

# TC2000

## Three Phase Two Leg Power Controller



The TC2000 series is available as a Solid State Contactor or an SCR Power Controller. Each can be configured to control three phase two-leg resistive loads (three-wire delta or wye) or two independent single phase resistive loads. The TC2000 can accept a logic input (AC or DC) or an analog or potentiometer input.

The TC2000 is a compact back-panel mounted unit with a fold-down front door for easy configuration access. Units above 100 amp are fan cooled. Units are equipped with such protective features as high speed fuses with optional fuse failure microswitch and varistors. The TC2000 is insensitive to phase rotation of the supply and self synchronizes to the line frequency. It has a partial load unbalance sensing option with an alarm relay to annunciate a change in any leg of >20%.

### Ordering codes

TC2000	1	2	3	4	5	6	7	8
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9	00
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Fuses internal, see page 3-47.

#### 1 Load Configuration

- 02 Three phase loads
- 21 Two single phase loads

#### 2 Current

- 60A 60 amps
- 75A 75 amps
- 100A 100 amps\*
- 150A 150 amps\*
- 250A 250 amps\*
- 300A 300 amps\*
- 400A 400 amps\*
- 500A 500 amps\*

#### 3 Line to Line Voltage

- 120V 120 volts
- 240V 240 volts
- 277V 277 volts
- 440V 440 volts
- 480V 480 volts
- 500V 500 volts

#### 4 Auxiliary Supply

- 000 NONE
- 110V 110 volts
- 120V 120 volts
- 220V 220 volts
- 240V 240 volts

#### 5 Input 1

- 0V5 0-5 volts
- 1V5 1-5 volts
- 0V10 0-10 volts
- 2V10 2-10 volts
- 0mA20 0-20mA
- 4mA20 4-20mA
- LGC Logic dc input
- ACL Logic ac input

Auxiliary supply required only for analog inputs or units over 75A.

#### 7 Language

- ENG English
- FRA French
- GER German

#### 6 Input 2

- 000 Three phase loads
- Single phase loads select from input 1

### Features

- 60-500 amps, 500Vac, max.
- selectable input signal
- optional load diagnostics

### Specifications

#### Dimensions:

- Up to 150A: 480H x 133W x 268D mm; 10kg
- 250A: 480H x 248W x 268D mm; 16kg
- 300 to 500A: 570H x 248W x 268D mm; 16.5kg

#### Load type:

Resistive

#### Firing mode:

Logic ON-Off or fast cycle with supply voltage compensation

#### Operating temperature:

0 to 45°C, 5 to 95% RH, non-condensing

#### Inputs:

DC Logic: ON:>5V at >4mA, 25V max

OFF: <1V

AC Logic: ON: >85V, 265V max

OFF: <10V

DC voltage: 0-5V, 1-5V, 0-10V, 2-10V,

68KΩ

DC current: 0-20mA or 4-20mA, 250Ω

Potentiometer: 5KΩ, external

#### Mounting:

Panel mounting

#### 8 Options

- PLU Partial Load Unbalance† (open in alarm)
- IPU Partial Load Unbalance† (closed in alarm)
- FILT Filter (100A/150A)

#### 9 Options

- FUMS Fuse fail microswitch
- FUSE Standard fuse

\* Fan cooled

External fuses and holders may be ordered separately, see pages 3-47 to 3-49.

†PLU/IPU are only available for three phase applications with analog or DC Logic Input.