KMC CONTROLS EIA-485 Network Wire Recommendations Owner's Manual

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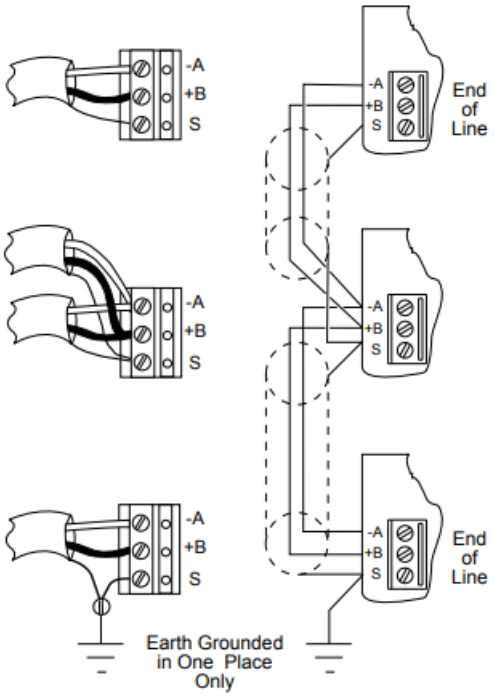
KMC CONTROLS EIA-485 Network Wire Recommendations

CONNECTION



Technical Bulletin (TB190529B)

This technical bulletin provides information on the wire recommendations for good network performance of KMC BACnet and KMDigital devices. BACnet devices use MS/TP protocol implemented using the EIA-485 signaling standard, while KMDigital devices use a proprietary protocol on an EIA-485 network.

Wire Recommendations

For all network wiring, it is recommended to use shielded twisted-pair cable with a maximum capacitance of 51 picofarads per foot (0.3 meters). The following manufacturers' cables (or equivalents) meet the requirements:

- **Belden (18 AWG):** P/N 82760
- **Windy City Wire (18 AWG):** P/N 052000LC
- **Windy City Wire (22 AWG):** P/N 043000-110 or 043000AL

More Network Wiring Information

For more information about network wiring, see the respective installation guide for your device. Additionally, the following downloadable documents are available:

- Diagnosing a BACnet MS/TP Network With a Multimeter Troubleshooting Guide
- Avoiding and Troubleshooting Ground Loops Application Guide
- Planning BACnet Networks Application Note

Product Usage Instructions

To ensure good network performance for KMC BACnet and KMDigital devices, it is recommended to use shielded twisted-pair cable with a maximum capacitance of 51 picofarads per foot (0.3 meters) for all network wiring. It is recommended to use cables from the following manufacturers (or equivalents): Belden (18 AWG) P/N 82760, Windy City Wire (18 AWG) P/N 052000LC, or Windy City Wire (22 AWG) P/N 043000-110 or 043000AL.

For more information about network wiring and installation, refer to the respective installation guide for your device. Additional information can also be found in the downloadable documents available, such as the Diagnosing a BACnet MS/TP Network With a Multimeter Troubleshooting Guide, Avoiding and Troubleshooting Ground Loops Application Guide, and Planning BACnet Networks Application Note.

ABOUT THIS BULLETIN

Good quality wire and connections are essential for good network performance for all KMC BACnet and KMDigital devices. BACnet devices use MS/TP (master slave/token passing) protocol implemented using the EIA-485 signaling standard. KMDigital devices use a proprietary protocol on an EIA-485 network.

MORE NETWORK WIRING INFORMATION

For more information about network wiring, see the respective installation guide for your device. See also the following downloadable documents:

- Diagnosing a BACnet MS/TP Network With a Multime- ter Troubleshooting Guide
- Avoiding and Troubleshooting Ground Loops Applica- tion Guide
- Planning BACnet Networks Application Note

Documents / Resources

	KMC CONTROLS EIA-485 Network Wire Recommendations [pdf] Owner's Manual EIA-485 Network Wire Recommendations, EIA-485, Network Wire Recommendations, Wire Recommendations, Recommendations