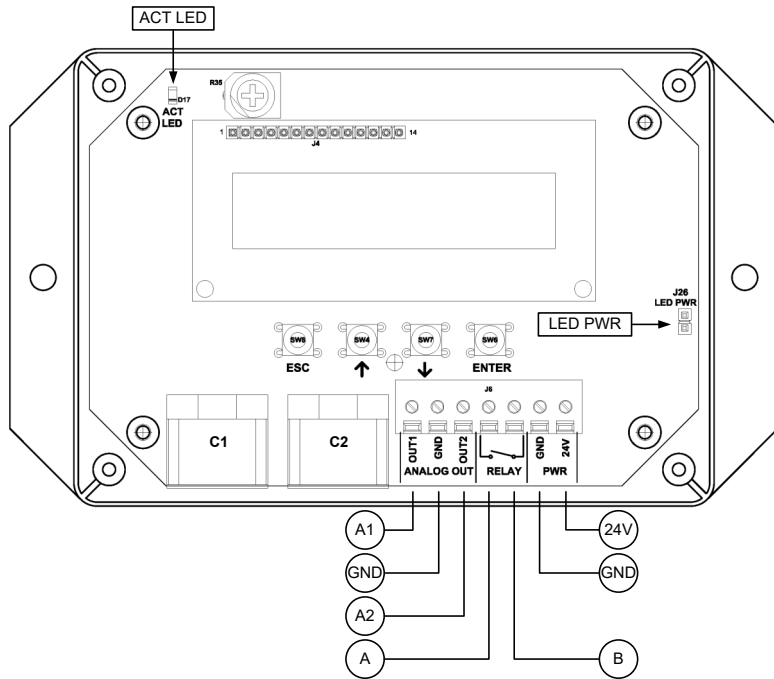


EB-FlowII EF-A2000-U WIRING GUIDE



TRANSMITTER CONNECTIONS

Single Location Configuration (Default)

Power		Analog Out (non-isolated)			Contact Closure		Connector	
24V	GND	A1	A2	GND	A	B	C1	C2
24 VAC (hot)	24 VAC (neutral)	Airflow +	Temperature or Alarm +	Signal Common	OUT	IN	1 probe x 1 sensor/probe	1 probe x 1 sensor/probe

Dual Location Configuration

Power		Analog Out (non-isolated)			Contact Closure		Connector	
24V	GND	A1	A2	GND	A	B	AF1	AF2
24 VAC (hot)	24 VAC (neutral)	Airflow1, Airflow1-2, or Airflow2-1 +	Airflow2, Airflow1-2, or Airflow2-1 +	Signal Common	OUT	IN	1 probe x 1 sensor/probe	1 probe x 1 sensor/probe

INSTRUCTIONS TO INSTALLER:

1. Mount the transmitter in a location where the probe cable can reach the receptacles of the transmitter. Provide a weatherproof enclosure (by others) and mount away from direct sunlight when outdoor mounting is required.
2. Connect the sensor probes to the transmitter. Although probes are “plug and play” and connections to specific receptacles are not required, it is recommended that probes are connected Probe 1 to receptacle C1 and Probe 2, if provided, to receptacle C2. Probe numbers are indicated on each cable hang tag.

i If the transmitter will be configured for two locations, connect the probe for Airflow1 into C1 and the probe for Airflow2 into C2.

i Cables have an FEP plenum rated jacket that are UV tolerant and suitable for operation over the entire operating temperature range of the device.

! Sensor probe plugs are keyed and NOT twist-lock. Align the key and push the plug onto the transmitter receptacle. Twisting may damage the connector pins.

3. Select a 24 VAC transformer that provides 22.8 to 26.4 VAC during operation. Size the transformer for 8.5 V-A for each measurement location.

! The labeling “24V” is equivalent to “L1” and “GND” is equivalent to “L2” in many AC wiring diagrams. Do not connect “GND” to earth ground.

! Most B.A.S. systems require devices with a “floating” signal common. Do not connect the secondary output of the power transformer to earth ground. Failure to follow this requirement will result in ground loops and may cause damage to the transmitter or host B.A.S.

! Multiple transmitters wired to a single transformer must be wired “in-phase” (24V to 24V and GND to GND).

4. EB-FlowII transmitters do not have a power switch. “Live” wiring to the power terminals is not recommended. Do not energize the transformer until power and all signal connections have been made to the transmitter.

! “Live” wiring may damage the transmitter and void warranty. Do not energize the transformer until power and all signal connections have been made to the transmitter.

5. If analog output signals are used, continue to step 6, otherwise skip to step 7.

6. Connect each analog output signal required to the host B.A.S. using shielded twisted-pair wire. Properly terminate the shield (typically at the B.A.S.).

! If twisted pair wire and/or shielded cable is not used, extraneous electrical noise can be picked up between the transmitter and host control panel.

7. If the contact closure relay is used continue to step 8, otherwise skip to step 11.

8. If the contact closure relay is used to energize an external alarm device, such as a relay, continue to step 9. If the contact closure relay is used to drive an LED, skip to step 10.

9. Connect the “hot” wire of an external alarm device in series with relay terminals A and B. The contact closure relay is normally open (N.O.) but can be setup for normally closed (N.C.) operation. Refer to the *Operations and Maintenance Manual* for more information. Skip to step 11.

! The alarm device must not exceed 3 amps @ 24 VAC or 30 VDC.

10. Connect the positive (anode) side of the LED to relay output A and the negative (cathode) side to ground (PCB GND terminal preferred). Place the shunt jumper across the LED PWR posts (J26).

11. Refer to the *EF-A2000-U Startup Guide* prior to energizing power to the transformer.