
| | VOLTAGE ADJ.RANGE | 5~5.5V | 10.8~13.8V | 21.6~28.8V | 43.2~57.6V |
| | VOLTAGE TOLERANCE | ±2% | ±1% | ±1% | ±1% |
| | LINE REGULATION | ±1% | ±0.5% | ±0.5% | ±0.5% |
| | LOAD REGULATION | ±1% | ±1% | ±1% | ±1% |
| | SETUP, RISE TIME | 500ms,50ms/230VAC 500ms,50ms/115VAC | | | |
| | HOLD UP TIME(Typ.) | 30ms/230VAC 12ms/115VAC | | | |
| PROTECTION | OVER LOAD | 110%~160% rated output power Protection type: hiccup mode, recovers automatically after fault condition removed | | | |
| | OVER VOLTAGE | 5.75~6.75V | 14.2~15.8V | 30~36V | 58.9~66V |
| | | Protection type: Clamping by zener diode | | | |
| ENVIRONMENT | WORKING TEMP.,HUMIDITY | -30~+70°C (Refer to "Derating curve") , 20~90%RH non-condensing | | | |
| | STORAGE TEMP.,HUMIDITY | -40~+85°C, 10~95%RH | | | |
| | TEMP. COEFFICIENT | ±0.03%/°C (0~50°C) | | | |
| | VIBRATION | 10~500Hz, 2G 10min./1 cycle, each along X、Y、Z axes | | | |

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|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|---------------------------------------------------------------------------|----------------------------------------------------|
| Safety and electromagnetic compatibility | Safety standards | Refer to UL62368-1,TUV EN62368-1,CCC GB4943.1 | | |
| | Withstand voltage and isolation resistance | I/P-O/P: 4KVac ; 100MΩ / 500Vdc / 25°C / 70%RH | | |
| | Electromagnetic | Parameter | Standard | Test Level / Note |
| | | Conducted emission | BS EN/EN55032(CISPR32),FCC PART 15 / CISPR22 ,GB9254.1 | Class B |
| | | Radiated emission | BS EN/EN55032(CISPR32),FCC PART 15 / CISPR22 ,GB9254.1 | Class B |
| | | Harmonic current | BS EN/EN61000-3-2,GB17625.1 | Class A |
| | | Voltage flicker | BS EN/EN61000-3-3 | ---- |
| | | BS EN/EN55035 | | |
| | | Parameter | Standard | Test Level /Note |
| | | ESD | BS EN/EN61000-4-2 | Level 4, 8KV air, Level 2, 4KV contact, criteria A |
| | RF field susceptibility | BS EN/EN61000-4-3 | Level 3, criteria A | |
| | EFT bursts | BS EN/EN61000-4-4 | Level 3, criteria A | |
| | Surge susceptibility | BS EN/EN61000-4-5 | Level 3, 1KV/L-N criteria A | |
| | Conducted susceptibility | BS EN/EN61000-4-6 | Level 3, criteria A | |
| | Magnetic field immunity | BS EN/EN61000-4-8 | Level 4, criteria A | |
| | Voltage dips and interruptions | BS EN/EN61000-4-11 | >95% dip 0.5 periods, 30% dip 25 periods , >95% interruptions 250 periods | |
| OTHERS | MTBF | ≥1000Khrs MIL-HDBK-217F(25°C) | | |
| | DIMENSION | 17.5*90*54.5mm(W*H*D) | | |
| | PACKING | 0.08Kg; 180pcs/ 15.4Kg/ 1.1CUFT | | |
| NOTE | <p>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF & 47uF parallel capacitor.</p> <p>3. Tolerance: includes set up tolerance, line regulation and load regulation.</p> <p>4. Line regulation is measured from low line to high line at rated load.</p> <p>5. Load regulation is measured from 0% to 100% rated load</p> <p>6. Length of set up time is measured at cold first start, Turning ON/OFF the power supply very quickly may lead to increase of the set up time.</p> <p>7. The ambient temperature derating of 5°C/1000m is needed for operating altitude great than 2000m(6500ft).</p> <p>8. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives.</p> <p>9. Installation clearances:40mm on top,20mm on the bottom,5mm on the left and right side are recommended when loaded permanently with full power. In case the adjacent device is a heat source, 15mm clearance is recommended.</p> | | | |

Mechanical specification

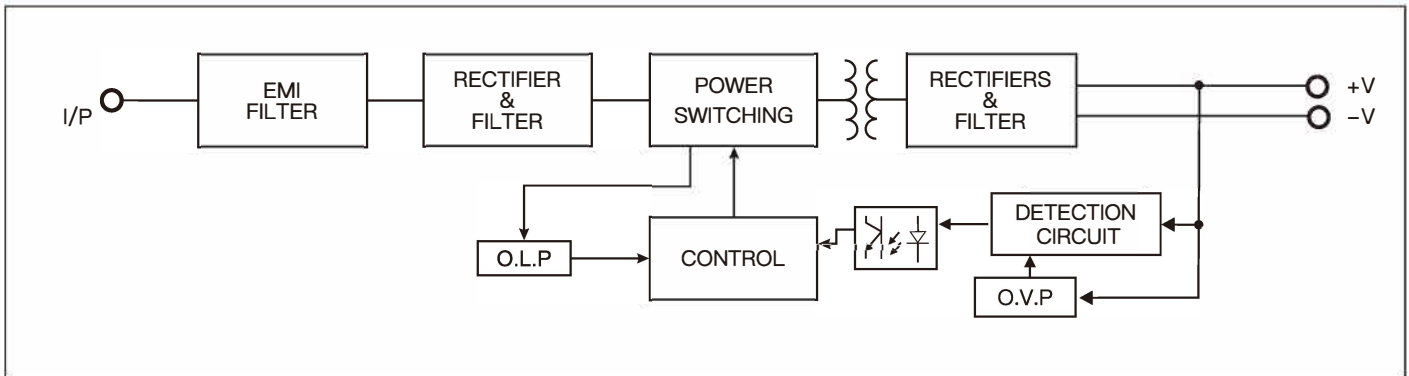


NOTE:
Unit: mm
ADJ: Output adjustable resistor
TOL: ±1.00

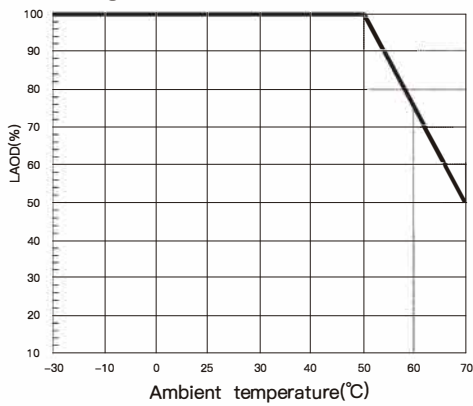
ADMISSIBLE DIN-RAIL: TS35/7.5 OR TS35/15
Terminal Pin No. Assignment

| TB1 | | TB2 | |
|---------|------------|---------|--------------|
| Pin No. | Assignment | Pin No. | Assignment |
| 3 | AC/N | 2 | DC output -V |
| 4 | AC/L | 1 | DC output +V |

Block diagram



Derating curve



Static characteristics

