

SERIES: ETSA 12 W

DESCRIPTION: SWITCHING POWER SUPPLY

## FEATURES

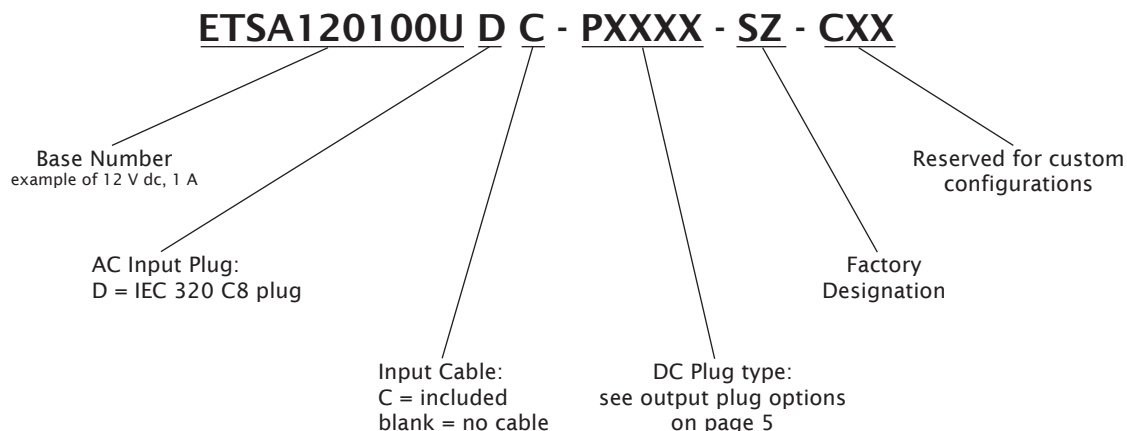
- universal AC input
- regulated output voltage
- short circuit protection
- meets EISA / efficiency level V regulations
- custom designs available



| MODEL       | output voltage    | output current |            | output wattage | ripple*         | efficiency level | cord length<br>(mm) |
|-------------|-------------------|----------------|------------|----------------|-----------------|------------------|---------------------|
|             | nominal<br>(V dc) | min<br>(A)     | max<br>(A) | max<br>(W)     | max.<br>(mVp-p) |                  |                     |
| ETSA050200U | 5                 | 0              | 2          | 10             | 100             | V                | 1830 +150/-0        |
| ETSA060200U | 6                 | 0              | 2          | 12             | 150             | V                | 1830 ±100           |
| ETSA090133U | 9                 | 0              | 1.33       | 12             | 150             | V                | 1830 ±100           |
| ETSA120100U | 12                | 0              | 1          | 12             | 100             | V                | 1830 +150/-0        |
| ETSA150080U | 15                | 0              | 0.8        | 12             | 150             | V                | 1830 ±100           |
| ETSA180066U | 18                | 0              | 0.66       | 12             | 150             | V                | 1830 ±100           |
| ETSA240050U | 24                | 0              | 0.5        | 12             | 150             | V                | 1830 ±100           |

\*at full load, 100 ~ 240 V ac input, measured at 20MHz bandwidth with a 10 uF electrolytic cap and a 0.1 uF ceramic cap on the output

## PART NUMBER KEY





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## INPUT

| parameter                 | conditions/description | min | nom | max | units |
|---------------------------|------------------------|-----|-----|-----|-------|
| rated input voltage       |                        | 100 |     | 240 | V ac  |
| input voltage range       |                        | 90  |     | 264 | V ac  |
| rated frequency           |                        | 50  |     | 60  | Hz    |
| frequency range           |                        | 47  |     | 63  | Hz    |
| rated input current       |                        |     |     | 0.3 | A     |
| inrush current            | 115 V ac, cold start   |     |     | 30  | A     |
|                           | 230 V ac, cold start   |     |     | 60  | A     |
| no load power consumption |                        |     |     | 0.3 | W     |

## OUTPUT

| parameter                | conditions/description                              | min | nom | max | units |
|--------------------------|-----------------------------------------------------|-----|-----|-----|-------|
| line regulation          |                                                     |     | ±5  |     | %     |
| load regulation          |                                                     |     | ±5  |     | %     |
| over voltage protection  | output voltage clamped by internal protection zener |     |     |     |       |
| short circuit protection | output shut down and auto-restart                   |     |     |     |       |

## SAFETY & EMI

| parameter             | conditions/description                  | min | nom | max            | units        |
|-----------------------|-----------------------------------------|-----|-----|----------------|--------------|
| HI-POT                | input to output at 10 mA for 1 minute   |     |     | 3,000<br>4,242 | V ac<br>V dc |
| insulation resistance | input to output at 500 V dc             | 100 |     |                | MΩ           |
| safety approvals      | UL/cUL (UL60950-1), TUV/GS              |     |     |                |              |
| EMI standard          | FCC class B, CE, VCCI, EN55022, EN55024 |     |     |                |              |
| leakage current       |                                         |     |     | 0.25           | mA           |
| RoHS compliant        | yes                                     |     |     |                |              |

## ENVIRONMENTAL

| parameter             | conditions/description | min | nom | max | units |
|-----------------------|------------------------|-----|-----|-----|-------|
| operating temperature |                        | 0   |     | 40  | °C    |
| operating humidity    |                        | 20  |     | 80  | %     |
| storage temperature   |                        | -10 |     | 70  | °C    |
| storage humidity      |                        | 10  |     | 90  | %     |

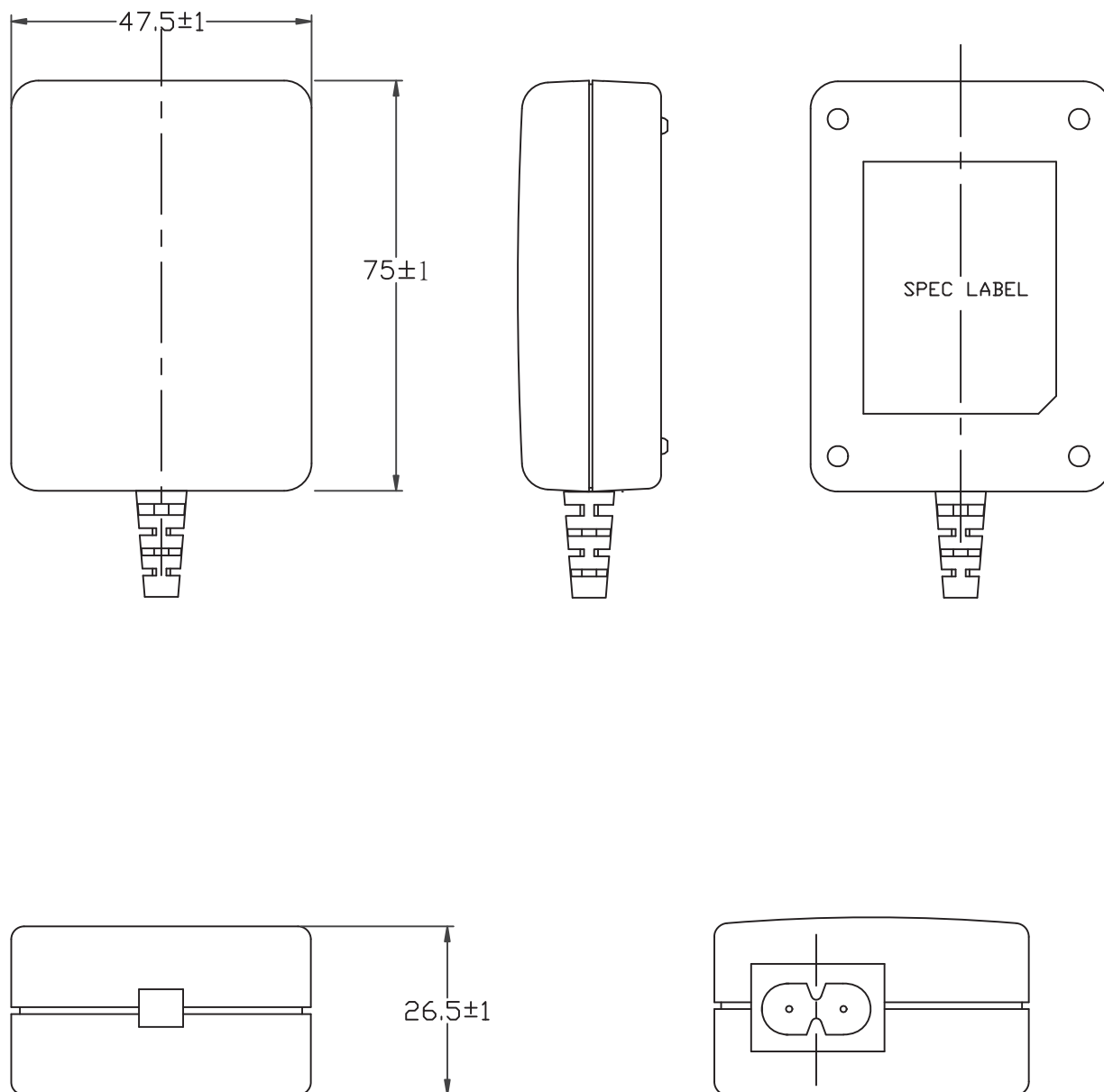


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## MECHANICAL DRAWING

|           |                           |
|-----------|---------------------------|
| case size | 75 L x 47.5 W x 26.5 H mm |
|           | tolerance: $\pm 1$ mm     |

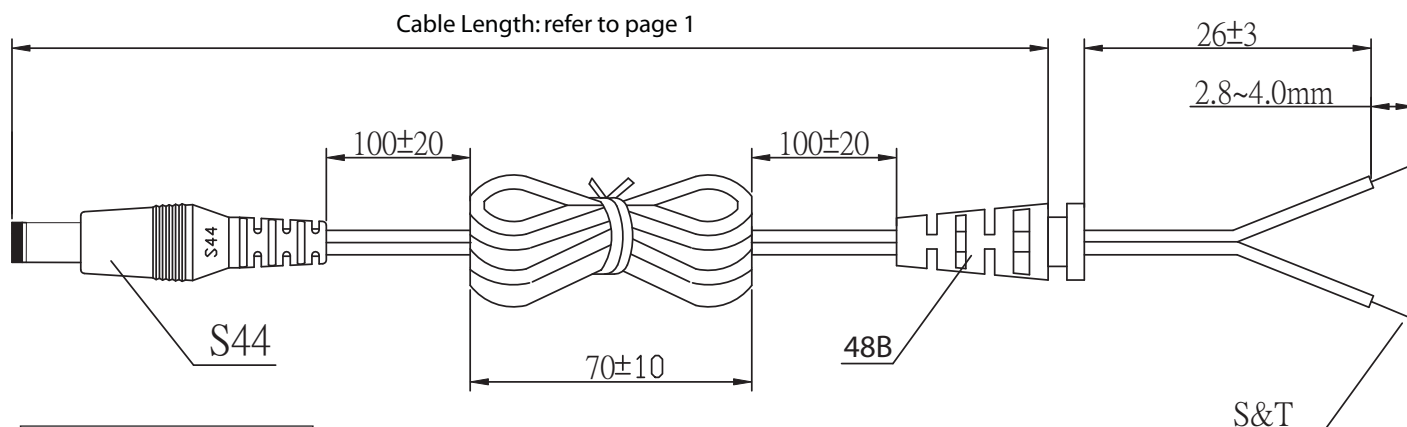




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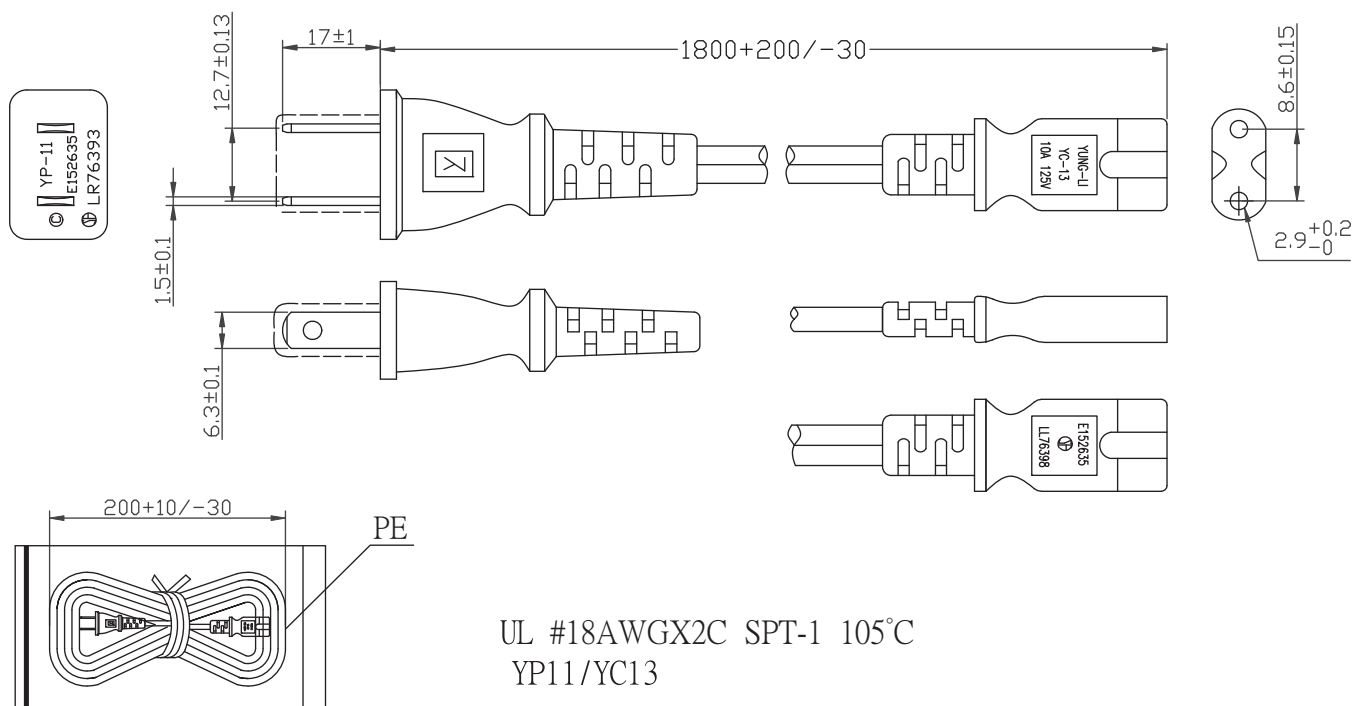
## DC CORD



| Cable Gauge |        |
|-------------|--------|
| ETSA050200  | 20 AWG |
| ETSA060200  | 18 AWG |
| ETSA090133  | 20 AWG |
| ETSA120100  | 22 AWG |
| ETSA150080  | 22 AWG |
| ETSA180066  | 24 AWG |
| ETSA240050  | 24 AWG |

Black wire, white stripe: Positive

## AC CORD



\*Contact CUI for additional ac cord input blade options.

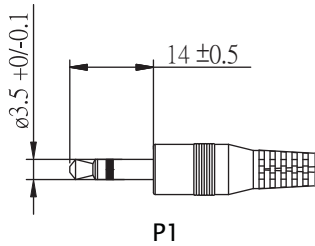
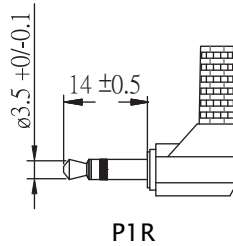


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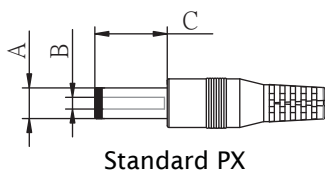
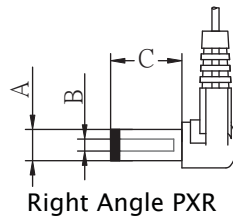
## OUTPUT PLUG OPTIONS

### 3.5 mm Phono Plug



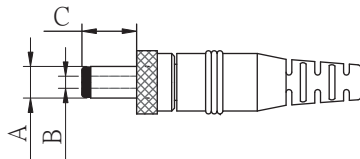
\*Tip positive

### Standard DC Plug



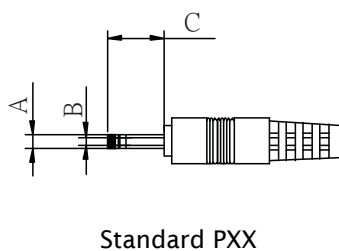
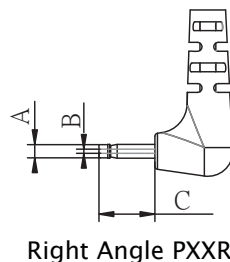
|        | A   | B    | CU  | nit |
|--------|-----|------|-----|-----|
| P5/P5R | 5.5 | 2.1  | 9.5 | mm  |
| P6/P6R | 5.5 | 2.5  | 9.5 | mm  |
| P7/P7R | 3.5 | 1.3  | 9.5 | mm  |
| P8/P8R | 3.8 | 1.35 | 9.5 | mm  |
| P9/P9R | 3.8 | 1.05 | 9.5 | mm  |

### Locking DC Plug

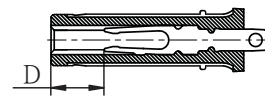


|     | A   | B   | CU  | nit |
|-----|-----|-----|-----|-----|
| P10 | 5.5 | 2.1 | 9.5 | mm  |
| P11 | 5.5 | 2.5 | 9.5 | mm  |

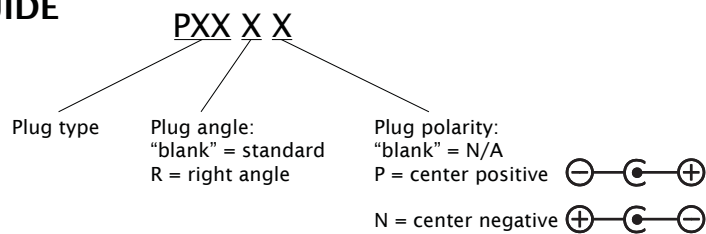
### EIAJ Plugs



|          | EIAJ   | A    | B   | C   | DU  | nit |
|----------|--------|------|-----|-----|-----|-----|
| P12/P12R | EIAJ-1 | 2.35 | 0.7 | 9.5 | NA  | mm  |
| P13/P13R | EIAJ-2 | 4.0  | 1.7 | 9.5 | 5.0 | mm  |
| P14/P14R | EIAJ-3 | 4.75 | 1.7 | 9.5 | 5.0 | mm  |



### PART NUMBER GUIDE



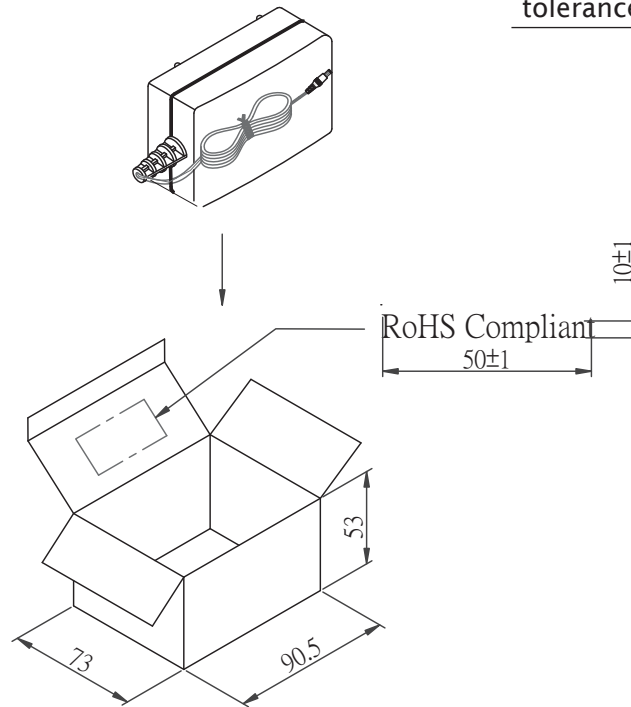
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## INDIVIDUAL PACKAGING



tolerance  $\pm 1$  mm

## PACKAGING

EXTERNAL CARTON MATERIAL:A=B(6mm)

INTERNAL CARTON MATERIAL:B33(3mm)

CARTON SIZE: 405X395X265mm

Q'TY: 80pcs(20x4x1)

"RoHS Compliant"

tolerance  $+7 / -0$  mm

