

- Power and Control Isolation
- Key Exchange
- Door Locks and Actuators

» Electronic Time Delay Switch Unit

TS



Electronic Time Delay Switch 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 turning the integrated isolation switch. This will simultaneously shut off the machine power.

The TS 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
- Machine 3 Phase supply isolation

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.

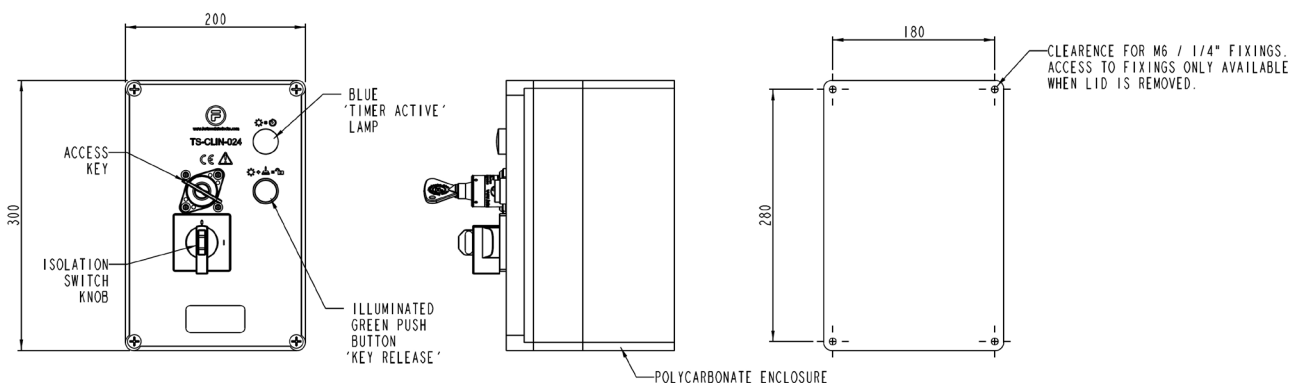
Technical Specification

Operating Voltage	24V dc, 110V ac, 230V ac
Power Consumption Value	24V dc = 16W 110V ac = 63VA 240V ac = 132VA
Time Delay	60s - 600s
Enclosure	Polycarbonate 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:	See tables below
Minimum Operating Current	5mA at 20v

Switch EN60947 / VDE0660 / IEC60947	AC-15	AC-23A-kW		AC-3A-kW		AC-21A
		3 Phase	1 Phase	3 Phase	1Phase	
220V - 240V	12A	7.5	4	5.5	4	lu = lth
380V - 440V	6A	15	7.5	11	5.5	32A
500V - 690V	-	15	-	11	-	

Motor	3 Phase	1 Phase
120V	5 HP	2 HP
240V	10 HP	5 HP
277V	-	5 HP

Dimensional Drawing



Article Codes

Type	Part N°
Enclosed (IP65)	TS
N° of Locks	-
1	
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

