

AC-DC Power Modules

**POWER
SOLVE**

TMT Series, 10 - 50 Watt

www.powersolve.co.uk

Features

- Industrial (UL508) & medical safety approvals
- PCB (solder pins) & chassis (screw terminals) mounting
- Adapter for DIN rail mounting
- Single, dual and triple outputs
- Universal input 85 - 264Vac
- Safety class II
- Short circuit and overload protection



Electrical Specification

Input voltage range	85 - 264Vac universal input 47-63Hz
EMI suppression	EN 55011 class B, EN 55022 class B, FCC level B
EMC immunity	EN 60601-1-2
Output current limitation	>105% Inom. foldback, automatic recovery
Efficiency	83% typical
Operating Temperature Range	-25°C to +60°C (derate at 2.5%/°C above 50°C)
Safety Approvals	cUL/UL 60950-1, EN 60950-1, UL 60601-1, IEC/EN 60601-1, CB report, UL 508 listed (chassis mount modules)
Degree of protection	class II prepared
Case	plastic (UL94V-0 rated)
Option	DIN rail mounting adapter

Output Voltage and Current Ratings

MODEL	OUTPUT POWER	OUTPUT 1	OUTPUT 2	OUTPUT 3	RIPPLE & NOISE	LINE REG.	LOAD REG.
TMT10105		5VDC / 2000mA			150mV pk-pk max.	20mV max.	50mV max.
TMT10112	10W	12VDC / 840mA			150mV pk-pk max.	20mV max.	50mV max.
TMT10115		15VDC / 670mA			150mV pk-pk max.	20mV max.	50mV max.
TMT10124		24VDC / 420mA			150mV pk-pk max.	20mV max.	50mV max.
TMT15105		5VDC / 3000mA			150mV pk-pk max.	20mV max.	50mV max.
TMT15112		12VDC / 1250mA			150mV pk-pk max.	20mV max.	50mV max.
TMT15115	15W	15VDC / 1000mA			150mV pk-pk max.	20mV max.	50mV max.
TMT15124		24VDC / 625mA			150mV pk-pk max.	20mV max.	50mV max.
TMT15212		+12VDC / 625mA	-12VDC / 625mA		150mV pk-pk max.	20mV max.	500mV max.
TMT15215		+15VDC / 500mA	-15VDC / 500mA		150mV pk-pk max.	20mV max.	500mV max.
TMT30105		5VDC / 6000mA			150mV pk-pk max.	20mV max.	50mV max.
TMT30112		12VDC / 2500mA			150mV pk-pk max.	20mV max.	50mV max.
TMT30115		15VDC / 2000mA			150mV pk-pk max.	20mV max.	50mV max.
TMT30124		24VDC / 1250mA			150mV pk-pk max.	20mV max.	50mV max.
TMT30212		+12VDC / 1250mA	-12VDC / 1250mA		150mV pk-pk max.	20mV max.	500mV max.
TMT30215	30W	+15VDC / 1000mA	-15VDC / 1000mA		150mV pk-pk max.	20mV max.	500mV max.
TMT30252		+5VDC / 3000mA ¹	+12VDC / 1200mA ⁴		150mV pk-pk max.	20mV max.	500mV max.
TMT30512		+5VDC / 3000mA ¹	+12VDC / 1000mA ⁵	-12VDC / 250mA ⁷	150mV pk-pk max.	20mV max.	500mV max.
TMT30515		+5VDC / 3000mA ¹	+15VDC / 500mA	-15VDC / 500mA	150mV pk-pk max.	20mV max.	500mV max.
TMT30503		+3.3VDC / 6000mA ²	+5VDC / 1500mA ⁵	+12VDC / 250mA ⁷	150mV pk-pk max.	20mV max.	500mV max.
TMT30505		+5VDC / 5000mA ³	+3.3VDC / 1000mA ⁶	+12VDC / 250mA ⁷	150mV pk-pk max.	20mV max.	500mV max.
TMT50105		5VDC / 9000mA			150mV pk-pk max.	20mV max.	50mV max.
TMT50112		12VDC / 4200mA			150mV pk-pk max.	20mV max.	50mV max.
TMT50115	50W	15VDC / 3400mA			150mV pk-pk max.	20mV max.	50mV max.
TMT50124		24VDC / 2300mA			150mV pk-pk max.	20mV max.	50mV max.
TMT50148		48VDC / 1150mA			150mV pk-pk max.	20mV max.	50mV max.

Peak Currents ¹4500mA ²7500mA ³6000mA ⁴1800mA ⁵2000mA ⁶1500mA ⁷500mA <30sec 10% duty cycle max, total load not to exceed 30Watts
For chassis mount version add suffix C

DIN rail mount adapter

TMT-MK1	for 15W models
TMT-MK2	for 30W models
TMT-MK3	for 50W models

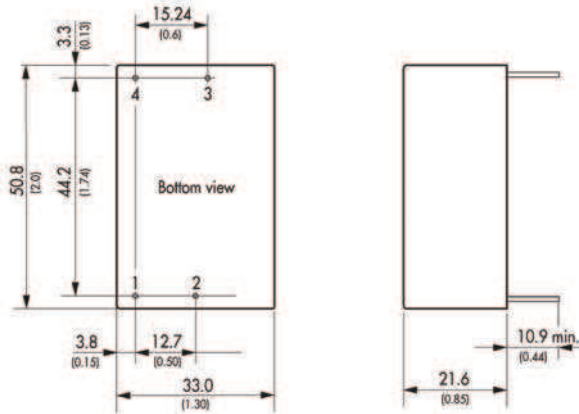
AC-DC Power Modules



www.powersolve.co.uk

Mechanical & Connection Details

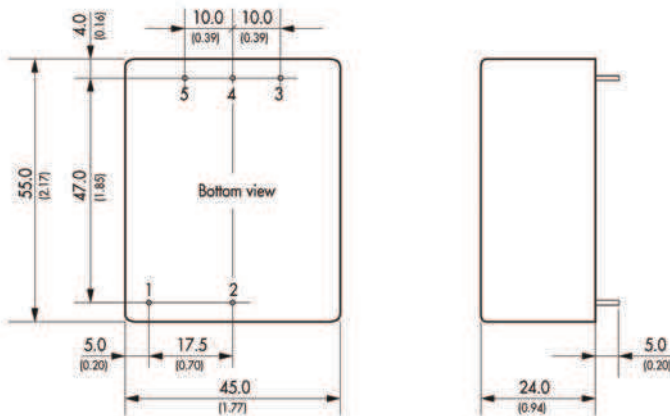
TMT10 models



Connection	
PIN	Single
1	AC IN
2	AC IN
3	-Vout
4	+Vout

Weight: 52 g (1.8 oz)

TMT15 models with solder pins

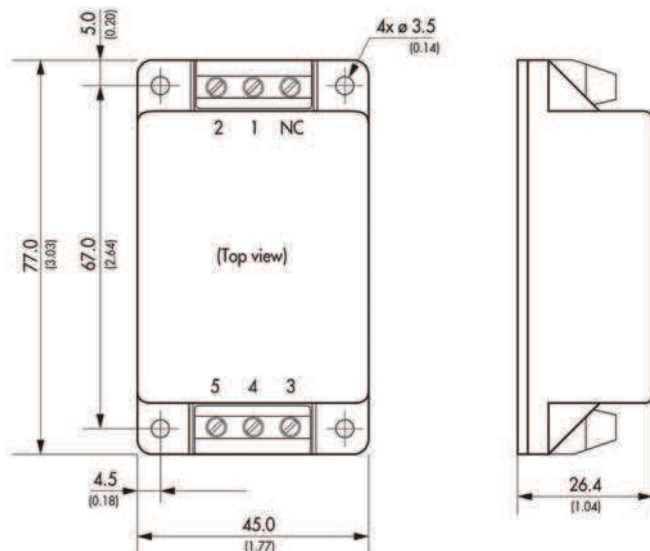


Weight: 75 g (2.6 oz)

Connection		
PIN	Single	Dual
1	AC IN	AC IN
2	AC IN	AC IN
3	-Vout	-Vout
4	No pin/nc	Comm.
5	+Vout	+Vout

Pin diameter: 1.0 (0.04)

TMT15C models with screw terminal block



Weight: 90 g (3.2oz)

Dimensions in [mm], () = Inches
 Case tolerances: ± 1.0 (± 0.04)
 Pin pitch tolerance: ± 0.5 (± 0.02)
 Mounting hole tolerance: ± 0.5 (± 0.02)

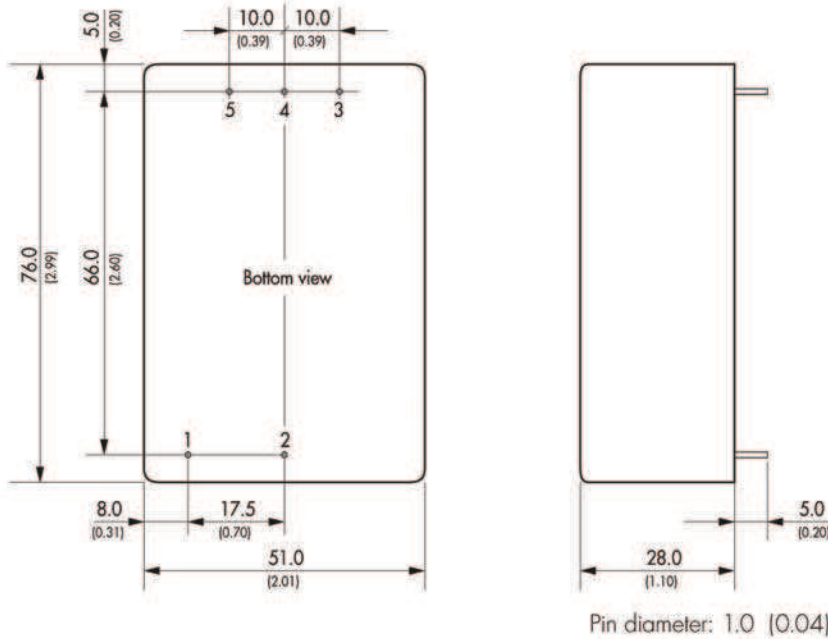
AC-DC Power Modules



www.powersolve.co.uk

Mechanical & Connection Details

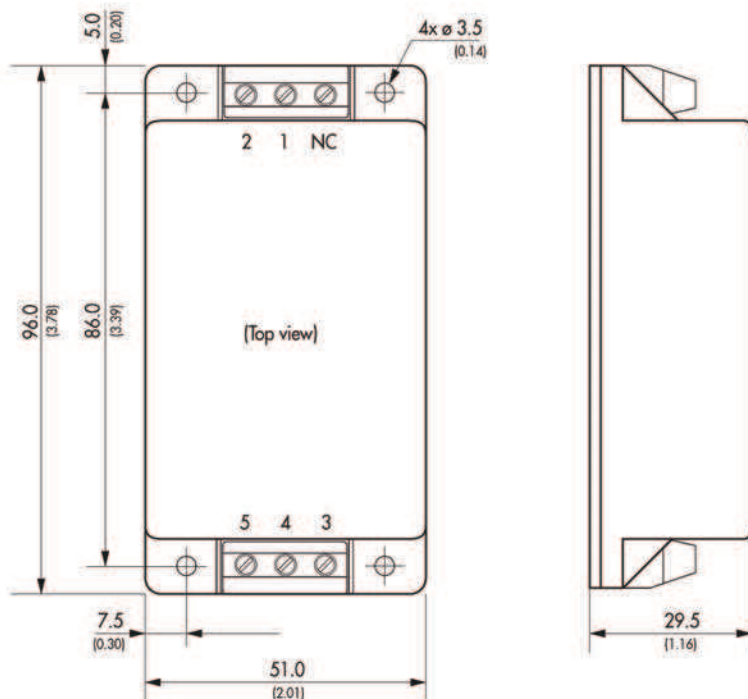
TMT30 single, TMT30212 & TMT30215 output models with solder pins



Weight: 165 g (5.8 oz)

Connection		
PIN	Single	Dual
1	AC IN	AC IN
2	AC IN	AC IN
3	-Vout	-Vout
4	No pin/nc	Comm.
5	+Vout	+Vout

TMT30C single, TMT30212C & TMT30215C output models with screw terminal block



Weight: 180 g (6.3 oz)

Dimensions in [mm], () = Inches
 Case tolerances: ± 1.0 (± 0.04)
 Pin pitch tolerance: ± 0.5 (± 0.02)
 Mounting hole tolerance: ± 0.5 (± 0.02)

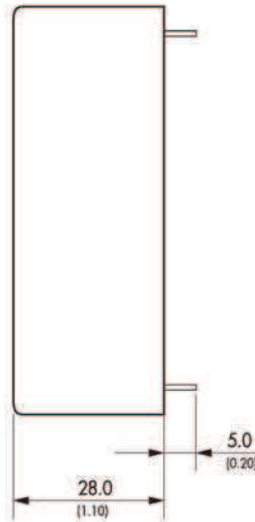
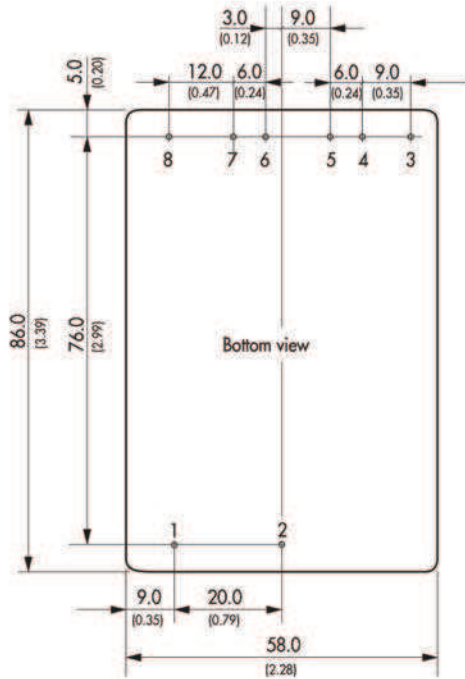
AC-DC Power Modules



www.powersolve.co.uk

Mechanical & Connection Details

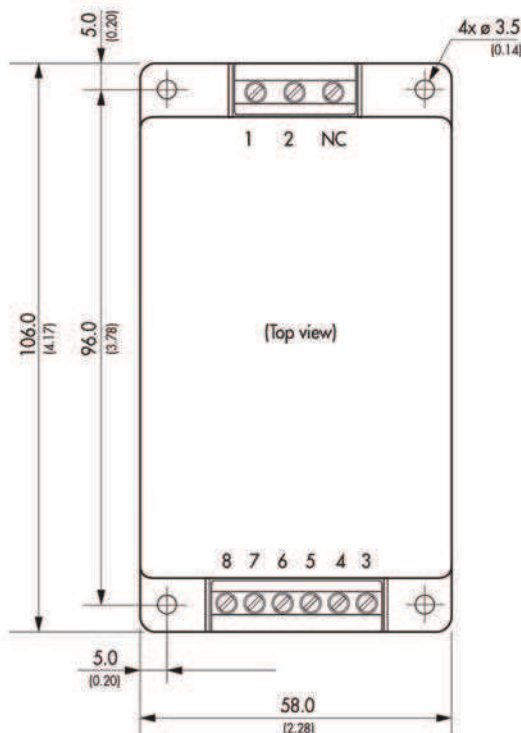
TMT30 triple & TMT30252 models with solder pins



Weight: 200 g (7.1 oz)

Pin diameter: 1.0 (0.04)

TMT30C triple output & TMT30252C models with screw terminal block



Weight: 220 g (7.8 oz)

Connection		
PIN	Dual	Triple
1	AC IN	AC IN
2	AC IN	AC IN
3	No pin/nc	-Vout3
4	No pin/nc	+Vout3
5	-Vout2	-Vout2
6	+Vout2	+Vout2
7	-Vout1	-Vout1
8	+Vout1	+Vout1

Dimensions in [mm], () = Inches
 Casing tolerances: ± 1.0 (± 0.04)
 Pin pitch tolerance: ± 0.5 (± 0.02)
 Mounting hole tolerance: ± 0.5 (± 0.02)

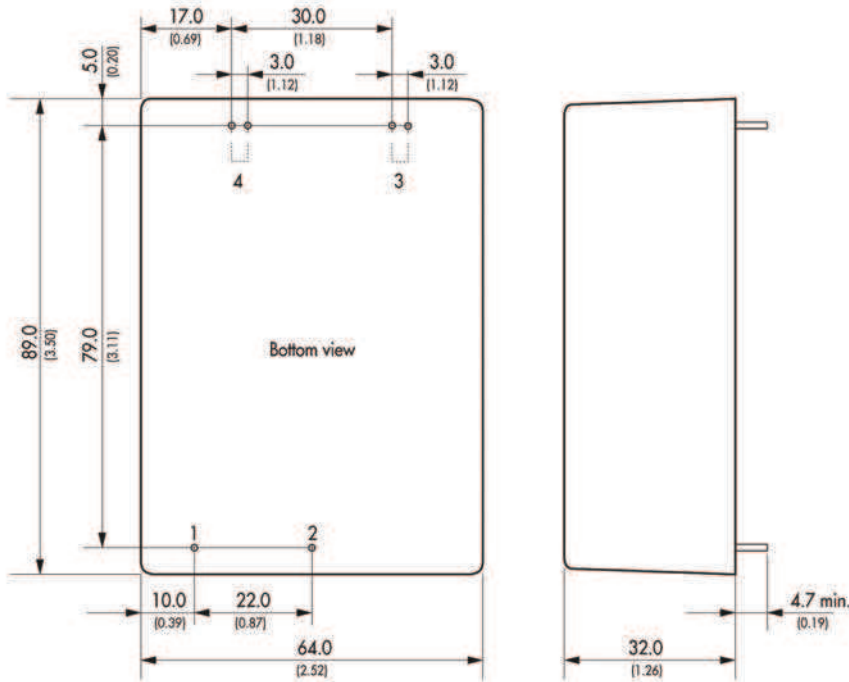
AC-DC Power Modules



www.powersolve.co.uk

Mechanical & Connection Details

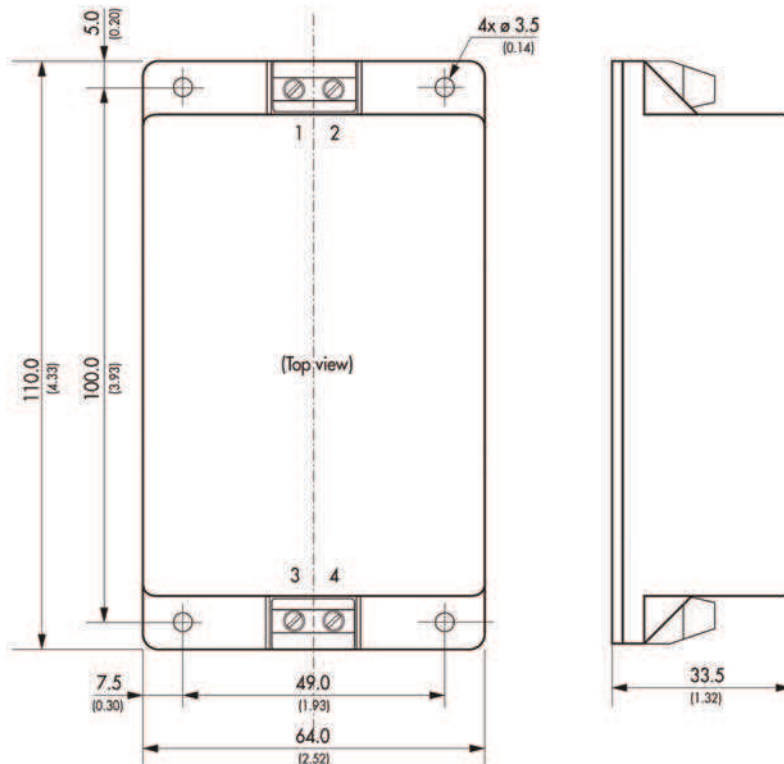
TMT50 models with solder pins



Weight: 245 g (8.6 oz)

Pin diameter: 1.0 (0.04)

TMT50C models with screw terminal block



Connection

PIN	Single
1	AC IN
2	AC IN
3	-Vout
4	+Vout

Weight: 295 g (10.4 oz)

Dimensions in [mm], () = Inches
 Case tolerances: ± 1.0 (± 0.04)
 Pin pitch tolerance: ± 0.5 (± 0.02)
 Mounting hole tolerance: ± 0.5 (± 0.02)