MiniLine ML30.100 with DC 24-28V / 30W

- Mounted and connected in record time, no tools required
- World-wide approvals (UL, EN, CSA, CB Scheme) for industry and office/home
- Tiny: WxHxD = 45 x 75 x 91mm
- NEC Class 2 Power Supply and Hazardous Location Class I Div. 2 (UL 1604)
- Output voltage adjustable to DC 28V
- 100-240V Wide Range Input (AC 85...264V permitted)
- PULS Overload Design™ (no switch off at overload but up to 1.5 times nominal current)

PULS GmbH, Arabellastrasse 15, D-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.
**Technical Data ML30.100**

### Input

- **Input voltage**: AC100-240V (Wide Range), 47...63Hz
  - Admiss. limits: AC 85...264V (DC 85...375V)
- **Input current**
  - <0.6A (@ AC 100V, 30W Pout)
  - <0.35A (@ AC 196V, 30W Pout)
- **External Fusing**
  - Not required, unit provides internal fuse (T3AH, not accessible)
- **Transient immunity**
  - Transient resistance acc. to VDE 0160 / W2
- **Hold-up time**
  - >190ms bei AC 230V, 24V / 1.3A
  - >107ms @ AC 196V, 24V / 1.3A
  - >19ms @ AC 100V, 24V / 1.3A

### Efficiency, Reliability

- **Efficiency**
  - typ. 87.5% (AC 230V, 24V / 1.3A)
  - (see also diagram below)
- **Losses**
  - typ. 4.5W (AC 230V, 24V / 1.3A)
- **MTBF (Reliability)**
  - ca. 650.000h acc. to Siemensnorm SN 29500
  - (24V/1.3A, AC 230V, T_amb = +40°C)
- **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, T_amb = +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**
  - B x H x T
  - 45mm x 75mm x 91mm (+ DIN Rail)
  - Depth incl. terminals: 98mm (+ DIN Rail)
  - 230g
- **Mounting orientation**
  - ≤15°C (cf. 'Output')
  - Voltage regulation stat. 0.5% V out, dyn. ±2% Vout overall
  - **Rated continuous**
  - up to 1.3A (convection cooling)
  - Loading depending on built-in orientation, V_in and T_amb; for details see derating diagram below
- **Overload behaviour**
  - PULS Overload Design™: No switch-off at overload/short-circuit, instead: up to 1.5 ⋅ Pout
  - So you need no oversizing to start awkward loads.
  - Protection
  - Unit is protected against (also permanent) short-circuit, overload and open-circuit
  - Derating
  - depending on built-in orientation; see diagram below
- **Parallel operation**
  - Yes
- **Power back immunity**
  - 35V
- **Operation indicator**
  - Green LED (DC ON)

### Environmental Data, EMC, Safety

- **Ambient temperature range** (measured 25mm 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)**
  - Class B (EN 55011, EN 55022) incl. output noise suppression
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- **Electromagnetic immunity (EMI)**
  - Class B (EN 55011, EN 55022) incl. output noise suppression
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- **Safe low voltage**
  - SELV (EN60950), VDE0100/7/410, PELV (EN50178)
  - Prot. class/degree:
    - Class I (EN60950) / IP20 (EN60529)
  - 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). NEC Class 2 Power Supply and 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 V_{out}/I_{out}** (min.)
  - (see diagram below)
- **Efficiency**
  - @ V_{out} = 24V, typ.
  - (see diagram below)
- **Derating of output power**
  - @ V_{out} = 24V, typ. + min.
  - (see diagram below)
- **Hold-up time with ACin**
  - (see diagram below)