

**SERIES:** ETSA 150W U | **DESCRIPTION:** AC-DC POWER SUPPLY

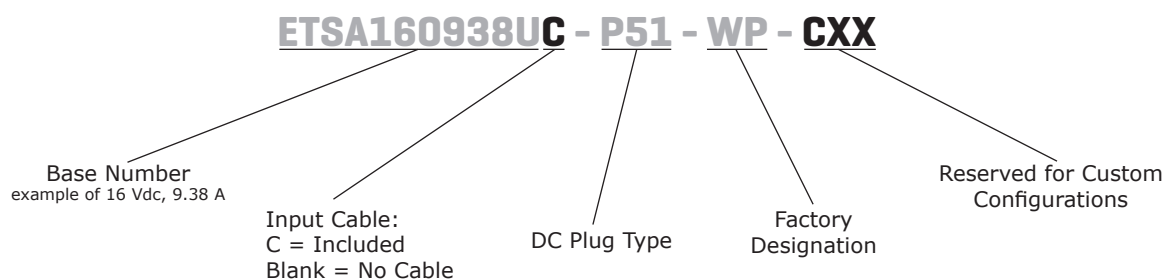
**FEATURES**

- 150 W power
- universal input (90~264 Vac)
- single regulated outputs
- over voltage, over current, and short circuit protections
- UL/cUL safety approvals
- level V efficiency
- power factor correction
- custom designs available



MODEL	output voltage	output current max	output power max	ripple and noise <sup>1</sup> max	efficiency level
	(Vdc)	(A)	(W)	(mVp-p)	
ETSA1201167U	12	11.67	140	240	V
ETSA160938U	16	9.38	150	320	V
ETSA190790U	19	7.90	150	380	V
ETSA240625U	24	6.25	150	480	V
ETSA360417U	36	4.17	150	480	V
ETSA480313U	48	3.13	150	480	V

Notes: 1. Ripple and noise measured with 20 MHz bandwidth oscilloscope, each output terminated with 10  $\mu$ F/50 V electrolytic and 0.1  $\mu$ F ceramic capacitors.

**PART NUMBER KEY**


## INPUT

parameter	conditions/description	min	typ	max	units
voltage		90		264	Vac
frequency		47		63	Hz
current	at 90 Vac, 50 Hz			2.5	A
inrush current	at 230 Vac, cold start			150	A
power factor correction	at full load		0.9		
no load power consumption				0.5	W

## OUTPUT

parameter	conditions/description	min	typ	max	units
total regulation		-2		+5	%
hold-up	at 115/230 Vac, 50/60 Hz, full load	16			ms
temperature coefficient				±0.05	%/°C

## PROTECTIONS

parameter	conditions/description	min	typ	max	units
over voltage protection	auto latch off	110		130	%
over current protection	auto restart when overload is removed	110		160	%
short circuit protection	auto shutdown, auto restart when short circuit removed				

## SAFETY & COMPLIANCE

parameter	conditions/description	min	typ	max	units
isolation voltage	input to output for 4 seconds	4,242			Vdc
	input to ground for 4 seconds	2,121			Vdc
isolation resistance	input to output at 500 Vdc	20			MΩ
	input to ground at 500 Vdc	20			MΩ
safety approvals	UL/cUL, GS				
EMI/EMC	FCC Part 15 Class B, EN55022/EN55024 Class B, CE				
MTBF	at full load, 25°C	140,000			hrs
RoHS	2011/65/EU				

## ENVIRONMENTAL

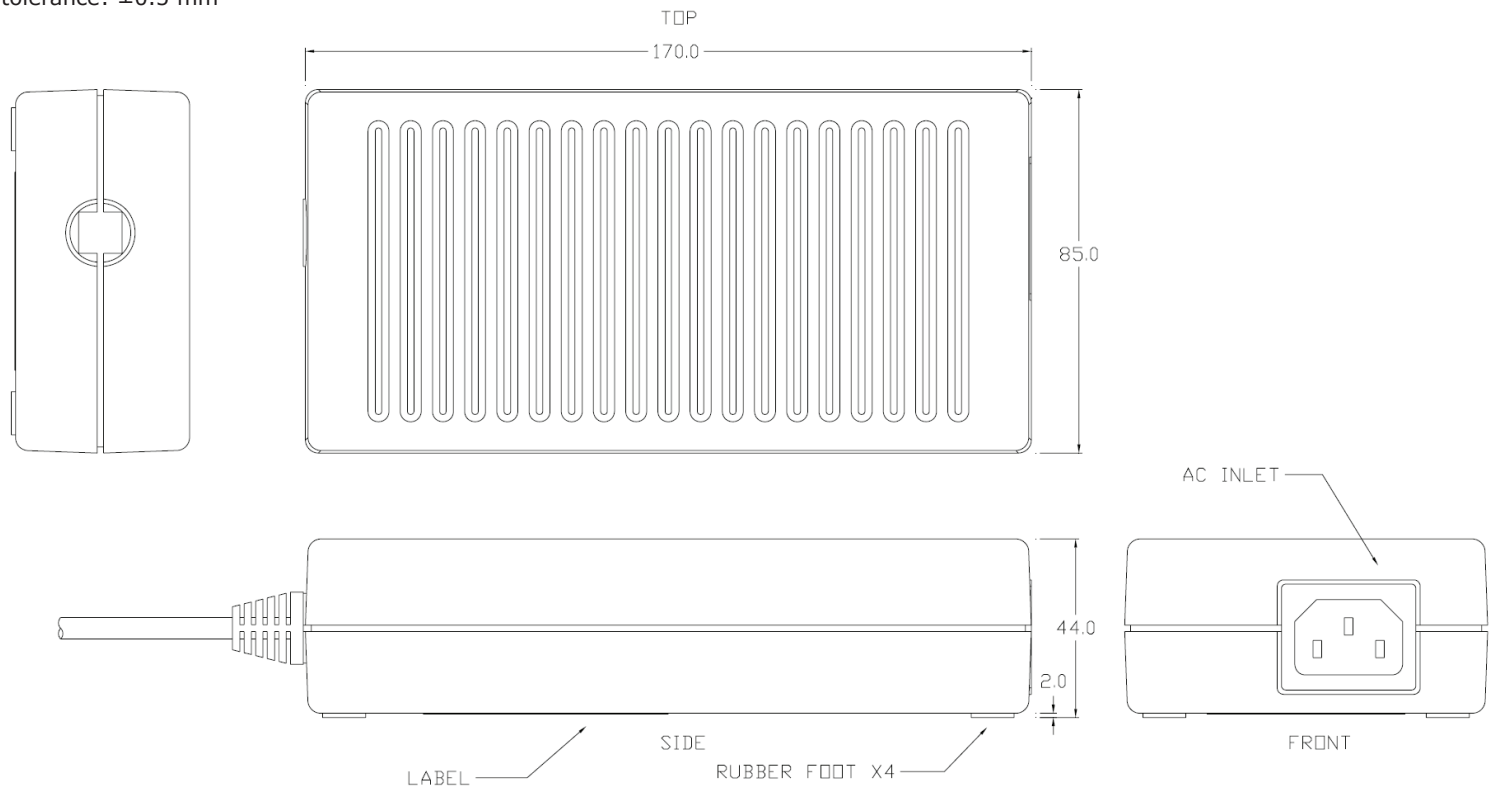
parameter	conditions/description	min	typ	max	units
operating temperature	derate linearly 2.5% per °C from 41~60°C	0		60	°C
storage temperature	16 Vdc input models	-10		85	°C
	all other models	-10		70	°C
operating humidity	non-condensing	20		90	%
storage humidity	non-condensing	20		90	%

MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	170 x 85 x 44				mm
input plug	IEC320 / C14				

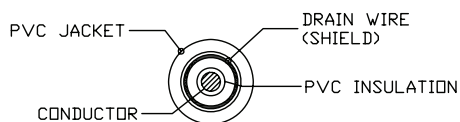
MECHANICAL DRAWING

units: mm  
tolerance: ±0.5 mm

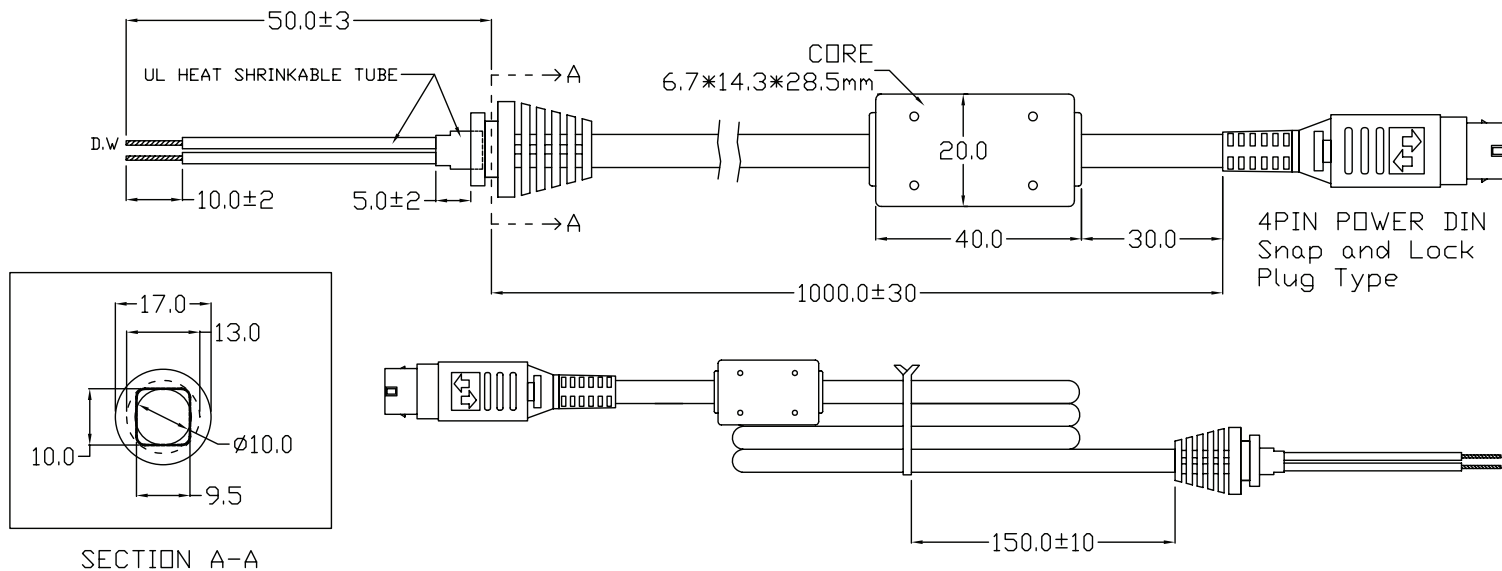
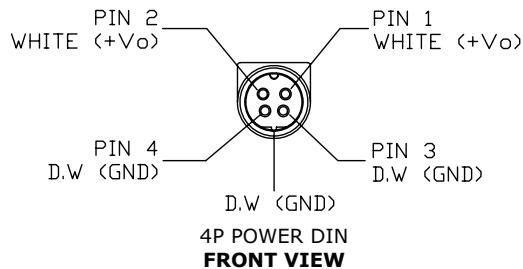


## DC CORD

units: mm



See Table 1  
**SECTIONAL DRAWING**



**Table 1**

MODEL NO.	CABLE
ETSA1201167U	14 AWG, Black, UL1571, 80°C, 30 V, 14 AWGX1C + aluminum shield (14 AWG)
ETSA160938U	14 AWG, Black, UL1571, 80°C, 30 V, 14 AWGX1C + aluminum shield (14 AWG)
ETSA190790U	14 AWG, Black, UL1571, 80°C, 30 V, 14 AWGX1C + aluminum shield (14 AWG)
ETSA240625U	14 AWG, Black, UL1571, 80°C, 30 V, 14 AWGX1C + aluminum shield (14 AWG)
ETSA360417U	16 AWG, Black, UL1185 80/90°C, 300 V, 16 AWGX1C + aluminum shield (16 AWG)
ETSA480313U	16 AWG, Black, UL1185 80/90°C, 300 V, 16 AWGX1C + aluminum shield (16 AWG)

AC CORD

units: mm

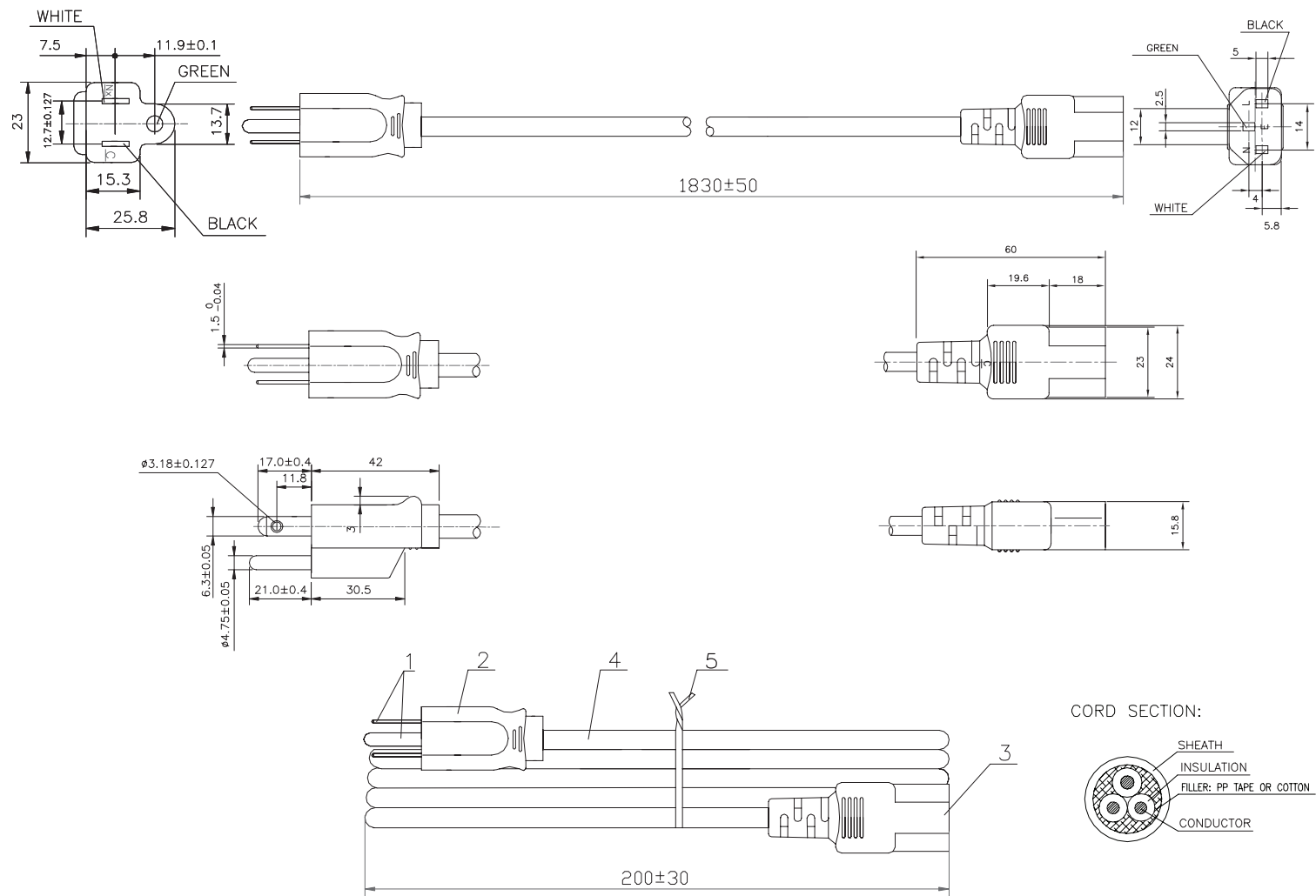


Table 2

ITEM NO.	DESCRIPTION
1	AC input pins (nickel plated)
2	PVC molded plug: PHP-301 (black)
3	PVC molded connector: PHS-301 (black)
4	PVC flexible cord: SVT 18 AWG x3C, 60°C (black)
5	elliptical tie (black)

## REVISION HISTORY

rev.	description	date
1.0	initial release	11/22/2013

The revision history provided is for informational purposes only and is believed to be accurate.

**CUI INC<sup>®</sup>**

**Headquarters**  
20050 SW 112th Ave.  
Tualatin, OR 97062  
**800.275.4899**

Fax 503.612.2383  
**cui.com**  
techsupport@cui.com

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

CUI offers a one (1) year limited warranty. Complete warranty information is listed on our website.

CUI reserves the right to make changes to the product at any time without notice. Information provided by CUI is believed to be accurate and reliable. However, no responsibility is assumed by CUI for its use, nor for any infringements of patents or other rights of third parties which may result from its use.

CUI products are not authorized or warranted for use as critical components in equipment that requires an extremely high level of reliability. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.