

## F-400U

### Electrical Specifications (@25C)

1. Maximum Power: 144.0 VA
2. Primary:
  - Series: 230V 50/60 Hz
  - Parallel: 115V 50/60 Hz
3. Secondary:
  - Series: 48.0VCT @ 3.0 Amps
  - Parallel: 24.0VCT @ 6.0 Amps
4. Voltage Regulation: 6 % TYP @ full load to no load
5. Temperature Rise: 35C TYP (45C MAX allowed)

### Description:

The F-400U transformer is part of a series of Triad Control transformers that have secondary voltages that are commonly utilized in various electronic, electro-magnetic and electrical control systems. These include such applications as use with relays, solenoids, small motors, speed changers, pumps, heating elements, control valves for fluid and gases, fans, blowers, electronic tubes, automatic assembly equipment, recording devices, elevators, door openers, low voltage lamps, etc.

### Construction:

Wound on a single channel nylon bobbin. Materials are UL recognized, Class B (130° C) rated.

### Safety:

These products are 100% hipot tested with an insulation of 1500V between primary and secondary windings as well as between the primary / secondary windings and the core.

### Dimensions:

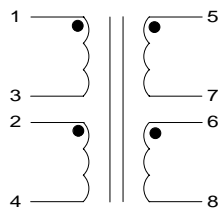
Units: In inches

A	B	C	D	E
4.75	3.125	3.50	2.50	2.875

Mounting Holes: 0.203 x 0.375"

Weight: 5.9 lbs

### Schematic:



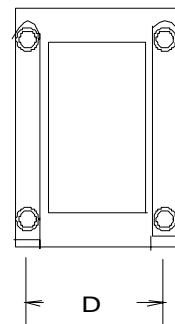
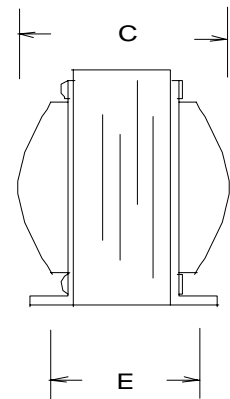
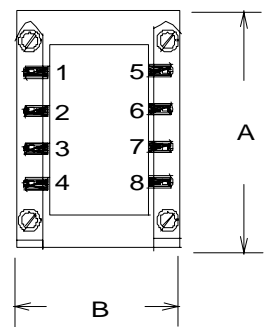
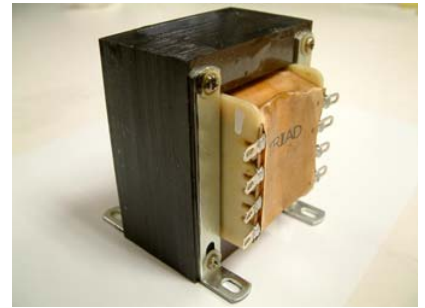
#### Primary:

- Series: 1 to 4, Jumper 3 to 2
- Parallel: 1 to 3, Jumper 1 to 2 and 3 to 4

#### Secondary:

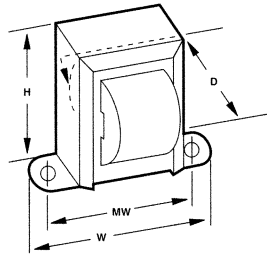
- Series: 5 to 8, Jumper 7 to 6
- Parallel: 5 to 7, Jumper 5 to 6 and 7 to 8

**RoHS Compliance:** As of manufacturing date February 2005, all standard products meet the requirements of 2002/95/EC, known as the RoHS initiative.

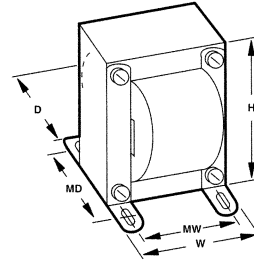


# Power Transformers

## Chassis Mount: Control



Case Type Z



Case Type U

### :: Description

Triad control transformers supply secondary voltages that are commonly utilized in various electronic, electro-magnetic and electrical control conditions. These include such applications as use with relays, solenoids, small motors, speed changers, pumps, heating elements, control valves for fluids and gases, fans and blowers, electronic tubes, automatic assembly equipment, recording devices, elevators, door openers, and low voltage lamps.

### :: Specifications

**Primary:** 115/230 VAC, 50/60 Hz  
**VA Range:** 12 to 192  
**Secondary:** 6/12/24 VAC

### :: Primary, 115/230 Volts / Secondaries, 6/12/24 Volts

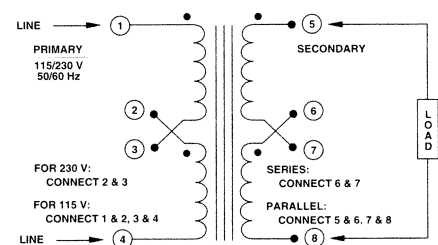
Section	Type No.	Secondaries		VA	Case Type	Connections	Dimensions			Mounting Dimensions		Wt. Lbs.
		Series	Parallel				H	W	D	MW	MD	
A	F-105Z	12.0V CT @ 1.0A	6.0V @ 2.0A	12	Z	Lugs	2 <sup>3</sup> / <sub>8</sub>	2 <sup>7</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>4</sub>	2 <sup>3</sup> / <sub>8</sub>	•	1.000
	F-211Z	48.0V CT @ 0.25A	24.0V @ 0.5A									
B	F-106Z	12.0V CT @ 2.0A	6.0V @ 4.0A	24	Z	Lugs	2 <sup>1</sup> / <sub>4</sub>	3 <sup>3</sup> / <sub>8</sub>	2	2 <sup>5</sup> / <sub>16</sub>	•	1.500
	F-212Z	48.0V CT @ 0.50A	24.0V @ 1.0A									
C	F-107Z	24.0V CT @ 2.0A	12.0V @ 4.0A	48	Z	Lugs	3 <sup>3</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>8</sub>	2 <sup>3</sup> / <sub>8</sub>	3 <sup>3</sup> / <sub>8</sub>	•	2.500
	F-213Z	48.0V CT @ 1.0A	24.0V @ 2.0A									
D	F-398U	24.0V CT @ 3.0A	12.0V @ 6.0A	72	U	Lugs	3 <sup>13</sup> / <sub>32</sub>	3 <sup>13</sup> / <sub>16</sub>	2 <sup>5</sup> / <sub>16</sub>	2 <sup>1</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>4</sub>	4.250
	F-108U	24.0V CT @ 4.0A	12.0V @ 8.0A									
E	F-214U	48.0V CT @ 2.0A	24.0V @ 4.0A	96	U	Lugs	3 <sup>13</sup> / <sub>32</sub>	2 <sup>5</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>16</sub>	2 <sup>1</sup> / <sub>4</sub>	2 <sup>7</sup> / <sub>8</sub>	3.240
	F-399U	24.0V CT @ 6.0A	12.0V @ 12.0A									
F	F-400U	48.0V CT @ 3.0A	24.0V @ 6.0A	144	U	Lugs	4 <sup>3</sup> / <sub>4</sub>	3 <sup>3</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>2</sub>	2 <sup>7</sup> / <sub>8</sub>	8.00
	F-109U	24.0V CT @ 8.0A	12.0V @ 16.0A									
G	F-215U	48.0 V CT @ 4.0A	24.0V @ 8.0A	192	U	Lugs	4 <sup>7</sup> / <sub>16</sub>	3 <sup>7</sup> / <sub>16</sub>	3 <sup>7</sup> / <sub>8</sub>	2 <sup>1</sup> / <sub>4</sub>	3	6.060

CT = Center Tap    Mounting hole sizes: Z = 3/16"    U = 1/8" x 3/8"

### :: Outline Dimensions

#### Technical Notes

- Hi-pot tested at 1,500 VRMS.
- Secondaries may be connected in series or parallel for expanded voltage and current ranges. See Control Transformer Connections diagram.
- Transformer termination is solder lug.



Control Transformer Connections

# Control Transformers

Class 2



## Control Transformers

UL File E65390  
CSA File 226495

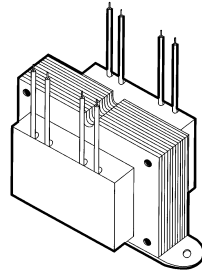


Figure A

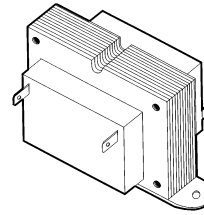


Figure B

### :: Description

Triad control transformers come with tamper resistant shrouds for safety and steel bracket welded to the bottom of the transformer for ease of mounting.

### :: Specifications

**Maximun Power:** 40VA

**Input (50/60 Hz):** 120V, 240V, 120/208/240V, 120/240V, 208/240V

**Output:** 12V, 24V

### :: Control Transformers

Type No.	Primaries	Secondary	VA	Connections	Dimensions (mm)			Mounting Dimensions	Wt. Lbs.
					H	W	D		
TCT40-01E07AB	120V	24V	40	Lugs	56.50	92.50	57.15	79.38	1.5
TCT40-01E07K	120V	24V	40	Leads	56.50	92.50	57.15	79.38	1.5
TCT40-02E07AB	240V	24V	40	Lugs	56.50	92.50	57.15	79.38	1.5
TCT40-02E07K	240V	24V	40	Leads	56.50	92.50	57.15	79.38	1.5
TCT40-05E07AB	120/208/240	24V	40	Lugs	56.50	92.50	57.15	79.38	1.5
TCT40-05E07K	120/208/240	24V	40	Leads	56.50	92.50	57.15	79.38	1.5
TCT40-06E07AB	120/240	24V	40	Lugs	56.50	92.50	57.15	79.38	1.5
TCT40-06E07K	120/240	24V	40	Leads	56.50	92.50	57.15	79.38	1.5
TCT40-09E07AB	208/240	24V	40	Lugs	56.50	92.50	57.15	79.38	1.5
TCT40-09E07K	208/240	24V	40	Leads	56.50	92.50	57.15	79.38	1.5
TCT40-03E07AB	120V	12V	40	Lugs	56.50	92.50	57.15	79.38	1.5
TCT40-03E07K	120V	12V	40	Leads	56.50	92.50	57.15	79.38	1.5
TCT40-04E07AB	240V	12V	40	Lugs	56.50	92.50	57.15	79.38	1.5
TCT40-04E07K	240V	12V	40	Leads	56.50	92.50	57.15	79.38	1.5
TCT40-07E07AB	120/208/240	12V	40	Lugs	56.50	92.50	57.15	79.38	1.5
TCT40-07E07K	120/208/240	12V	40	Leads	56.50	92.50	57.15	79.38	1.5
TCT40-08E07AB	120/240	12V	40	Lugs	56.50	92.50	57.15	79.38	1.5
TCT40-08E07K	120/240	12V	40	Leads	56.50	92.50	57.15	79.38	1.5
TCT40-10E07AB	208/240	12V	40	Lugs	56.50	92.50	57.15	79.38	1.5
TCT40-10E07K	208/240	12V	40	Leads	56.50	92.50	57.15	79.38	1.5

### :: Outline Dimensions

**Technical Notes**  
[mm]