# imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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## TRACO<sup>®</sup> POWER

## **AC/DC Power Supplies**

TOP 100 Series, 100 Watt



### **Features**

- 100 W power supply in 2.0"x 4.0" footprint! openfram and enclsoed version available
- Full load operation up to +50°C with convection cooling
- Highest efficiency, 90 % typ.
- EMI filter meets EN 55022, level B
- Compliance with EN 61000-3-2
- Low leakage current
- Safety class I and class II operation
- 3-year product warranty



The new TOP-100 Series AC/DC Power Supplies feature the highest power rating in the industry standard 2.0"  $\times$  4.0" (50.8  $\times$  101.6 mm) footprint. They can supply up to 100 W output power with convection cooling over an industrial operating temperature range of -25°C to +50°C. This performance could be realized by a state of the art design providing an extremely high efficiency of >90 % which eliminates the need for a dedicated power supply cooling fan.

Also see: www.tracopower.com/products/top100\_article\_e1.pdf

Compliance with global safety and EMC standards qualify these power supplies for worldwide markets. Approved for Class I and Class II applications, these switchers are suitable for industrial and IT systems but also for consumer products. High reliability is provided by use of industrial quality grade components and an excellent thermal management. This product offers an interesting power supply solution for many space and cost critical applications in commercial and industrial electronic equipment.

Models			
Order Code	Order Code	Output Voltage	Output Current
(open frame)	(enclosed)	(Adjustment Range)	max.
TOP 100-105	TOP 100-105C	<b>5.0 VDC</b> (5.0 - 5.2)	20.0 A
TOP 100-112	TOP 100-112C	12 VDC (12.0 - 13.0)	8.3 A
TOP 100-115		<b>15 VDC</b> (15.0 - 16.0)	6.7 A
TOP 100-124	TOP 100-124C	<b>24 VDC</b> (24.0 - 26.0)	4.2 A
TOP 100-148	TOP 100-148C	<b>48 VDC</b> (48.0 - 52.0)	2.1 A

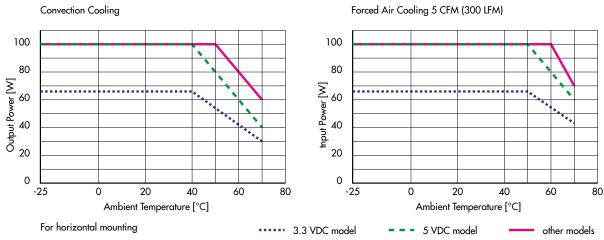
On demand (not for new design in) : TOP 100-103 with Output 3.3 VDC (3.3-3.5) / 20.0 A



# AC/DC Power Supplies TOP-100 Series 100 Watt

Input voltage range			90 – 132 / 187 – 264 VAC autorange
inpor volidge runge	р	ower derating at low input voltage:	50 % at 90 VAC - 0 % at 103 VAC 20 % at 187 VAC - 0 % at 207 VAC
Input frequency			47 – 63 Hz
Input protection			T4 A/250 V internal fuse in both line & neutra
Harmonic limits			EN 61000-3-2, class A
Zero load power consumption			3.6 W
Recommended circuit bre	eaker		6 A (characteristic C) or slow blow fuse
<b>Output Specification</b>	ons		
Regulation	– Input and Load vo	riation	1.0 % max.
Output voltage adjustme	ent		with internal potentiometer
			(for range see model table)
Ripple and noise (20Mhz	Ripple and noise (20Mhz Bandwidth)		<100 mVp-р
		48 VDC model:	<200 mVp-p
Overvoltage protection		3.3 VDC model:	5.0 V
		5.0 VDC model:	6.0 V
		12 VDC model:	16 V
		15 VDC model:	
		24 VDC model:	
		48 VDC model:	
Power back immunity			5.0 V (6.0 V for 1 sec)
			6.3 V (7.0 V for 1 sec)
			16 V (18 V for 1 sec)
			<b>20 V</b> (23 V for 1 sec)
			<b>35 V</b> (40 V for 1 sec)
<u> </u>		48 VDC model:	<b>63 V</b> (68 V for 1 sec)
Overload protection by a	current limit		at 150 % lout max.
Short circuit protection			foldback (automatic recovery)
Capacitive load			10′000 μF max.
General Specificat	tions		
Operating temperature			-25°C to +70°C with derating

#### Power derating depending on temperature



Forced Air Cooling 5 CFM (300 LFM)

### TRACO<sup>®</sup> POWER

## AC/DC Power Supplies TOP-100 Series 100 Watt

<b>General Specification</b>	ns		
Temperature coefficient Humidity (non condensing)		0.02 %/K 0 – 95 % rel. H max.	
Switching frequency		100 kHz typ. (pulse width modulation)	
Hold-up time	– Vin = 115 VAC – Vin = 230 VAC	10 ms typ. 15 ms typ.	
Start-up time	– Vin = 115 VAC – Vin = 230 VAC	<3.5s <2s	
Isolation voltage	– Input / Output – Input / Field Ground – Output / Field Ground	3000 VAC 1500 VAC 500 VAC	
Isolation resistance (at 500 VDC)		100 Mohm min.	
Earth leakage current		250 µA max.	
Reliability, calculated MTBF	at +25°C acc. to IEC 61709	www.tracopower.com/overview/top100	
Isolation class		class II double isolation	
EMC emissions	<ul> <li>Conducted input RI suppression</li> <li>Harmonic current emissions</li> </ul>	EN 55022, class B (conductive plane to be connected to safety earth) IEC / EN 61000-3-2, class A	
EMC immunity	<ul> <li>Electrostatic discharge ESD</li> <li>RF field immunity</li> <li>Electrical fast transients/burst immunity</li> <li>Surge</li> <li>Conducted RF</li> <li>Voltage dip</li> </ul>	IEC / EN 61000-4-2 IEC / EN 61000-4-3 IEC / EN 61000-4-4 IEC / EN 61000-4-5 IEC / EN 61000-4-6 IEC / EN 61000-4-11	
Safety approvals and certifications	<ul> <li>CB certificate</li> <li>SIQ certificate</li> <li>UL coc</li> <li>CSA certificate</li> <li>Certification documents</li> </ul>	IEC 60950-1 EN 60950-1 UL 60950-1 CSA C22.2 No. 60950-1-03 www.tracopower.com/overview/top100	
Environment	– Vibration acc. IEC 60068-2-6; – Shock acc. IEC 60068-2-27	3 axis, sine sweep, 10–55Hz, 1g, 1oct/min 3 axis, 10g half sine, 11msShock 20 G (3 directions each 3 times)	
Environmental compliance	– Reach – RoHS	www.tracopower.com/info/reach-declaration.pdf RoHS directive 2011/65/EU	
Connection		pin connector (Molex)	
Weight		140 g (4.9 oz)	

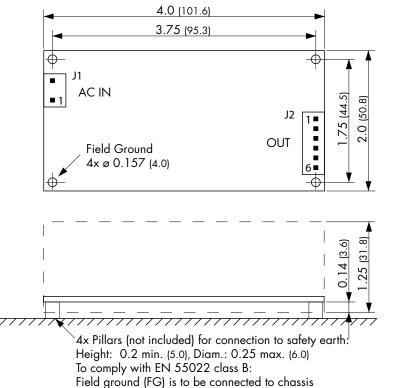
Installation instructions : www.tracopower.com/overview/top100

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

## TRACO<sup>®</sup> POWER

### **Dimensions**

#### open frame:



AC/DC Power Supplies TOP-100 Series 100 Watt

Output		
Pin	J2	
1	– Vout	
2	– Vout	
3	– Vout	
4	+ Vout	
5	+ Vout	
6	+ Vout	

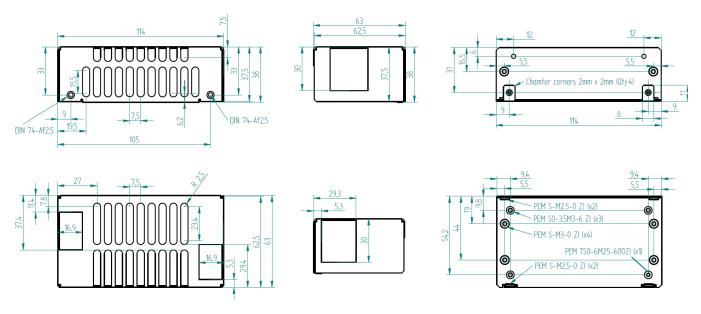
Input	
Pin	JI
1	AC in
2	AC in

**J1:** Molex Series 41791 mates with Molex crimp terminal: 08-52-0072 and terminal housing: 09-50-3031

**J2:** Molex Series 41791 mates with Molex crimp terminal: 08-52-0072 and terminal housing: 09-50-3061

Dimensions in Inch, () = mm

#### enclosed:



Dimensions in mm

Specifications can be changed without notice! Make sure you are using the latest documentation, downloadable at www.tracopower.com