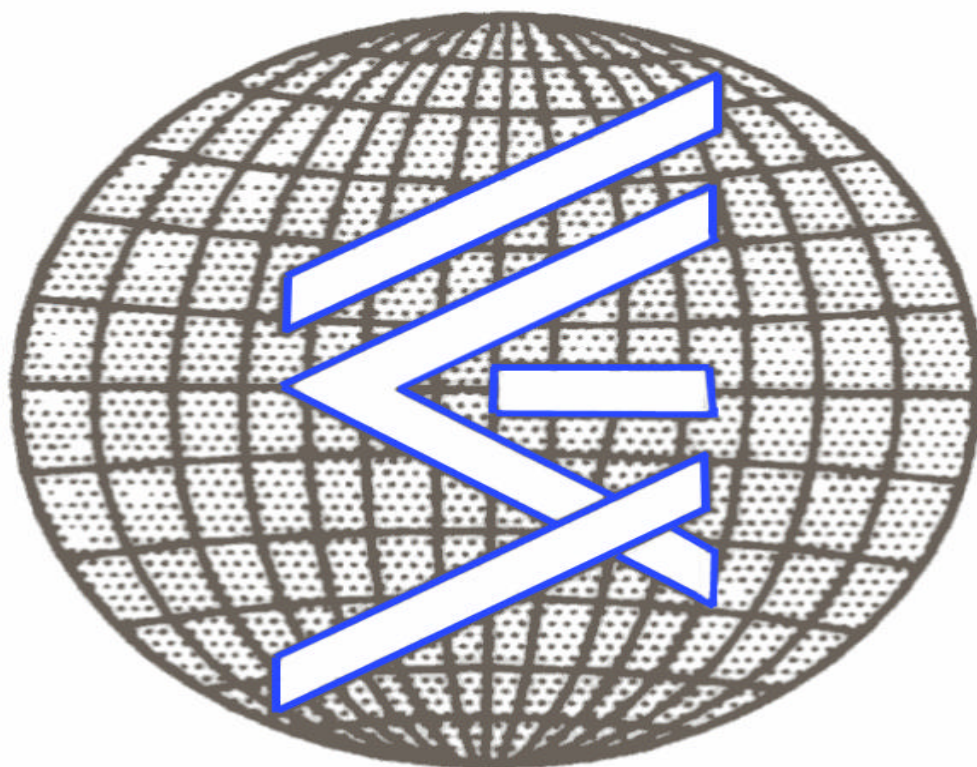


# **OPERATIONAL MANUAL FOR BAG FILTER CONTROLLER**



# **SINGLE CHIP MICRO- CONTROLLER BASED BAG FILTER CONTROLLER**

Shyamrai make Micro-Controller based BAG-FILTER CONTROLLER conceived and designed by – IMECO – has unique features with lower cost, thus making it most efficient and reliable and unparalleled in Industry.

- a) Single Chip Micro Controller is used to reduce the component count of the controller. Hence the chance of failure of components is reduced and all the timings like On time and Off time variation is ? 1 mili second.
- b) Watch-Dog timer is provided to stop the chance of hang of the processor.
- c) Micro switch push buttons are used to set all the timings and no. of channel selection instead of Thumb wheel switch, which has reduced the chance of failure the contact of Thumb wheel switches.
- d) EEPROM is provided to store all the Time and Channel Setting, which will never loss the setting parameters.
- e) The controller controls the Bag-Filter for 1 to 32 nos. of channel in multiplexing mode or 1 to 12 no. of channel for direct connection.
- f) Substantial reduction in cost of Cabling and erection cost in multiplexing mode.**
- g) All the Outputs are Short Circuit protected and also has the skipping facility.
- h) Computer interfacing facility for diagnostic, data logging and remote monitoring (optional).

## **TECHNICAL SPECIFICATION :**

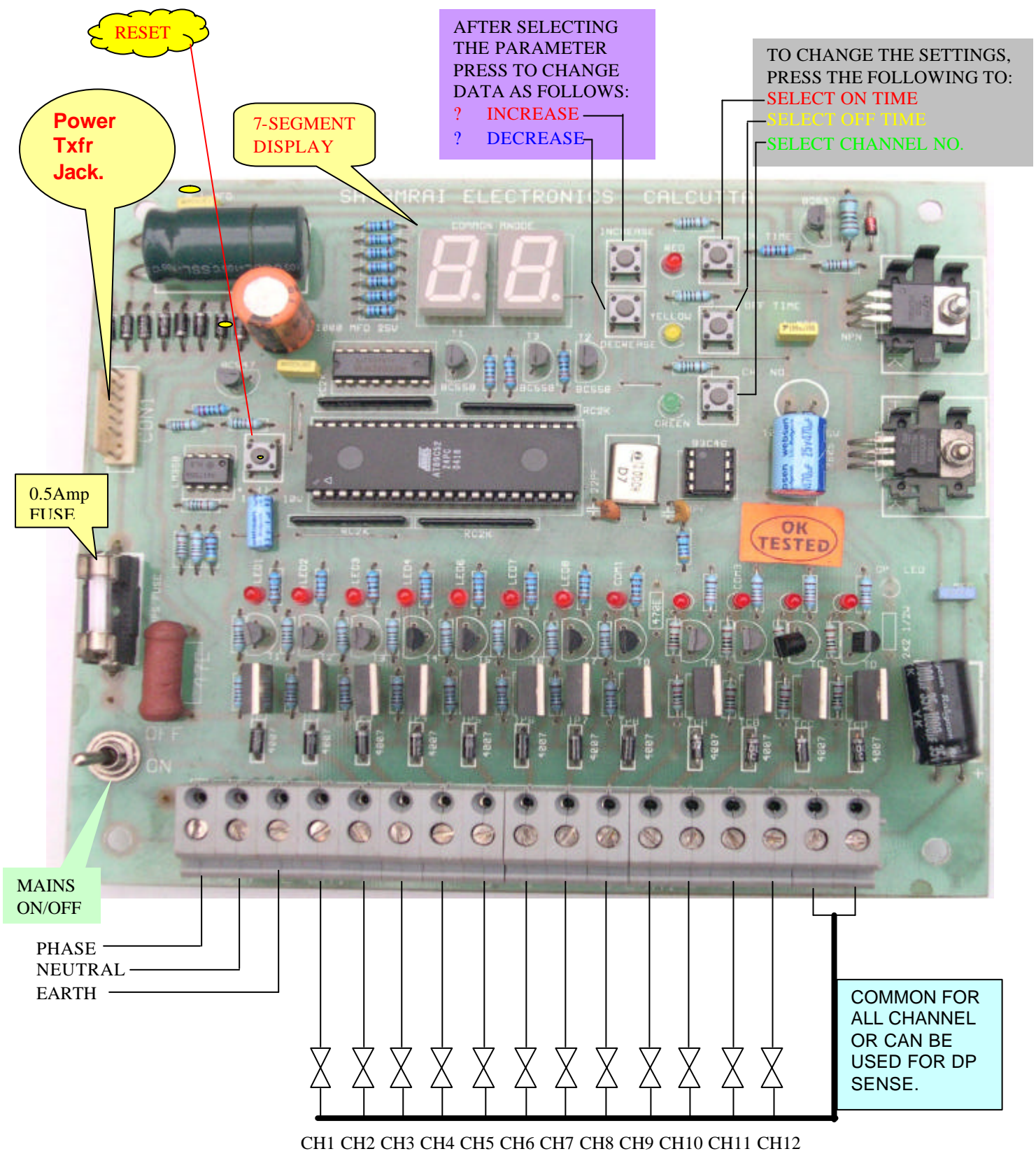
1. Power Supply : 230 V AC ? 15%, 50 Hz. ? 5 Hz.
2. Outputs : Max.12 Nos. of direct output or 32 nos. of matrix output is available. These outputs are suitable for 24 Volt DC solenoid Valves. Each output is capable of driving upto 1.2 Amps of current or 32 Watts of load. The Outputs are fully short circuit protected. The no. of output can be selected by selecting channel no. in display and with the help of Inc. & Dec. Push button.
3. On time : The activation time of solenoids are programmable from 10 to 990 mili-second in step of 10 mili-second.
4. Off / Pause Time : The Pause time between two channel activation is programmable from 10 to 990 second in step of 10 second.
5. DP Time : The differential pressure time is fixed and it is 20 second.
6. Display : Two nos of 7-Seg. Display for indication of last activated channel no. or while setting, it will display the corresponding value of the On time, Off Time or No. of Channel selected.

7. LED Indication : a. 12 nos. RED LED for indication of corresponding channel activation.  
b. 3 nos. LED indication for parameter settings. (RED for On Time, Amber for Off Time and Green for No. of Channel)
8. Micro-Switches : Five Nos. of Micro-Switches are provided for parameter settings as follows:
- i) Press to select for On Time Setting
  - ii) Press to select for Off Time Setting
  - iii) Press to select for Channel No. Setting.
  - iv) Press to increase the set value of the corresponding Parameter.
  - v) Press to Decrease the set value of the corresponding Parameter.
9. Reset Switch : Press to reset the function of the controller. The controller will start activation from channel 1 upto the last selected channel. The controller will also reload all the last parameter settings.

## **PROTECTION**

- a) Mains Fuse
- b) Output Overload
- c) Output Short Circuit

## DESCRIPTION & CONNECTIONS OF THE CONTROLLER



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