

# Programmable Time Delay Switch Product information LSTDER-L 2 Wire (Optional 3 Wire) LSTDERB-L 2 Wire (Optional 3 Wire)

# **Specifications**



Contact status Normally open Connection type 2 Wire with Optional 3 Wire LED Indicator Colour RFD 230-240Vac +/-10% Supply voltage Frequency 50Hz Max current 10amp Over temp cutout Current 12amp Max Load 2400W (Incandescent) 2400VA (Fluorescent)

Min Load 5W(when no neutral terminal)
Operating temperature 0 to 50 °C

Cycle timer range 30secs to 480 minutes

Factory setting 30secs

Compliance AS/NZS 60669.2 SAA Approved

#### **Features and Applications:**

The time delay switch is capable of switching loads for a number preset programmable times from 30 seconds to 480 minutes. A total of 8 preset times are available depending on the micro-switch toggle settings. The time delay switch incorporates an LED indicator around the switch button to enable easy locating in dim lit areas. This unit can be used on most kinds of loads, with or without a neutral terminal connection.

This device incorporates a unique inrush current limiting design circuitry which limits the maximum current of loads to improve reliability.

#### Understanding the function of the time delay switch:

Our time delay switch is capable of being used in three different environments:

#### Type A - Start / Restart

Setting will commence programmed preset timing each time the button is pressed. In the event that the button is pressed again prior to the preset time out, the program will recommence timing again.

#### Type B - Start / Stop

Setting will commence programmed preset timing when the button has been pressed from the "Off" position. Once the programmed timing is running and the button is pressed again, the programmed timing will stop and power off the switch.

# Type C - Start / Run On / Stop

This function can only be performed when the Type C wiring diagram is installed (Refer to Fig. 4) and the Program Type (bit4) is set to B. In this setting, the device performs a run on timer function. Pressing the button once turns the load on for a maximum of two hours or until the button is pressed a second time. Pressing the button a second time commences the configured run on timer countdown setting. Pressing the button a third time overrides the run on timer countdown and turns the load off.

**Note:** Additional switching points cannot be used with the Type C operation.

#### **Setting Program Type:**



Bit 4	Program Type	
Α	Type A	
В	Type B	
В	Type C (Refer to Fig.4)	

#### **Program Time Out Setting:**

Bit1	Bit2	Bit3	Time
0	0	0	30s
I	0	0	1m
0	I	0	5m
I	I	0	10m
0	0	I	30m
I	0	I	60m
0	I	I	120m
I	I	I	480m

#### **LED Indications:**

TYPE	Indication	
Dimmed Solid	Off	
Solid Single Flash	Time out period countdown	
Solid Double Flash	Run on timer countdown	
Continuous Flash	Off – Over temperature fault	

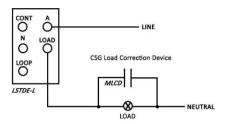
#### Notes for Installation:

- 1) As with all devices that do not have a neutral connection, for the unit to operate, a working load must be connected, and current passed through the load even when off. In various applications, a load correction device may be required. For instance, inductive, fluorescent, compact fluorescent and LED loads less than 5W may require a load correction device such as the CSG (MLCD) wired across the load to provide power to the circuit in the off state (Refer to Fig. 1). Luminaries with power factor correction capacitor do not need additional load correctional device.
- When no neutral connection is provided, Fluorescent light loads are restricted to electronic type ballasts, and low voltage transformers are restricted to electronic type only.
- 3) In installations where additional switching points requires the installation of a momentary press mechanism connected to the "CONT" terminal (Refer to Fig. 2).
  Note: When using the Optional Control Switch, a momentary press mechanism must be used.
  - mechanism must be used.
- The maximum recommended length of the control wire to remote push buttons is 50m.
- Optional wiring diagram for applications where connected loads require a higher current rating than the rated 10A using an external 240V AC auxiliary contact (Refer to Fig. 3)

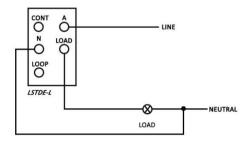
# **Wiring Diagrams**

# **LOW WATTAGE 2 WIRE**

#### FIG. 1

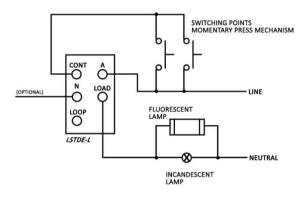


# LOW WATTAGE 3 WIRE FIG. 5



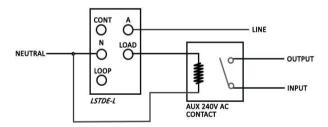
## **ADDITIONAL SWITCHING POINTS**

#### FIG. 2



## **HIGH CURRENT**

FIG. 3 Note: A neutral connection to the switch is required to operate auxiliary contactors. Switch will not operate correctly in 2 wire mode.



# TYPE C START / RUN ON / STOP

# FIG. 4

