Control IQ – Butler Driver Details

This document contains the details for using the Butler / Enercon Driver

Personality field details in the Subsystem table

RefreshInterval=[0] = Wait Time (in seconds) between rescans
InterFrameTimer=[100] = Number of milliseconds between the TX characters

This driver supports 2021,2022,2032x,2051,2033,21xx devices through a 2011/2008
Address 254 and 255 are reserved for broadcast address

Address Schema = Address.Position

Subsystem Setting COM1:1200,N,7,2
Subsystem Type = "Bulter"

For ICMs (21xx)
Set the point up as a "Butler" subsystem with an ASIC1 point type
Fields used in ASIC1 Details are
Setpoint
Occ Schedule
Display Format
EngUnits

It takes two+ consecutive errors from the devices before the start reporting that there is a communication problem.
Error -1 - The device responded but there is an error on the transmission
Error -2 - There is no response from the device
Error -3 - The device is on the first scan since restarting proc (this should not appear)

Note ANY override to a 21xx puts it in Total ShutDown. This is the method to "reset" the 21xx. For this reason, DON'T set the "IncludeInSetpoint=1" for a 21xx device.

Address is set by the dip switch on the board

Position is decoded as

DO 0 - Primary Output [123.0]
DO 1 - Secondary Output [123.1]

AO 0 - Primary output (on the secondary address) [124.0]
This requires a 2032A as the master
If no Scaling in the AO screen it assumes 0-100
The AO is only 4 bit (0-15 scales 0-100%) so output is rather crude
The AO is either 1-5 vdc or 4-20ma

AI 0 - Analog Input [123.0]
If no Scaling in the AI screen it assums 0-127 (temperature)
Raw data is 7 bit (0-127) so the temperature is in full degrees

DI 10 - Digital Input #1 (called "Prove Input")
DI 11 - Digital Input #2 (called "Timed Override")

DI 10 - AO Board Terminals 10/11 - Note these are wet inputs
DI 11 - AO Board Terminals 9/10
DI 12 - AO Board Terminals 7/8

Meter 8 (default) use 8 bit counter (a 0 assumes 8 bit) [123.0 = 123.8]
Meter 12 use the 12 bit counter [123.12] (this was a special chip)

ASIC1 0 - Read / Write to the 21xx. This reports similar to an ASIC1