

Power and Control Isolation » Electronic Time Delay Unit **TD**  
 Key Exchange  
 Door Locks and Actuators



### Electronic Time Delay Unit



A solid state Time Delay unit for use where machines do not come to an immediate stop. The gate access key is held captive in the unit until the desired condition of the machine or process has been achieved. The time delay is internally programmable with range from 60 to 600 seconds (10 minutes). As part of an interlock system, the units are used to control keys giving access to enclosed areas or machines where hazards may be present, until a safe condition has been achieved.

The time delay is initiated by the insertion of a key that would normally be released from the operation of an isolator. Therefore the time delay cannot start until the machine power has been shut off. There is a facility to add an additional switch to a TD to prevent accidental start-up though this shouldn't normally be needed as the initiation key should come from the isolator anyway.

The TD unit uses a timer relay that provides a Delay-on energisation in accordance with VDE 0113-1, 11/98, EN 60204-1, 12/97, EN 1088, 12/97 and IEC 204-1, 11/98.

- Self monitoring time circuits
- Timed release of locked gate access key

### Safety Data

Standards	EN60947-3:2009 ISO EN14119:2013 EN13849-1:2008 EN13849-2:2012 EN62061:2005	
Certifications	CE marked for all applicable directives	
Category	Cat. 4, PLe (EN/ISO 13849-1) and SIL3 (EN/IEC 62061)	
Functional safety data	B10d	5,000,000
	DC	High 99% (with correct monitoring)

### mGard range

mGard is the ultimate range of robust mechanical trapped key products. Trapped key technology offers purely mechanical access locks (removing the need for expensive wiring). mGard offers an extensive variety of modular interlocking solutions.

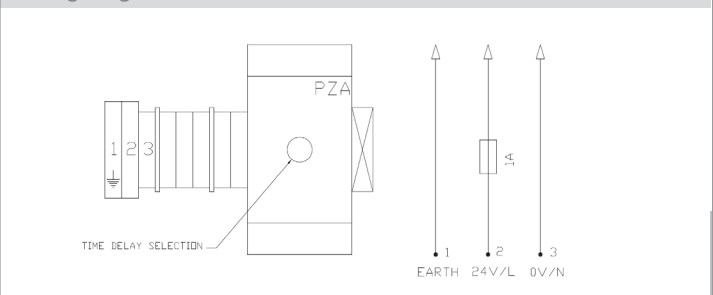
### Technical Specification

Operating Voltage	24V dc, 110V ac, 230V ac
Power Consumption Value	24V dc = 16W 110V ac = 63VA 240V ac = 132VA
Enclosure	Stainless Steel sealed to IP65
Lock Mechanism	Die-cast zinc body with stainless operating mechanism
Voltage Tolerance (all voltages)	85...110% Residual Ripple on AC units DC units: 10%.
Delay-on De-energisation	Approx. 40ms, Recovery Time 80ms.
Time Ranges are internally selectable (24V dc)	60s, 80s, 100s, 140s, 180s, 240s, 300s, 360s, 420s, 480s, 540s & 600s.
Time Ranges are internally selectable (110V ac / 230V ac)	30s, 40s, 50s, 70s, 90s, 120s, 150s, 180s, 210s, 240s, 270s & 300s.
Switch Contact Rating:	300V - 20A
Minimum Operating Current	5mA at 20v

### Article Codes

Type	Part N°
Enclosed (IP65)	TD
N° of Locks	-
2	
Lock Type	
Key and lock types must be specified separately	
Solenoid Voltage	Part N°
24V DC	024
110V AC	110
230V AC	230

### Wiring Diagram



### Dimensional Drawing

