

# OPERATING INSTRUCTIONS

## DIGITAL FLOW CALIBRATOR ECOTECH MODEL AAS 127C

*(For intermediate checks)*

- Ecotech Digital Flow Calibrator AAS 127C has been designed for intermediate checking of flow rates for the range of 0 -30 lpm.
- Calibrator can be used in lab or in field
- Dry and filtered air need to be sucked in the system using a non pulsating pump of suitable capacity which can generate adequate suction for desired flow (upto 30 lpm)
- Environmental condition such as Temperature, Relative Humidity and Barometric pressure need to be recorded at place and time of calibration



- Device under calibration need to be connected at inlet of the calibrator suction end marked with IN. There are two tubes with PU fitting upper tube is connected to upper low flow unit having flow range 0-5 lpm. while lower PU fitting tube connected to High flow unit having flow range higher flow rates 5-30lpm.
- Connection of suction pump need to be made at OUT mark two PU ports are existing upper tube is low flow rate 0-5 lpm while lower part is for 5-30 lpm.
- Ensure that valve is at fully close position. Pump need not to be started unless and until flow indicator is switch on and show zero reading.
- Warm up time of 15 minute is required to get stable precise reading. Input voltage 220V AC must not have variation more than  $\pm 2V$  is required for electronic unit . A CVT need to be used to give supply of power to AAS 127C. Separate stabilized power to pump may be necessary ensure input voltage to pump  $220 \pm 10V$  AC for satisfactory stable suction.
- Once power is connected to calibrator use wo way switch provided on front panel of the calibrator. Two way switch controls power to flow indicators and one can switch on and switch off it one by

### Specification:

1. **Flow Range: 0 -30 lpm**
2. **Low Flow: 0.5 – 5 lpm**
3. **High Flow: 5 – 30 lpm**
4. **Resolution: 0.01 lpm**
5. **Size: 200 mm x 150 mm x 200 mm**
6. **Power: 220  $\pm$  2 Volts AC single – phase**

one. Upper indicator is for 0-5 lpm and lower indicator is for 5- 30 lpm switched on indicator will display 0.00 lpm while other indicator will remain in off position

- Leave indicator switched on for at least 15 min for warming up meanwhile connect unit under calibration to selected flow indicator. As explained in earlier sections.
- Pump can be switched on and open control valve gradually to achieve the suction desired carefully. Once desired flow is achieved leave entire system for at least 1 minute to stabilize the flow in DUC and in flow calibrator at set position
- Record environmental condition Temp. RH and Barometric Pressure.
- At inlet of DUC ensure putting a filter so that particulates do not enter in the calibration system
- Record flow indicator reading against set flow in DUC record 5 readings at each calibration point.
- For 0 -5 lpm following calibration points can be selected  
0.5, 1.0, 3.0 and 4.5 lpm
- Once calibration 0-5 lpm range is over switch off pump and close the valve. Now with the help of two way on off switch select high flow indicator. Switch on pump open valve to achieve desired flow in DUC leave system in operation for one minute and then record reading of DUC, Flow calibrator at set calibration point. Five reading need to be taken at each calibration point.
- For high flow range 5 -30 lpm following calibration points can be selected  
6,9,14,20,25 and 30 lpm
- Calculate error in flow rate indicated by DUC in reference to the True Flow rate displayed by flow calibrator. Sample blank data sheet is enclosed for making observations



For pricing information and queries contact:

## **ECOTECH INSTRUMENTS**

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