PULS does it again: practical, versatile and reliable like the SilverLine – yet small like no other.

Data Sheet

MiniLine ML100.102 with DC 12-15V / 90W

- Mounted and connected within seconds, no tools required
- World-wide approvals (UL, EN, CSA, CB Scheme) for industry and office/home
- Tiny: WxHxD = 73 x 75 x 103mm
- Hazardous Location Class I Div. 2 (UL 1604)
- Adjustable output voltage up to DC 15V
- 115/230V Auto Select Input
- Selectable single/parallel operation (jumper)

PULS GmbH, Arabellastrasse 15, 81925 Munich
Tel. +49.(0)89.9278-244, Fax: +49.(0)89.9278-299
sales@puls-power.com, http://www.puls-power.com

Mini is more.
Prior to shipment, every unit undergoes the following tests in order to isolate any defective units which might suffer an early failure:

- Run-in/burn-in (Full load, Tamb = +60°C, on/off cycle) isolate any defective units which might suffer an early failure:
- Weights

## Efficiency, Reliability

<table>
<thead>
<tr>
<th>Efficiency</th>
<th>&gt;88.5% (AC 230V, 12V / 7.5A) (see also diagram below)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Losses</td>
<td>&lt;11.7W (AC 230V, 12V / 7.5A)</td>
</tr>
<tr>
<td>MTBF (Reliability)</td>
<td>approx. 500,000 h acc. to Siemensnorm SN 29500 (12V / 7.5A, AC 230V, Tamb = +40 °C)</td>
</tr>
</tbody>
</table>

Prior to shipment, each unit undergoes the following tests in order to isolate any defective units which might suffer an early failure:

- Run-in/burn-in (Full load, Tamb = +60°C, on/off cycle)
- Functional test (100%) +

## Construction, Mechanics, Installation

Robust plastic housing (US Patent No. D442, 923S), fine ventilation grid on three housing sides to keep out small parts (e.g. screws), IP20

- Weight: 360 g
- Mounting orientation: IP20 (EN 60529), fine ventilation grid recom’d.: 25 mm on sides with ventilation grid

Easy snap-on mounting onto the DIN-rail (T35/7.5 or T35/15). Unit sits safely and firmly on the rail; no tools required even to remove

- Connection: by Spring Clamp terminals; uniformly firm hold, vibration-resistant and maintenance-free: 2 terminals per output

Connector size range:

- Flexible cable: 0.3-2.5mm² (28-12 AWG)
- Solid cable: 0.3-4mm² (28-12 AWG)
- Wire strip length: 0.3-4mm² (28-12 AWG)

## Environmental Data, EMC, Safety

Ambient temperature range (measured 25 mm below unit):

- storage/transport: -25°C...+85°C
- operation: -10°C...+70°C (for derating see diagram below)

Humidity: max. 95% (without condensation)

**Electromagnetic emissions (EME)**

- EN 61000-6-3 (includes EN 61000-6-4)
- EN 61000-6-2 (IEC 61000-6-1)

**Electromagnetic immunity (EMI)**

- EN 61000-3-2 (PFC)
- EN 61000-6-3 (includes EN 61000-6-4)
- EN 61000-6-2 (includes EN 61000-6-1)

**Safe low voltage:** SELV (EN 60950), VDE010077.101, PELV (EN 50178)

The PSU complies with all major safety approvals for EU (EN 60 950, EN 60204-1, EN 50178), USA (UL 60950, E137006, UL508 LISTED, E198865), Canada (CAN/CSA-C22.2 No 60950 [CUR], CAN/CSA-C22.2 No. 14 [CUL]), CB Scheme (IEC 60950). Hazardous Location Class I Div. 2 (UL 1604)

Design details – for your advantage:

- All terminals are easy to reach as mounted on the front panel.
- Input and output are strictly apart from each other (input below, output above) and so cannot be mixed up.
- Mounting and connection do not require any screwdriver → Easy, quick, durable and reliable installation.

## Diagrams

### Output characteristic Vout/Iout (min.)

- Output voltage (V) vs. Output current (I)

### Efficiency (@ Vout = 12V, typ.)

- Efficiency [%] vs. Output current (I)

### Derating of output power

- Output power (W) vs. Ambient temperature (°C)

### Hold-up time with ACin

- Hold-up time (ms) vs. Input voltage (VACin)

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Product information (ML100e102), Rev.: 29. June 2004. Unless otherwise stated, specifications are valid for AC 230V input voltage, +25°C ambient temperature, and 5 min. run-in time. They are subject to change without prior notice.

PULS GmbH, Arabellastraße 15, D-81925 München. Tel: +49.(0)89.9278-244, Fax: +49.(0)89.9278-299, E-Mail: sales@puls-power.com. www.puls-power.com