



Installation & Calibration Guide

Airflow Monitor AFA500/BSC

Startup

The AFA500/BSC must be field-calibrated once the room air supply and exhaust is balanced. When the unit is powered up, the following sequence of events occurs:

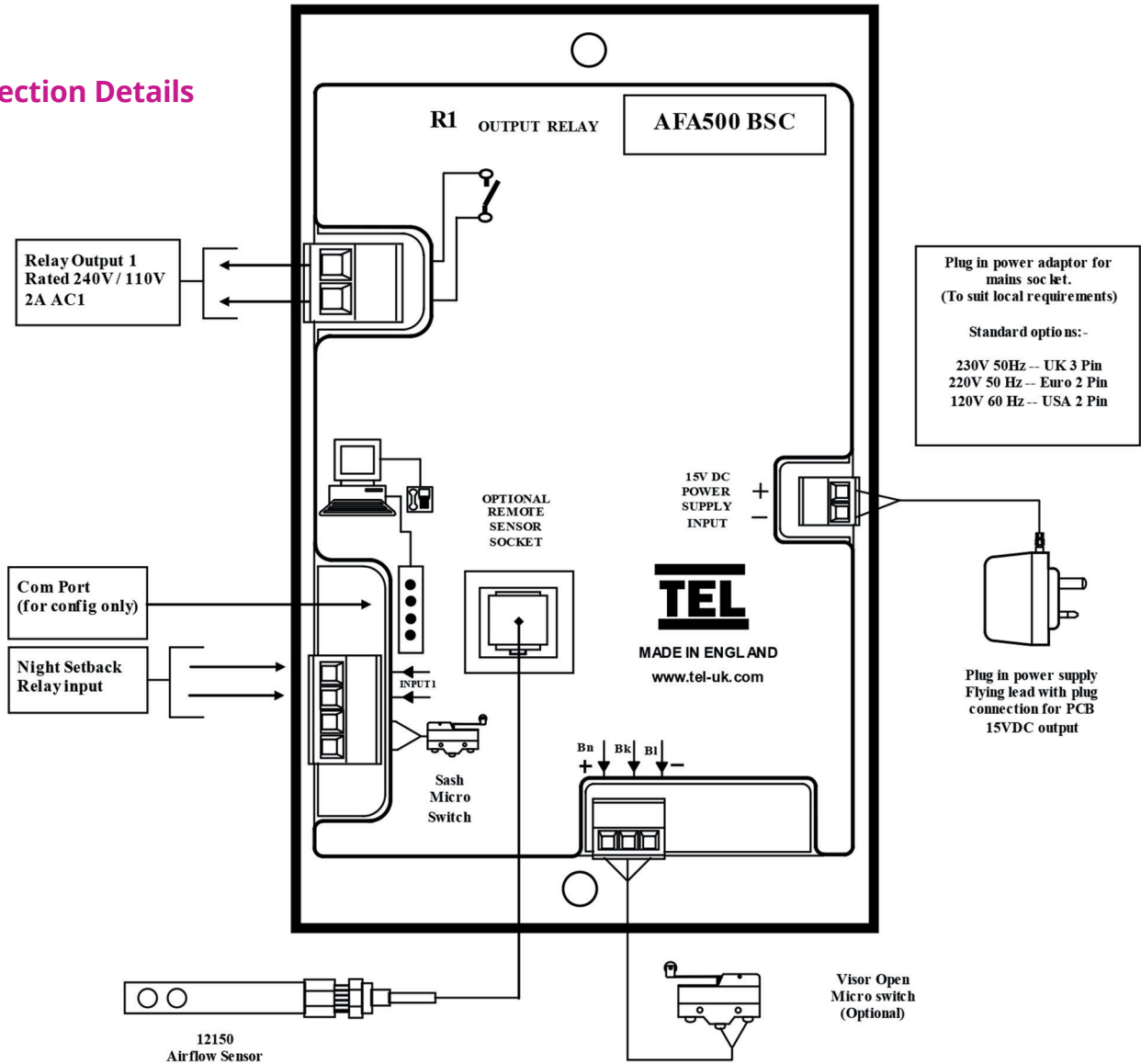
1. The alarm performs a self-test of its functions, LEDs and audible alarm (approximately 2 seconds) and then initiates a delay timer of 30 seconds to allow the airflow sensor to stabilize.
2. During the 30-second stabilizing period, all alarms and relay outputs are deactivated and the red and green LEDs remain on.
3. At the end of the delay, the unit will do one of two things:
 - a. If the monitor has been calibrated,** the unit enters normal operating mode (solid green light for safe velocity, red light and audible alarm if low velocity).
 - b. If the unit has not been calibrated,** the red and green LEDs will flash, the audible alarm will be muted.

Calibration - Single Point (default)

1. The calibration process establishes an alarm point at 80% of the flow rate captured during calibration. That is, the alarm value will be 20% less than standard airflow.
2. Press and hold the ENTER button for 5 seconds to enter Calibration Mode. This is indicated by both red and green LEDs flashing with the audible alarm beeping.
3. To initiate calibration, press and hold the ENTER and SET buttons at the same time. The unit will sample the airflow for 5 seconds, during which time the green LED goes off and the red LED flashes. The audible alarm continues to sound during the air sampling.
4. If calibration is successful, the monitor will give a two-tone beep at the end of the air sample, and then automatically enter run mode.
5. If the ENTER or SET button is released during the air sampling period, or if the airflow is fluctuating too much, the alarm will emit a lower-frequency buzzing for a short period and then re-enter calibration mode. If this occurs, press the ENTER and SET buttons again to repeat the airflow sampling.
6. If, during normal operation after a successful calibration, the airflow drops below the alarm point, the unit will go into alarm condition (red LED flashing, audible horn beeping). Push the enter button to temporarily mute the horn.
7. The horn can be permanently disabled by pressing and holding the SET button for 10 seconds. The horn will sound 3 times to indicate that it has been disabled. In Safe mode the Green LED will flash if the horn is disabled or be solid to indicate that the horn is enabled. To enable the horn press and hold the SET button for 10 seconds, the horn will sound 3 times to indicate that it has been enabled.



Connection Details



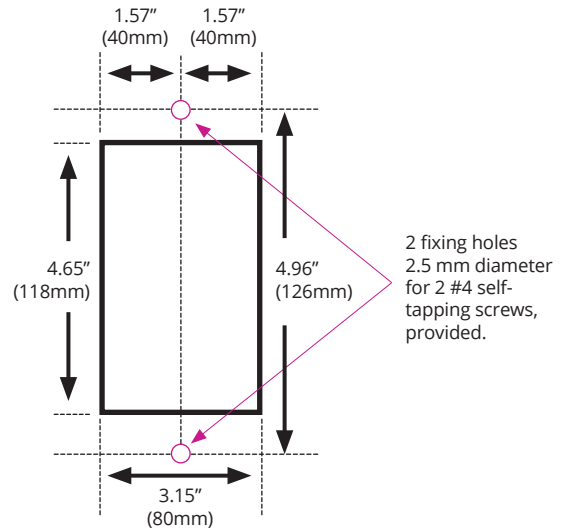
Operation

| Horn | Red LED | Green LED | Operation |
|---------|----------|-----------|--|
| Beep* 1 | On | On | Power up 30 second time period to allow sensor stabilization |
| Off | Flashing | Flashing | Requires Calibration - follow calibration procedure |
| Off | Off | On | Air SAFE - audible alarm enabled |
| Off | Off | Flashing | Air SAFE - audible alarm permanently disabled |
| On | On | Off | Air Fail |
| Off | On | Flashing | Air Fail - Setback mode (remote horn mute activated) |
| On | Flashing | Off | Visor Open |

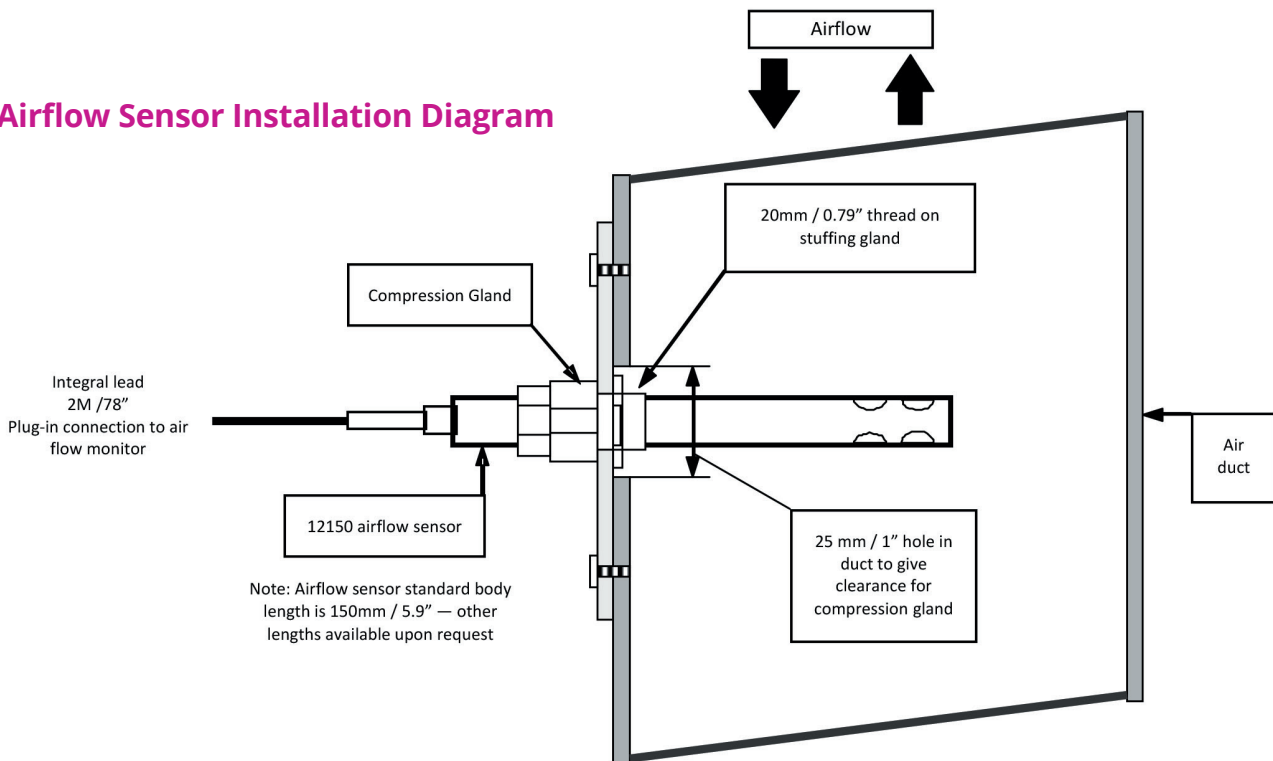
Monitor Panel Dimensions



Monitor Panel Cutout Dimensions (NOT shown to scale)



Airflow Sensor Installation Diagram



For complete manual and product information, log on to www.tel-uk.com