RUSKIN®

3900 Dr. Greaves Rd. • Kansas City, MO 64030 • (816) 761-7476 • FAX (816) 765-8955

MODEL EAMP020 CONTROL TRANSMITTER

FOR USE WITH ALL RUSKIN THERMAL DISPERSION PRODUCTS

Ruskin model EAMP020 includes factory programming to ensure complete compatibility with any Ruskin thermal dispersion product. The simplicity of the “plug & play” design provides quick and trouble-free installation. Dust proof housing has two electrical access points to the internally fused power supply. The control transmitter offers precise setpoint monitoring and adjustment for easy field calibration, when required. Unit provides 4-20 mA or 2-10 VDC (with 500 ohm resistor) velocity and temperature outputs to communicate with any building automation system (BAS). The microprocessor based EAMP020 comes standard with a multi-line, 16 x 2 alphanumeric, liquid crystal digital (LCD) display, indicating both CFM and Temperature of the measuring location. Average up to four probes and 16 sensing points with each control transmitter.

EAMP020 Control Transmitter

STANDARD CONSTRUCTION

CONTROLLER ENCLOSURE

6 1/8" (156) x 11 3/8" (290) x 3 1/8" (80) ABS plastic, dust proof

SUPPLY VOLTAGE

24VAC or 24VDC with automatic detection & selection

OUTPUT COMMUNICATION SIGNAL

Velocity: 4-20mA or 2-10VDC Field Selectable with 500 ohm resistor

Temperature: 4-20mA or 2-10VDC Field Selectable with 500 ohm resistor

AGENCY LISTINGS

All components are U.L. Listed and compliant with Part 15 of the FCC Rules and RoHS

OPERATING RANGE

-20° F to 120° F (-29° C to 49° C)

0-99% RH, non-condensing

DISPLAY

Multi-line 16X2, alphanumeric LCD with contrast control

CIRCUIT BOARD

On/Off Switch

Pushbutton interface

High speed microprocessor

Memory logic and calibration in non-volatile EPROM

Fused input power (isolated from output)

CONNECTOR PORTS

RJ45 locking cable receptacles

NOTES:

1. Dimensions shown in ( ) indicate millimeters.

2. Refer to Installation Instructions for additional details.

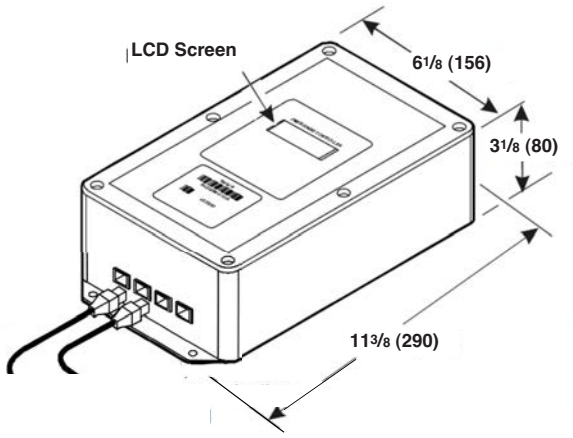
FEATURES

- High speed microprocessor
- LCD display standard
- Individual sensor readings
- CAT5e “plug & play” connectors
- Displays field selectable I.P. or S.I. units
- Connects to any Ruskin thermal dispersion monitor device

VARIATIONS

- IAQ080 120VAC/24VAC Transformer (ships loose)

DIMENSIONAL DETAILS



EAMP020 Electronic Controller
Dimensions, in. (mm)

FIELD WIRING CONNECTIONS

1. Connect dedicated 24VAC power to Control Transmitter.
   a. Connect 24 VAC hot to +24H terminal
   b. Connect 24 VAC common to -24C terminal
2. Connect 4-20mA velocity and temperature output signal from transmitter to Building Automation System (BAS) noting the polarity indicated on the wiring schematic.
3. Connect CAT5e network shielded cable between probe(s) and transmitter
4. Turn power switch on

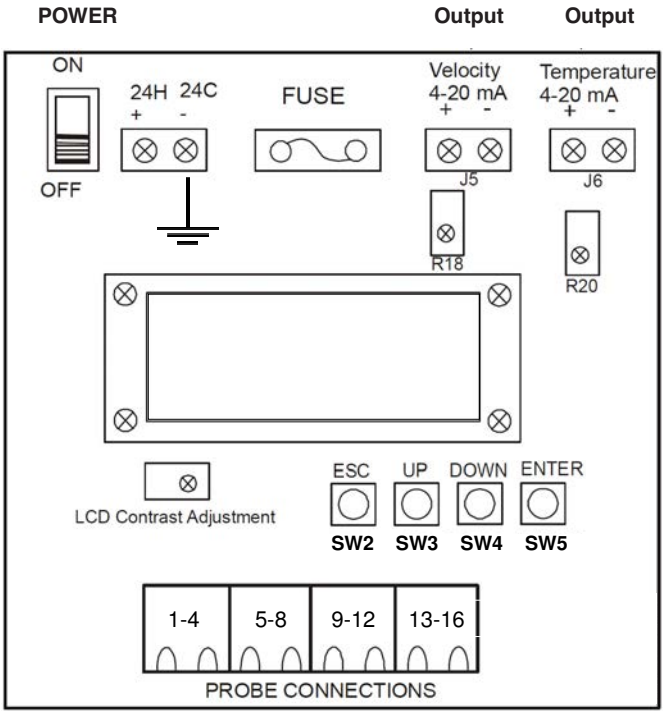
Operation

The options menu allows access to reset factory settings, adjust gain and offset, change units, enable error indication, and set the zero cutoff of the device. The up and down buttons on the control panel are used to scroll through the menu options and adjusts values.

Normal Operation

During normal operation the UP and DOWN buttons will scroll through each sensor's velocity and temperature reading. Pressing the ESC button on the control panel will display the average velocity and temperature values. During Normal Operation two LED's illuminate at the RJ45 connector on the control panel. The left LED indicates that the EAMP has properly identified the probe. The right LED illuminates each time the EAMP020 communicates with the connected probe.

For additional information, reference installation instructions of related thermal dispersion air/temperature monitoring device.



SUGGESTED SPECIFICATION

Furnish and install, at locations shown on plans, or in accordance with schedules, a microprocessor based control transmitter housed in a dust proof electrical enclosure. Electrical enclosure shall be equipped with four RJ-45 connectors for flawless wiring of associated air/temperature monitoring device. Control transmitter shall be capable of digitally communicating calibration data from the associated air/temperature monitoring device to the microprocessor. Circuit shall be capable of processing up to 16 independent flow and temperature sensing points per airflow measuring location. An integral multi-line, alphanumeric 16 x 2 liquid crystal digital display shall display both flow and temperature in field selectable I.P. or S.I. units. Transmitter shall include auto zero, digital offset/gain adjustment, continuous performing sensor/transmitter diagnostics and visual alarm to detect malfunctions in the system. The main circuit shall include an on/off switch and fused protection. Circuit shall include automatic detection and selection of 24VAC or 24VDC power. Controller shall feature two 4-20mA or 2-10VDC, field selectable, linear output communication signals indicating air velocity and temperature. Operating range shall be -25° to 140°F. Complete assembly shall be assembled, wired and calibrated in an ISO 9001 certified facility. All components shall be U.L. listed and RoHS compliant. Control Transmitter shall be, in all respects, equivalent to Ruskin model EAMP020.

RUSKIN®

3900 Dr. Greaves Rd.
Kansas City, MO 64030
(816) 761-7476
FAX (816) 765-8955
www.ruskin.com