

## MODEL 278

# AC Current Transducer



- High accuracy, low cost
- Isolated input and output
- Socket-mounted, solid-state design
- Five year unconditional warranty

### DESCRIPTION

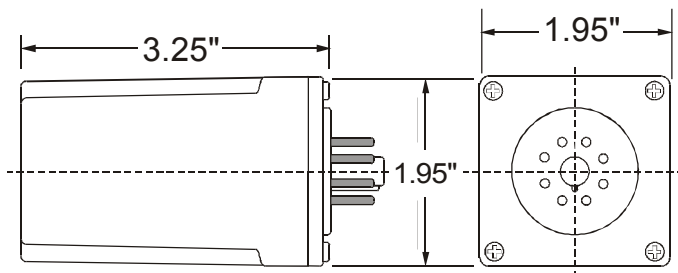
The **Model 278 AC Current Transducer** is designed to accept an AC current input, and provide a proportional DC current output. A linear transformer input is coupled to a solid-state output amplifier. The Model 278 is powered by a 115 VAC or 230 VAC source, and is socket-mounted for ease of use.

Model 278 Current Transducers can be used with computer and programmable controls to provide:

- Motor and power control
- Supervisory data acquisition
- Load monitoring
- Feedback control
- Energy management

The Model 278 is available in two 4-20 output configurations. A 0-10 VDC output is available on the Model 2780.

### DIMENSIONS



### SPECIFICATIONS

MODEL	C278	C278-230
Supply voltage	115VAC @ 50/60 Hz	230VAC @ 50/60 Hz
Input current	0-5 amps	0-5 amps
Input frequencies	25-400 Hz	
Input burden	0.5VA at 120VAC 60 Hz	
Output @ rated input	4-20ma	4-20ma
Maximum load	500 ohms	500 ohms
Output accuracy	2% at 77°F	
Output ripple	1% max at nominal frequency	
Response time	800 msec from 0-99%	
Overload withstand	2 times rated output-continuous 10 times rated input-1 second	
Dielectric withstand voltage (isolation)	1500 VRMS input, output, case	
Operating temperature	-40° to +131°F	
Humidity tolerance	0-97% w/o condensation	
Enclosure material	ABS plastic	
Mounting	8-pin socket (*order separately)	
Weight	9.5 oz.	
Agency Approvals	UL Recognized-US/Canada	

\*Order 8-pin socket number 51X120

Telephone: Main - (918) 438-1220  
Sales - (800) 862-2875  
Fax: (918) 437-7584

E-mail: sales@time-mark.com  
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# AC Current Transducer

READ ALL INSTRUCTIONS BEFORE INSTALLING, OPERATING OR SERVICING THIS DEVICE.  
KEEP THIS DATA SHEET FOR FUTURE REFERENCE.

## GENERAL SAFETY

POTENTIALLY HAZARDOUS VOLTAGES ARE PRESENT AT THE TERMINALS OF THE MODEL 278.  
ALL ELECTRICAL POWER SHOULD BE REMOVED WHEN CONNECTING OR DISCONNECTING WIRING.  
THIS DEVICE SHOULD BE INSTALLED AND SERVICED BY QUALIFIED PERSONNEL.

## Installation Instructions

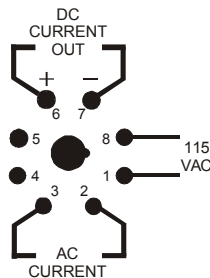
### INSTALLATION

The **Model 278 AC Current Transducer** requires an 8-pin mounting socket, such as the Time Mark Model 51X120.

The base connecting diagram on the unit shows the pin connection numbers for the 115 volt power, the AC Current input, and the DC Current Out.

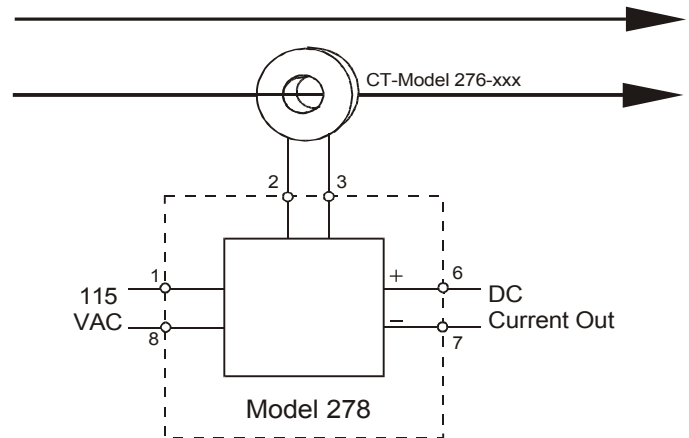
Connect the appropriate wiring to the socket as required (See the *Typical Application diagram*).

### PIN DRAWING



**NOTE:** When installing the Model 278 Transducer in areas of high humidity or contamination, it is recommended that the base area and all exposed metal parts of the socket be coated liberally with a good quality silicon grease, such as Dow Corning DC-4 or DC-4X. Insert the unit into the socket and wipe off excess grease around the base. This will prevent the entrance of moisture and other contaminants into the base and socket areas.

### TYPICAL APPLICATION



### TROUBLESHOOTING

Should the **Model 278 AC Current Transducer** fail to operate properly, check that all voltage is present, and is of the correct voltage level. Check all fuses and verify that all wiring connections are correct. If problems persist, contact your local Time Mark Distributor, or the factory for assistance, *Monday-Friday, 8 a.m. to 5 p.m. CST.*

### WARRANTY

The **Model 278 AC Current Transducer** is warranted to be free from defects in materials and workmanship, and is covered by our exclusive **5-year Unconditional Warranty**. If this device fails to operate, for any reason, we will repair or replace it free, for five years from the date of purchase. Contact the Time Mark Sales department, Monday through Friday; 8 a.m. to 5 p.m., CST, for further details.


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