

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 announce 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*

* Fan cooled

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.

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

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
FUUSE Standard fuse

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