# PD/CTX TM



# Intelligent current transmitter

The PD/CTX $^{\text{TM}}$ , one in the PD Series of intelligent modules from Eurotherm, is a compact sensor which eliminates the wiring labour cost normally required to display load current. This benefit is obtained when using a pulse density signalling, PDS(IO), logic output from a Eurotherm Series 2000 controller to control a time proportioned Solid State Relay (SSR) or contactor.

# **PDSIO® Load Diagnostics**

The innovative Eurotherm digital transmission technique, superimposes diagnostic data onto the SSR logic wiring. The two logic wires which operate the SSR also carry load current and status information back to the Series 2000 controller. This is referred to as 'PDS Mode 2' operation.

# Additional cost savings

An advantage of the PD/CTX compared to conventional current transformers is that no costly analog input card is required in the controller. This adds to savings already incurred from reduced wiring and labour.

# Mounting

The PD/CTX mounts directly to the SSR mounting screw for convenient location or may be mounted to a panel if desired.

# **Current display**

The measurement made by the PD/CTX and returned to the Series 2000 controller is displayed as RMS load ON-STATE current.

# Load and SSR faults

The PD/CTX also transmits diagnostic information to the controller to show an SSR fault (short circuit condition) or heater fault. The lower display of the controller will display either SSr.F or Htr.F depending upon the particular fault condition.

# **Alarm annunciation**

The Series 2000 controllers can be configured to produce an alarm output based on signalling from the PD/CTX. The following alarms may be configured: heater open circuit fault, SSR short circuit fault, low current alarm, or high current alarm.

# **Alternative operation**

An alternative capability, referred to as 'PDS Mode 5', allows the PD/CTX to monitor relay or triac output load circuits. The PD/CTX can be connected to the logic input of a Series 2000 controller. This version can monitor mechanical or mercury contactors and line voltage SSRs.

# **Ideal for:**

 Designed for Series 2000 controllers

# **Features:**

- No additional wiring
- No additional input card
- Connects to standard Solid State Relays
- Series 2000 controller indicates heater and load fault messages
- No ammeters required
- Transmission of RMS ON-current
- Mounts to Solid State Relay or panel

NB. Solid-State Relay must meet technical requirement shown on back



PD/CTX™ Intelligent Current Transmitter

# **Technical specification**

# General specification

Range	100A
Accuracy	2% (typically at reference conditions)
Temperature	Operating 0 to 55°C (32 to 131°F)
& RH	RH 5 to 90% noncondensing
	Storage -10 to 70°C (14 to 158°F)

Recommended working current is 4A or above (0.5A when using multiple turns)

PDS Mode 2 and Mode 5 compliant

Dimensions	
Width	48.77mm
Height	45.67mm without connector and mounting bracket 93.73mm with connector and mounting bracket
Depth	40.91mm with mounting bracket
Max. conductor	13mm

# **Mode 2 SSR Drive Level**

PD/CTX output rating 5V, 7mA (max) - flying leads

Note: The SSR must be able to switch on from the PD/CTX

# 5V drive signal and draw a maximum of 7mA. **Compatible SSRs for Mode 2 Operation**

Eurotherm model SSDA/xxx

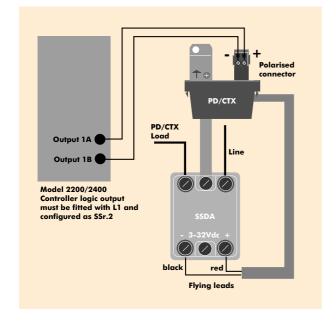
Continental Industries model \$505-O\$J6xx-000

Any industry isolated zero voltage level switching SSR, switching signal max. (5V, 7mA)

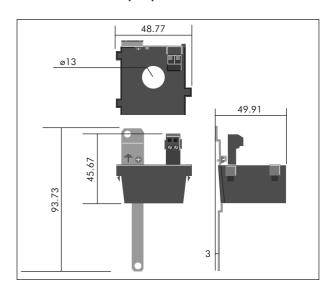
# **Compatible Eurotherm Controllers**

PD/CTX "Mode 2" (M2) All 2200e and 2400 models PD/CTX "Mode 5" (M5) 2208e and 2204e, 2408 and 2404

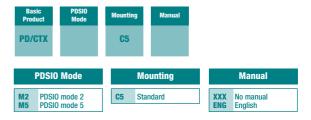
# Connection details: PD/CTX Mode 2



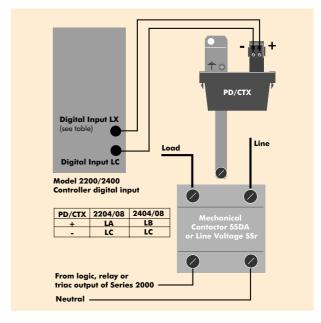
### Dimensional details (mm)



### **Ordering code**



# Connection details: PD/CTX Mode 5



# **EUROTHERM CONTROLS LIMITED**

# http://www.eurotherm.co.uk

# **UK SALES OFFICE**

Eurotherm Controls Limited. Faraday Close, Durrington, Worthing, West Sussex BN13 3PL Telephone Sales: (01903) 695888; Technical: (01903) 695777; Service: (01903) 695444 Fax (01903) 695666

# Sales and support in over 30 countries worldwide

Enquiries/orders to: Eurotherm Controls Limited Export Dept., Faraday Close, Durrington, Worthing. West Sussex BN13 3PL. United Kingdom Telephone (+44 (0)1903) 268500, Fax (+44 (0)1903) 265982





