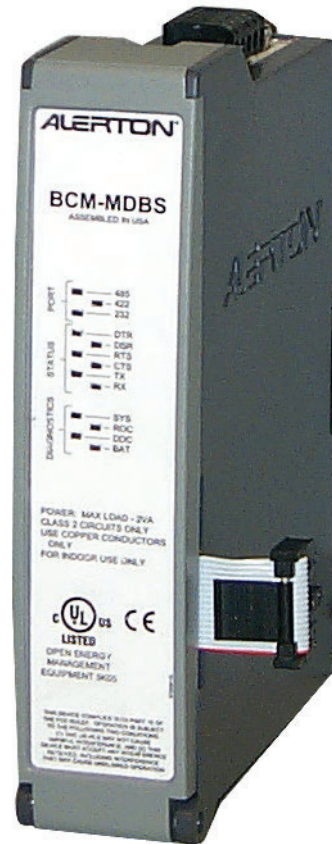## Features and highlights

- **Scalable**
  Combine BACtalk® control modules (BCMs) to fulfill unique processing and network integration requirements.

- **Interoperable**
  BACnet-compliant controller supports data from slave nodes on an EIA-485, EIA-422, or EIA-232 network.

- **Powerful**
  32 MB RAM, 32-bit processor, and 8 MB of flash RAM provide a fast, reliable platform to run DDC programming and global automation routines.

The BCM-MDBS is a BACnet-compliant gateway to a Modbus EIA-232, EIA-422, or EIA-485 network. The BCM-MDBS is a fully programmable network controller. It hosts its own schedules, calendars, alarms, trend logs, and DDC.

The BCM-MDBS connects Modbus devices—such as variable speed drives—to a BACnet system, converting data from connected Modbus devices to BACnet AV and BV objects. The BCM-MDBS has a capacity for 1000 AV and 1000 BV objects—each AV and BV can be assigned to one Modbus data point.

DIN-rail mounting and a ribbon-cable connection to other BCMs make expansion easy. You can add a network or integration option in minutes, which gives you unprecedented flexibility to adapt quickly as your connectivity, integration, processing, and control requirements change.
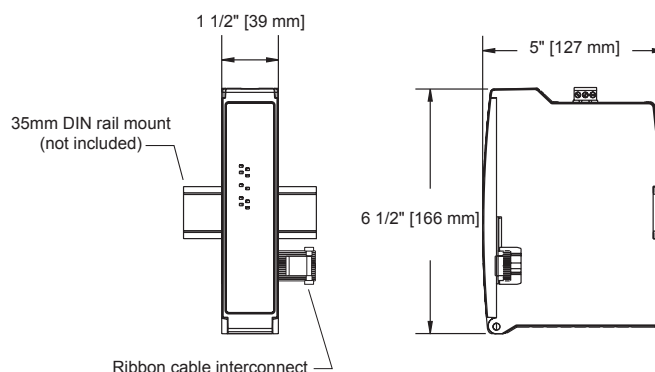
ALERTON®

BCM-MDBS

Technical data

- **Power**   No independent power supply required. Conditioned power is provided by the BCM-PWS through a ribbon-cable connection.

- **Data Backup**   7.2V 700mA-h battery in the BCM-PWS provides interim power for orderly shutdown and backup to flash memory in the event of power loss. Real-time clock retains date and time for up to 20 days without power.

- **Connections**   Supports data from up to 247 Modbus slave nodes (32 unit load maximum) on an EIA-485 or EIA-422 network, or one device on an EIA-232 network.

- **Memory & CPU**   8 MB flash RAM. 32 MB SDRAM for program execution. 32-bit, high-integration Motorola CPU.

- **Real-time Clock**   Onboard real-time clock supports schedule operations, trendlogs, and timed DDC functions.

- **Max. Dimensions**   6.5" (166mm) H x 1.5" (39mm) W x 5.0" (127mm) D.

- **Environmental**   32-131 deg. F (0-55 deg. C). 0-95% RH, non condensing.

- **Ratings**

   Listed Underwriters Laboratories for Open Energy Management Equipment (PAZX) under the UL Standard for Safety 916.

   EMC Directive 89/336/EEC (European CE Mark).

   FCC Part 15, Subpart J, Class A.

- **Software**
   Programming interface: BACtalk® operator workstation software over BACnet Ethernet.

   DDC: VisualLogic® control algorithms execute locally every second. Supports a maximum of 1000 BACnet AVs and 1000 BACnet BVs.

   Schedules: Supports a maximum of 80 schedules and 80 calendars.

   Alarms: Supports a maximum of 320 alarm setups—system destination and actions individually configurable.

   Trendlogs: Supports a maximum of 320 trendlogs to store data point histories for analysis.

   Demand limiting: Supports two demand limiter objects, each with 100 loads defined.

   Zones and tenant activity logs: Supports 80 zones and 80 tenant activity logs to monitor after-hours energy usage.

1 1/2" [39 mm]

35mm DIN rail mount (not included)

5" [127 mm]

6 1/2" [166 mm]

Ribbon cable interconnect

Ordering information

Item number	Description
BCM-MDBS	BACtalk control module, Modbus gateway

Specifications subject to change without notice

LTBT-BCMMDBS   Rev. 0001