

## MLC 9000+ MODBUS/TCP Bus Module



The MODBUS/TCP 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/TCP network. Systems larger than 32 loops can be built using multiple Bus Modules, within the limitations of your MODBUS/TCP system.

- MODBUS/TCP port
- 10/100BaseT supported
- DIN Rail Mounting
- Software Configurable
- Configuration port
- Configurable Data Area



### Technical Data

#### MODBUS/TCP 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/TCP (Slave Device)

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

IP Address, MAC Address and MODBUS port Address 0 – 257 (Default = 96). Configured using the MLC 9000+ Configurator software, via the configuration port

Function codes 01, 02, 03, 04, 05, 06, 08, 0Fh, 10h and 17h

RJ45 type conforming to CAT5 10/100BaseT

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

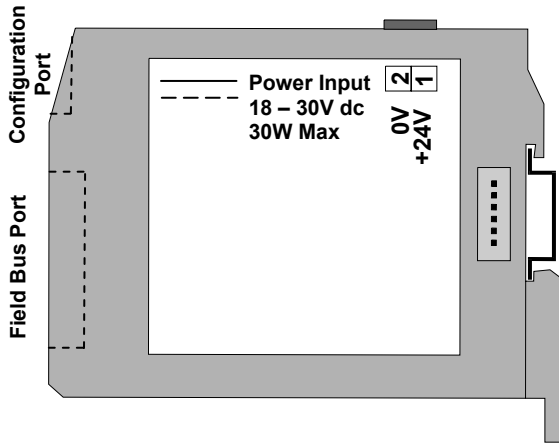
18 to 30Vdc (inc ripple), 30W Max

2-way 5.08mm Combicon type

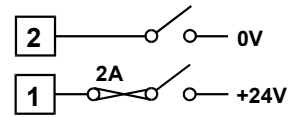
IEC IP20. Designed for installation in an enclosure which is sealed against dust and moisture

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

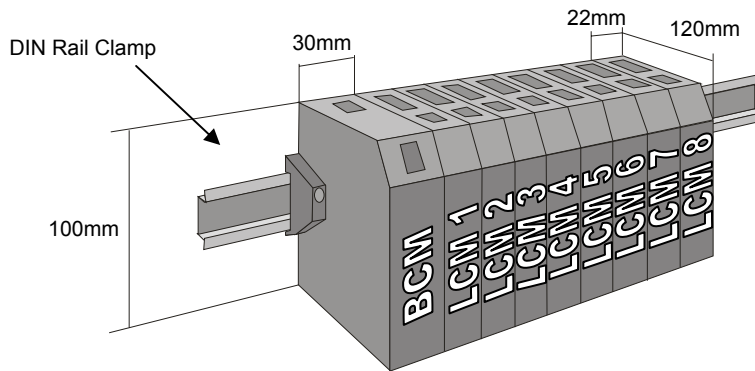
### Connection Details



### Power Connections



### System Dimensions



### MODBUS/TCP Connections

Pin No.	568A	568B
1	WHITE/green	WHITE/orange
2	GREEN/white	ORANGE/white
3	WHITE/orange	WHITE/green
4	BLUE/white	BLUE/white
5	WHITE/blue	WHITE/blue
6	ORANGE/white	GREEN/white
7	WHITE/brown	WHITE/brown
8	BROWN/white	BROWN/white

### Data Assemblies

Using the MLC 9000+ configuration software the user can define a collection of parameters (data assembly) for communication via MODBUS/TCP. 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 assembly area allowing the MODBUS/TCP master to gather several parameters in a single message.

### Order Code

**MLC 9000-BM250-MT** Bus Module with MODBUS/TCP & Configuration Port

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