

# Product **Specification**

# MLC 9000+ MODBUS RTU Bus Module



The MODBUS Bus Module is part of the MLC 9000+ DIN-Rail mounted multiple loop PID control system. The Bus Module is the supervisor in the MLC 9000+ system and manages the communication with up to 8 single or multiple Loop Modules and the MODBUS RTU network. Systems larger than 32 loops can be built using multiple Bus Modules, within the limitations of your MODBUS RTU system.

- MODBUS RTU port
- Configurable data rate
- DIN Rail Mounting
- Software Configurable
- Configuration port
- Configurable Data Assemblies







#### **Technical Data**

#### **MODBUS Port**

Protocol Function Configuration

Messaging Supported

Connector Diagnostics

#### **Configuration Port**

Protocol
Function
Diagnostics
Connector
Physical
Dimensions
Mounting
Weight

#### **Operating & Environmental**

Temperature & RH Power Supply Power Connector Protection

Approvals and Certification

#### MODBUS RTU (Slave Device)

Connection of the MLC 9000+ system to a MODBUS RTU Master Device

Data Rates 2.4kbps, 4.8kbps, 9.6kbps and 19.2kbps

Address 0 - 257 (Default = 96). Configured using the MLC9000+ Configuration software, via the dedicated configuration port

MODBUS RTU Function codes 01, 02, 03, 04, 05, 06, 08, 0x0F, 0x10 and 0x17

3-way 5.08mm combicon type

Two Colour LED, indicating On/Off-line, Self Test, Bus Fault and Communication Status

West PC Configuration protocol only

Communicates with West MLC 9000+ Configuration Software

Three colour LED, indicating Power Fail, Bus Alarm & Communications Status

6-way RJ11 Type

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

Directly fitted onto 35mm Top-Hat DIN mounting rail (EN50022, DIN46277-3)

0.21kg

0 to 55°C (-20 to 80°C storage), 30% to 90%RH non-condensing

18 to 30Vdc (inc ripple), 30W Max 2-way 5.08mm Combicon type

IEC IP20. Designed for installation in an enclosure which is sealed against dust and

moisture

EMC: Certified to EN61326. Safety: Complies with EN61010 and UL 3121-1, awaiting

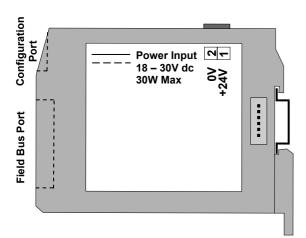
approval from MODBUS Organisation



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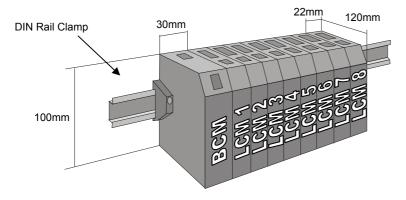
#### **Connection Details**



#### **Power Connections**



### **System Dimensions**



#### **MODBUS Connections**



#### **Data Assemblies**

Using the MLC 9000+ configuration software the user can define a collection of parameters for communication via MODBUS RTU. This allows the user to fully customise the communication interface to the MLC 9000+ system. The user drags and drops the required parameters into the data assemblies allowing the MODBUS master to gather several parameters in a single message.

## **Order Code**

MLC 9000-BM220-MB Bus Module with MODBUS RTU & Configuration Port

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

MLC 9000+ MODBUS RTU Bus Module - 05/04





