

## West MLC 9000 Bus Communications Module



The West RS232 and RS485 Bus Communications Modules, are part of the MLC 9000 DIN-rail mounting bus compatible PID control system. The BCM handles communication between PLC's, HMI's, SCADA systems and PC's for up to 8 Loop Control Modules. Larger systems can be built up using multiple BCM's, up to a total of 224 loops.

- Hot Swap of PID Loops
- Single loop integrity
- Modbus RS485 comms
- Heat/Cool operation
- 10 samples/second
- Software Configurable



### Technical Data

#### RS 232 Port

This is a local port for connection to an RS232 port on a PC (for use with the West Loop Supervisor or the West MLC 9000 Configurator software) or to a West Loopview HMI.

#### Modbus Port

This is an optional RS485 port for connection to a MODBUS master device. Data rate, address and format are configurable via the RS232 port using the MLC 9000 Configurator software from a PC. The MODBUS port can fulfil a variety of roles.

Multi-drop configuration

Configuration and monitoring of the system may be performed with a local RS485 MODBUS network.

Field bus

When a plant uses MODBUS as its field bus choice, this permits the system to be integrated into a field bus network.

Multi-drop Operator Interface

A third party operator interface may be connected, which can read and change parameters over this port.

MODBUS RTU Protocol

Is supported using an RS485 physical layer. Each MLC 9000 system consists of a Bus Communications Module (BCM) plus up to eight Loop Controller Modules (LCM) – a total of nine addresses. Up to 28 systems with 8 LCM's (total 224 loops) can be connected via RS485.

MODBUS Base address

1-247 (default = 96)

Data Rate

4800, 9600 or 19200 (default = 9600)

Parity

None, even or odd (default = None)

#### Physical

Dimensions

Height:100mm Width: 30mm Depth: 120mm

Mounting

Directly mounted on DIN-rail

Weight

0.21kg

#### Environmental Specifications

Ambient operating temperature

0°C to 55°C (32°F to 131°F)

Storage temperature

-20°C to 80°C (-4°F to 176°F)

Relative Humidity

30% to 90% non-condensing (operation and storage)

Supply Voltage

18 to 30Vdc (inc ripple) 25W Max

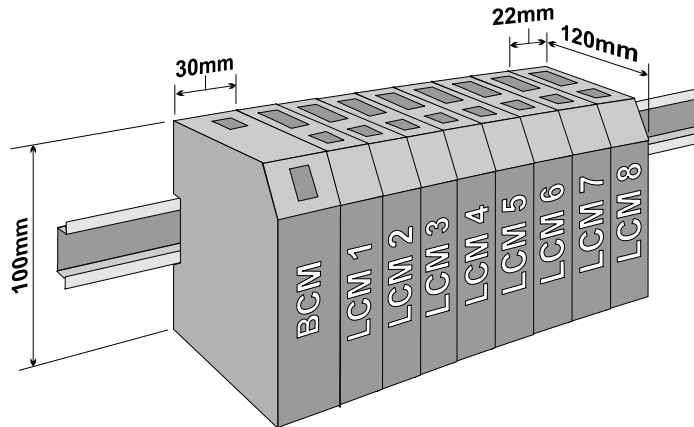
Approvals

EMC: Certified to EN61326-1:1997 Safety: Complies with EN61010 and UL 3121-1

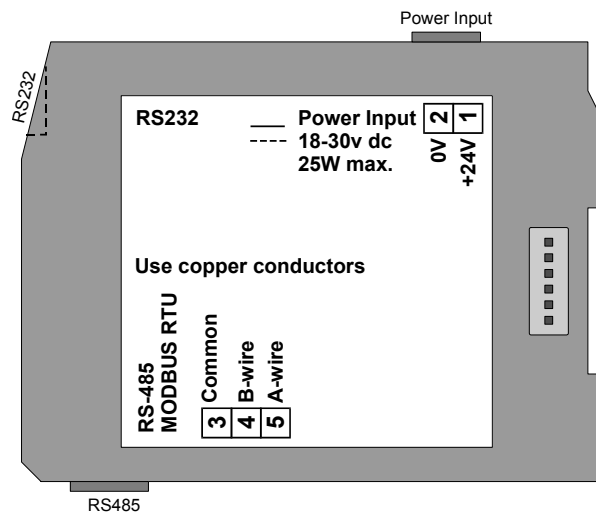
Connector Types

Power Input: 2-way 5.08mm Combicon type. RS232 port: 6-way RJ11Type. MODBUS port (MLC 9000-B220 only): 2-way 5.08mm Combicon type

## Required Space for System Modules



## Electrical Connections for BCM (RS485 on MLC9000-B220 only)



## Order Codes

**MLC 9000-B210**  
**MLC 9000-B220**

BCM: 24vdc powered with RS232 Port

BCM: 24vdc powered with RS232 Port and MODBUS RS485 Port

In accordance with our policy of continuous improvement, we reserve the right to change specifications from those shown in this document.

MLC 9000 RS232 & RS485 BCM Specs – 08/03