

ABB MEASUREMENT & ANALYTICS | SERVICE INSTRUCTION

ControlMaster

CM10, CM30 and CM50 universal process controllers CM15 indicator



Ethernet cable assembly issue.

CM10, CM30 and CM50 universal process controllers and CM15 indicator

1 Introduction

An issue has been identified that may be experienced when using a ControlMaster Ethernet cable assembly with Modbus TCP communications. This publication describes the issue and the recommended action to take if it occurs.

2 Action

| 1 | Implement when fault reported | Implement at nex service |
|---|-------------------------------|--------------------------|
| | Information only | Recall instrumen |

3 Identification

The issue is known to affect ControlMasters manufactured before November 2013 containing a device type 4 or earlier and software version 2.1 or earlier.

It may occur when using a ControlMaster as a Modbus TCP Slave (Client) but is especially noticeable when the ControlMaster is communicating with more than one Modbus TCP Master (Server). The following symptoms are indicative of the issue:

- The Modbus signal is lost at the Modbus Master and communications cannot be restored without powering the ControlMaster off and then on.
- Multiple parameters are read from a single ControlMaster but only some display as valid on the Modbus Master; the others show as failed. After powering the ControlMaster off and then on, the good parameters may change, but only some will be displayed as valid.
- If more than one Modbus Master is connected, the ControlMaster communicates with one Modbus Master only and communications show as failed at the other device(s).

If you have any problems or questions, please contact Recording & Control Technical Support.

4 Remedy

Referring to the User Guide supplied with your ControlMaster:

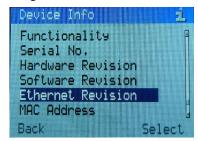
1 Access the Advanced access level.



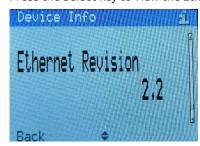
2 Navigate to the Device Info page:



3 Navigate the menu and select the Ethernet Revision page.



4 Press the Select key to view the Ethernet firmware revision.



5 If your Ethernet firmware revision is 2.1 (or earlier) and your ControlMaster is displaying any of the symptoms described, replace the Ethernet cable assembly with one containing the latest firmware.

Acknowledgements

Modbus is a registered trademark of the Modbus-IDA organization.

ABB Limited Measurement & Analytics Howard Road, St. Neots

Howard Road, St. Neots Cambridgeshire, PE19 8EU, UK Tel: +44 (0)870 600 6122 Fax: +44 (0)1480 213 339 Email: instrumentation@gb.abb.com abb.com/measurement ABB Inc. Measurement & Analytics 125 E. County Line Road Warminster, PA 18974

Tel: +1 215 674 6000 Fax: +1 215 674 7183 We reserve the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB does not accept any responsibility whatsoever for potential errors or possible lack of information in this document.

We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents – in whole or in parts – is forbidden without prior written consent of ABB.

© ABB 2019