

Features

- ◆ Very compact metal cased power supplies
- ◆ Cost optimized design
- ◆ High operating temperature up to 70°C
- ◆ Low no load power consumption
<0.5W up to 75 W units
- ◆ Screw terminal block
- ◆ No internal fan up to 150 W models
- ◆ Universal input AC input, full range
- ◆ Withstand 300 VAC surge input for 5 sec.
- ◆ Adjustable output voltage
- ◆ 3-year product warranty



The TRACOPOWER TXM series is a family of enclosed power supplies designed for a wide range of cost critical applications. With a low profile metal case and screw terminal block connection, they are easy to install in any equipment.

There are 40 models with single output voltages from 3.3 VDC to 48 VDC in 9 power ranges from 15 W to 320 W. These power supplies have universal input and comply with European EMC standards and the Low Voltage Directive (LVD).

Models with Single Output

| Order Code | Output Power max. | Output Voltage | | Output Current max. | Efficiency | |
|-------------|-------------------|----------------|---------------|---------------------|------------|---------|
| | | nominal | adjustable | | 115 VAC | 230 VAC |
| TXM 015-103 | 15 Watt | 3.3 VDC | 3.0-3.6 VDC | 4.0 A | 70 % | 71 % |
| TXM 015-105 | | 5 VDC | 4.4-5.5 VDC | 3.0 A | 76 % | 78 % |
| TXM 015-112 | | 12 VDC | 10.3-13.8 VDC | 1.3 A | 80 % | 82 % |
| TXM 015-115 | | 15 VDC | 13.8-16.1 VDC | 1.0 A | 82 % | 83 % |
| TXM 015-124 | | 24 VDC | 20.7-16.1 VDC | 0.7 A | 84 % | 85 % |
| TXM 025-103 | 25 Watt | 3.3 VDC | 3.0-3.6 VDC | 5.0 A | 70 % | 71 % |
| TXM 025-105 | | 5 VDC | 4.4-5.5 VDC | 5.0 A | 76 % | 78 % |
| TXM 025-112 | | 12 VDC | 10.3-13.8 VDC | 2.1 A | 80 % | 82 % |
| TXM 025-115 | | 15 VDC | 13.8-16.1 VDC | 1.6 A | 82 % | 83 % |
| TXM 025-124 | | 24 VDC | 20.7-26.7 VDC | 1.1 A | 84 % | 85 % |
| TXM 035-105 | 35 Watt | 5 VDC | 4.75-5.5 VDC | 6.0 A | 79 % | 80 % |
| TXM 035-112 | | 12 VDC | 11.3-13.5 VDC | 3.0 A | 83 % | 84 % |
| TXM 035-115 | | 15 VDC | 14.3-16.5 VDC | 2.4 A | 85 % | 86 % |
| TXM 035-124 | | 24 VDC | 22.4-27.6 VDC | 1.5 A | 86 % | 87 % |
| TXM 035-148 | | 48 VDC | 45.6-52.8 VDC | 0.75 A | 87 % | 88 % |
| TXM 050-105 | 50 / 60 Watt | 5 VDC | 4.6-5.5 VDC | 8.0 A | 79 % | 80 % |
| TXM 050-112 | | 12 VDC | 10.6-13.8 VDC | 4.2 A | 84 % | 85 % |
| TXM 050-115 | | 15 VDC | 13.8-16.5 VDC | 3.4 A | 85 % | 86 % |
| TXM 050-124 | | 24 VDC | 22.5-27.8 VDC | 2.2 A | 87 % | 88 % |
| TXM 050-148 | | 48 VDC | 16.0-51.0 VDC | 1.1 A | 88 % | 89 % |

Models with Single Output

| Order Code | Output Power max. | Output Voltage nom. | | Output Current max. | | Efficiency | |
|-------------|-----------------------|---------------------|---------------|---------------------|---------|------------|---------|
| | | nominal | adjustable | 115 VAC | 230 VAC | 115 VAC | 230 VAC |
| TXM 075-105 | 60 / 75 Watt | 5 VDC | 4.7-5.5 VDC | 12.0 A | | 79 % | 80 % |
| TXM 075-112 | | 12 VDC | 11.3-13.8 VDC | 6.0 A | | 84 % | 85 % |
| TXM 075-115 | | 15 VDC | 13.8-16.5 VDC | 5.0 A | | 85 % | 86 % |
| TXM 075-124 | | 24 VDC | 22.5-28.6 VDC | 3.2 A | | 86 % | 88 % |
| TXM 075-148 | | 48 VDC | 46.0-51.0 VDC | 1.6 A | | 88 % | 89 % |
| TXM 100-105 | 100 Watt | 5 VDC | 4.5-5.5 VDC | 20.0 A | | 78 % | 80 % |
| TXM 100-112 | | 12 VDC | 10.6-13.6 VDC | 8.5 A | | 84 % | 86 % |
| TXM 100-115 | | 15 VDC | 13.5-17.0 VDC | 6.7 A | | 84 % | 86 % |
| TXM 100-124 | | 24 VDC | 21.8-27.4 VDC | 4.2 A | | 84 % | 86 % |
| TXM 100-148 | | 48 VDC | 44.0-52.0 VDC | 2.1 A | | 86 % | 87 % |
| TXM 150-112 | 150 Watt | 12 VDC | 10.6-13.5 VDC | 9.6 A | 11.2 | 83 % | 86 % |
| TXM 150-124 | | 24 VDC | 22.1-26.7 VDC | 4.8 A | 5.6 A | 84 % | 86 % |
| TXM 150-148 | | 48 VDC | 44.0-52.0 VDC | 2.4 A | 2.8 A | 84 % | 87 % |
| TXM 200-112 | 200 Watt | 12 VDC | 11.2-13.4 VDC | 16.7 A | | 77 % | 81 % |
| TXM 200-124 | | 24 VDC | 22.0-26.7 VDC | 8.4 A | | 79 % | 83 % |
| TXM 200-148 | | 48 VDC | 45.0-52.9 VDC | 4.2 A | | 80 % | 84 % |
| TXM 320-112 | 300 / 320 Watt | 12 VDC | 10.5-13.3 VDC | 20.5 A | 25 A | 78 % | 86 % |
| TXM 320-124 | | 24 VDC | 19.7-26.4 VDC | 10.6 A | 13 A | 79 % | 87 % |
| TXM 320-136 | | 36 VDC | 33.2-38.4 VDC | 7.2 A | 8.8 A | 80 % | 87 % |
| TXM 320-148 | | 48 VDC | 41.5-53.1 VDC | 5.5 A | 6.7 A | 81 % | 88 % |

Scheduled for Q4/2013

* Total power must not exceed specified max. output power

Input Specifications

| | | |
|--|---|--|
| Input voltage range | – nominal – AC range (universal input) – DC range | 100 – 240 VAC 90 – 264 VAC 127 – 370 VDC |
| Input voltage frequency | | 47 – 63 Hz |
| Input current | | TXM 015/025 models: 0.70 A max. TXM 035 models: 1.00 A max. TXM 050 models: 1.50 A max. TXM 075 models: 2.50 A max. TXM 100 models: 1.70 A max. TXM 150 models: 2.00 A max. TXM 200 models: 3.50 A max. TXM 300 models: 4.00 A max. |
| Recommended circuit breaker (characteristic C) or slow blow fuse | | up to 75 Watt models: 5 A up to 320 Watt models: 10 A |

Output Specifications

| | | | |
|---|--|---|--|
| Regulation | – Input variation – Load variation (10–100%) – Minimum load: | TXM 015, 025, 075: all other models: | 0.5 % max. 2 % max. 1 % max. no minimum load required |
| Ripple and noise (20 MHz bandwidth) | | | < 1.0 % of Vout nom. typ. |
| Output current limitation | | TXM 015: TXM 200: TXM 320: all other models: | 110 % – 180 % of Iout max. 105 % – 135 % of Iout max. 105 % – 140 % of Iout max. 105 % – 150 % of Iout max. |
| Overload protection mode | | | Hiccup / constant power, automatic recovery |
| Over voltage protection (only output 1) | | | 105 % – 150 % of Vout nom. (depending on model) |

General Specifications

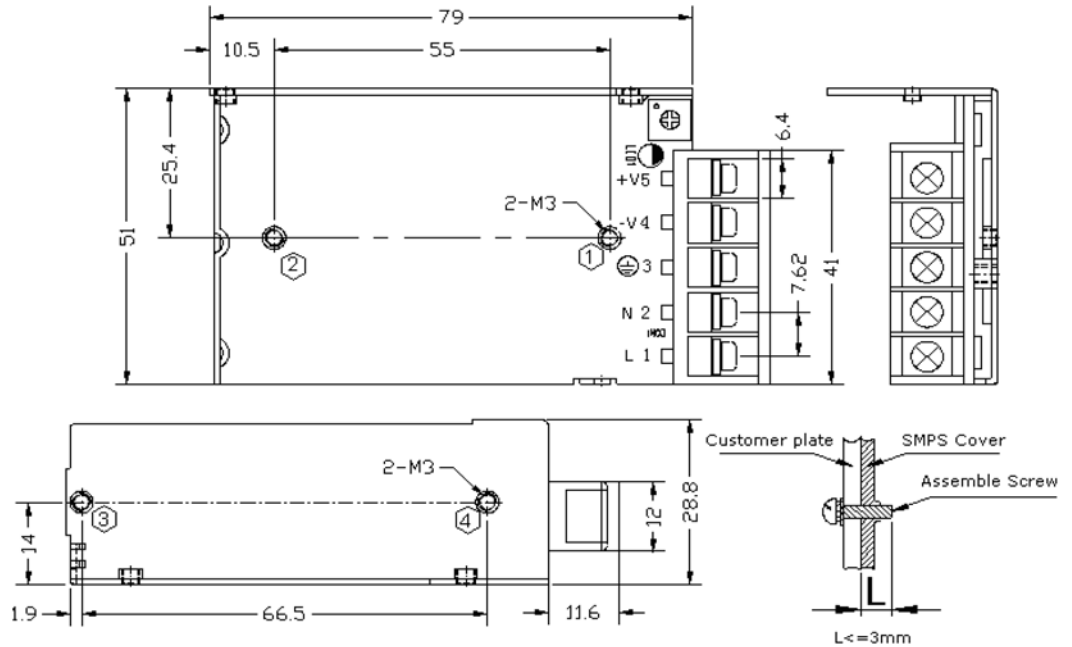
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|--|--|--|--|
| Temperature ranges | – Operating | TXM 100/150/200 | –10°C to +60°C |
| | | TXM 320 | –20°C to +65°C |
| | – Load derating above 40°C | TXM 015/025/035/050 | –20°C to +70°C |
| | | TXM 075 | –25°C to +70°C |
| – Load derating above 50°C | TXM 100/150 or 3.3/5V | 2%/°K (1.3%/°K for 3.3/5V) | |
| | all other models | 2%/°K (4%/°K for TXM 200; 3.3%/K for TXM 320) | |
| | – Storage (non operating) | –40°C to +85°C | |
| Temperature coefficient | TXM 200 | 0.05 %/°C | |
| | all other models | 0.03%/°C | |
| Humidity (non condensing) | | 90 % rel. H max. (non condensing) | |
| Hold-up time | | 10 ms min. (115 VAC) | |
| | | 20 ms min. (230 VAC) | |
| Isolation voltage (60 sec.) | – Input/Output | 3'000 VAC | |
| | – Input/Case | 1'500 VAC | |
| | – Output/Case | 500 VAC | |
| Reliability /calculated MTBF (MIL-HDBK-217F, at +25°C typ., ground benign) | | >200'000 h | |
| Altitude during operation | TXM 015 & 025 models: | 2'000 m max. (6'667 ft) approved | |
| | all other models: | 5'000 m max. (16'400 ft) approved | |
| Electromagnetic compatibility (EMC), Emissions | – Conducted input RI suppression | EN 55022, class B | |
| | – Harmonic current emissions | IEC/EN 61000-3-2, | |
| | – Flicker | IEC/EN 61000-3-3 | |
| Electromagnetic compatibility (EMC), Immunity | – Electrostatic discharge ESD | IEC/EN 61000-4-2 4 kV / 8 kV | |
| | – RF field immunity | IEC/EN 61000-4-3 3 V/m | |
| | – Electrical fast transients/burst immunity | IEC/EN 61000-4-4 1 kV | |
| | – Surge | IEC/EN 61000-4-5 1 kV / 2 kV | |
| | – Conducted RF | IEC/EN 61000-4-6 3 V/m | |
| | – Magnetic field | IEC/EN 61000-4-8 3 A/m | |
| | – Voltage dip | IEC/EN 61000-4-11 | |
| | – Light industry | ENV 50204, criteria A | |
| Safety standards | | UL 60950-1, IEC/EN 60950-1 | |
| Safety approvals | – UL/cUL | | www.ul.com -> certifications -> File: e188913 (entry for 100-320W models is pending) |
| | | TXM 015 models: | www.tracopower.com/products/txm015-cb.pdf |
| | TXM 025 models: | www.tracopower.com/products/txm025-cb.pdf | |
| | TXM 035 models: | www.tracopower.com/products/txm035-cb.pdf | |
| | TXM 050 models: | www.tracopower.com/products/txm050-cb.pdf | |
| | TXM 075 models: | www.tracopower.com/products/txm075-cb.pdf | |
| | TXM 100 models: | www.tracopower.com/products/txm100-cb.pdf | |
| | TXM 150 models: | www.tracopower.com/products/txm150-cb.pdf | |
| TXM 200 models: | www.tracopower.com/products/txm200-cb.pdf | | |
| TXM 320 models: | www.tracopower.com/products/txm320-cb.pdf | | |
| Environmental compliance | – Reach | | www.tracopower.com/products/txm-reach.pdf |

All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

Case Dimensions

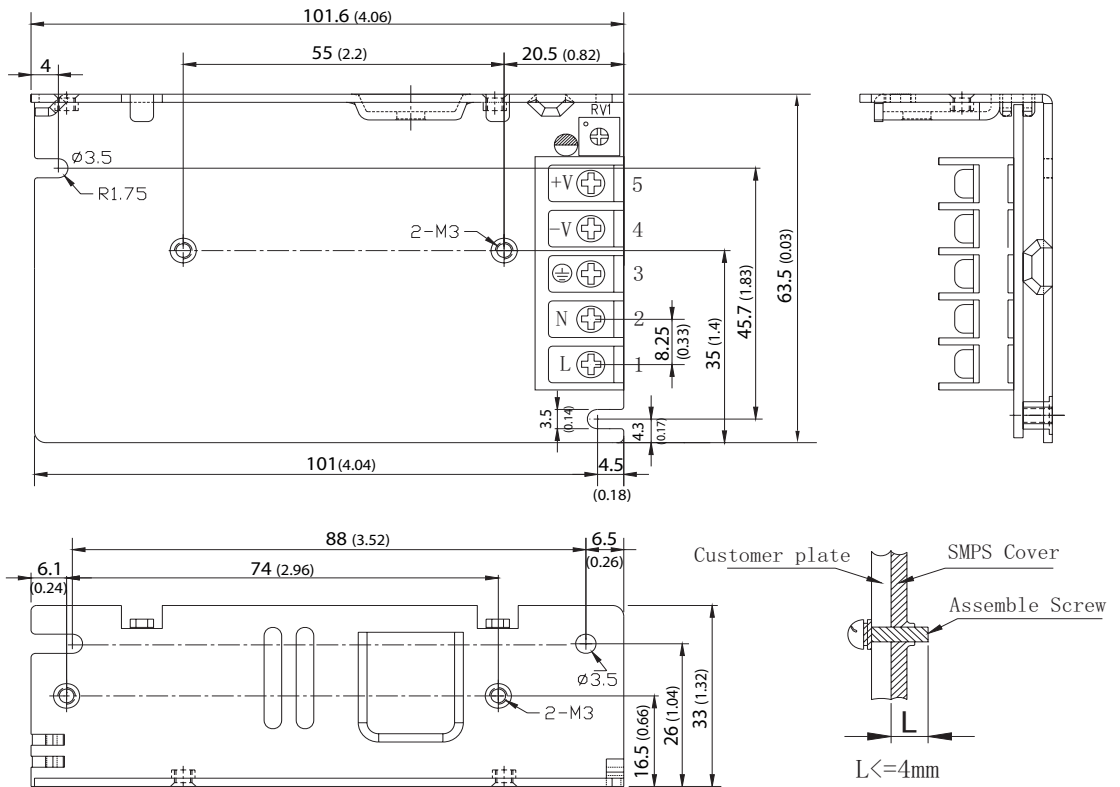
Case for TXM 015 & TXM 025

| Pin-Out | |
|---------|----------|
| Pin | Function |
| 1 | AC L |
| 2 | AC N |
| 3 | GND |
| 4 | -Vout |
| 5 | +Vout |



Case for TXM 035

| Pin-Out | |
|---------|----------|
| Pin | Function |
| 1 | AC L |
| 2 | AC N |
| 3 | GND |
| 4 | -Vout |
| 5 | +Vout |

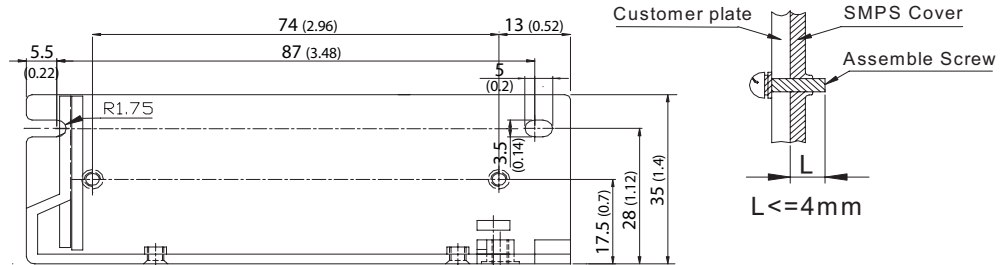
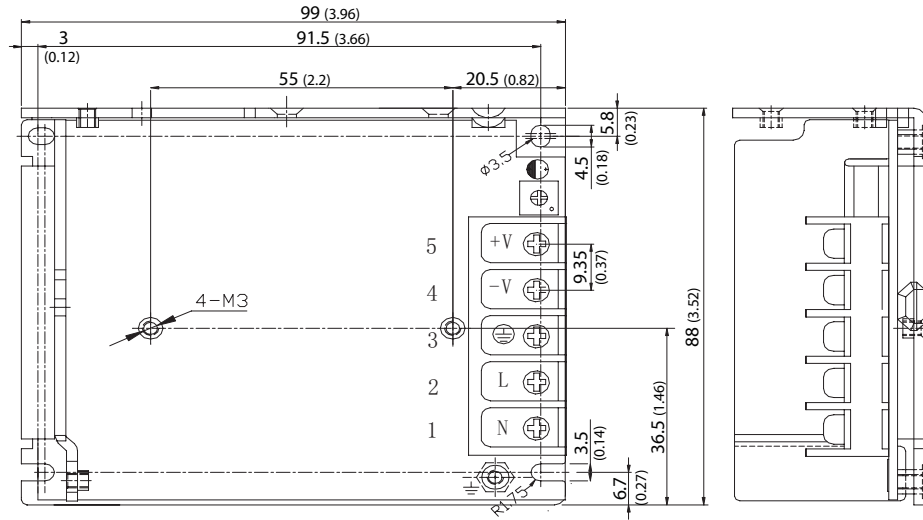


Max mounting screw penetration: 2.0 mm (0.08)

Case Dimensions

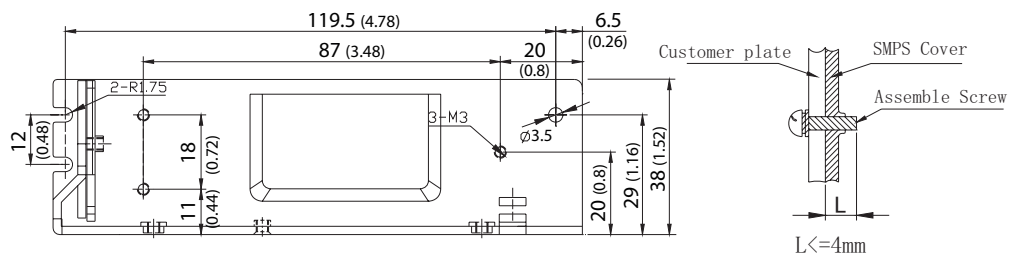
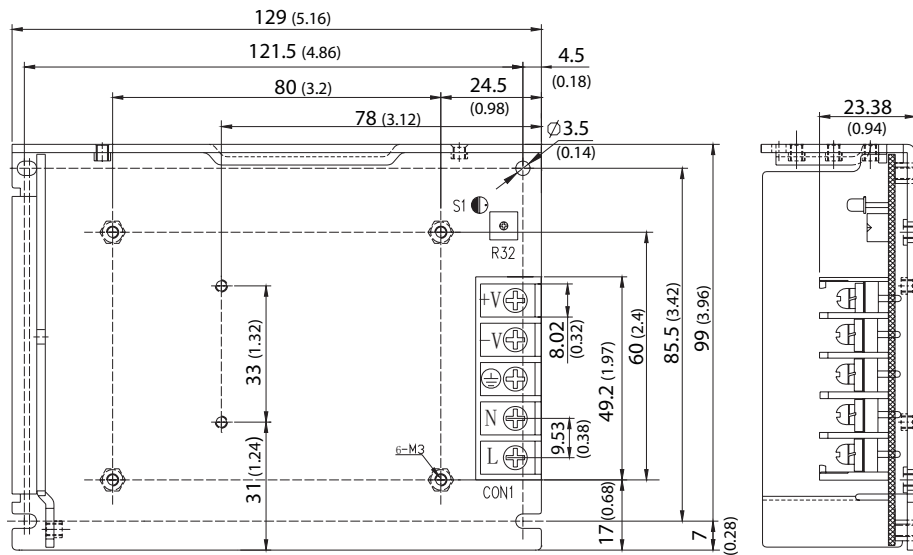
Case for TXM 050

| Pin-Out | |
|---------|----------|
| Pin | Function |
| 1 | AC L |
| 2 | AC N |
| 3 | GND |
| 4 | -Vout |
| 5 | +Vout |



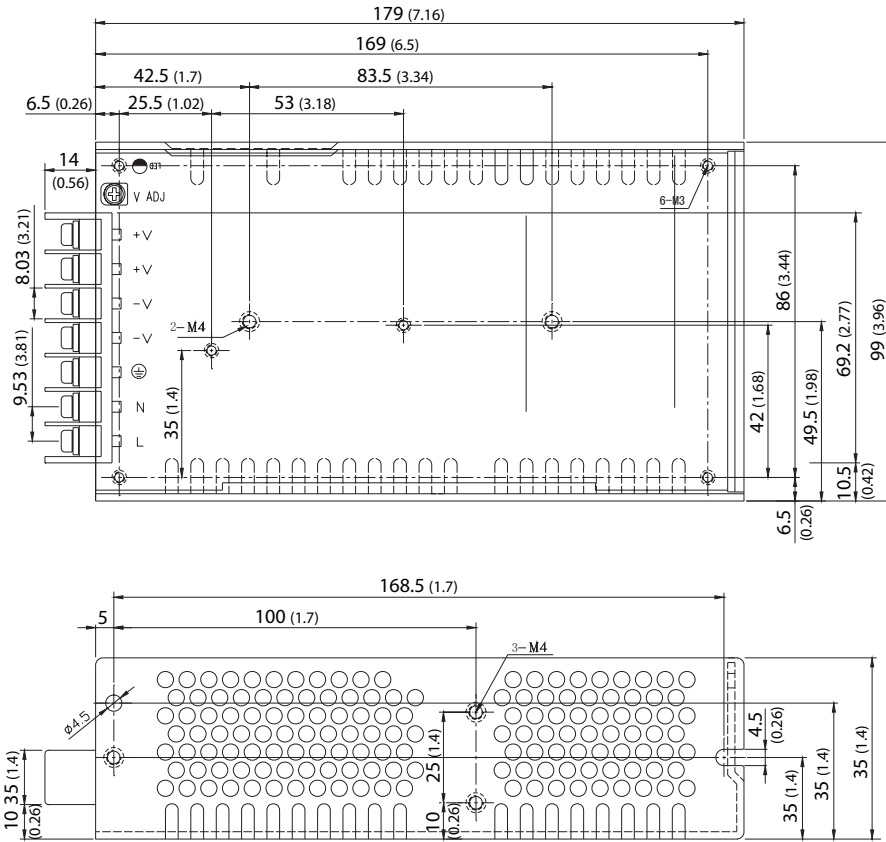
Case for TXM 075

| Pin-Out | |
|---------|----------|
| Pin | Function |
| 1 | AC L |
| 2 | AC N |
| 3 | GND |
| 4 | -Vout |
| 5 | +Vout |

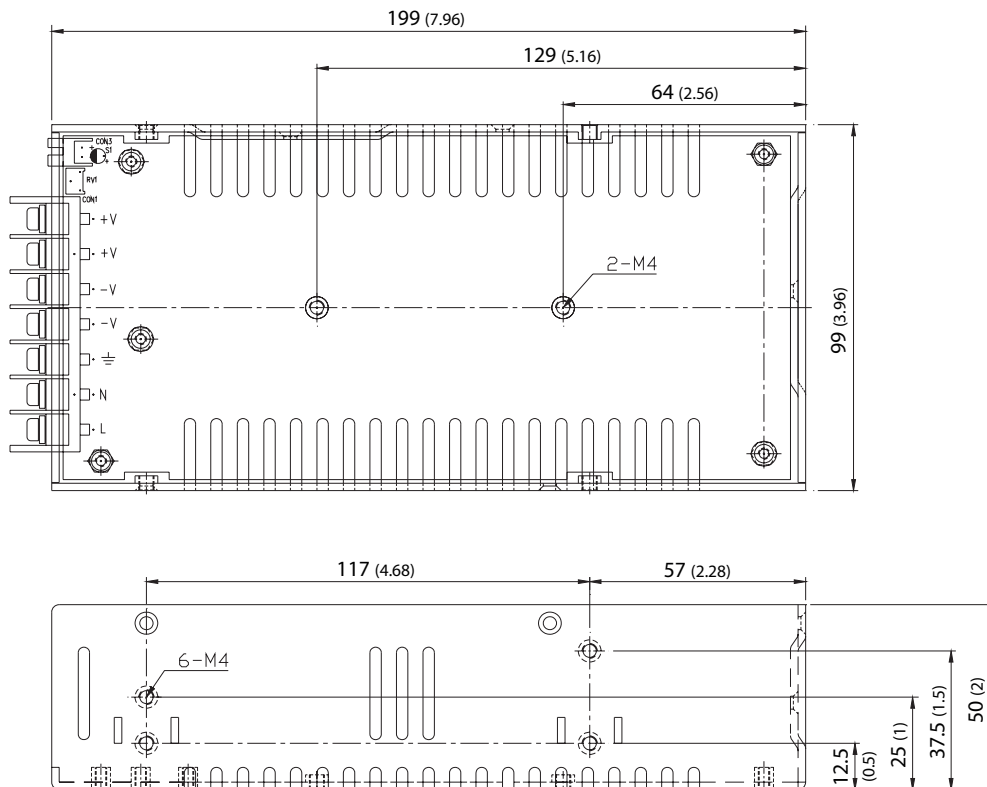


Case Dimensions

Case for TXM 100 & 150



Case for TXM 200



Max mounting screw penetration: 3.0 mm (0.12)

