

REV. Status

REVISION -  
02/04/03 YS

REVISION A  
ADDED RoHS &  
UPDATED LABELS  
DELETED CSA#  
LR69223  
02/27/06 MP

REVISION B  
CHG TUV FILE #  
WAS 810/89  
(EN60950 & VDE  
0551). CLARIFIED  
PIN OUTS  
04/19/07 YS

REVISION C  
UPDATE LOGO'S  
TO STD IED.  
Dielectric  
Withstand WAS  
Hi-Pot 3500.  
4-30-08 EB

REVISION D  
MOUNTING  
NOTE ADDED  
09/28/11 MP

REVISION E  
UPDATE SAFETY  
09/29/11 MP

REVISION F  
SAFETY NOTES  
ADDED  
03/20/13 MP

| TOLERANCES (mm) |       |
|-----------------|-------|
| ≤ 4             | ± 0.2 |
| 4 ≤ 20          | ± 0.3 |
| 20 ≤ 50         | ± 0.4 |

PREPARED BY:

M. PITCHAI

ENGINEER:  
M. PITCHAI

SAFETY ENGINEER  
B. OCONNELL

APPROVED:  
P. BRUNE

THREE FLANGE DUAL PRIMARY 20VA PC BOARD POWER TRANSFORMER

A. Electrical Specifications (@ 25°C)

1. Maximum Power: 20VA
2. Primary Voltage and Frequency: 115/230VAC 50/60Hz
3. Secondary RMS Rating: See Table A
4. Voltage Regulation: 18% TYP @ full load to no load
5. Temperature Rise(normal op. condition): 45°C TYP (60° MAX)
6. A 10% Input Voltage change will proportionally affect transformer sec voltage. The max. allowed wdg temp under abnormal condition is 155°C
7. Insulation Resistance:  
100MΩ MIN @ 500VDC, Pri to Sec, Pri to Core, Sec to Core
8. Dielectric Withstand: 3750Vrms 1 minute @ Pri to Sec  
1500Vrms 1 minute @ Pri to Core, Sec to Core

B. Marking: includes input and output ratings (per sheet 2),

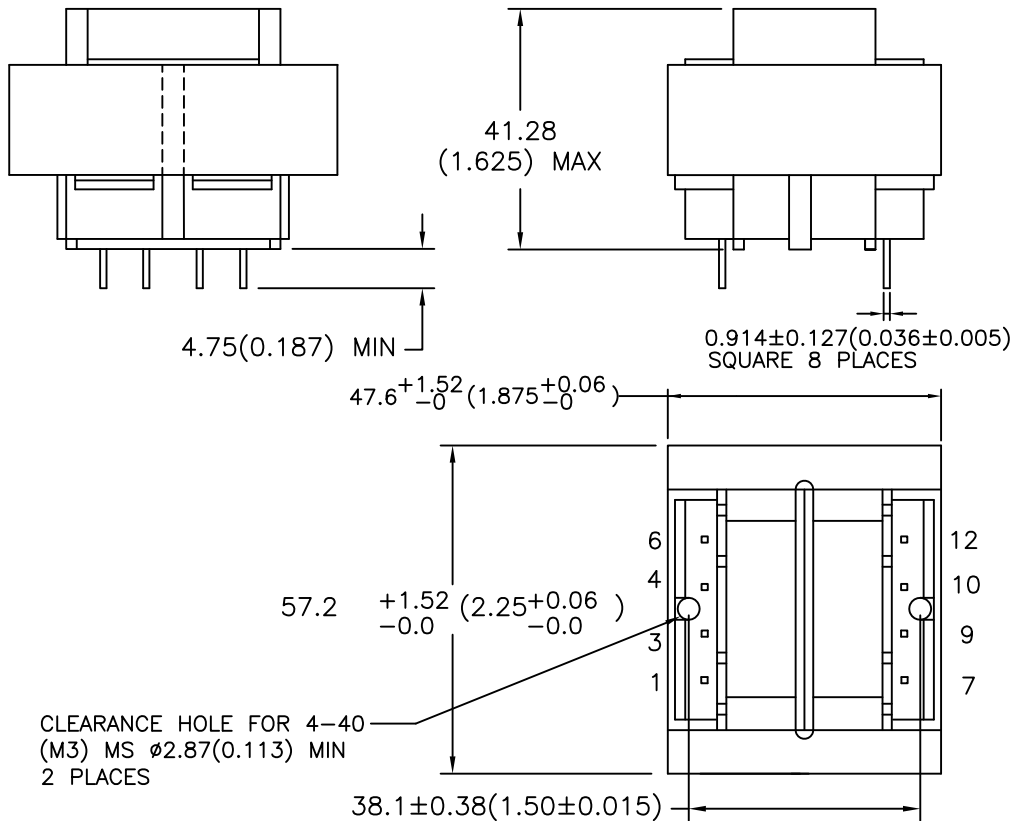
C. Safety:

Conforms to construction requirement of:  
UL5085-1, -2; CSA No. 66.1, 66.2  
(from Datecode 1143 and onwards).  
UL506, UL1411  
UL1446 (CLASS 130(B))  
EN61558-1, -2-6

Safety certificate file reference:  
UL E138028, E79781, E92957  
CSA 175561  
TUV (P.S.) 4478013415698

Non short-circuit proof safety isolating transformer.  
Intended for mounting on PCBs and for building into end use-equipment.  
Not intended for series/parallel connection with other transformers.  
Mounting hardware may reduce spacing in end use application.

D. Mechanical Specifications:

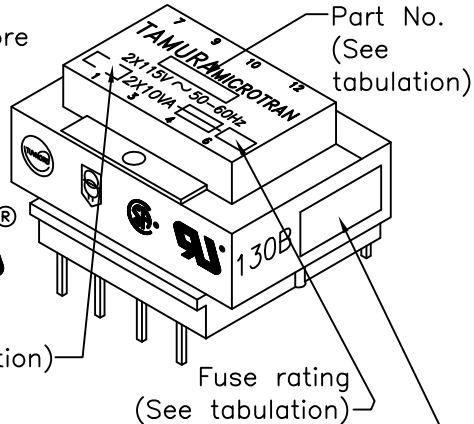


NOTE: BOARD WASHING IS NOT RECOMMENDED FOR THESE PARTS



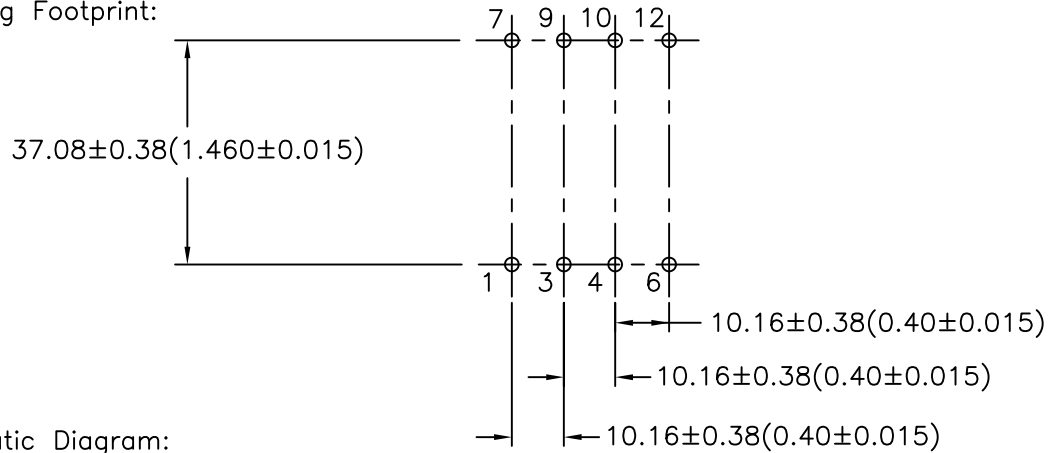
MODEL NUMBER

PL20-XX-130B



|   |          |   |                                     |
|---|----------|---|-------------------------------------|
| DRAWING CONTROL NO.<br>P-A1-12260<br>ACAD/MXFMR/A1122601.DWG  | REV<br>F | MODEL DESCRIPTION<br>POWER<br>TRANSFORMER   | MODEL SPECIFICATION<br>PL20-XX-130B |
| CONTENTS OF THIS DRAWING ARE<br>SUBJECT TO CHANGE WITHOUT<br>PRIOR NOTICE   |          | TAMURA CORPORATION OF AMERICA<br>1040 SOUTH ANDREASEN DRIVE, #100 ESCONDIDO, CA. 92029<br>(951) 699-1270 FAX 7607400536 | DIM: mm[In] SCL: 1/1 SH: 1 OF 2     |
| <p>PROPRIETARY NOTICE: THIS DRAWING PRINT OR DOCUMENT AND SUBJECT MATTER DISCLOSED HEREIN ARE PROPRIETARY ITEMS TO WHICH TAMURA<br/>RETAINS THE EXCLUSIVE RIGHT OF DISSEMINATION, REPRODUCTION, MANUFACTURE AND SALE. THIS DRAWING, PRINT OR DOCUMENT IS SUBMITTED IN<br/>CONFIDENCE FOR CONSIDERATION BY THE RECIPIENT ALONE UNLESS PERMISSION FOR FURTHER DISCLOSURE IS EXPRESSLY GRANTED IN WRITING.</p> |          |   |                                     |

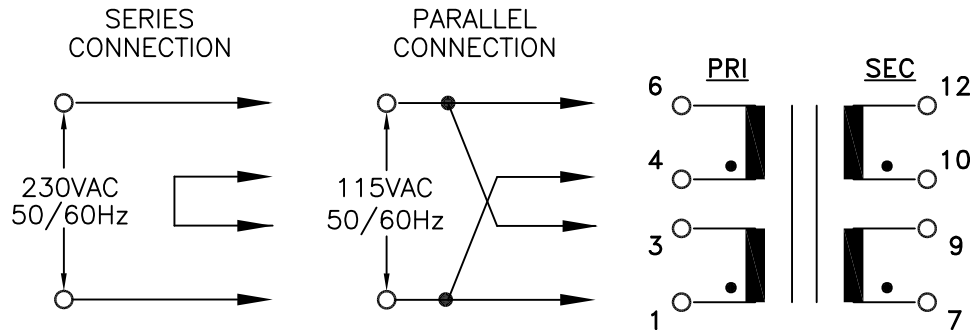
E. Mounting Footprint:



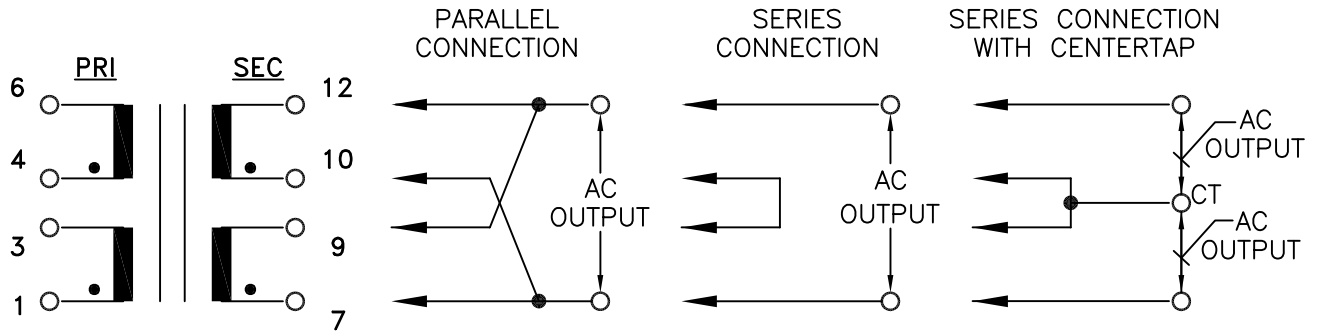
MODEL NUMBER  
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F. Schematic Diagram:

**PRIMARY INPUT CONNECTIONS**



**SECONDARY OUTPUT CONNECTIONS**



G. Table A:

T= Time lag

| PART NO.     | PARALLEL |          | SERIES   |          | SERIES WITH CT |          | OUTPUT  | SECONDARY FUSE REQ'D EA. WINDING |
|--------------|----------|----------|----------|----------|----------------|----------|---------|----------------------------------|
|              | AC VOLTS | RMS AMPS | AC VOLTS | RMS AMPS | AC VOLTS       | RMS AMPS |         |                                  |
| PL20-10-130B | 5.0      | 4.00     | 10.0     | 2.00     | 5.0-CT-5.0     | 2.00     | 2X5.0V  | T 2.00A                          |
| PL20-12-130B | 6.3      | 3.20     | 12.6     | 1.60     | 6.3-CT-6.3     | 1.60     | 2X6.3V  | T 1.60A                          |
| PL20-16-130B | 8.0      | 2.50     | 16.0     | 1.25     | 8.0-CT-8.0     | 1.25     | 2X8.0V  | T 1.25A                          |
| PL20-20-130B | 10.0     | 2.00     | 20.0     | 1.00     | 10.0-CT-10.0   | 1.00     | 2X10.0V | T 1.00A                          |
| PL20-24-130B | 12.0     | 1.66     | 24.0     | 0.83     | 12.0-CT-12.0   | 0.83     | 2X12.0V | T 1.00A                          |
| PL20-28-130B | 14.0     | 1.44     | 28.0     | 0.72     | 14.0-CT-14.0   | 0.72     | 2X14.0V | T 0.80A                          |
| PL20-36-130B | 18.0     | 1.12     | 36.0     | 0.56     | 18.0-CT-18.0   | 0.56     | 2X18.0V | T 0.63A                          |

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DRAWING CONTROL NO.  
P-A1-12260  
ACAD/MXFMR/A1122602.DWG

REV  
F

MODEL DESCRIPTION  
POWER  
TRANSFORMER

**TAMURA CORPORATION OF AMERICA**  
1040 SOUTH ANDREASEN DRIVE, #100 ESCONDIDO, CA. 92029  
(951) 699-1270 FAX 7607400536

MODEL SPECIFICATION

**PL20-XX-130B**

DIM: mm[In] SCL: NONE SH: 2 OF 2

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