MiniLine ML100.100
ML100.109
with DC 24-28V / 100W

- Mounted and connected in record time, 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 28V
- 115/230V Auto Select Input
- PULS Overload Design™ (high output overload capability)
- Selectable single/parallel operation (jumper)
**Technical Data ML100.100/109**

### Input

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
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<tbody>
<tr>
<td>Input voltage</td>
<td>AC 100-120/220-240 V (Auto Select), 47…63 Hz (AC 85…132 V / AC 184…264 V, DC 220…375 V)</td>
</tr>
<tr>
<td>Input current</td>
<td>&lt;2.1A (@ AC 100Vin, 100W Pout)</td>
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<tr>
<td>External fusing</td>
<td>not required, unit provides internal fuse (T3A15H, not accessible)</td>
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<tr>
<td>Transient immunity</td>
<td>Transient resistance acc. to VDE 0160 / W2 (750V / 1.3 ms), over entire load range</td>
</tr>
<tr>
<td>Hold-up time (see diagram below)</td>
<td>&gt;40 ms @ AC 230V, 24.5 V / 4.2A</td>
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<tr>
<td></td>
<td>&gt;20 ms @ AC 196V, 24.5 V / 4.2A</td>
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<tr>
<td></td>
<td>&gt;20 ms @ AC 100V, 24.5 V / 4.2A</td>
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</tbody>
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### Efficiency, Reliability

**Efficiency**
- typ. 90% (AC 230V, 24.5 V / 4.2A) (see also diagram below)
- typ. 71.4 W (AC 230V, 24.5 V / 4.2A)

**MTBF (Reliability)**
- appr. 500,000 h acc. to Siemenst norm SN 29500 (24.5V / 4.2A, AC 230V, Tamb = +60°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, 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

- **Dimensions and weight**
  - W x H x D: 73 mm x 75 mm x 103 mm (+ DIN rail)
  - Weight: 360 g

- **Mounting orientation**
  - Horizontal or Vertical (cf. ‘Output’)

- **Ventilation/Cooling**
  - Normal convection, no fan required

- **Free space for cooling**
  - recommand.: 25 mm on sides with ventilation grid

- **Easy snap-on mounting onto the DIN-rail (T535/7,5 or T535/15).** 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: 6mm (0.24in) recommended

**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} (min.)**
- **Efficiency (@ V_{out} = 24.5V, typ.)**
- **Derating of output power**
- **Hold-up time with ACInput (at V_{out} = 24.5V, typ. + min.)**