



FEATURES:

- RoHS compliant
- Switching power modules for PCB mounting
- Standard and extended temperature range
- Universal input: 90-260VAC, 47-440Hz, or 120-370VDC
- Low ripple and noise
- High efficiency up to 79%
- CE, cULus approvals

Models
Single output

| Model | Input Voltage (VAC/Hz) | Input Voltage (VDC) | Output Voltage (V) | Temperature range (°C) | Output Current max (A) | Minimum load (%) | Efficiency (%) |
|---------------|------------------------|---------------------|--------------------|------------------------|------------------------|------------------|----------------|
| AMEL10-3.3SZ | 90-260/47-440 | 120-370 | 3.3 | -25 ~ +70 | 2.5 | 0 | 70 |
| AMEL10-5SZ | 90-260/47-440 | 120-370 | 5 | -25 ~ +70 | 2 | 0 | 72 |
| AMEL10-12SZ | 90-260/47-440 | 120-370 | 12 | -25 ~ +70 | 0.833 | 0 | 79 |
| AMEL10-15SZ | 90-260/47-440 | 120-370 | 15 | -25 ~ +70 | 0.667 | 0 | 79 |
| AMEL10-24SZ | 90-260/47-440 | 120-370 | 24 | -25 ~ +70 | 0.417 | 0 | 79 |
| AMEL10-3.3SEZ | 90-260/47-440 | 120-370 | 3.3 | -40 ~ +70 | 2.5 | 0 | 70 |
| AMEL10-5SEZ | 90-260/47-440 | 120-370 | 5 | -40 ~ +70 | 2 | 0 | 72 |
| AMEL10-12SEZ | 90-260/47-440 | 120-370 | 12 | -40 ~ +70 | 0.833 | 0 | 76 |
| AMEL10-15SEZ | 90-260/47-440 | 120-370 | 15 | -40 ~ +70 | 0.667 | 0 | 75 |
| AMEL10-24SEZ | 90-260/47-440 | 120-370 | 24 | -40 ~ +70 | 0.417 | 0 | 72 |

Input Specifications

| Parameters | Conditions | Typical | Maximum | Units |
|---------------------|----------------------------|---------|---------|-------|
| Current (full load) | 115 VAC | | 220 | mA |
| | 230 VAC | | 150 | mA |
| Current (no load) | 115 VAC | | 12 | mA |
| | 230 VAC | | 24 | mA |
| Inrush current <2ms | 115 VAC | | 10 | A |
| | 230 VAC | | 20 | A |
| Leakage current | | | 0.25 | mA |
| External fuse | Recommended slow blow type | 1.5 | | A |

Output Specifications

| Parameters | Conditions | Typical | Maximum | Units |
|-------------------------|------------------------|------------|--------------------|-------|
| Voltage accuracy | | ±2 | | % |
| Line regulation | | | ±0.3 | % |
| Load regulation | | | ±0.5 | % |
| Maximum capacitive load | Depending of the model | 470-23 000 | | µF |
| Noise | | | 0.5 %Vout + 50 m V | |
| Ripple | | | 0.2 %Vout + 40 m V | |
| Hold-up time (min) | | 15 | | ms |

Isolation Specifications

| Parameters | Conditions | Typical | Maximum | Units |
|----------------|------------|---------|---------|-------|
| Input / Output | | 3000 | | VAC |

General Specifications

| Parameters | Conditions | Typical | Maximum | Units |
|--------------------------|---|---|-----------------------|--------|
| Switching frequency | | 125 | | KHz |
| Over current protection | Auto recovery | Hiccup | | |
| Over voltage protection | | Zener diode clamp | | |
| Short circuit protection | Auto recovery | Hiccup mode, indefinite | | |
| Operating temperature | With derating above 50°C | (-25 - +70) & (-40 - +70) | | °C |
| Storage temperature | | -40 to +85 | | °C |
| Temperature coefficient | | 0.02 | | % / °C |
| Cooling | Free air convection | | | |
| Humidity | | 20-85 | | % RH |
| Case material | Plastic resin + Fiberglass (flammability to UL 94V-0) | | | |
| Weight | | 54 | | g |
| Dimensions | | 2.05 x 1.06 x 0.91 inches | 52.4 x 27.2 x 23.5 mm | |
| MTBF | | > 330 000 hrs (MIL-HDBK -217F, t=+25°C) | | |
| Vibration | 1 min. cycle | 10-55 (0.5mm width) | | Hz |
| Shock | 3 directions each 3 times | 20 | | G |

Safety Specifications

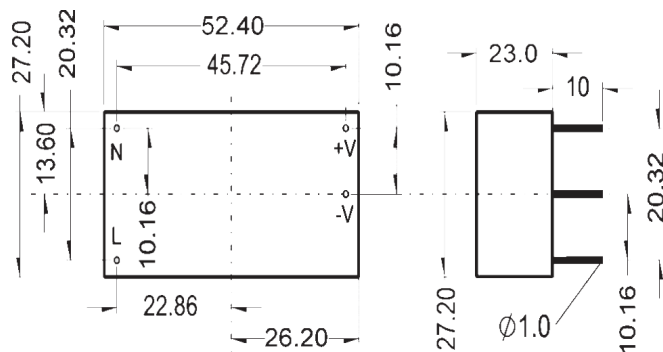
Standards

| | |
|------------------|--|
| Safety | EN55022, class B (EMI - Conducted and radiated emission), EN55024 (EMS - Noise immunity) |
| Agency approvals | CE, cULus |

Pin Out Specifications

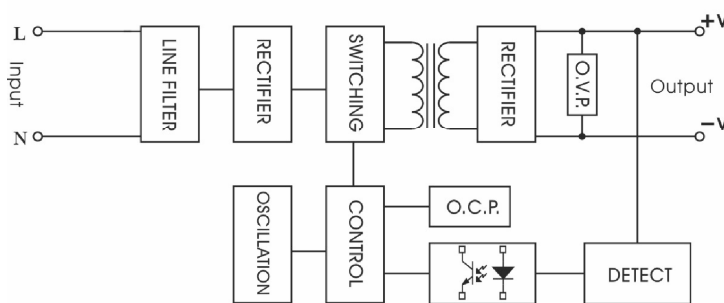
| Pin | Single |
|-----|------------|
| N | AC Input |
| L | AC Input |
| +V | +DC Output |
| -V | -DC Output |

Dimensions



Block diagram

Single Output



Derating

