ANYTHING BUT COMPLICATED

YASKAWA DRIVE TO PLC INTEGRATION

under 1 minute

That's the amount of time you'll need to add a Yaskawa VFD into your Rockwell PLC programming environment

STEP 1

DETERMINE YOUR DATA

If all you'll want to do is start and stop the drive and give it a speed reference, use assemblies 21 and 71. Or refer to the EtherNet/IP ™ Technical manual for a list of your options.

You'll need to change b1-01 and b1-02 to 3: Option PCB for control over EtherNet/IP.

Extended Speed Control Output - 21 (0x15)

Output Instance	Word	Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit3	Bit 2	Bit 1	Bit 0
21	0	0	-	NetRef	NetCtrl	-	-	Fault Reset	Run Rev	Run Fwd
		1	-							
	1	2	Speed Reference (Low Byte)							
		3	Speed Reference (High Byte)							

Extended Speed Control Input - 71 (0x47)

Output Instance	Word	Byte	Bit 7	Bit 6	Bit 5	Bit 4	Bit3	Bit 2	Bit 1	Bit 0
71	0	0	At Speed	Ref from Net	Ctrl from Net	Ready	Running 2 (REV)	Running 1 (FWD)	Warning	Faulted
		1	Drive State							
	1	2	Speed Actual (Low Byte)							
		3	Speed Actual (High Byte)							

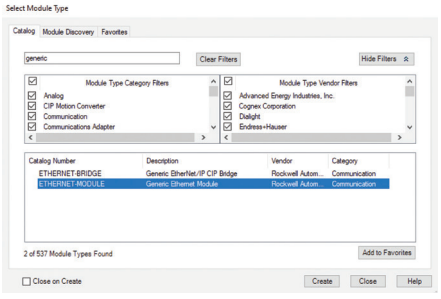
STEP 2

ADD MODULE IN LOGIX

Right click on the EtherNet/IP scanner and choose **"New Module..."**

Select the **Generic Ethernet Module (ETHERNET-MODULE)** and click OK.

Tip: Use the search box and type in "generic" to find the module quicker.

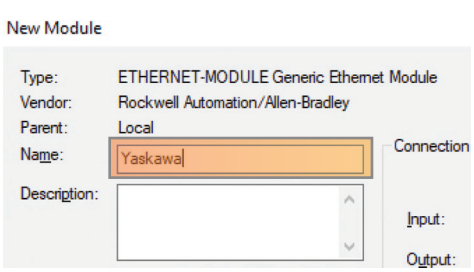


STEP 3

NAME THE DRIVE

Give the drive a logical name (tag) like Pump1 or Conveyor1. This is how the drive will be referenced in the program.

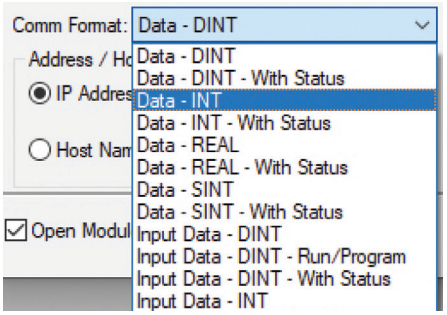
Example: Yaskawa



STEP 4

CHANGE THE COMM FORMAT

Change the Comm Format to ***DATA-INT***.



YASKAWA

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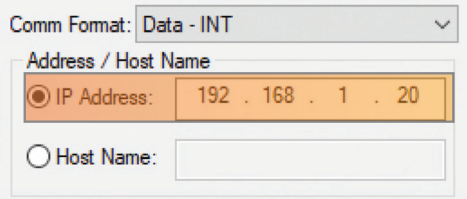
STEP 5

IP ADDRESS

Enter the IP address assigned to the drive.



STEP 6

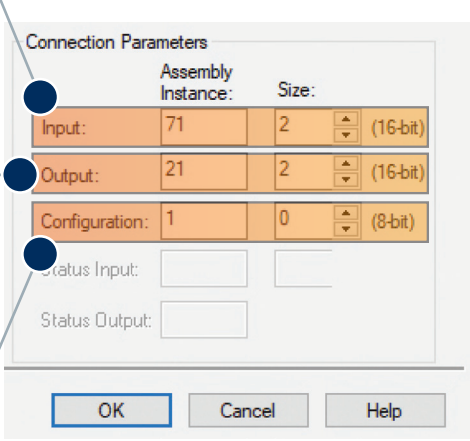
INPUT ASSEMBLY AND SIZE

Enter the desired input assembly (data to the PLC from the drive) from step 1.

STEP 7

OUTPUT ASSEMBLY AND SIZE

Enter the desired output assembly (data from the PLC to the drive) from step 1.



Recommendation for input assembly and size is assembly 71 of size 2 words (4 bytes) for drive status and output frequency.

Recommendation for output assembly and size is assembly 21 of size 2 words (4 bytes) for start, stop, and speed reference.

Configuration assembly is always Instance 1 and Size 0.

STEP 8

CONFIGURATION ASSEMBLY AND SIZE

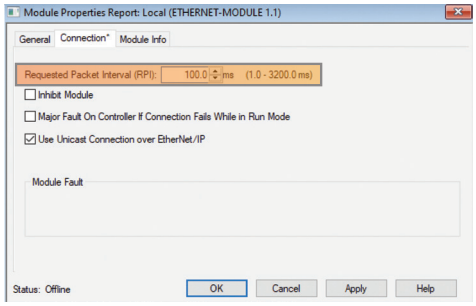
Configuration assembly is always **Instance 1** and **Size 0**.

STEP 9

ENTER RPI TIME

Requested Packet Interval (RPI) time is how often data is transmitted back and forth between the PLC and the drive.

Recommendation for RPI time is 100 ms.



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The number of steps you'll need to get a Yaskawa drive communicating EtherNet/IP to a Logix Controller.

Questions? Learn more at www.yaskawa.com/ethernet-ip