Network Boards That Deliver Superior Performance

Designed to ensure the superior performance of ARCNET 156 Kbps in the field, the ARCNET ancillary network boards serve to properly terminate, bias, protect and repeat data transmitted over the twisted pair EIA-485 network. Based on a native BACnet® architecture, the Automated Logic system uses ARCNET 156 Kbps as the high speed building control network to connect Portal, ME line, SE line and ZN controllers with a family of routers.

Key Features and Benefits

- **DIAG485** correctly biases the ARCNET 156 Kbps network independent of the length of the wiring and offers visual diagnostics of the signal levels.
- **PROT485** protects controllers residing on the ARCNET 156 Kbps network within 250 ft. (76m) from induced electrical surges on the twisted pair wiring.
- **REP485** creates a new network segment by amplifying and re-transmitting data - extending the length of the ARCNET 156 Kbps communication bus and the number of control modules that can be connected on one segment.
- A termination resistor is used to effectively terminate every ARCNET wiring segment, preventing end-of-line reflections and noise.
**ARCNET Network Boards**

- **D** = DIAG485
- **P** = PROT485
- **R** = REP485
- **T** = 120 Ohm (1/2W) Termination Resistor

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**DIAG485 Specifications**

- **Power:** 24V-ac ±10%, 7.2VA, 50-60Hz.
- **Mounting:** 4” Snap Track.
- **Terminals:** Removable screw terminals.
- **Network Requirement:** One per network segment (see diagram).
- **Listed By:** UL916 (Canadian Std C22.2 No. 205-M1983), CE
- **Dimensions:** 4” (width) by 4” (height) by 2” (depth).
  - 102mm (width) by 102mm (height) by 51mm (depth).

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**PROT485 Specifications**

- **Power:** N/A.
- **Mounting:** 4” Snap Track.
- **Terminals:** Removable screw terminals.
- **Network Requirement:** One recommended within 250 ft. (76m) of each controller.
- **Listed By:** CE
- **Dimensions:** 4” (width) by 4” (height) by 2” (depth).
  - 102mm (width) by 102mm (height) by 51mm (depth).

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**REP485 Specifications**

- **Power:** 24V-ac ±10%, 6VA, 50-60Hz.
- **Mounting:** 4” Snap Track.
- **Terminals:** Removable screw terminals.
- **Network Requirement:** One every 32 modules or every 2500 ft. (762m) with unshielded twisted pair.
- **Listed By:** UL916 (Canadian Std C22.2 No. 205-M1983), CE
- **Dimensions:** 4” (width) by 4” (height) by 2” (depth).
  - 102mm (width) by 102mm (height) by 51mm (depth).