Digital Devices

BURNER CONTROLLER
Model DDL 817 PR2

General:

The controller is state of art microprocessor based design. The controller's basic functionality is to manage a safe start up of the Burner and continuos monitoring of the flame there after.

The controller is housed in elegant metal enclosure with over all size of 96 X 96 X 100 mm. (LXBXD) . The controller can be mounted on front panel in standard 92 X 92 mm cutout.

Description:

The Burner Controller is designed for automatic start up of small capacity Burners with instant start up and flame monitoring of oil fired Burners using Photo resistive type flame sensor.

Terminal Connections:

Phase	1	7	Blower
Neutral	2	8	Ignition
Ext. Reset	3	9	Fuel Valve
Ext. Reset	4	10	Lockout Alarm
Flame Sensor	5	11	Control Switch
Flame Sensor	6	12	Control Switch

Note:

1. Supply voltage – 230 V AC, 50 Hz.
2. Do not connect Phase or Neutral wires to Flame sensor terminals.

Operation:

All the connections are made as per the electrical schematic diagram. When supply is provided to the terminal No. 1, The Controller will go through the following sequence of operation.

Supply at terminal No. 11 is switched On. If the Start Interlock at terminals11 & 12 is closed, The Blower at terminal 7 is energised. Also, The controller will switch On Fuel Valve at terminal No.9 and Ignition at terminal No. 8.

If flame is sensed by the flame sensor (F) , connected across terminals No.5 & No. 6, Ignition will be switched Off and the controller will monitor the flame there on.

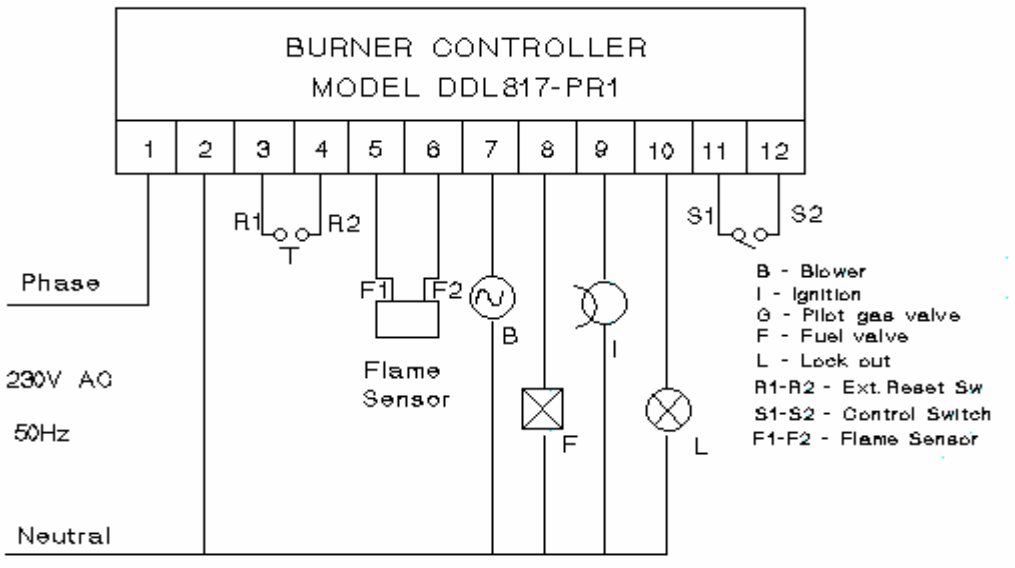
If flame is not sensed with in **8 seconds** since the start of Ignition, the controller will goto Lockout condition. When in lockout , the Alarm is switched at terminal No. 10 and all other outputs will be switched Off.

Re trial : When flame is sensed and normal running is established, the controller will monitor flame continuously. If Flame failure occurs, the controller will try to re establish flame by switching On Ignition again. If flame is not established with in **8 seconds** , the Controller will goto Lockout.

False flame check: Check for false flame will be carried out the beginning of the sequence start. If flame is sensed before the start of Fuel and Ignition, which is may be due to false light ingress or faulty flame sensor. The controller will goto Lockout with out starting the firing sequence. Thus making the start up sequence safe.

Lockout: When in lockout , the controller can be reset by momentarily pressing the Reset P.B. (R) provided locally on the controller or through the external remote reset switch wired across Phase and terminal No. 3 & 4. Momentary interruption in power supply the controller will also have the same reset effect on the controller.

Controlled shut down : When under normal firing condition, if the control interlock initiating the firing sequence , across terminals 11&12, is opened, the firing is switched Off and Fuel valve and Blower will be switched Off. Now the control will waits for the closure of the control switch. If the control switch is closed the controller will start the firing sequence from the start.



Please contact Digital Devices for any clarification.