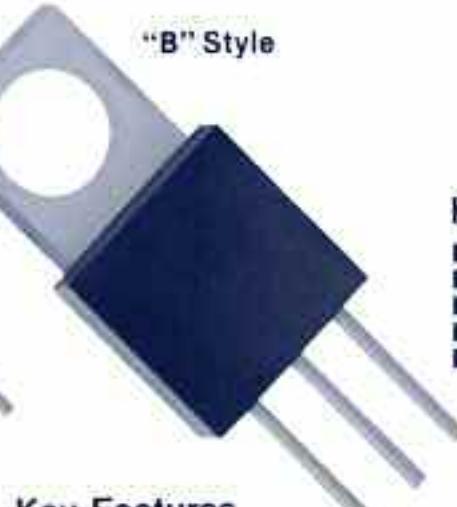
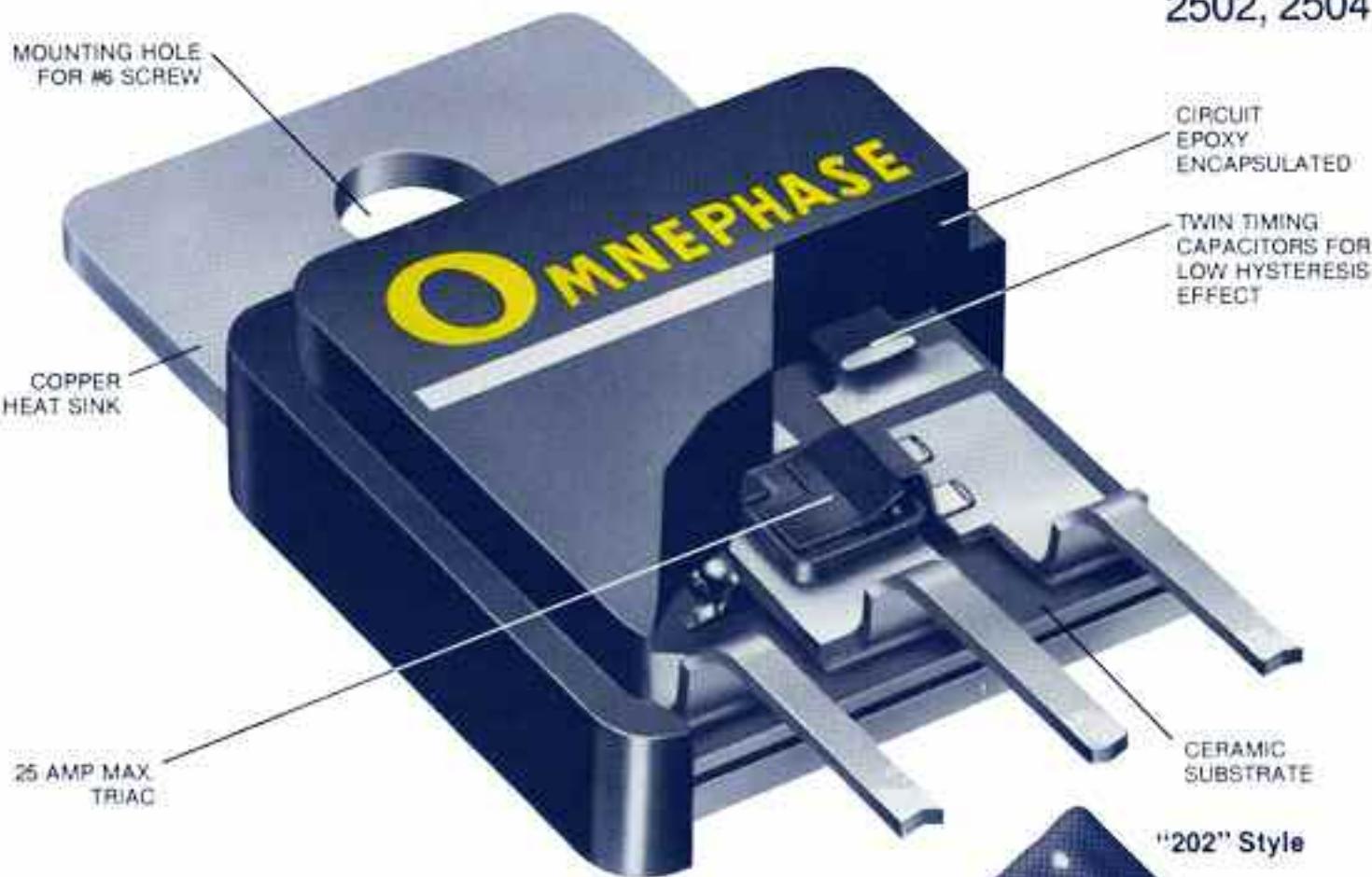


# Omnephase

AC Phase Control/Series 202, 204, 602, 604, 1002, 1004, 1502, 1504,  
2502, 2504



## Key Features

- Low cost.
- Totally encapsulated circuit.
- 2 amp rating (120 VAC).
- Double time constant.
- Printed circuit board mounting.

## Key Features

- Power capacity up to 6000 watts.
- Thick film technology.
- Simple 3 terminal connection.
- Low hysteresis effect—double time constant.

## Key Features

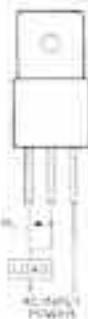
- Low cost.
- 6, 10, 15 and 25 amp ratings.
- Compact size.
- Rugged epoxy encapsulated design.
- Heat sink or potentiometer mounting.

ICM

Industrial Products Distributing, Inc.  
4061 S.R. 182  
New London, OH 44851 USA  
Phone: 419-829-5093  
Toll-free: 800-543-8142  
Fax: 419-829-4216  
Toll-free fax: 800-731-8142  
[www.ipdc.com](http://www.ipdc.com)  
[info@ipdc.com](mailto:info@ipdc.com)

# Omnephase

## AC Phase Control — Applications Data



Standard Connection

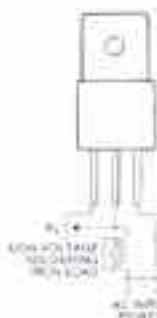


Standard Connection with RFI\* Added

\*Supplied by Customer.  
Recommended Values for "L" & "C":  
 $L = 100 \text{ Micro Henry}$   
 $C = .1 \text{ mil } 400 \text{ volt}$



Fan Speed Control with RFI Added

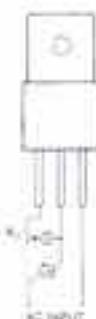
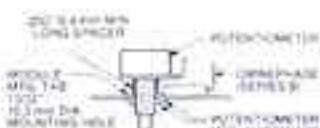


Temperature Control for Transformer Type Soldering Iron



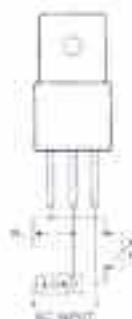
Switched Rr

Replacing Potentiometer. Typical Applications Include Blender / Mixers, Heater Controls, Speed Controls, Lamp Dimming.



AC Motor Speed Control with Positive Feedback

"G" represents an AC generator providing between 50 to 100 VAC and directly coupled to the shaft of the driving motor (M) which may be an induction motor. Readjusts the speed setting while providing a feedback loop to maintain a constant output speed under varying load conditions.



Shunt Feedback Control System

Shunt feedback control system. When  $R_s$  is a negative coefficient resistance element such as a thermistor or a photocell, the "Omnephase" may be used to control temperature or light intensity as a function of the value of  $R_s$ . A feedback loop is thus established and maintains a specific output to the load.



Industrial Products Distributing, Inc.

4051 S.R. 162

New London, OH 44851 USA

Phone: 419-929-5093

Toll-free: 800-543-8142

Fax: 419-929-4218

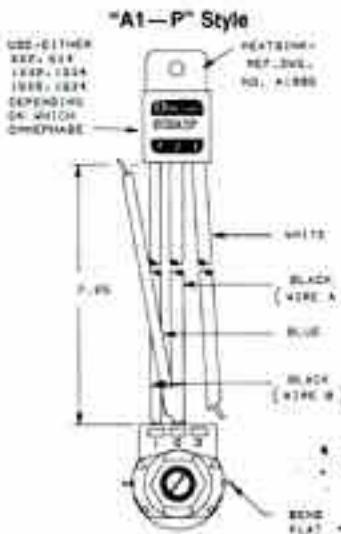
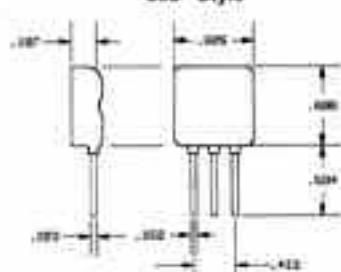
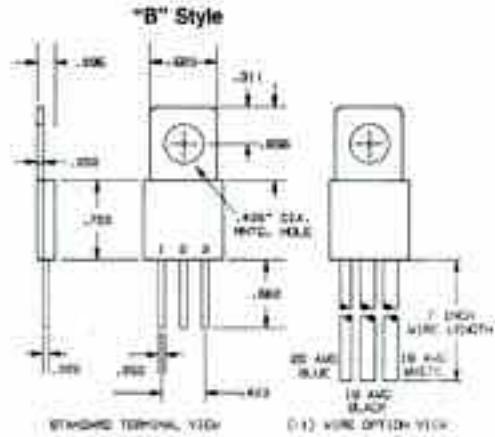
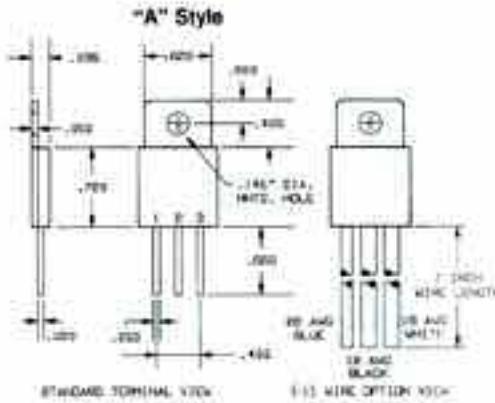
Toll-free fax: 800-731-8142

[www.ipdco.com](http://www.ipdco.com)

[info@ipdco.com](mailto:info@ipdco.com)

# Omnephase

## AC Phase Control



### Specifications

#### Electrical

##### Phase Control

- Low hysteresis effect
- Full wave control

##### Input

- 120 or 240 VAC RMS
- Frequency: 50/60 cycles

##### Output

- Triac output, full wave AC
- Rating: Max. 2, 6, 10, 15, and 25 amps  
Min. 40 milliamps
- Max power capacity to 6000 watts
- Hysteresis: 15% typical
- Forward Voltage Drop: 1.5 volts
- Leakage Current: 1.5 milliamperes
- Off State Voltage: 400 volts
- Peak Surge on State Current: 10 times rated current for 1 cycle at 60 Hertz

#### Protection

- Dielectric insulation: lead to lead — 1500 volts RMS

#### Physical

- Mounting:  
"A" Style: 9/16" hole for #8 screw.  
"B" Style: 13/32" hole for potentiometer.
- Termination: three 10/32" leads.
- C-wire leads
- Weight: 10 grams

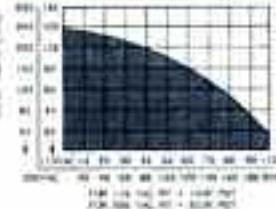
#### Environmental

- Operating temperature: measured at the triac  
—40°C to +95 degrees C maximum
- Storage Temperature: -40 degrees C to +125 degrees C maximum
- Humidity: 95% relative

### Typical Output V/S External Potentiometer



Typical Output Waveform



### Omnephase Product Numbering

15 02 A I P

POTENTIOMETER OPTION

#b P = WITH POT WIRED SEE VOLTAGE RATING FOR VALUE  
02 POT = ACR-100K  
04 POT = ACR-200K

WIRE OPTION

I = WITH WIRES

STYLE

A = A TYPE HEAT SINK  
B = B TYPE HEAT SINK

\* NOTE a WIRES ARE NOT AVAILABLE ON 2 AMP SERIES

\* NOTE b POTENTIOMETER AVAILABLE WITH TA<sup>+</sup> HEATSINK ONLY



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www.ipdco.com • info@ipdco.com

