

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	MODBUS RTU (Slave Device)
Function	Connection of the MLC 9000+ system to a MODBUS RTU Master Device
Configuration	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
Messaging Supported	MODBUS RTU Function codes 01, 02, 03, 04, 05, 06, 08, 0x0F, 0x10 and 0x17
Connector	3-way 5.08mm combicon type
Diagnostics	Two Colour LED, indicating On/Off-line, Self Test, Bus Fault and Communication Status

Configuration Port

Protocol	West PC Configuration protocol only
Function	Communicates with West MLC 9000+ Configuration Software
Diagnostics	Three colour LED, indicating Power Fail, Bus Alarm & Communications Status
Connector	6-way RJ11 Type

Physical

Dimensions	Height: 100mm, Width: 30mm, Depth: 120mm
Mounting	Directly fitted onto 35mm Top-Hat DIN mounting rail (EN50022, DIN46277-3)
Weight	0.21kg

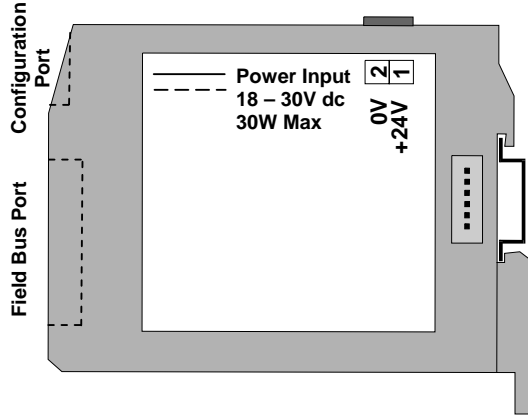
Operating & Environmental

Temperature & RH	0 to 55°C (-20 to 80°C storage), 30% to 90%RH non-condensing
Power Supply	18 to 30Vdc (inc ripple), 30W Max
Power Connector	2-way 5.08mm Combicon type
Protection	IEC IP20. Designed for installation in an enclosure which is sealed against dust and moisture

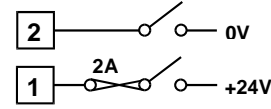
Approvals and Certification

Approvals and Certification	EMC: Certified to EN61326. Safety: Complies with EN61010 and UL 3121-1, awaiting approval from MODBUS Organisation
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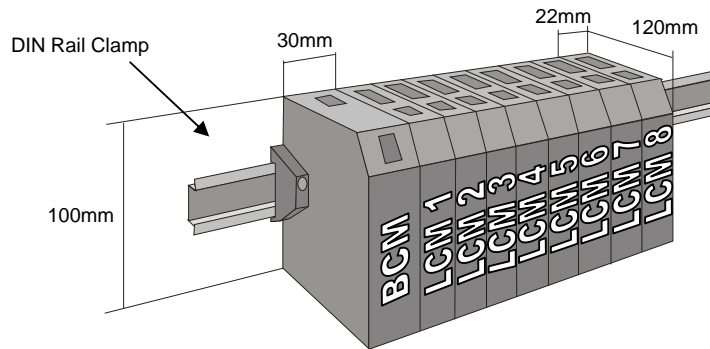
Connection Details



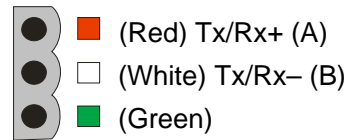
Power Connections



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.