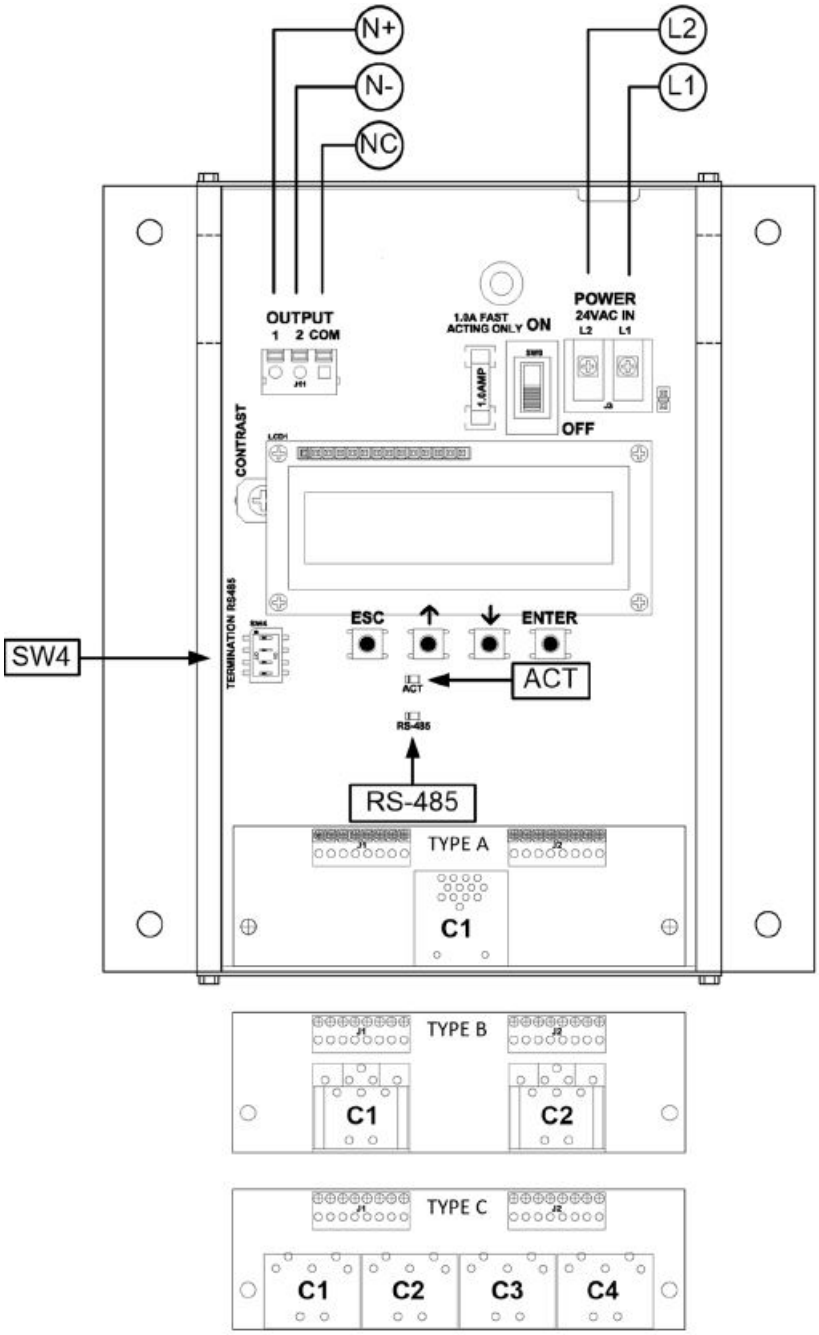
EBTRON HTN104-T Digital Parameter User Guide

Contents

EBTRON HTN104-T Digital Parameter

Overview


N+
N-
NC
L2
L1
OUTPUT
1 2 COM
1.0A FAST
ACTING ONLY
ON
POWER
24VAC IN
L2 L1
OFF
CONTRAST
ESC
ENTER
SW4
ACT
RS-485
TERMINATION RS485
TYPE A
C1
TYPE B
C1
C2
TYPE C
C1
C2
C3
C4

Parameters

Description	Parameter	Default	Optional Settings/Ranges	Units
System of Units	SYS	I-P (US customary)	SI (metric)	
Airflow Calculation Method	AIRFLOW	ACT (actual)	STD (standard mass flow)	
Altitude (for actual flow correction)	ALT	0	0 to 20000 [0 to 6000]	ft [m]
Low Limit Airflow Cutoff	LLIMIT	0 FPM	0 to 500 FPM [0.0 to 2.5 m/s]	
Area	AREA	{Order Area}	0.00 to 9999.99 [0.000 to 999.999]	sq ft [sq m]
RS-485 Network	BACnet MS/TP or Modbus RTU (requires configuration)			

Refer to the O&M Manual for more information and/or additional parameter defaults, settings, and ranges.

STARTUP INSTRUCTIONS

1. Verify that the sensor probe is located where they meet EBTRON published installation guides.
2. Verify that the probe is properly installed with the airflow arrow pointing in the direction of airflow.
   Improperly installed probes will compromise the installed accuracy of the device and degrade system performance.
3. Verify that the transmitter is installed and wired in accordance with the HTN104-T Wiring Guide provided with the transmitter and power is provided to the transmitter.
4. Make sure the ductwork is clean and free of debris prior to fan startup.
5. Move the power switch to the “ON” position. Power-up faults, if detected, are displayed on the LCD. If any power-up faults are detected, resolve all conflicts or contact EBTRON customer service at 1- 800-232-8766 before proceeding.
   If extension cables have been added, the extension cable length must be entered into the transmitter. Refer to the Operations and Maintenance Manual for more information.
6. The transmitter is fully functional as a factory-calibrated airflow and temperature measurement device in I-P units (ft, FPM, CFM °F). Airflow (CFM) and temperature (°F) are displayed on the LCD.
   - If SI units are required, refer to the Operations and Maintenance Manual.
   - The factory default airflow output is set to actual airflow (FPM, CFM). If standard (mass) airflow (SFPM, SCFM) is required, refer to the Operations and Maintenance Manual.
7. Verify that the area on the hang-tag matches the actual area of the duct or opening where the probes are located (less any internal insulation). If the area is different, modify the area parameter stored in the transmitter and use the correct area for any external conversion calculations from FPM to CFM.
   Failure to use the correct area will result in volumetric airflow (CFM) measurement error and degrade system performance. If the area parameter must be changed, refer to the Operations and Maintenance Manual.

8. If the RS-485 network connection is required continue to step 9, otherwise, skip to step 11.
9. Press the ↑↓ arrow buttons simultaneously to enter the MAIN MENU. The SETTINGS menu is displayed. Press the ENT button to select the top of the SETTINGS submenu category. Press the ↓ button until the RS-485 submenu category is visible. Press the ENT button again to enter the RS-485 submenu. Set the NET OUT parameter for BACnet (MS/TP) or Modbus (RTU) and continue through the RS-485 submenu to configure the remaining network parameters. Enable network communications by setting the RS485 COM parameter to "ON". Refer to the Operations and Maintenance Manual for more information.
10. Refer to the Operations and Maintenance Manual for detailed information on the BACnet Objects and Modbus Registers supported by this device.
11. The startup is complete! If additional customization is desired, consult the Operation and Maintenance Manual.

VERIFICATION

Many installations require third-party airflow verification. If the airflow measuring device is within the measurement uncertainty of the verification technique, EBTRON strongly recommends that no field adjustment correction is made. EBTRON airflow measurement devices are factory calibrated to NIST traceable standards. Field adjustment is not recommended when installed in accordance with published guidelines.

If field adjustment is required, refer to the Operation and Maintenance Manual.

- If minimum placement guidelines cannot be achieved, installed accuracy may be compromised.

Transmitters can be field adjusted to match a third-party measurement. Adjusted field measurements typically result in comparative readings within ±3% of the third-party measurement. Be advised that the third-party measurement may have uncertainties greater than or equal to ±10% and should only be used to adjust the airflow measurement device if the probes do not meet minimum placement requirements or the discrepancy is greater than the uncertainty of the third-party source.

FOR MORE INFORMATION

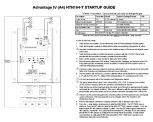
Operations and Maintenance Manual
The Operations and Maintenance Manual is a comprehensive reference document that contains information on installation, startup, custom configuration, built-in tools, diagnostics, troubleshooting, and maintenance.

NEED MORE HELP?

EBTRON Customer Service
For toll-free factory support call 1-800-2EBTRON (1-800-232-8766), Monday through Thursday 8:00 AM to 4:30 PM, and Friday 8:00 AM to 2:00 PM eastern time.

Your Local EBTRON Representative
Visit EBTRON.com for the name and contact information of your local representative.

Documents / Resources

	EBTRON HTN104-T Digital Parameter [pdf] User Guide HTN104-T Digital Parameter, Digital Parameter, HTN104-T Parameter, Parameter, HTN104-T

References

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