

# Industrial Power Supplies

**POWER  
SOLVE**

## TSPC Series, 80-480 Watt

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### Features

- Operating temperature range -25°C to +70°C
- Boost power up to 120%
- International safety approval package
- ATEX certification for hazardous locations
- Power good signal
- Overload & over temperature protection
- Vibration & shock proof
- TSPC-DM decoupling module for redundant operation (optional)
- Wall mounting plate available (optional)
- Rugged, compact metal casing for harsh industrial environments



### Electrical Specification

Input Voltage Range	85-132VAC / 187-264VAC by selection switch, derate output power at 3.3%/V at input <100VAC		
Input Frequency	47-63Hz		
Harmonic Limits	EN61000-3-2		
Inrush Current	40A		
Recommended Input Protection	TSP080 / TSP120: 6-16A, TSP240: 10-16A, TSP480: 16-25A (by fuse or circuit breaker)		
Efficiency	85-92%		
Output Voltage Adj. Range	24-28VDC (output power derating above 24VDC = 5%/V)		
Boost Output Current	120% continuous at 24VDC <50°C ambient		
Overload Protection	120-140% of lout nominal, constant current		
Short Circuit Protection	90% of lout nominal, foldback		
Output Overvoltage Protection	45VDC		
Over Temperature Protection	Switch off at over temperature, automatic restart		
Power OK Signal	21.0-22.5VDC, open collector 10mA max.		
Max. Capacitive Load	Unlimited		
Operating Temperature Range	-25°C to +70°C (derate at 2.5%/°C above 60°C)		
Humidity	95% max. non-condensing		
Temperature Coefficient	0.02%/°K		
Cooling	Convection cooling, no internal fan		
Isolation	according to IEC/EN60950-1 UL60950-1 UL508		
Safety Standards	IEC/EN60950-1, UL60950-1, CSA22.2 No. 60950-1-07, UL508, CSA-C22.2 N0. 107, EN60204-1, EN50178, EN61558-2-4, IEC/EN 60079-15, 13G EX nA IC T4		
Class of protection	Safety class I (IEC 536)		
Degree of protection	IP20 (IEC60529)		
EMC Emissions	EN61000-6-3, EN61204-3, EN55011 class B, EN55022 class B (conducted & radiated)		
EMC Immunity	EN61000-6-2, EN61204-3		
Electrostatic Discharge ESD	IEC/EN61000-4-2	4kV/8kV	criteria B
Radiated RF Field Immunity	IEC/EN61000-4-3	10V/m	criteria A
Fast Transient/Burst Immunity	IEC/EN61000-4-4	2kV	criteria B
Surge Immunity	IEC/EN61000-4-5	1kV/2kV	criteria B
Conducted RF	IEC/EN61000-4-6	10V	criteria A
Power Frequency Field	IEC/EN61000-4-8	30A/m	criteria A
Voltage Dips & Interruptions	IEC/EN61000-4-11		criteria B/C
Vibration & shock	IEC 60068-2-6 / IEC 60068-2-27		
Connection	screw terminals		
Casing	aluminium (chassis) / stainless steel (cover)		
Mounting	snap-on mounting on 35mm DIN-rail (optional wall mounting brackets)		

### Output Voltage and Current Ratings

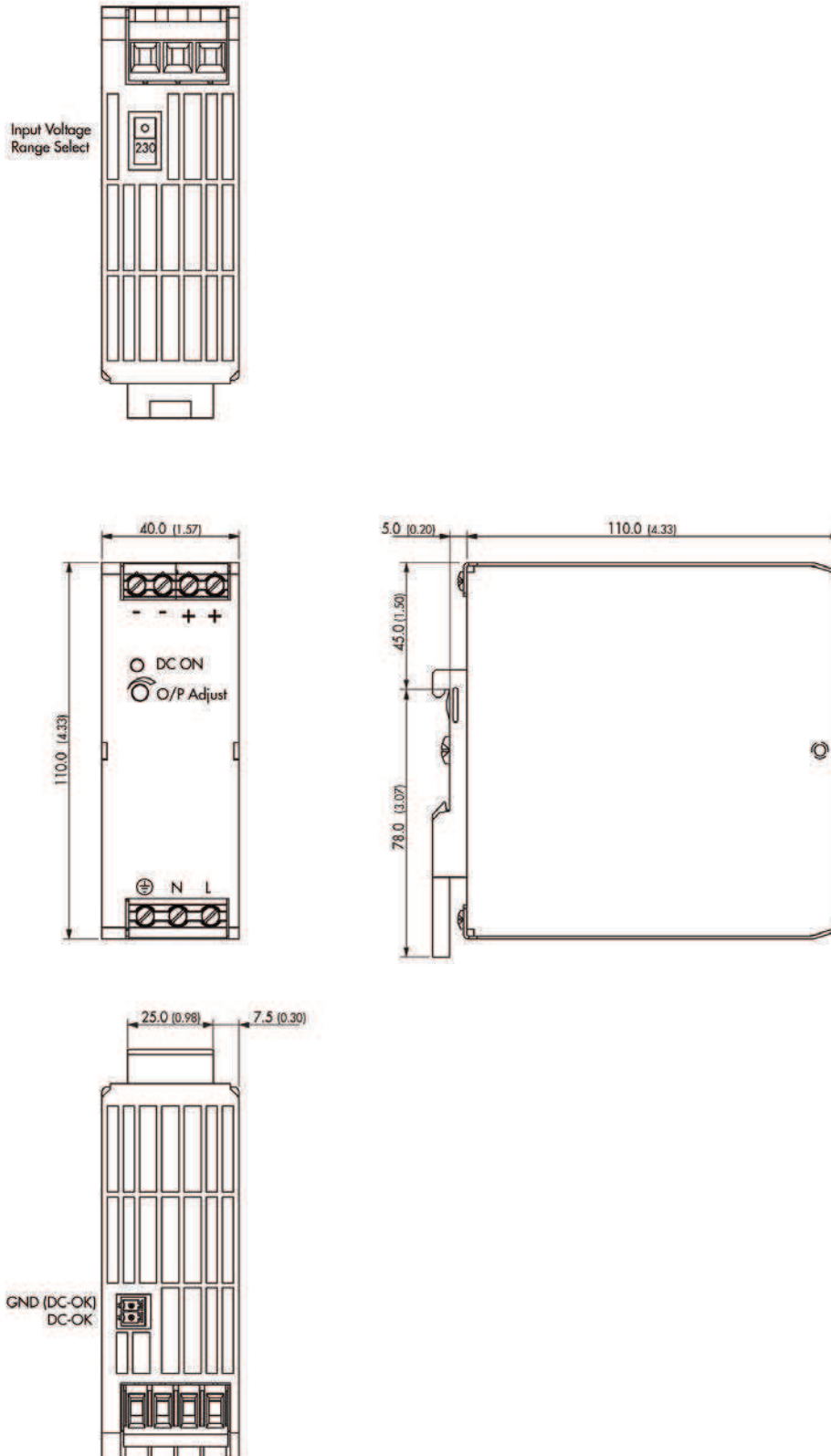
MODEL	OUTPUT POWER	OUTPUT VOLTAGE	OUTPUT CURRENT	RIPPLE & NOISE	LINE REG.	LOAD REG.
TSPC080-124	80W max.	24VDC	3.3A	200mV pk-pk max.	1.0%	1.0%
TSPC120-124	120W max.	24VDC	5.0A	200mV pk-pk max.	1.0%	1.0%
TSPC240-124	240W max.	24VDC	10A	200mV pk-pk max.	1.0%	1.0%
TSPC480-124	480W max.	24VDC	20A	200mV pk-pk max.	1.0%	1.0%

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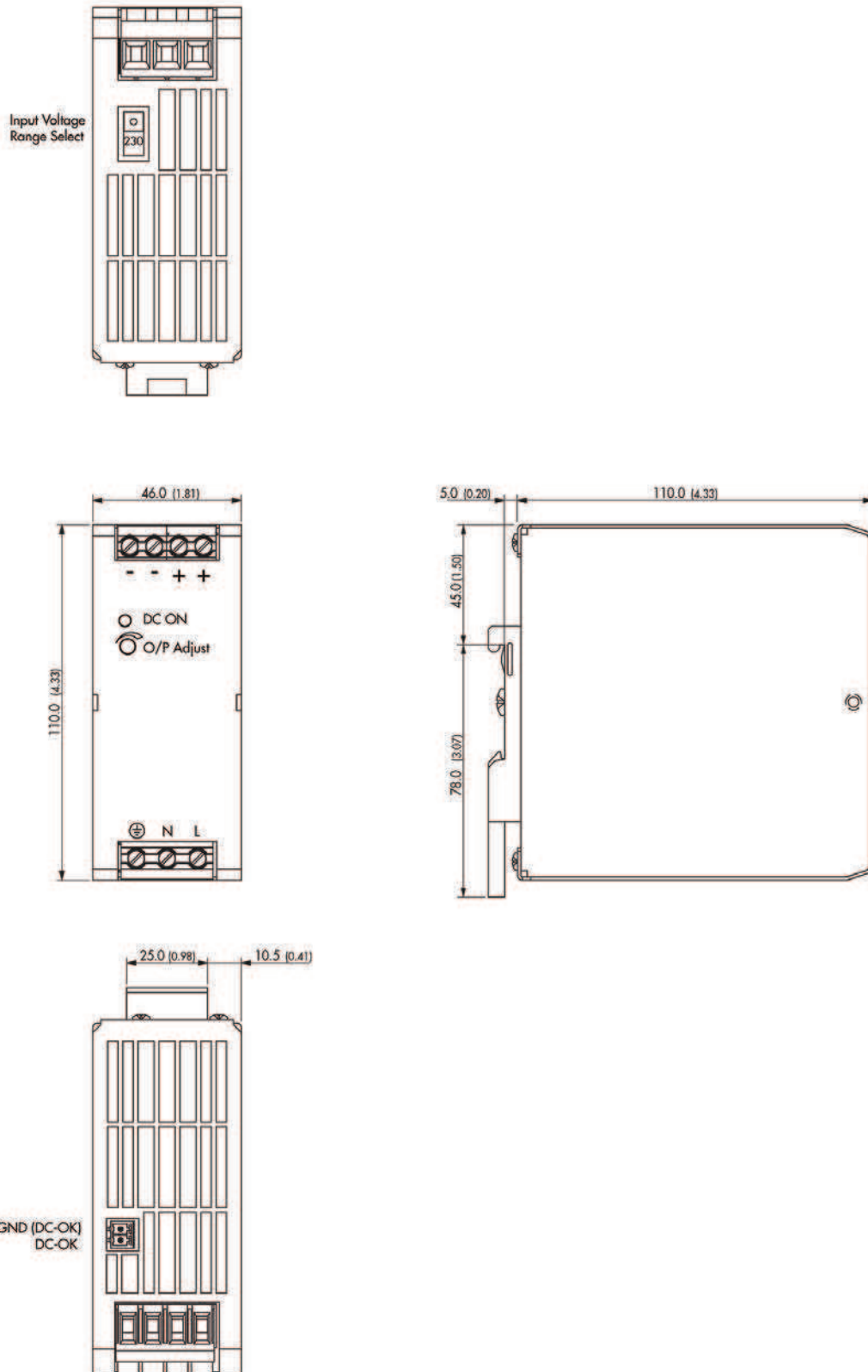


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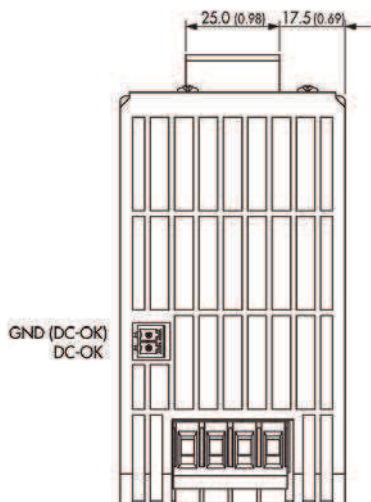
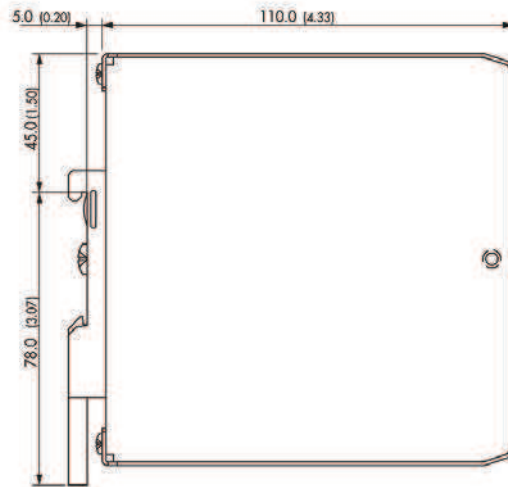
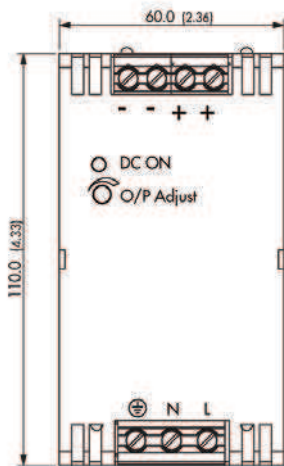
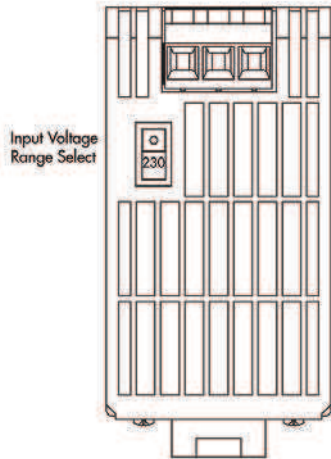
## TSPC 080-124 Mechanical Details



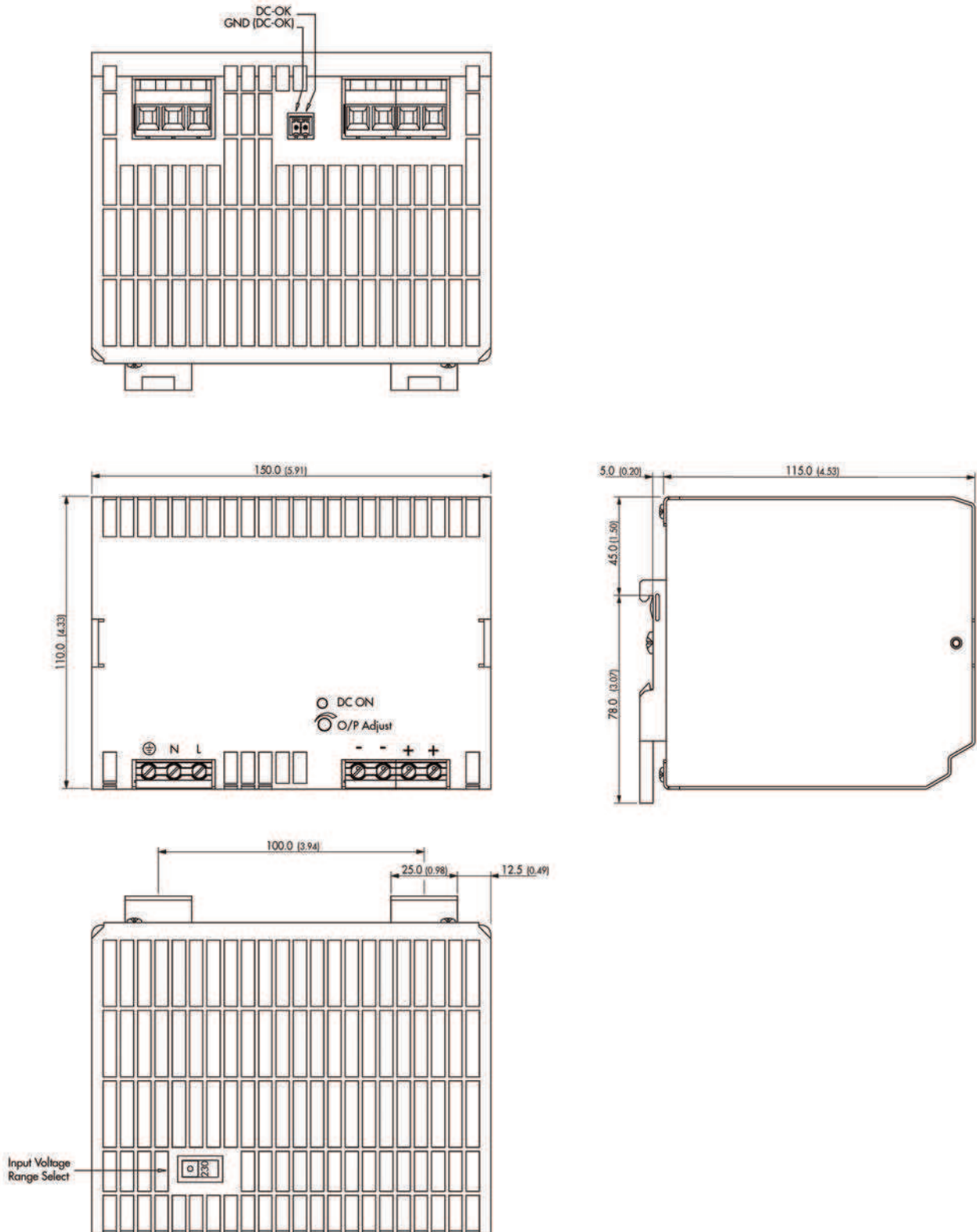
## TSPC120-124 Mechanical Details



## TSPC240-124 Mechanical Details



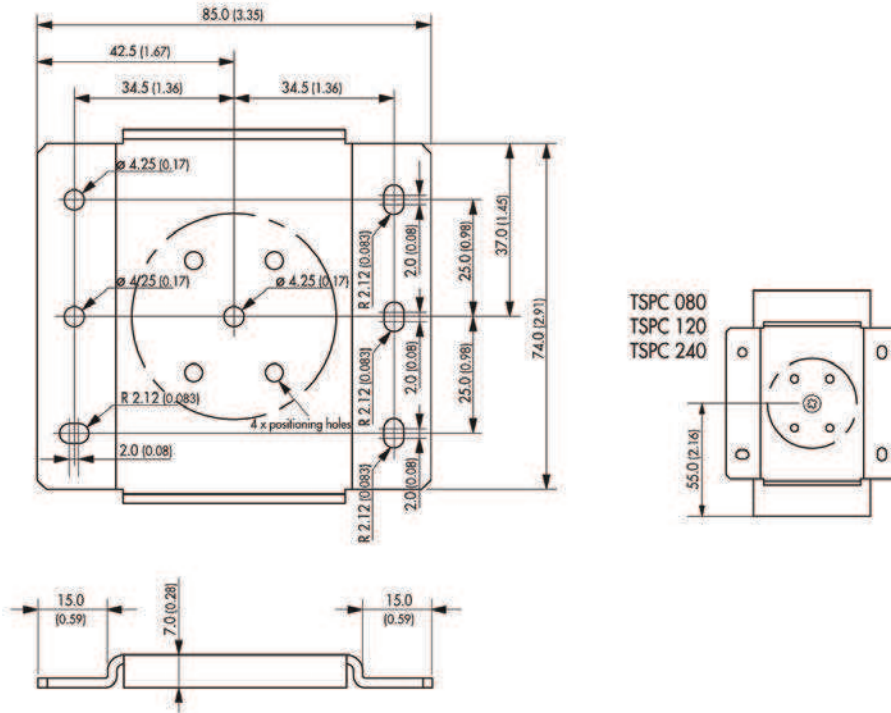
## TSPC480-124 Mechanical Details



## TSP-WMK Wall Mounting Bracket Details

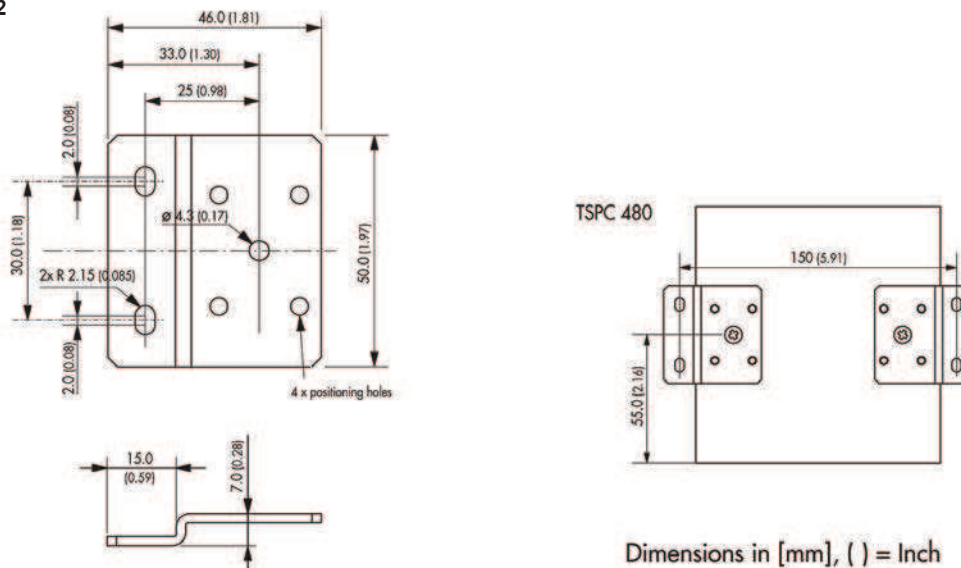
MODEL	FOR POWER SUPPLIES	CONTENTS OF KIT
TSP-WMK03	TSPC080, TSPC120, TSPC240, TSPC-DCM	1 bracket
TSP-WMK02	TSPC480	2 brackets

### TSP-WMK03



Material: 2 mm Mild Steel  
Tolerance:  $\pm 0.1$  mm ( $\pm 0.004$ )

### TSP-WMK02



Material: 2 mm Mild Steel  
Tolerance:  $\pm 0.1$  mm ( $\pm 0.004$ )

Dimensions in [mm], ( ) = Inch  
Tolerances:  $\pm 0.5$  mm ( $\pm 0.02$ )