

# TC2000 TC2001

MODELS



## Two Phase Solid State Relays

### Specification Sheet

- **Current range from 25A to 1650A at 40°C**
- **Voltage up to 500V (690V for TC2001)**
- **Logic and analogue inputs**
- **Phase angle, burst firing, soft start and single cycle firing available**

Compact, two phase thyristor power switches for electrical heating applications from 100 to 690 volts, 60 to 1200 amps. Higher current ranges available with separate MC2001 driver and thyristor units.

#### Economic three phase power control

The TC2000 and TC2001 use two thyristor pairs to switch the supply to two legs of a three phase, three wire star or delta load. They can also control two independent single phase loads. The TC2000 and TC2001 work with logic or analogue inputs and deliver whole supply cycles to the load for minimum electrical interference.

#### Compact size and low power dissipation

These units give space-efficient power control for three phase loads. Switching only two phases reduces by 33% the power dissipated by the thyristors. The compact size and lower dissipation mean that the control cubicle too can be more compact and less expensive.

#### Better temperature control than contactors

For a reasonable lifetime, mechanical contactors cannot be switched too frequently. The resulting long cycle times cause temperature fluctuation. Shorter cycle times possible with thyristors mean power can be delivered exactly as it is needed to maintain a constant temperature. When used with analogue inputs the TC2000 and TC2001 also compensate for supply variations to hold load power constant and further reduce temperature changes.

#### Low maintenance costs

Mechanical contactors in electrical heating applications can switch millions of times every year, resulting in relatively short lifetimes. The TC2000 and TC2001 have no moving contacts so will last almost indefinitely.

#### Additional savings

The short on/off cycle times cause less heater expansion and contraction and reduce breakage due to fatigue and thermo-mechanical stress. Overall savings include reduced costs of new heaters, contacts, installation and lost production. The reduction of scrap also provides a positive benefit.

## TC2000

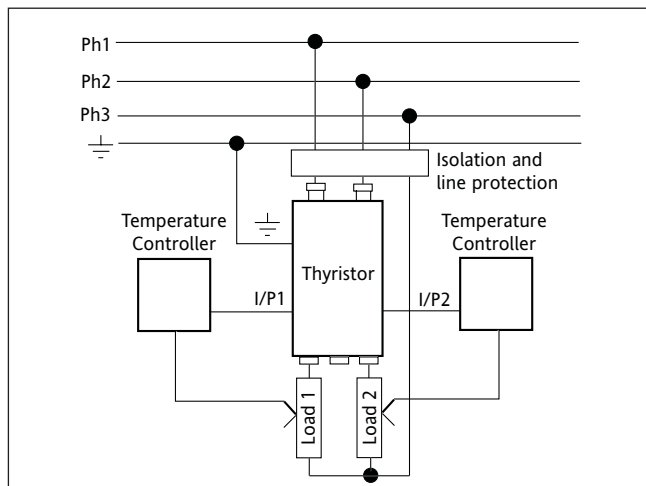
The TC2000 is suitable for controlling Resistive loads with low temperature coefficient. The firing mode is either Burst Firing for analogue inputs or Logic Firing for logic inputs.

## TC2001

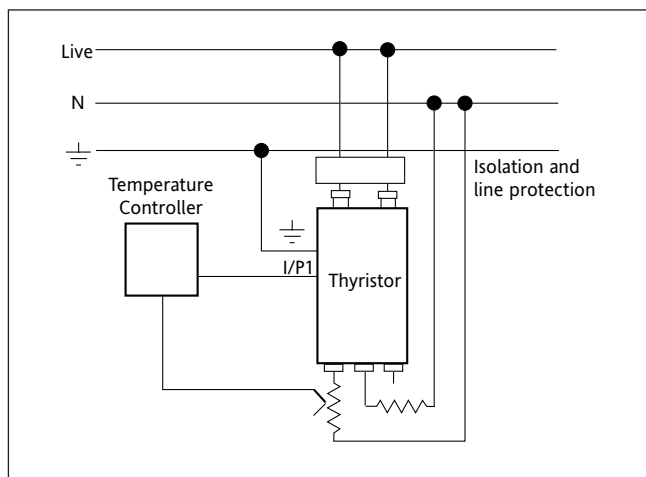
The TC2001 is suitable for controlling Inductive loads including three phase transformers as well as Resistive loads with low temperature coefficient. The firing mode is either Burst Firing with adjustable delayed firing angle on first Cycle or Logic Firing.

The TC2000 and TC2001 thyristor units can either be used to drive either a single three phase 3 wire load or two independent single phase loads.

Example of three phase load being controlled by a TC2000 or TC2001. Load connection "02" in ordering code.



Example of two single phase loads being controlled by TC2000 or TC2001. Load connection "21" in ordering code.



## SPECIFICATION

|                        |                                                                                                                                                                                                                 |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Current:               | 60A to 1650A per channel (500A max. for TC2000)                                                                                                                                                                 |
| Voltage:               | 120V to 500V per channel (+10%, -15%)                                                                                                                                                                           |
| Supply frequency:      | 50Hz to 60Hz                                                                                                                                                                                                    |
| Auxiliary supply       | TC2000: 100V to 240V (+10%, -15%). No auxiliary supply for 60A and 75A logic input units without PLU option. Rating 5VA + fans<br>TC2001: Up to 500A none (self supply), 750A to 1200A-115 or 230VAC fan supply |
| Environment:           | Pollution degree 2 (IEC 664)                                                                                                                                                                                    |
| Altitude:              | Maximum altitude 2000m                                                                                                                                                                                          |
| Storage temperature:   | -10°C to 70°C                                                                                                                                                                                                   |
| Operating temperature: | 0°C to 50°C with unit mounted vertically. (40°C for 500A units)                                                                                                                                                 |

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cooling:                 | Natural cooling up to 75A<br>Two fans for 100A and 250A, (additional auxiliary supply consumption 25VA per fan)<br>Three fans from 300A to 500A, (additional auxiliary supply consumption 25VA per fan)                                                                                                                                                                                                                                             |
| TC2001 only:             | 750A to 1200A one fan 230V 115W (auxiliary supply)<br>Over temperature shut down for fan cooled units                                                                                                                                                                                                                                                                                                                                               |
| Power dissipation:       | Allow for 2Watts per amp per switched phase (includes thyristors and fuses)                                                                                                                                                                                                                                                                                                                                                                         |
| Humidity:                | 5% to 95% RH non condensing                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Enclosure protection:    | IP20 (IEC 529)                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Electrical safety:       | Complies with EEC Low Voltage Directive 73/23/EEC dated 19/2/73 amended by directive 93/68/EEC dated 22/7/93<br>EN 61010 installation category 3 (voltage transients must not exceed 4.0KV)                                                                                                                                                                                                                                                         |
| Electrical protection:   | RC snubber network and varistor<br>Built in high speed fuses for thyristor protection only. Line protection to be provided separately                                                                                                                                                                                                                                                                                                               |
| Load                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Load types               | TC2000: Resistive load<br>TC2001: Any three phase constant resistance or inductive load                                                                                                                                                                                                                                                                                                                                                             |
| Load configuration:      | 3 wire star, 3 wire delta                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Control type:            | Two phases of a three phase system                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Phase rotation:          | Phase rotation insensitive - connect phases in any order (except when PLU selected on TC2001)                                                                                                                                                                                                                                                                                                                                                       |
| Operation                |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Firing modes             | TC2000 Burst: Power level determined by analogue input<br>Cycle time 600ms at 500% power<br>Logic: Cycle time defined by logic input<br>Switches on zero crossing in both of the above firing modes<br>TC2001 Burst: Fast cycle 600ms or slow cycle 20s<br>Logic: Cycle time defined by logic input<br>Switches on at zero voltage for resistive loads, at zero current for inductive loads (adjusted by pot. on unit)<br>Setpoint ramp after reset |
| Power ramps:             |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Control                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Analogue input:          | TC2000 DC voltage: 0-5V, 1-5V, 0-10V, 2-10V<br>Input impedance 68k<br>DC current: 0-20mA, 4-20mA<br>Input impedance 250Ω<br>TC2001 DC voltage: 0-5V, 1-5V, 0-10V, 2-10V<br>Input impedance 100k<br>DC current: 0-20mA, 4-20mA<br>Input impedance 50ohmΩ                                                                                                                                                                                             |
| Second input:            | Same input ranges as first input - lowest used                                                                                                                                                                                                                                                                                                                                                                                                      |
| Logic input:             | Range selected from analogue input.<br>>5V =ON, <1V=OFF                                                                                                                                                                                                                                                                                                                                                                                             |
| Control mode:            | Open loop, V <sup>2</sup> 12 or W                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Linearity:               | Burst firing ±2% for all feedback modes                                                                                                                                                                                                                                                                                                                                                                                                             |
| Stability:               | Burst firing ±2% for +10% to -15% supply variation, for 0°C to 50°C ambient temperature                                                                                                                                                                                                                                                                                                                                                             |
| Enable/inhibit:          | Logic input of +10V enables operation                                                                                                                                                                                                                                                                                                                                                                                                               |
| Alarm                    | Loss of any supply phase, under voltage - below 70% or 50%, over voltage above 20% of nominal, frequency error, external measurement signal failure. Thermal switch operation. Any of these will give an alarm                                                                                                                                                                                                                                      |
| Options                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Partial load unbalance:  | Detects 10% unbalance of line currents, fuse failure or short circuit of one thyristor<br>Only with three phase loads                                                                                                                                                                                                                                                                                                                               |
| Fuse blown microswitches |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

## TC2000 Ordering code

|        |   |   |   |   |   |   |   |   |   |    |    |
|--------|---|---|---|---|---|---|---|---|---|----|----|
| TC2000 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 00 |
|--------|---|---|---|---|---|---|---|---|---|----|----|

Fuses internal

|                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1 Load Configuration</b><br><b>02</b> Three phase loads<br><b>21</b> Two single phase loads<br><b>2 Current</b><br><b>60A</b> 60 amps<br><b>75A</b> 75 amps<br><b>100A</b> 100 amps*<br><b>150A</b> 150 amps*<br><b>250A</b> 250 amps*<br><b>300A</b> 300 amps*<br><b>400A</b> 400 amps*<br><b>500A</b> 500 amps*<br><i>* Fan cooled</i> | <b>3 Line to Line Voltage</b><br><b>120V</b> 120 volts<br><b>240V</b> 240 volts<br><b>277V</b> 277 volts<br><b>440V</b> 440 volts<br><b>480V</b> 480 volts<br><b>500V</b> 500 volts<br><b>4 Auxiliary Supply <sup>(1)</sup></b><br><b>000</b> NONE<br><b>110V</b> 110 volts<br><b>120V</b> 120 volts<br><b>220V</b> 220 volts<br><b>240V</b> 240 volts<br><i>(1) Auxiliary supply only required for analogue inputs or units over 75A</i> | <b>5 Input 1</b><br><b>0V5</b> 0-5 volts<br><b>1V5</b> 1-5 volts<br><b>0V10</b> 0-10 volts<br><b>2V10</b> 2-10 volts<br><b>0mA20</b> 0-20mA<br><b>4mA20</b> 4-20mA<br><b>LGC</b> Logic dc input<br><b>ACL</b> Logic ac input | <b>6 Input 2</b><br>Three Phase loads<br><b>000</b> None<br>Single Phase loads<br><b>0V5</b> 0-5 volts<br><b>1V5</b> 1-5 volts<br><b>0V10</b> 0-10 volts<br><b>2V10</b> 2-10 volts<br><b>0mA20</b> 0-20mA<br><b>4mA20</b> 4-20mA<br><b>LGC</b> Logic dc input<br><b>ACL</b> Logic ac input<br><b>7 Language</b><br><b>ENG</b> English<br><b>FRA</b> French<br><b>GER</b> German | <b>8 Options</b><br><b>PLU</b> Partial Load Unbalance† (open in alarm)<br><b>IPU</b> Partial Load Unbalance† (closed in alarm)<br>† PLU /IPU are only available for three phase applications with analogue or DC Logic Input | <b>9 Options</b><br><b>FUMS</b> Fuse Fail Microswitch<br><b>FUSE</b> High Speed Fuse<br><b>NOFUSE</b> No Fuse *<br><i>* High speed fuses are not recommended for SWIR loads</i><br><b>10 EMC Filter</b><br><b>-</b> No filter<br><b>FILT</b> Filter |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Please note that replacement fuses are marked with a higher current rating than the thyristors. This allows correct operation at elevated temperatures and does not imply that higher current is permissible.

### SPARE FUSE

| Current rating | Fuse rating | Fuse number  |
|----------------|-------------|--------------|
| 60A            | 80A         | LA172468U080 |
| 75A            | 100A        | LA172468U100 |
| 100A           | 125A        | LA172468U125 |
| 150A           | 200A        | LA172468U200 |
| 250A           | 315A        | LA172468U315 |
| 300A           | 410A        | LA172468U400 |
| 400A           | 500A        | LA172468U500 |
| 500A           | 630A        | LA172468U630 |

## TC2001 Ordering code

|        |   |   |   |   |   |   |   |   |   |    |    |    |    |
|--------|---|---|---|---|---|---|---|---|---|----|----|----|----|
| TC2001 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|--------|---|---|---|---|---|---|---|---|---|----|----|----|----|

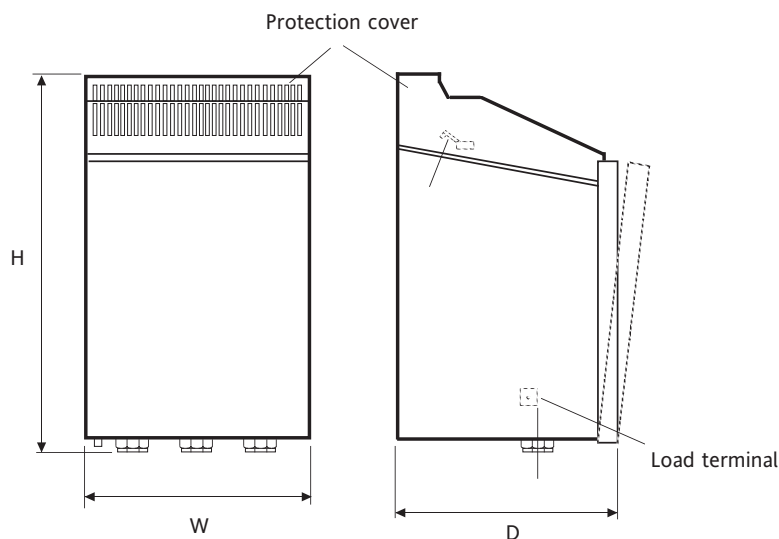
|    |    |    |
|----|----|----|
| 14 | 15 | 00 |
|----|----|----|

Fuses included

| <b>1 Load Configuration ††</b><br><b>02</b> Three phase loads<br><b>21</b> Two single phase loads<br><b>2 Current</b><br><b>60A</b> 60 amps<br><b>75A</b> 75 amps<br><b>100A</b> 100 amps<br><b>150A</b> 150 amps*<br><b>250A</b> 250 amps*<br><b>300A</b> 300 amps*<br><b>400A</b> 400 amps*<br><b>500A</b> 500 amps*<br><b>750A</b> 750 amps*<br><b>900A</b> 900 amps*<br><b>1200A</b> 1200 amps*<br><b>1650A</b> 1650 amps*<br><i>* Fan cooled</i><br>† Above 1200A, thyristors are external to drive using MC2001 Driver. (690V not available)<br>†† Consult Eurotherm if driving three phase transformer loads | <b>3 Line to Line Voltage</b><br><b>100V</b> 100 volts<br><b>110V</b> 110 volts<br><b>115V</b> 115 volts<br><b>120V</b> 120 volts<br><b>200V</b> 200 volts<br><b>220V</b> 220 volts<br><b>240V</b> 240 volts<br><b>380V</b> 380 volts<br><b>400V</b> 400 volts<br><b>415V</b> 415 volts<br><b>440V</b> 440 volts<br><b>480V</b> 480 volts<br><b>500V</b> 500 volts<br><b>690V</b> 690 volts<br><b>4 Fan Supply</b><br><b>00</b> Internal up to 1200A<br><b>115V</b> 115 volts<br><b>230V</b> 230 volts<br><b>5 Input 1</b><br><b>0V5</b> 0-5 volts<br><b>1V5</b> 1-5 volts<br><b>0V10</b> 0-10 volts<br><b>2V10</b> 2-10 volts<br><b>0mA20</b> 0-20mA<br><b>4mA20</b> 4-20mA | <b>6 Input 2</b><br><b>000</b> Three phase loads<br>Single phase loads<br><b>0V5</b> 0-5 volts<br><b>1V5</b> 1-5 volts<br><b>0V10</b> 0-10 volts<br><b>2V10</b> 2-10 volts<br><b>0mA20</b> 0-20mA<br><b>4mA20</b> 4-20mA<br><b>7 Firing Mode</b><br><b>LGC</b> Logic<br><b>FC</b> Fast cycle<br><b>SC</b> Slow cycle<br><b>8 Control Mode</b><br><b>00</b> Supply compensation<br><b>V<sup>2</sup></b> Load voltage <sup>2</sup><br><b>I</b> Load current <sup>2</sup><br><b>W</b> Active Power<br><b>9 Language</b><br><b>ENG</b> English<br><b>FRA</b> French<br><b>GER</b> German | <b>10 Frequency</b><br><b>-</b> 50Hz<br><b>60H</b> 60Hz<br><b>11 Current Transducer</b><br><b>-</b> No current transducer<br><b>CTE</b> Current transducer fitted<br><b>12</b><br><b>13 Partial Load Failure</b><br><b>PLU</b> Relay open in alarm<br><b>IPU</b> Relay closed in alarm<br><b>14 Fuse</b><br><b>FUSE</b> High speed fuse<br><b>FUMS</b> High speed fuse with microswitch<br><b>NOFUSE</b> No fuse *<br><i>* High speed fuses are not recommended for SWIR loads</i> | <b>15 MC Driver</b><br><b>-</b> No MC Driver<br><b>MC</b> MC Driver<br><b>SPARE FUSE</b><br><table> <tr> <th>Current rating amps</th><th>Fuse rating amps</th><th>Fuse number</th></tr> <tr> <td>60A</td><td>80A</td><td>LA172468U080</td></tr> <tr> <td>75A</td><td>100A</td><td>LA172468U100</td></tr> <tr> <td>100A</td><td>125A</td><td>LA172468U125</td></tr> <tr> <td>150A</td><td>200A</td><td>LA172468U200</td></tr> <tr> <td>250A</td><td>315A</td><td>LA172468U315</td></tr> <tr> <td>300A</td><td>400A</td><td>LA172468U400</td></tr> <tr> <td>400A</td><td>500A</td><td>LA172468U500</td></tr> <tr> <td>500A</td><td>630A</td><td>LA172468U630</td></tr> <tr> <td>750A</td><td>630A</td><td>LA172468U630 *</td></tr> <tr> <td>900A</td><td>900A</td><td>CS175633U900 *</td></tr> <tr> <td>1200A</td><td>1000A</td><td>CS175633U1000 *</td></tr> <tr> <td>1650A</td><td>1400A</td><td>CS175633U1400 *</td></tr> </table> <i>* Two fuses are required</i><br><b>ACCESSORIES</b><br><table> <tr> <th>Code</th></tr> <tr> <td>Diagnostic 260</td></tr> <tr> <td>260-13-00</td></tr> </table> | Current rating amps | Fuse rating amps | Fuse number | 60A | 80A | LA172468U080 | 75A | 100A | LA172468U100 | 100A | 125A | LA172468U125 | 150A | 200A | LA172468U200 | 250A | 315A | LA172468U315 | 300A | 400A | LA172468U400 | 400A | 500A | LA172468U500 | 500A | 630A | LA172468U630 | 750A | 630A | LA172468U630 * | 900A | 900A | CS175633U900 * | 1200A | 1000A | CS175633U1000 * | 1650A | 1400A | CS175633U1400 * | Code | Diagnostic 260 | 260-13-00 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|------------------|-------------|-----|-----|--------------|-----|------|--------------|------|------|--------------|------|------|--------------|------|------|--------------|------|------|--------------|------|------|--------------|------|------|--------------|------|------|----------------|------|------|----------------|-------|-------|-----------------|-------|-------|-----------------|------|----------------|-----------|
| Current rating amps                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Fuse rating amps                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Fuse number                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                     |                  |             |     |     |              |     |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |                |      |      |                |       |       |                 |       |       |                 |      |                |           |
| 60A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 80A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | LA172468U080                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                     |                  |             |     |     |              |     |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |                |      |      |                |       |       |                 |       |       |                 |      |                |           |
| 75A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 100A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | LA172468U100                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                     |                  |             |     |     |              |     |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |                |      |      |                |       |       |                 |       |       |                 |      |                |           |
| 100A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 125A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | LA172468U125                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                     |                  |             |     |     |              |     |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |                |      |      |                |       |       |                 |       |       |                 |      |                |           |
| 150A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 200A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | LA172468U200                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                     |                  |             |     |     |              |     |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |                |      |      |                |       |       |                 |       |       |                 |      |                |           |
| 250A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 315A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | LA172468U315                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                     |                  |             |     |     |              |     |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |                |      |      |                |       |       |                 |       |       |                 |      |                |           |
| 300A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 400A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | LA172468U400                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                     |                  |             |     |     |              |     |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |                |      |      |                |       |       |                 |       |       |                 |      |                |           |
| 400A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 500A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | LA172468U500                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                     |                  |             |     |     |              |     |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |                |      |      |                |       |       |                 |       |       |                 |      |                |           |
| 500A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 630A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | LA172468U630                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                     |                  |             |     |     |              |     |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |                |      |      |                |       |       |                 |       |       |                 |      |                |           |
| 750A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 630A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | LA172468U630 *                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                     |                  |             |     |     |              |     |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |                |      |      |                |       |       |                 |       |       |                 |      |                |           |
| 900A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 900A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | CS175633U900 *                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                     |                  |             |     |     |              |     |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |                |      |      |                |       |       |                 |       |       |                 |      |                |           |
| 1200A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1000A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | CS175633U1000 *                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                     |                  |             |     |     |              |     |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |                |      |      |                |       |       |                 |       |       |                 |      |                |           |
| 1650A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1400A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | CS175633U1400 *                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                     |                  |             |     |     |              |     |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |                |      |      |                |       |       |                 |       |       |                 |      |                |           |
| Code                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                     |                  |             |     |     |              |     |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |                |      |      |                |       |       |                 |       |       |                 |      |                |           |
| Diagnostic 260                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                     |                  |             |     |     |              |     |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |                |      |      |                |       |       |                 |       |       |                 |      |                |           |
| 260-13-00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                     |                  |             |     |     |              |     |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |              |      |      |                |      |      |                |       |       |                 |       |       |                 |      |                |           |

## Dimensional details

### TC2000 and TC2001



TC2000 and TC2001 (mm)

| Unit               | Height (H) | Width (W) | Depth (D) | Weight |
|--------------------|------------|-----------|-----------|--------|
| upto 150A          | 480        | 133       | 268       | 10kg   |
| 250A               | 480        | 248       | 268       | 16kg   |
| 300-500A           | 570        | 248       | 268       | 16.5kg |
| <i>TC2001 only</i> |            |           |           |        |
| 750A               | 560        | 380       | 510       | 35kg   |
| 900-1200A          | 560        | 380       | 510       | 39kg   |

## Eurotherm: International sales and service

Understanding and providing local support is a key part of Eurotherm's business. Complementing worldwide Eurotherm offices are a whole range of partners and a comprehensive technical support team... to ensure you get a service you will want to go back to.

**AUSTRALIA** Sydney  
Eurotherm Pty. Ltd.  
T (+61 2) 9838 0099  
F (+61 2) 9838 9288  
E [info.au@eurotherm.com](mailto:info.au@eurotherm.com)

**AUSTRIA** Vienna  
Eurotherm GmbH  
T (+43 1) 7987601  
F (+43 1) 7987605  
E [info.at@eurotherm.com](mailto:info.at@eurotherm.com)

**BELGIUM & LUXEMBOURG** Moha  
Eurotherm S.A./N.V.  
T (+32) 85 274080  
F (+32) 85 274081  
E [info.be@eurotherm.com](mailto:info.be@eurotherm.com)

**BRAZIL** Campinas-SP  
Eurotherm Ltda.  
T (+5519) 3707 5333  
F (+5519) 3707 5345  
E [info.br@eurotherm.com](mailto:info.br@eurotherm.com)

**DENMARK** Copenhagen  
Eurotherm Danmark AS  
T (+45 70) 234670  
F (+45 70) 234660  
E [info.dk@eurotherm.com](mailto:info.dk@eurotherm.com)

**FINLAND** Abo  
Eurotherm Finland  
T (+358) 22506030  
F (+358) 22503201  
E [info.fi@eurotherm.com](mailto:info.fi@eurotherm.com)

**FRANCE** Lyon  
Eurotherm Automation SA  
T (+33 478) 664500  
F (+33 478) 352490  
E [info.fr@eurotherm.com](mailto:info.fr@eurotherm.com)

**GERMANY** Limburg  
Eurotherm Deutschland GmbH  
T (+49 6431) 2980  
F (+49 6431) 298119  
E [info.de@eurotherm.com](mailto:info.de@eurotherm.com)

**HONG KONG & CHINA**  
Eurotherm Limited North Point  
T (+85 2) 28733826  
F (+85 2) 28700148  
E [info.hk@eurotherm.com](mailto:info.hk@eurotherm.com)

Guangzhou Office  
T (+86 20) 8755 5099  
F (+86 20) 8755 5831  
E [info.cn@eurotherm.com](mailto:info.cn@eurotherm.com)

Beijing Office  
T (+86 10) 6567 8506  
F (+86 10) 6567 8509  
E [info.cn@eurotherm.com](mailto:info.cn@eurotherm.com)

Shanghai Office  
T (+86 21) 6145 1188  
F (+86 21) 6145 1187  
E [info.cn@eurotherm.com](mailto:info.cn@eurotherm.com)

**INDIA** Chennai  
Eurotherm India Limited  
T (+91 44) 24961129  
F (+91 44) 24961831  
E [info.in@eurotherm.com](mailto:info.in@eurotherm.com)

**IRELAND** Dublin  
Eurotherm Ireland Limited  
T (+353 1) 4691800  
F (+353 1) 4691300  
E [info.ie@eurotherm.com](mailto:info.ie@eurotherm.com)

**ITALY** Como  
Eurotherm S.r.l.  
T (+39 31) 975111  
F (+39 31) 977512  
E [info.it@eurotherm.com](mailto:info.it@eurotherm.com)

**KOREA** Seoul  
Eurotherm Korea Limited  
T (+82 31) 2738507  
F (+82 31) 2738508  
E [info.kr@eurotherm.com](mailto:info.kr@eurotherm.com)

**NETHERLANDS** Alphen a/d Rijn  
Eurotherm B.V.  
T (+31 172) 411752  
F (+31 172) 417260  
E [info.nl@eurotherm.com](mailto:info.nl@eurotherm.com)

**NORWAY** Oslo  
Eurotherm A/S  
T (+47 67) 592170  
F (+47 67) 118301  
E [info.no@eurotherm.com](mailto:info.no@eurotherm.com)

**POLAND** Katowice  
Invensys Eurotherm Sp z o.o.  
T (+48 32) 2185100  
F (+48 32) 2177171  
E [info.pl@eurotherm.com](mailto:info.pl@eurotherm.com)

**SPAIN** Madrid  
Eurotherm España SA  
T (+34 91) 6616001  
F (+34 91) 6619093  
E [info.es@eurotherm.com](mailto:info.es@eurotherm.com)

**SWEDEN** Malmo  
Eurotherm AB  
T (+46 40) 384500  
F (+46 40) 384545  
E [info.se@eurotherm.com](mailto:info.se@eurotherm.com)

**SWITZERLAND** Wollerau  
Eurotherm Produkte (Schweiz) AG  
T (+41 44) 7871040  
F (+41 44) 7871044  
E [info.ch@eurotherm.com](mailto:info.ch@eurotherm.com)

**UNITED KINGDOM** Worthing  
Eurotherm Limited  
T (+44 1903) 268500  
F (+44 1903) 265982  
E [info.uk@eurotherm.com](mailto:info.uk@eurotherm.com)  
[www.eurotherm.co.uk](http://www.eurotherm.co.uk)

**U.S.A.** Leesburg VA  
Eurotherm Inc.  
T (+1 703) 443 0000  
F (+1 703) 669 1300  
E [info.us@eurotherm.com](mailto:info.us@eurotherm.com)  
[www.eurotherm.com](http://www.eurotherm.com)

ED53

© Copyright Eurotherm Limited 2007

Invensys, Eurotherm, the Eurotherm logo, Chessell, EurothermSuite, Mini8, Eycan, Eyris and Wonderware are trademarks of Invensys plc, its subsidiaries and affiliates. All other brands may be trademarks of their respective owners.

All rights are strictly reserved. No part of this document may be reproduced, modified, or transmitted in any form by any means, nor may it be stored in a retrieval system other than for the purpose to act as an aid in operating the equipment to which the document relates, without the prior written permission of Eurotherm limited.

Eurotherm Limited pursues a policy of continuous development and product improvement. The specifications in this document may therefore be changed without notice. The information in this document is given in good faith, but is intended for guidance only. Eurotherm Limited will accept no responsibility for any losses arising from errors in this document.