RSLOGIX 5000 ERROR CODES WHEN USING ETHERNET IP AND ABB DRIVES

Description:

The RSLogix 5000 Error Codes or Module Fault # can be found under the connection Tab within the RSlogix 5000 software.

Right click on the Generic Ethernet Module and select Properties.
Next click the Connection Tab.  

The Error Codes or Module Fault # can be found in the following location.

**Error Code 16#0204** = Connection Request Error: Connection request timed out.  
Reason: The PLC can’t locate the Drive at the given IP Address. 
**Things to check:**
- Check to make sure DHCP is disabled if a Static IP Address is being programmed in the drive.
- Check the programming of the IP address of the Drive and Subnet.  Check the programming of the IP Address in the PLC for the drive.
- Try to ping the drives IP address via a PC connected to the same network.
- Locate and correct the IP address problem.
- Check network wiring.

**Error Code 16#012a** = Connection Request Error: Invalid output application path.  
Reason: There is a mismatch in the selected profile between the PLC and Drive. 
**Things to check:**
- Check the Profile setting in the drive (FENA-xx parameter 51.02 or RETA-01 51.16) for the selected Assembly Instances that where chosen in the PLC.
- There is a mismatch in the selected profile (example the drive is programmed for ODVA Profile and the PLC is programmed for ABB Profile).
Error Code 16#0127 = Connection Request Error: Invalid output size.

Reason: The connection words size is too large to fit in the programmed word array size in the PLC.

Things to check:
- Check the programmed connection size in the PLC and the drive (example the drive is sending 13 words and the PLC is programmed to 10 words).
- Also check to make sure the Comm Format is programmed to Data – INT in the PLC.

Error Code 16#0005 = Connection Request Error: Bad Class.

Reason: There is a mismatch in the selected profile between the PLC and Drive.

Things to check:
- Check the Profile setting in the drive (FENA-xx parameter 51.02 or RETA-01 51.16) for the selected Assembly Instances that were chosen in the PLC.
- There is a mismatch in the selected profile (example the drive is programmed for ODVA Profile and the PLC is programmed for ABB Profile).
- Also check the programmed connection size in the PLC and the drive (example the drive is sending 2 words and the PLC is programmed to 6 words).
- Also check to make sure the Comm Format is programmed to Data – INT in the PLC.

Error Code 16#0109 = Connection Request Error: Invalid connection size (Invalid Input size).

Reason: The connection words size for the Input is too large to fit in the programmed word array size in the PLC.

Things to check:
- Check the programmed connection size in the PLC and the drive (example the drive is sending 2 words and the PLC is programmed to 4 words).
- Also check to make sure the Comm Format is programmed to Data – INT in the PLC.

Error Code 16#0111 = Requested Packet Interval (RPI) out of range.

Reason: The programmed RPI rate is lower then allowed by the Fieldbus option.

Things to check:
- Increase the RPI rate in RSLogix 5000, this can be found under the Connection Tab.
Documents or other reference material:

FENA-01/-11/-21 Ethernet adapter module user’s manual 3AUA0000093568

Basic Guide to Communications ODVA (ControlNet, DeviceNet and EtherNet/IP), US LVD-PNTG03U-EN

RETA-01 Ethernet Adapter Module User’s Manual 3AFE64539736

Corrective Actions:

Follow the instructions above.