

RECA-01 ETHERCAT DOES NOT FAULT ON COMM FAULT WHEN CABLE IS UNPLUGGED

Description:

The RECA-01 (EtherCAT adapter) does not fault the drive when the cable is unplugged from the RECA-01 adapter.

Answer:

The Process Data should be configured before enabling the Watchdog timer.

The following parameters need to be programmed in the drive for Comm Fault. The drive parameter 30.18 COMM FLT FUNC needs to be programmed to "FAULT" and parameter 30.19 MAIN REF DS T-OUT [s] needs to programmed to the time the drive should wait before faulting on a communication loss.

Enabling the Comm Fault watchdog within TwinCAT's software.

Click on the RECA-01 node within the TwinCAT's System Manager Software and click on the EtherCat Tab.

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SYSTEM - Configuration PLC - Configuration I/O - Configuration	General EtherCAT Process Data Startup CoE - Online Online
i ↓ 0 comgatation	Type: RECA-01 and ACS800 Std
Device 4 (EtherCAT (v2.10 only))	Product/Revision: 257 / 131078
🕂 Device 4-Image	Auto Inc Addr: FFF8
Device 4-Image-Info	EtherCAT Addr: 🔲 1009 🚖 Advanced Settings
inputs 	Identification Value: 0
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Author: Jeff Fell – Application Eng.		Date: 04, 2013	
External	Industry – Industrial, HVAC	Document #: LVD-EOTN36U-EN	
http://www.abb.us/drives. or PLC		Revision: A	
Product Categories: ACS800, ACS550, ACH550, DCS800			



Click the Advanced Settings... button.

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🖶 🛃 SYSTEM - Configuration	General EtherCAT	Process Data Startup CoE - Or	
- 🙀 PLC - Configuration	General		
🛓 🛒 I/O - Configuration	Type:	RECA 91 and ACS800 Std	
🖨 🎬 I/O Devices	Product/Revision:	257 / 131078	
🖻 🚍 Device 4 (EtherCAT (v2.10 only))	Product/Revision:	25/ / 1310/8	
🛁 🛨 Device 4-Image	Auto Inc Addr:	FFF8	
🕂 🕂 Device 4-Image-Info	EtherCAT Addr:	1009	Advanced Settings
ian la transferencia de l	Identification Value:	0	
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Term 2 (EL1008)			
Term 3 (EL2624)			
Term 4 (EL3064)			
Term 5 (EL4014)			
Term 6 (EK1122)			
infoData			
📺 🛄 Term 7 (EK1100)			
Term 10 (EL6751)			
Term 12 (EL9011)			
Mappings			

Click and expand the General tree and then click on the FMMU/SM.

Advanced Settings				/				X	\Box
⊡. General	FMMU / SM								1
- Timeout Settings	L Start	Length	L EndBit	P Start	Flags	Sm	Su		
Identification FMMU / SM	0x01000000.0		7	0x1000.0	WE	0	0		
Init Commands	0x01000000.0	4	7	0x1600.0	RE	0	0		
Distributed Clock ESC Access									
H. LSC ACCES	•			ppend	Delete		▶		
							JIC		
	Start 0x1C00	Length 192	Data 0x00010026 (1W		aster				
	0x1E00	192	0x00010028 (11)						
	0x1000 0x1600	4 4	0x00010064 (3W 0x00010020 (3R						
	UX 1600	4	000010020 (36	FE)					
			A	ppend	Delete	Ec	lit		
								OK Cancel	

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Double click on the 0x1000.

Advanced Settings	and a set of the set o	
⊡. General	FMMU/SM	
Timeout Settings	L Start Length L EndBit P Start Flags Sm Su	
Identification FMMU / SM Init Commands Mailbox Distributed Clock	0x0100000.0 4 7 0x1000.0 WE 0 0 0x01000000.0 4 7 0x1600.0 RE 0 0	
ESC Access	۰ (ا	
	Append Delete Edit	
	Start Length Data Master	
	0x1C00 192 0x00010026 (1WPE) 0x1E00 192 0x00010022 (1RPE) 0x1000 4 0x00010064 (3WPTE) 0x1600 4 0x00010020 (3RPE)	
	OK	Cancel

Click to add a check to the box below the watchdog timer.

Edit Sync Manager	1000	<u> </u>	
Type: Outputs - Start Address:	Buffer ③ 3 ⑦ 1	OK Cancel	
4096 Length: 4	Access Read Write		
📝 Enable	Interrupts To EtherCAT To PDI		
Watchdog Trigger			

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Click ok and Reload I/O Devices within the TwinCAT's System Manager Software and test to make sure the Comm Fault is now working.

Documents or other reference material:

None

Corrective Actions:

None

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