

Totally Integrated Automation Portal

Cyclic_holding_register_swap [OB37]

Cyclic_holding_register_swap Properties

General

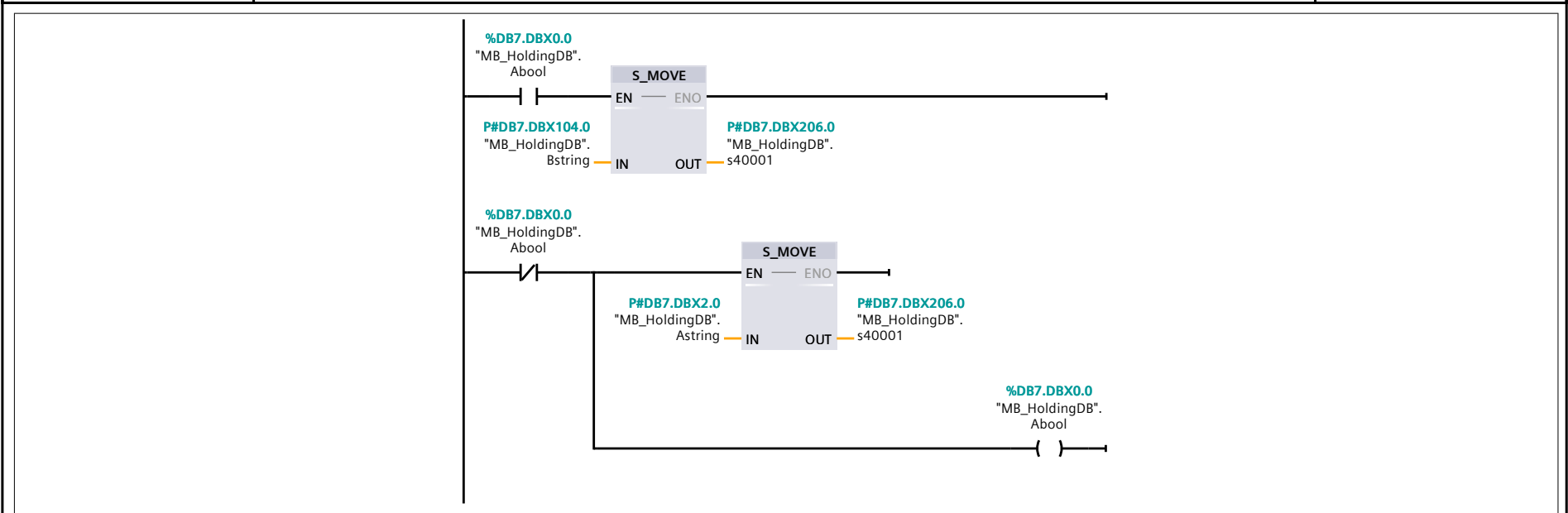
Name	Cyclic_holding_register_swap	Number	37	Type	OB	Language	LAD
Numbering	Manual						

Information

Title		Author		Comment	High-priority (24) Cyclic Interrupt (1ms) block to overwrite string MB_HoldingDB.s40001 with alternating values, to test if this can affect the consistency of read that string from the Modbus server instruction (MB_SERVER) in Program Cycle Block Main_MB_Server	Family	
Version	0.1	User-defined ID					

Name	Data type	Default value	Supervision	Comment
▼ Input				
Initial_Call	Bool			Initial call of this OB
Event_Count	Int			Events discarded
Temp				
Constant				

Network 1: Bit to control alternating string writes in block Cyclic_holding_register_swap (OB37)



Symbol	Address	Type	Comment
"MB_HoldingDB".Abool	%DB7.DBX0.0	Bool	Bit to control alternating string writes in block Cyclic_holding_register_swap (OB37)
"MB_HoldingDB".Astring	P#DB7.DBX2.0	String	'A' alternating string to write to .s40001
"MB_HoldingDB".Bstring	P#DB7.DBX104.0	String	'B' alternating string to write to .s40001
"MB_HoldingDB".s40001	P#DB7.DBX206.0	String	Modbus server's Holding registers; includes initial register with length before first character

Network 2:

Count passes through this block

```

      graph LR
        A["\"ModbusDB\".  
cyclic_counter"]
        B["1"]
        C["ADD  
Auto UDInt"]
        D["\"ModbusDB\".  
cyclic_counter"]
        E[">  
UDInt  
1999"]
        F["MOVE"]
        G["\"ModbusDB\".  
cyclic_counter"]

        A -- IN1 --> C
        B -- IN2 --> C
        C -- ENO --> D
        D --> E
        E --> F
        F -- ENO --> G
        F -- OUT1 --> G
    
```

The diagram shows a sequence of operations. It starts with an ADD block (Auto UDInt) where the input "ModbusDB".cyclic_counter is added to the constant 1. The output of the ADD block is then compared to the value 1999 using a greater-than (UDInt) contact. If the condition is true, a MOVE block moves the value from "ModbusDB".cyclic_counter to the output "ModbusDB".cyclic_counter.

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Symbol	Address	Type	Comment
"ModbusDB".cyclic_counter		UDInt	