Enclosed Power Supplies

TXM Series, 15–320 Watt

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 encased 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	3.1-3.6 VDC	4.0 A	70 %	71 %
TXM 015-105		5 VDC	4.7-5.5 VDC	3.0 A	76 %	78 %
TXM 015-112		12 VDC	11.4-13.2 VDC	1.3 A	80 %	82 %
TXM 015-115		15 VDC	14.2-16.5 VDC	1.0 A	82 %	83 %
TXM 015-124		24 VDC	22.8-26.4 VDC	0.7 A	84 %	85 %
TXM 025-103	25 Watt	3.3 VDC	3.1-3.6 VDC	5.0 A	70 %	71 %
TXM 025-105		5 VDC	4.7-5.5 VDC	5.0 A	76 %	78 %
TXM 025-112		12 VDC	11.4-13.2 VDC	2.1 A	80 %	82 %
TXM 025-115		15 VDC	14.2-16.5 VDC	1.6 A	82 %	83 %
TXM 025-124		24 VDC	22.8-26.4 VDC	1.1 A	84 %	85 %
TXM 035-105	35 Watt	5 VDC	4.7-5.5 VDC	6.0 A	79 %	80 %
TXM 035-112		12 VDC	11.4-13.2 VDC	3.0 A	83 %	84 %
TXM 035-115		15 VDC	14.2-16.5 VDC	2.4 A	85 %	86 %
TXM 035-124		24 VDC	22.8-26.4 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	4.7-5.5 VDC	8.0 A	79 %	80 %
TXM 050-112		12 VDC	11.4-13.2 VDC	4.2 A	84 %	85 %
TXM 050-115		15 VDC	14.2-16.5 VDC	3.4 A	85 %	86 %
TXM 050-124		24 VDC	22.8-26.4 VDC	2.2 A	87 %	88 %
TXM 050-148		48 VDC	45.6-52.8 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	11.4-13.2 VDC	6.0 A		84 %	85 %
TXM 075-115		15 VDC	14.2-16.5 VDC	5.0 A		85 %	86 %
TXM 075-124		24 VDC	22.8-26.4 VDC	3.2 A		86 %	88 %
TXM 075-148		48 VDC	45.6-52.8 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	100 – 240 VAC
	– AC range (universal input)	90 – 264 VAC
	– DC range	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		0.5 % max.
	– Load variation (10–100%)	TXM 015, 025, 075:	2 % max.
		all other models:	1 % max.
	– Minimum load:		no minimum load required
Ripple and noise (20 MHz bandwidth)			< 1.0 % of Vout nom. typ.
Output current limitation		TXM 015:	110 % – 180 % of Iout max.
		TXM 200:	105 % – 135 % of Iout max.
		TXM 320:	105 % – 140 % of Iout max.
		all other models:	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

Temperature ranges	– Operating	TXM 100/150/200	–10°C to +60°C
		TXM 320	–20°C to +65°C
		TXM 015/025/035/050	–20°C to +70°C
		TXM 075	–25°C to +70°C
	– Load derating above 40°C	TXM 100/150 or 3.3/5V	2 %/°K (1.3 %/°K for 3.3/5V)
	– Load derating above 50°C	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)
	– CB report	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

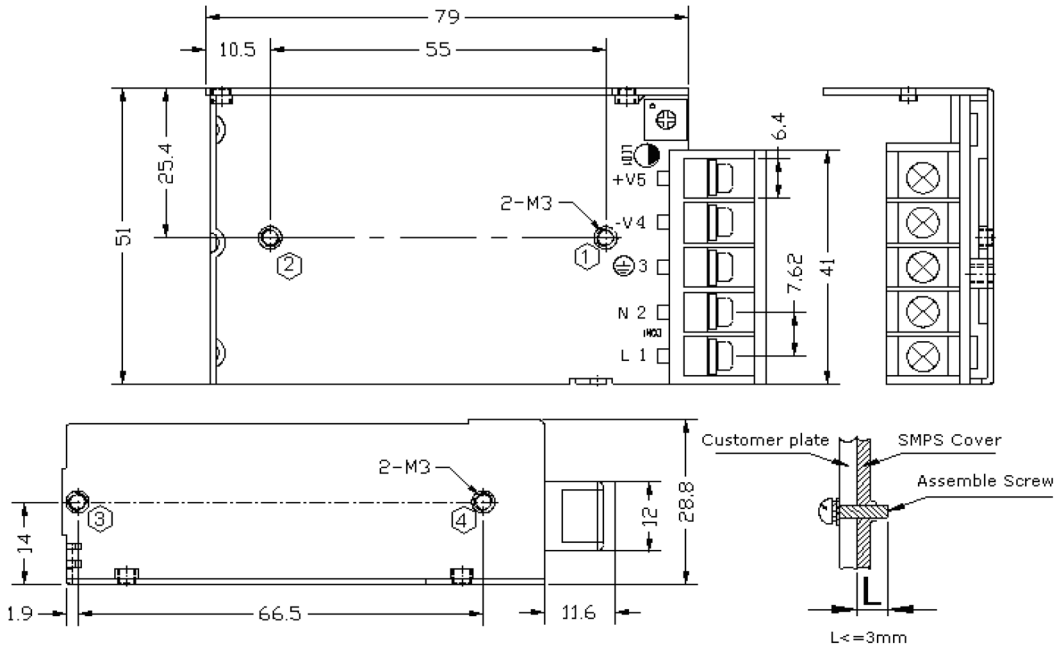
Pending

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

Case Dimensions

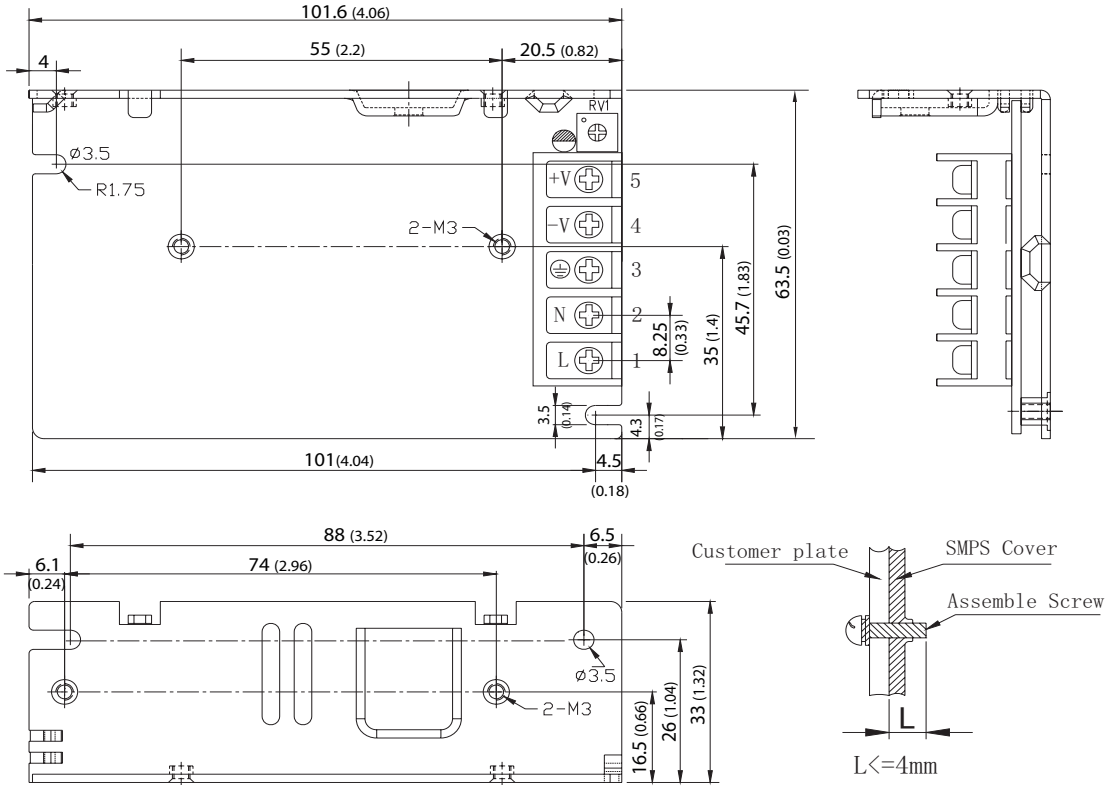
Case for TXM 015 & TXM 025

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

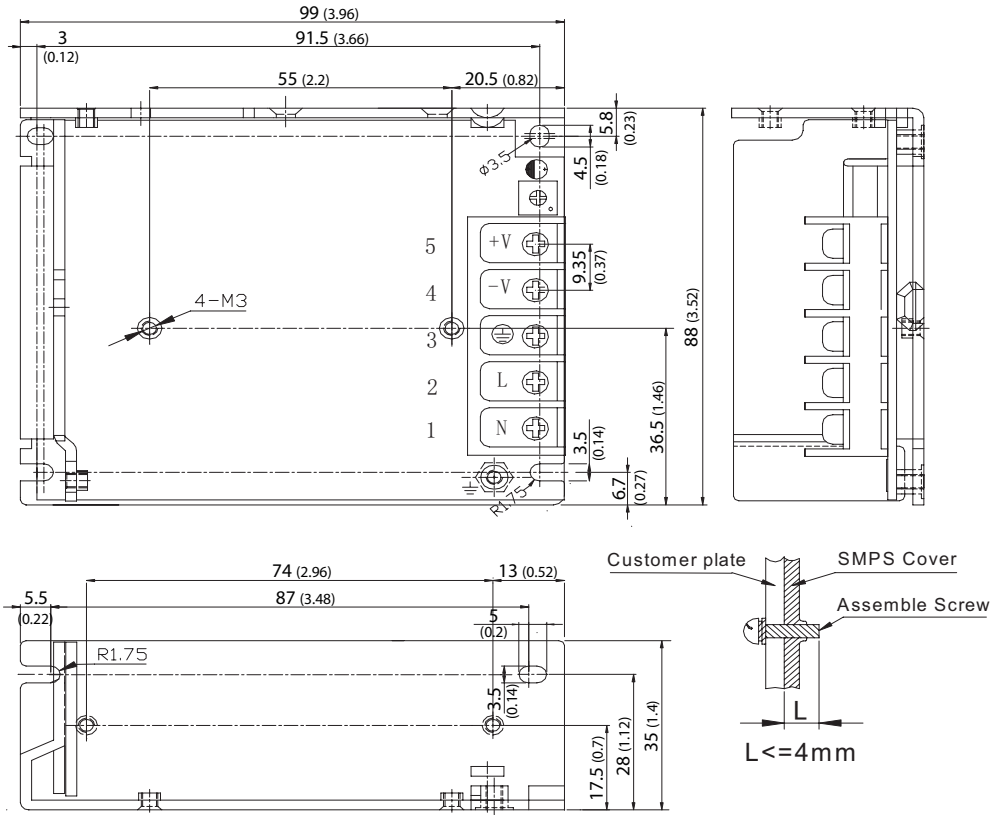


Max mounting screw penetration: 2.0 mm (0.08)

Case Dimensions

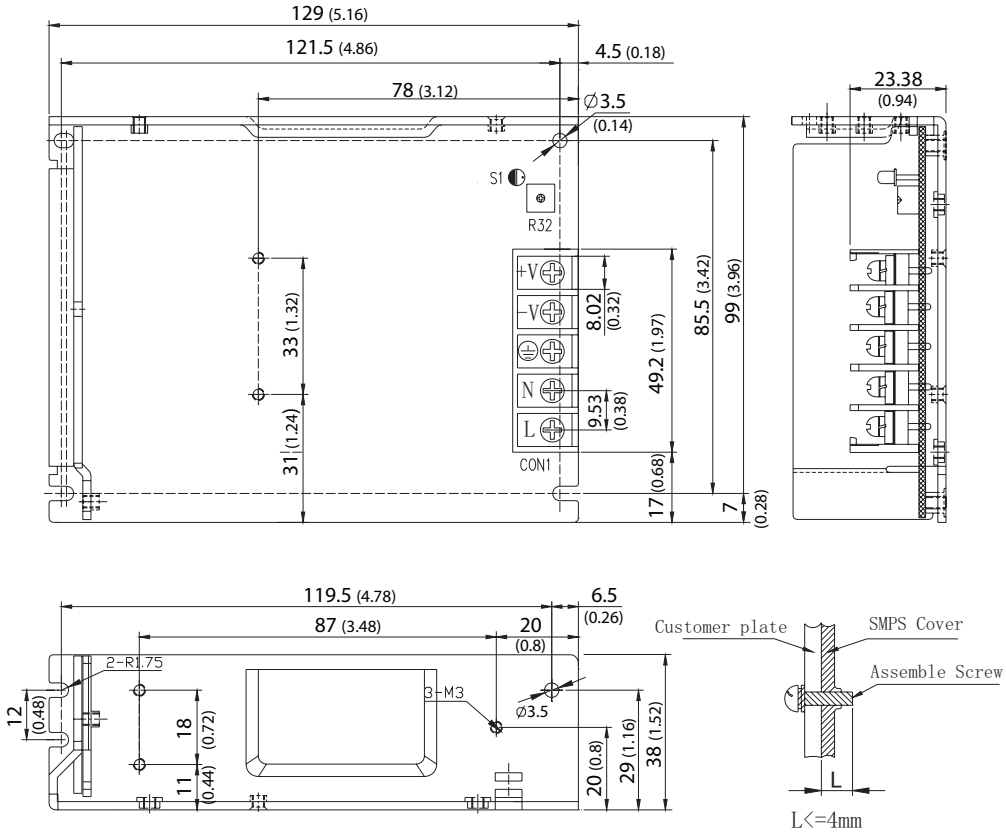
Case for TXM 050

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



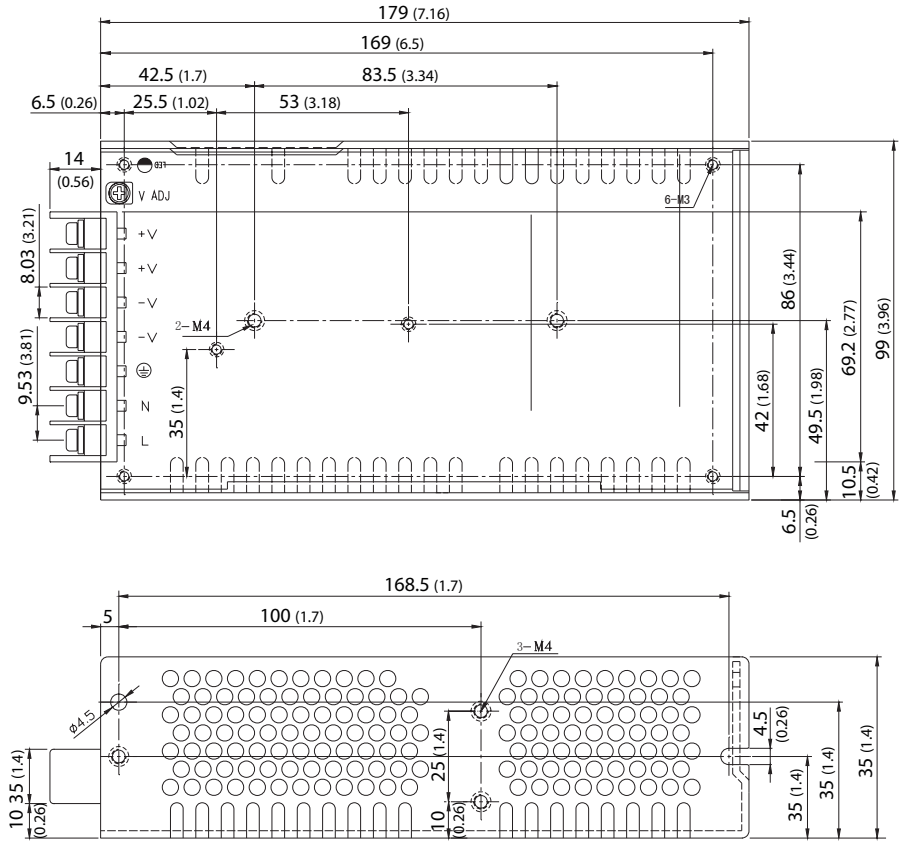
Case for TXM 075

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

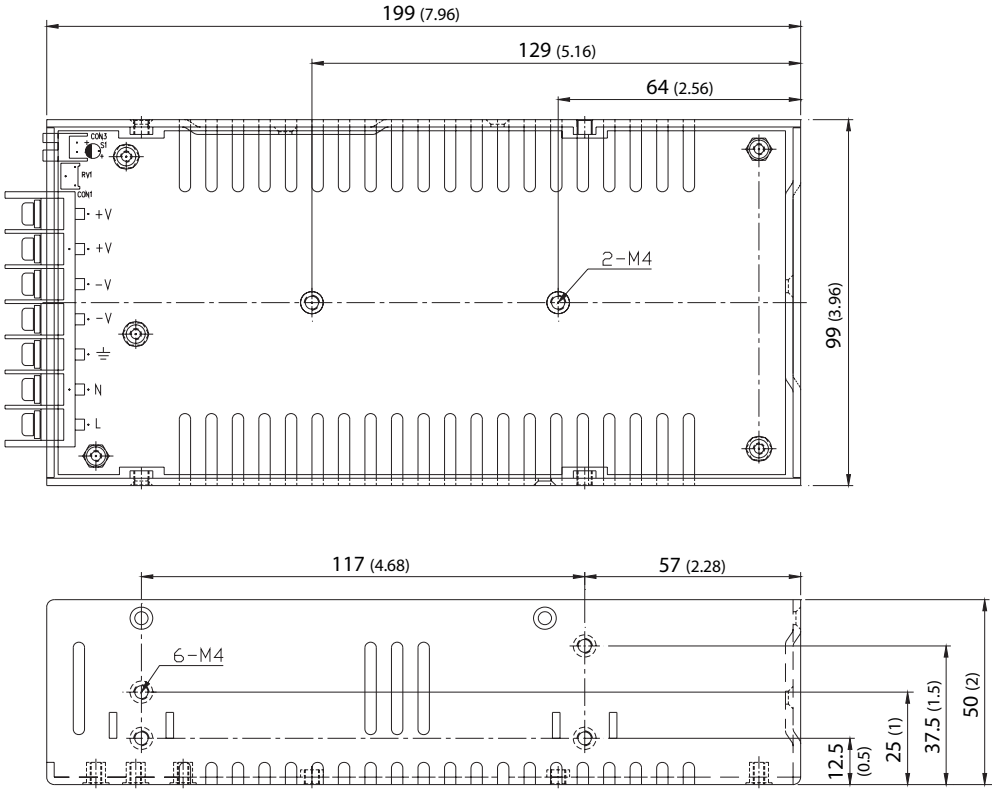


Case Dimensions

Case for TXM 100 & 150



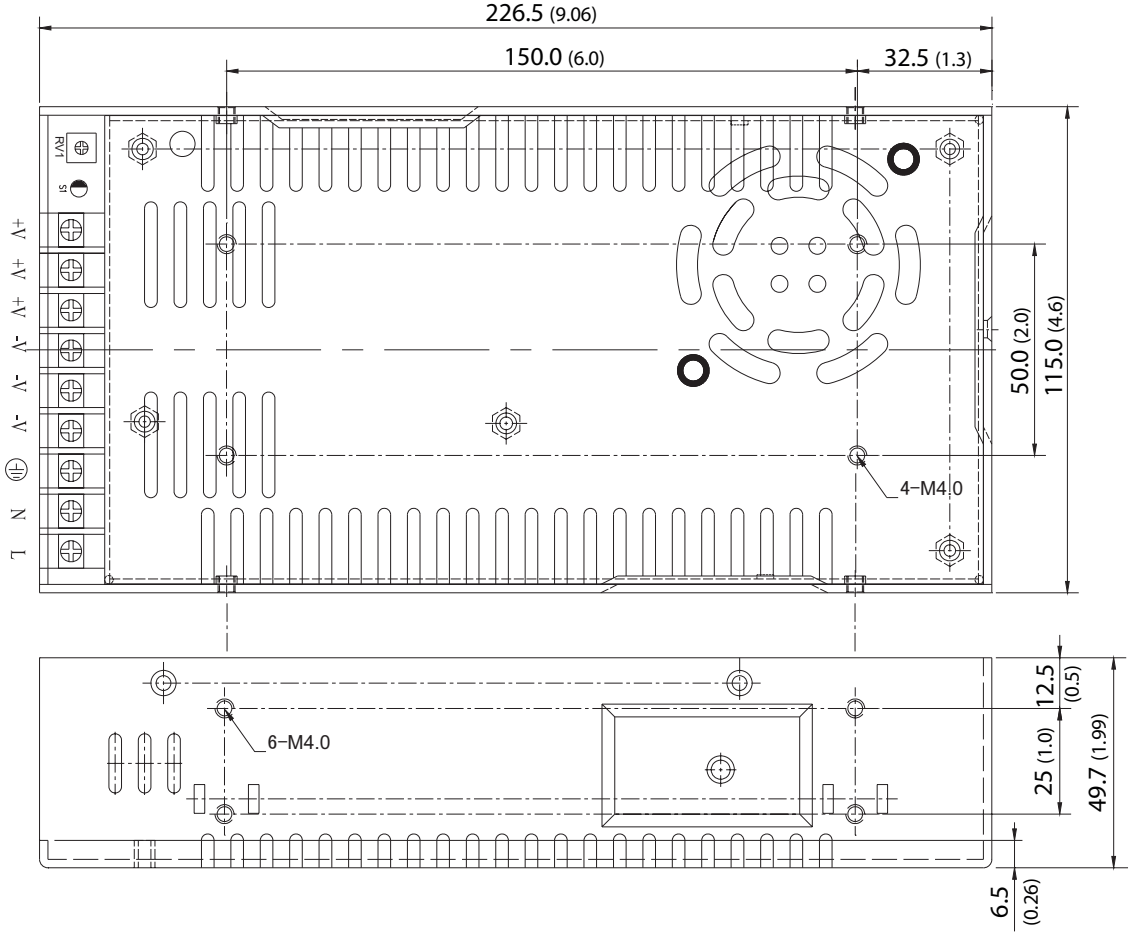
Case for TXM 200



Max mounting screw penetration: 3.0 mm (0.12)

Case Dimensions

Case for TXM 320



Max mounting screw penetration: 3.0 mm (0.12)