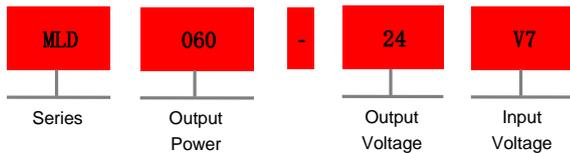




▲ Specification

- rail installation: TS-35/7.5 or 15
- 4.7KVdc I/O high high isolation (reinforced isolation)
- 30~+85°C wide range working temperature (>+60° C derating)
- ultra-thin width 32mm
- Output voltage (DC) adjustable
- DC OK relay contacts
- Protection: Over Voltage/Over load/Short circuit/Over temperature
- natural air cooling
- 3 years warranty

▲ Model encoding



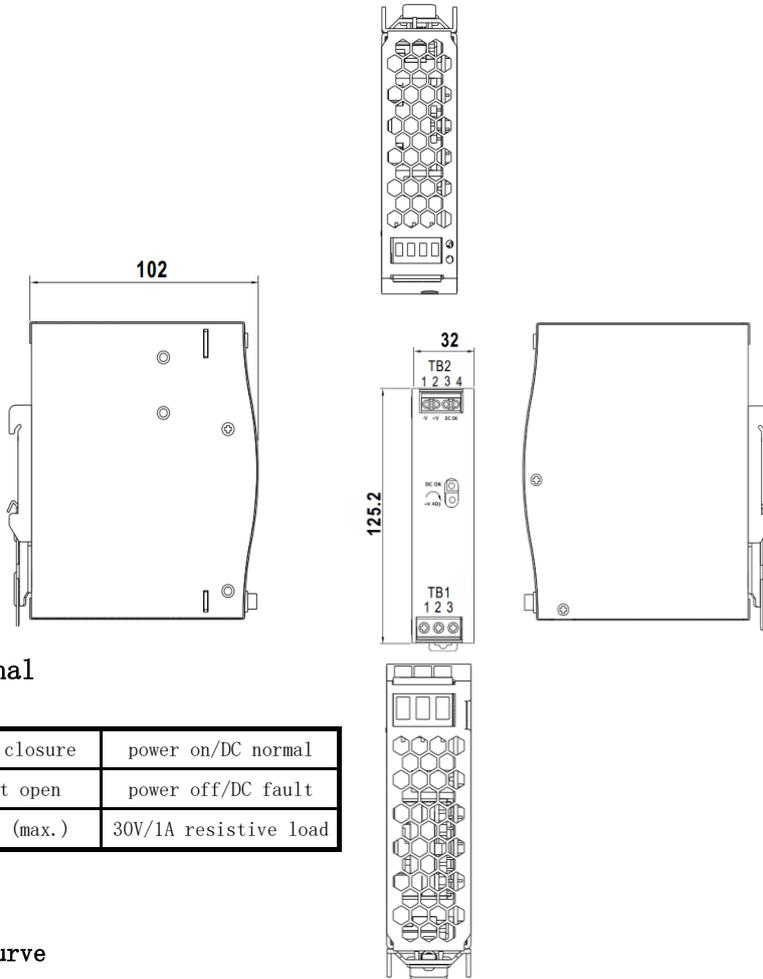


Specification

| Input | | | | | |
|---------------------------------|--|-------------------|-------------|--|--|
| Input voltage note1 | 254-850Vdc | | | | |
| Input Current (Typ.) | 0.4A/565Vdc 0.7A/325VDC | | | | |
| Surge current (Typ.) | cold start:50A/565Vdc | | | | |
| Leakage current | <2mA / 749Vdc | | | | |
| Output | | | | | |
| Model | MLD060-05V7 | MLD060-12V7 | MLD060-15V7 | MLD060-24V7 | MLD060-48V7 |
| DC voltage (V) | 5V | 12V | 15V | 24V | 48V |
| Efficiency (Typ.) | 83.5%/565Vdc | 86.5%/565Vdc | 87%/565Vdc | 89%/565Vdc | 90.5%/565Vdc |
| Voltage adjustment range | 5-6V | 12-15V | 15-18V | 24-29V | 48-57V |
| Rated current | 10A | 5A | 4A | 2.5A | 1.25A |
| Current range | 0-10A | 0-5A | 0-4A | 0-2.5A | 0-1.25A |
| Rated power | 50W | 60W | 60W | 60W | 60W |
| Ripple & noise (max MVP-P)note3 | 100mVp-p | 120mVp-p | 150mVp-p | 150mVp-p | 200mVp-p |
| Voltage tolerance note4 | ±2% | ±1.5% | ±1.0% | ±1.0% | ±1.0% |
| Line regulation | ±0.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% |
| Load regulation | ±1.5% | ±0.5% | ±0.5% | ±0.5% | ±0.5% |
| Setup, rise time | 1000ms, 70ms, 20ms/565Vdc 2000ms, 70ms, 10ms/325Vdc (at full load) | | | | |
| Status indicator | Green LED | | | | |
| Protection | | | | | |
| Over load | 105% - 135% of the rated output power | | | | |
| | Output voltage <50%: Hiccup mode, recover automatically after fault condition is removed | | | | |
| | Output voltage 50% - 100%: constant current mode, recover automatically after fault condition is removed | | | | |
| Over voltage | 6.2-7.2V | 16-18V | 19.5-22.5V | 31-37V | 58-60.5V |
| | Protection mode: Output shutdown, recoverable after power reset | | | | |
| Over temperature | Protection mode: Output shutdown, recoverable after power reset | | | | |
| DC OK Signal | maximum relay contact rating: 30V / 1A resistive load | | | | |
| Safety and EMC | | | | | |
| Withstand voltage | I/P-O/P:4.7KVAC I/P-FG:2.5KVAC 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°C/ 70% RH | | | | |
| Safety standard | Reference U161010, BS EN/EN61558-2-16, AS/NZS 62368.1 | | | | |
| EMC emission | Parameter | Standard | | | Test Level/Note |
| | Conducted | EN55032 (CISPR32) | | | Class B |
| | Radiated | EN55032 (CISPR32) | | | Class B |
| | Harmonic Current | EN 61000-3-2 | | | Class A |
| | Voltage Flicker | EN 61000-3-3 | | | |
| EMC immunity | EN55035, EN61000-6-2, EN61204-3 | | | | |
| | Parameter | Standard | | | Test Level/Note |
| | ESD | EN 61000-4-2 | | | Level 3, 8KV air; Level 2, 4KV contact, criteria A |
| | Radiated Susceptibility | EN 61000-4-3 | | | Level 3, 10V/m; criteria A |
| | EFT/Burst | EN 61000-4-4 | | | Level 3, 2KV/5KHz, criteria A |
| | Surge | EN 61000-4-5 | | | Level 4, 2KV/Line-Line, 4KV/Line-Earth, criteria A |
| | Conducted | EN 61000-4-6 | | | Level 3, 10V, criteria A |
| | Magnetic Field | EN 61000-4-8 | | | Level 4, 30A/m, criteria A |
| Voltage Dips and interruptions | EN 61000-4-11 | | | >95% dip 0.5 periods, 30% dip 25 periods, >95% interruptions 250 periods | |
| Environment | | | | | |
| Working temperature | -30~+85°C (Please refer to the "derating curve") | | | | |
| Working humidity | 20~90% RH, No condensation | | | | |
| Storage temperature | -40~+85°C, | | | | |
| Temperature coefficient | ±0.03%/°C (0~60°C) | | | | |
| Vibration resistance | Component: 10~ 500Hz, 2G 10min/Circle 60min in each X,Y,Z direction; Installation:IEC60068-2-6 | | | | |
| Altitude | 2000m | | | | |
| Others | | | | | |
| MTBF | ≥313.7K hrs, MIL-HDBK-217F (25°C) | | | | |
| Weight | 0.45Kg | | | | |
| Dimension | 32*125.2*102mm | | | | |

| Data | Model | Model |
|-----------|-------------------|-------------|
| | MLD 50W 10A/5V | MLD060-05V7 |
| | MLD 60W 5A/12V | MLD060-12V7 |
| | MLD 60W 4A/15V | MLD060-15V7 |
| | MLD 60W 2.5A/24V | MLD060-24V7 |
| | MLD 60W 1.25A/48V | MLD060-48V7 |
| Accessory | Description | Model |

Installation instruction



| Pin Numbering | Function |
|---------------|---------------|
| 1 | DC output -V |
| 2 | DC output +V |
| 3, 4 | Relay Contact |

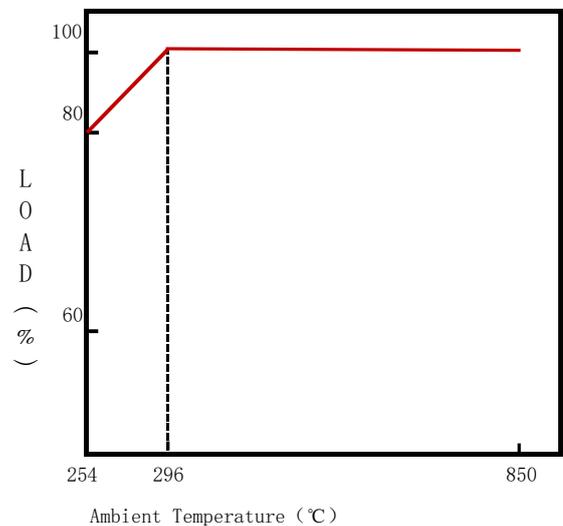
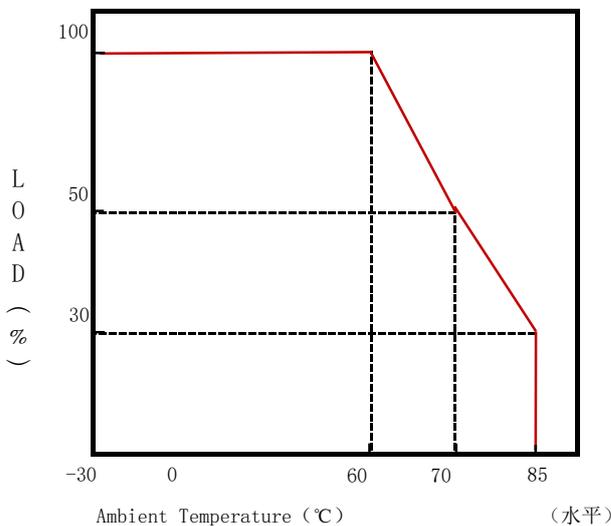
Terminal Block Pin Def

| Pin Numbering | Function |
|---------------|--------------|
| 1 | FG (⊥) |
| 2 | DC output -V |
| 3 | DC output +V |

DC OK Signal

| | |
|-----------------|-----------------------|
| contact closure | power on/DC normal |
| contact open | power off/DC fault |
| contact (max.) | 30V/1A resistive load |

Derating Curve



Note:

- 1: Under low input voltage conditions, output derating is required. Please refer to the derating curve for specifics.
- 2: Unless otherwise specified, all specifications are tested at an input of V2: 24Vdc; V3: 48Vdc, rated load, and 25°C ambient temperature.
- 3: Ripple & noise are measured at 20MHZ of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor
- 4: Tolerance: includes set up tolerance, line regulation and load regulation.
- 5: When operating at an altitude higher than 2000 meters (6500 feet), the ambient temperature for fanless models decreases by 3.5°C per 1000 meters, and for models with fans, it decreases by 5°C per 1000 meters.
6. Installation distance: It is recommended to have a distance of 40 mm from the top, 20 mm from the bottom, 5 mm from the left, and 5 mm from the right when the unit is loaded at full power permanently.