# OFF LINE SEQUENTIAL CONTROLLER WITH LCD DISPLAY Model No. : OBT-200





#### **INTRODUCTION:**

The Poushali Electronics make Sequential Controller has been designed to operate the equipments used for dust collection purpose in modern Industries, especially in the POWER, CEMENT, METAL & STEEL, MATERIAL HANDLING sectors.

The controller is wall mounting type and hazard free in operation. It is designed in one no. of CPU card and 10 channel relay card as per relay output to facilitate easy operation and cost effective maintenance.

The controller is having a "Back Lit LCD Display", "KEY Board" along with "Relay LEDs", which provide visual indication for energized relay for the selective solenoids. Once switched ON the controller operates the solenoid valves with a pre-seted time duration (ON time) measured in milli seconds and with a pre-seted time interval measured in seconds (Off time) as per operation sequence. Every setting is field programmable.

It is also provided four Relay outputs.

- #1. "Timer Power On"
- #2. "Timer Running" Indication
- #3. "DP Lo" Indication
- #4. "Remote Start Fail"

If there is no Power, the "Timer Power On Relay" will be off.

- If there is any unhealthy condition and timer is off, the "Timer Running Relay" will be off.
- If DP becomes Lo, the "DP Lo Relay" will be on.

If there is no Remote Start Command, the "Remote Start Fai Relayl" will be on.

The controller is provided with two digital inputs along with LED indication. One for 'Remote Start' and another for 'High Pressure'.

If Differential Pressure is high more than Pre-seted value then only the Timer will run. Otherwise it will not run and will off the "Timer Running" relay and show that "High Pressure input fail".

Remote Start input helps to start the Timer from remote location. It can also be interlock with ID Fan. If ID Fan is "OFF" the Timer will be off. If the "Remote Start" input dose not comes the Timer will not run and will off the "Timer Running" relay and show that "Remote Start input fail".

The Timer has 2 fuses F1 & F2. Fuse F1 is 250mAmps for transformer and fuse F2 is for solenoid input current.

## **SEQUENCE:**

First the "Damper Close" pulse for Chamber-1 will come. After that "Pre-Null Time" will come. This time for stabilized the air and dust inside the Chamber. Then purging will start, "ON Time" and "Off Time" sequence. After finishing the purging procedure "Post-Null Time" will come. This is also for stabilized the air and dust inside the Chamber. After that the "Damper Open" pulse for Chamber-1 will come. Then the "Damper Close" pulse for Chamber-2 will come and the same sequence will run till last Chamber. Then it will come back to first Chamber and the sequence will continue.

## **SAFETY MEASURES:**

Enclosure IP55. Power Supply Card is fuse protected. All Solenoid Outputs are fuse protected. All Relay Contacts are surge protected by MOV.

# **SPECIFICATIONS:**

No. of Chamber	:	Up-to 12 Nos. (Field Selectable)
No. of Channel	:	Up-to 16 Nos. (Field Selectable)
Damper Close Time	:	In seconds
Damper Open Time	:	In seconds
Pre-Null Time	:	In seconds
Post-Null Time	:	In seconds
On Time duration	:	50 milli seconds to 250 milli seconds
Off Time duration	:	5seconds to 125 seconds
Potential Free Relay output	:	3Amps for 220VAC / 10Amps for 24V DC
for solenoid operation		
Solenoid Power Supply :		220V AC (110V AC / 24V DC optional)
Controller input Power Supply :		220V AC +/- 10%, 50 Hz ( 110V AC +/- 10%, optional )
Enclosure	:	Wall mounting type IP55 enclosure.
Operating Temperature	:	0 to 55 Deg.C

## **Poushali Electronics**

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