

**EUROTHERM**

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**TE100**

**Solid State Contactor  
60A to 125A**

Installation and  
Operating Instructions

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Appendix 1 - Coding Information

## 1.0 GENERAL

The type TE100 solid state contactor is a cost effective single-phase thyristor unit which operates in the whole-cycle firing mode in response to a logic level input, either ac or dc.

It is designed for the control of electroheat loads with resistive characteristics only and with a low temperature coefficient of resistance.

### 1.1 Labels

<b>EI EURO THERM</b>	(1.11)
WORTHING, ENGLAND :0903-68500	
MODEL : TE100/60A/240V/00/00	
SERIAL No : X02557/001/002/11/88	
RATING : 60A 240V AUXILIARY SUPPLY :	
INPUT : LOGIC	
ANY OTHER FUSE INVALIDATES GUARANTEE	
FERRAZ X76656	

For your code details refer to appendix 1 at the back of this booklet.

## 2.0 MECHANICAL INSTALLATION

This model TE100 may be installed in two different ways:

- bulkhead
- semi through panel

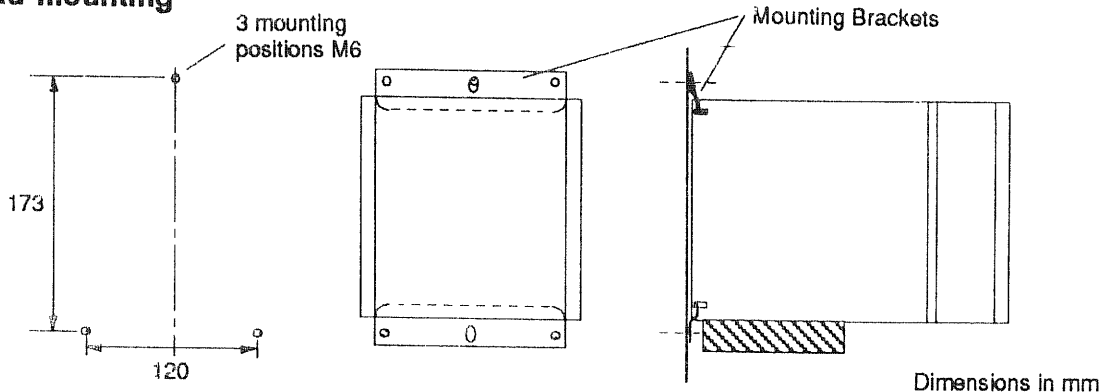
Two mounting brackets are supplied with each unit.

For both types of mounting, following instructions apply.

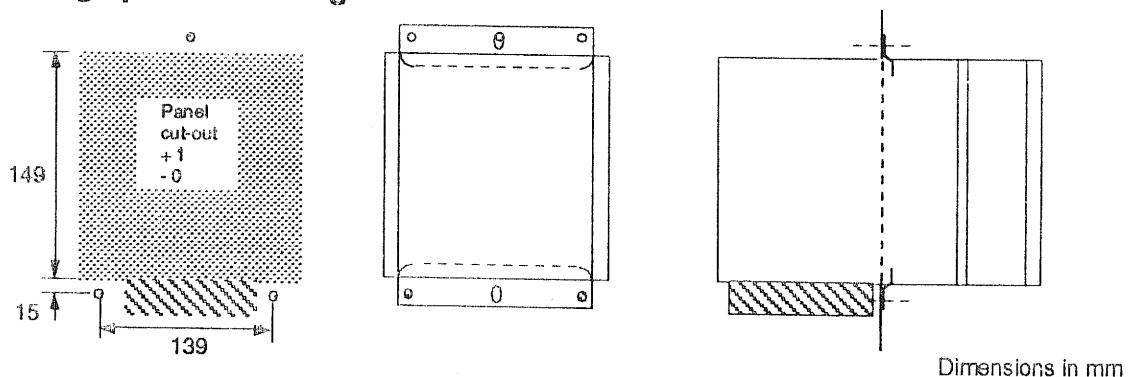
- 1) Attach both brackets to the panel, being careful to fix them correctly orientated, as shown!  
The lower bracket should be fixed by the outer mountings.  
The upper bracket should be fixed by the central mounting.

*Note: If mounting several units vertically an absolute minimum of 100mm must be allowed between each unit to ensure adequate air circulation.*

### Bulkhead mounting



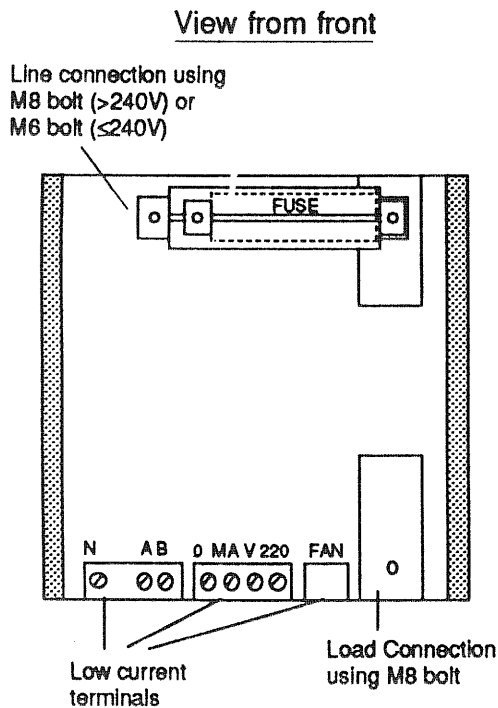
### Semi through panel mounting



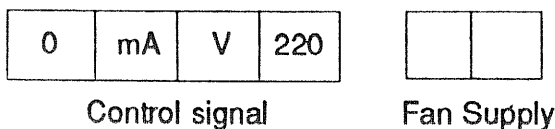
- 2) Slide the contactor onto the lower bracket.  
Two channels are provided for this in the heatsink. Dependent upon the mounting chosen, use either:
  - the channels at the back of the heatsink (for bulkhead mounting), or
  - the channels in the middle (for semi-through panel mounting).
- 3) Slacken the screw of the upper bracket so that it may be lifted clear of the top of the unit, then slide into the heatsink channels.
- 4) Once installed, re-tighten all screws.

### 3.0 ELECTRICAL INSTALLATION

#### 3.1 Power Connections



#### 3.2 Low Current Connections



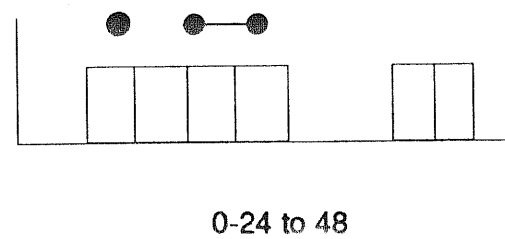
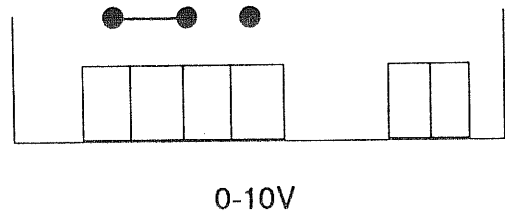
See 6.0 for 2 and 3 phase connections.

#### 3.3 Control

Between terminals 0 and mA, the user may supply a logic signal of 0-20mAac or dc.

Between terminals 0 and V, the user may supply a logic signal of either 0-10Vac or dc or 0-24V to 48Vac or dc

The input link has to be selected at installation



*Note that the unit is delivered with the link in the 0-10V position*

#### 3.4 Fan Supply

The 125A units only are force ventilated. Connect the supply appropriate to the unit specification (110-240V)

#### 3.5 Partial Load Failure (PLF) (Option)

Connect neutral to terminal N. Relay output (either N-O or N-C) connections are to terminals A and B. Ratings are 2A, 264V, max.

Note: Selection of N-O or N-C is by link.

## 4.0 INDICATIONS

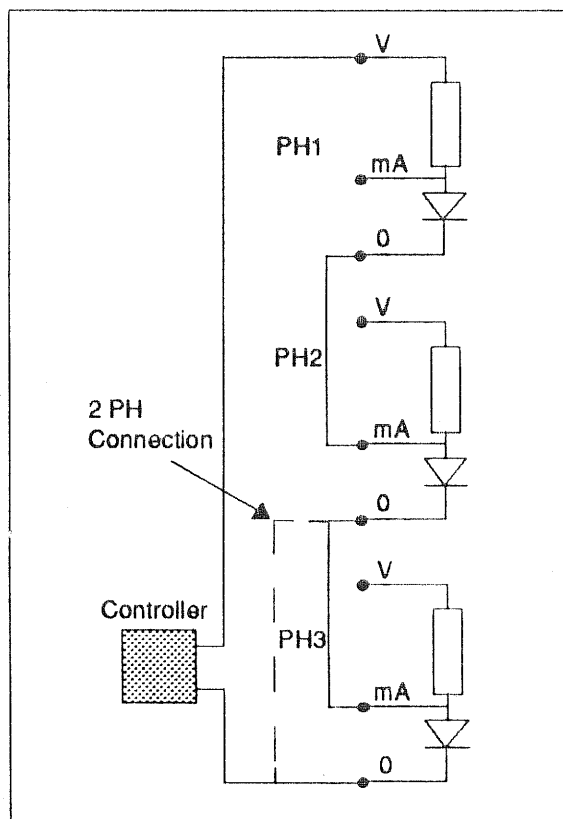
Two LED indicators are fitted which may be utilised as a diagnostic aid.

LED		Indication
Green	Red	
0	0	No control signal/ No contactor supply (or failed fuse)
1	0	Control signal present / Normal conduction ('on') state
0	1	No control signal / Normal non-conduction ('off') state
1	1	Control signal present / Contactor supply but no conduction - Electrical fault

## 5.0 FUSES

The integral semiconductor - protection fuse is installed for the protection of the contactor/thyristor unit only. It is not intended for protection of other installed equipment and its use in such a role may contravene local standards.

## 6.0 TWO AND THREE PHASE CONNECTIONS



Current	Voltage	Eurotherm No.	Ferraz No.	Brush No.60A
60A	240V 440V 500V	CS 172 671 CH 120094 CH 120094	2.5 URGS17-75X76656 6.6URT217-90A99958 6.6URT217-90A99958	E1000/90 E1000/90
75A	240V 440V 500V	CS 172 672 CH 120 114 CH 120 114	2.5URZ 17-100Y85558 6.6URT217-110B99959 6.6URT217.110B99959	EE1000/110 EE1000/110
100A	240V 440V 500V	CS 172 673 CH 120 154 CH 120 154	2.5 URZ 17.125697526 6.6URT217.150C99960 6.6URT217.150C99960	EE10000/150 EE1000/150
125A	240V 440V 500V	CS 172 674 CH120 154 CH 120 154	2.5URZ 17-150W85556 6.6URT217-150C99959 6.6URT217-150C99959	EE1000/150 EE1000/150

Different suitable fuses may become available from time to time from these or other manufacturers.

For further advice please contact either our Power Products Applications Department or your local Eurotherm engineer.

# Appendix 1 - Coding Information

## Output Current Voltage

	Basic Code	RMS Current Rating Code	RMS Voltage Rating Code
60A 240V	TE100	60A	240V
60A 440V		60A	440V
60A 500V		60A	500V
75A 240V		75A	240V
75A 440V		75A	440V
75A 500V		75A	500V
100A 240V		100A	240V
100A 440V		100A	440V
100A 500V		100A	500V
125A 240V (blown)		125A	240V
125A 440V (blown)		125A	440V
125A 500V (blown)		125A	500V

Basic Product    Output Current    Voltage Rating    Fan Supply Voltage    Option    End

TE100 -    -    -    -    - 00

## Fan Supply Voltage

Code

60-100A units	00
125A units - Fan voltage 110V	110V120
Fan volatge 220V	220V240

## Option

Code

Partial Load Failure	PLF
None	00

