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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AC/DC Power Supplies

TIW Series, 4 – 24 Watt

Features

- High efficiency switching power supplies
- Easy installation into standard flush boxes
- Fully encapsulated plastic housing
- Dust and waterproof to IP 67
- Protection class II
- Safety approval to IEC/EN 60950-1
  EN 50178, EN 60335-1, UL 1310 class 2
- Approved for mounting onto wood or materials with unknown flammability
- Ready to meet ErP directive
- Universal input range 93 to 264 VAC
- Regulated output voltage
  (models from 3.3 to 24 VDC)
- Operating temp. range –25°C to +50°C
- Short circuit and overload protection
- 3-year product warranty

(Mounted in standard flush box)

The TIW series is a new range of small size DC-power supplies which have been designed particularly for applications in home and office installations.
The compact modules cases fit in the standardized in-wall flush boxes or also can be mounted on walls. For connection there are models available with flying wires
The power supplies comply fully with the safety and EMC standards requested for commercial and residential class II installations. Typical applications are powering of electric devices used in home automation and in security systems like i.e. DC-motors, controllers, indicators, etc.

Models

Order Code	Output Power max.	Output Voltage	Output Current	Efficiency
TIW 06-103	4 W	3.3 VDC	1.2 A	75 %
TIW 06-105	5 W	5.0 VDC	1.0 A	75 %
TIW 06-106	6 W	6.0 VDC	1.0 A	80 %
TIW 12-112	12 W*	12 VDC	1.0 A	80 %
TIW 12-115	12 W*	15 VDC	0.8 A	80 %
TIW 12-124	12 W*	24 VDC	0.5 A	80 %
TIW 24-112	24 W*	12 VDC	2.0 A	83 %
TIW 24-124	24 W*	24 VDC	1.0 A	85 %

* If these models are used with 115 VAC input voltage, a 25% load reduction must be applied.

Input Specifications

Input voltage range	– nominal	115 – 230 VAC
	– ranges	93 – 264 VAC (universal input)
	– output power derating for 12 & 24 W models	0.45 %/V below 187 VAC down to 132 VAC 1 %/V below 115 VAC
Input frequency		47 – 63 Hz
No load power consumption (acc. ErP directive EC No.278/2009)		< 300 mW
External input fuse required (recommended values)		2 to 6 A slow blow resp. characteristic C
Harmonic limits		EN 61000-3-2, Class A

Output Specifications

Voltage set accuracy		±3 % max.
Regulation	– Input variation	1 % max.
	– Load variation (0–100%)	2 % max.
Ripple and noise (20 Mhz Bandwidth)		<200 mVp-p
Start-up time		<1s
Hold-up time	– Vin = 115 VAC	5 ms typ.
	– Vin = 230 VAC	20 ms typ.
Overload protection by current limit	TIW 06-xxx & TIW 24-xxx models:	<2.5 A
	TIW 12-xxx models:	<3.5 A
Short circuit protection		foldback (automatic recovery)

General Specifications

Operating Temperature (Ambient)			–25°C to +50°C Please take heat sources (such as lamps) nearby into consideration for ambient temperature of the power supply
Over temperature protection			built in (for safety reason only)
Preventive fire protection			VDE 710-14
Protection class			class II as per IEC/EN 61140
Safety standards	– CB test certificate	IT safety	IEC 60950-1:2005(2nd)+A1:2009+A2:2013, EN 60950-1:2006+A1:2010+A2:2013+ A11:2009+A12:2011
	– BV certificate	household appliance	IEC/EN 60335-1, VDE 710-14
		safety of transformers	IEC/EN 61558-2-16, IEC/EN 61558-2-8 used in conjunction with IEC/EN 61558-1
		lamp controlgear	IEC/EN 61347-2-13 used in conjunction with IEC/EN 61347-1
		electronic equipment for power installation	IEC 62103 (1st Ed.), EN 50178:1997
	– CSA certificate of compliance	IT safety	UL 60950-1(2nd Ed.)+Am1:2011, CAN/CSA-C22.2 No.60950-1-07+Am1:201
		class 2 power units	UL 1310 (6th Edition), CAN/CSA-C22.2 No.223-M91(R2008)
	– Certification documents		www.tracopower.com/overview/tiw
Electromagnetic compatibility (EMC), emissions			EN 61000-6-3
	– Conducted RI suppression on input		EN 55022 class B, EN 55014-1
	– Radiated RI suppression		EN 55022 class B, EN 55014-1

Electromagnetic compatibility (EMC), immunity		EN 61000-6-2-1,	IEC 61204-3
– Electrostatic discharge (ESD)	EN 61000-4-2	4 kV / 8 kV,	class B
– Radiated RF field immunity	EN 61000-4-3	10 V/m,	class A
– Electrical fast transient / burst immunity	EN 61000-4-4	2 kV / 0.5 kV,	class B+A
– Surge immunity	see next page		

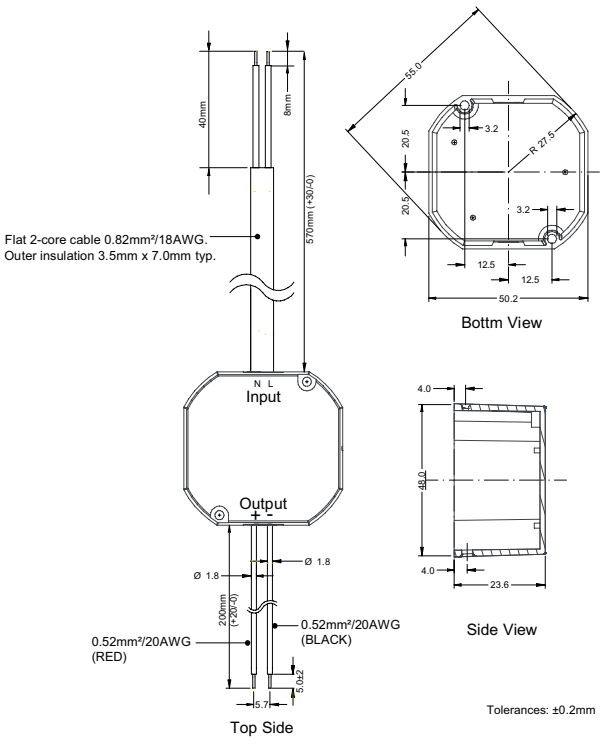
All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.

General Specifications

Electromagnetic compatibility (EMC), immunity				
	– Surge immunity line – ground	EN 61000-4-5	2 kV,	class B+A
	– Surge immunity line – line	EN 61000-4-5	1 kV,	class B+A
	– Surge immunity output	EN 61000-4-5	0.5 kV	
	– Immunity to conducted RF disturbances	EN 61000-4-6	10 V,	class A
	– Mains voltage dips and interruptions	EN 61000-4-11	30 % /10 mS,	class B
			60 % /100 mS,	class B
Casing material		plastic (UL 94V-0 rated)		
Casing protection		IP 67		
Reliability, calculated MTBF according to IEC 61709		www.tracopower.com/overview/tiw		
Humidity (non condensing)		5 – 95 % rel. H max.		
Environment	– Vibration acc. IEC 60068-2-6	Part 2, test Fe: Vibration (sinusoidal)		
	– Shock acc. IEC 60068-2-27	Part 2, test Ea: Shock		
Connection wires	– Input	2 x 570 mm +30/-0 (black/white) AWG 18		
	– Output	2 x 200 mm +20/-0 (red/black) AWG 20		
Environmental compliance	– Reach	www.tracopower.com/overview/tiw		
	– RoHS	RoHS directive 2011/65/EU		
Weight	– 24 Watt models:	100 g (3.8 oz)		
	– other models:	80 g (2.7 oz)		

Outline Dimensions

TIW 6 & 12 Watt models:



TIW 24 Watt model: