## OB1 - <offline>

"CYCL\_EXC" Cycle Execution Name: Author: Version: 0.1

Block version: 2

Time stamp Code: 28-08-2001 14:23:52

Interface: 13-08-2001 23:52:59 Lengths (block/logic/data): 00296 00156 00020

Address	Declaration	Name	Type	Initial value	Comment
0.0	temp	OB1_EV_CLASS	BYTE		Bits 0-3 = 1 (Coming event), Bits 4-7 = 1 (Event cla
					ss 1)
1.0	temp	OB1_SCAN_1	BYTE		1 (Cold restart scan 1 of OB 1), 3 (Scan 2-n of OB 1
					)
2.0	temp	OB1_PRIORITY	BYTE		1 (Priority of 1 is lowest)
3.0	temp	OB1_OB_NUMBR	BYTE		1 (Organization block 1, OB1)
4.0	temp	OB1_RESERVED_1	BYTE		Reserved for system
5.0	temp	OB1_RESERVED_2	BYTE		Reserved for system
6.0	temp	OB1_PREV_CYCLE	INT		Cycle time of previous OB1 scan (milliseconds)
8.0	temp	OB1_MIN_CYCLE	INT		Minimum cycle time of OB1 (milliseconds)
10.0	temp	OB1_MAX_CYCLE	INT		Maximum cycle time of OB1 (milliseconds)
12.0	temp	OB1_DATE_TIME	DATE_AND_TIME		Date and time OB1 started

#### Block: OB1

This program demostrates how to use the FC1-blok to communicate with a FBG10 adapter connected to a JVL motor controller.

It's assumed that the address of the FBG is 10.

It's assumed that the connected controller is in MO=2 and it's possible to run

the motor with a SP command

The program is using the RS and SR command of the controller.

The program starts the motor by sending the SR=50000 command.

Then it reads the value of RS. If RS<>0 then it reads it again.

When RS=0 the program is starting the motor again by sending a new SR=50000

command.

M3.0 Start SET position M3.1 Start GET position

M3.2 Is in position

## Network: 1

Controls whenever the FC1 sould send a command, or request a parameter.



Network: 2

This network call the FC1 function block.

```
FC1
(CALL)
```

Network: 3

Set M3.0 if the motor is in position (M3.2) and nothing else is running

```
M3.0
                     M3.1
                                M3.2
                                           M3.0
M1.0
                     +/-
                                + \vdash
                                         —(s)—
+/-
```

Network: 4

Set M3.1 if the motor isn't in position and nothing else is running

```
M1.0
          M3.0
                    M3.1
                              M3.2
                                         M3.1
╢
                               +/-
                                        —(s)—
```

Network: 5

Starts a timer, that signals that the command is finished.

```
M1.0
                                             Т3
\dashv \vdash
                                          -(SD)
                                        S5T#1S500M
```

#### Network: 6

If M3.0 then load the command number (773 = SR) and the value 50000 into the FBG10. Activate M3.3 wich signals that a command is ready.

```
M3.0
                                                             M3.3
            MOVE
                                                MOVE
                                                              ()—(
               ENO
                                                    ENO
    773 — IN
               OUT -MW10
                                                    OUT MD12
                                   L#50000 - IN
```

## Network: 7

Resets M3.0 when the timer, that signals command executed, is fininshed.

```
M3.0
                                           -(R)---
```

## Network: 8

If M3.1 then load the command number (766 = RS) into the FBG10 Activate M3.4 wich signals that a command is ready

```
M3.1
                                 M3.4
          MOVE
        EN
                                 ()
              ENO
              OUT -MW10
   766 IN
```

# Network: 9

If there is a command ready, set M1.0. M1.0 is a signal to FC1 to start the FBG10.

```
M3.3
                             M1.0
                             ()
M3.4
```

Network: 10

If the SR command has been executed, then read the result and compare it with 0.

If RS=0 then the motor has reached its position.

```
M3.1
                                                  M3.2
                  Т3
                                                  (s)
                      _{\text{ID4}} - \text{IN1}
                      L#0-IN2
```

Network: 11

If excuting of the RS command is finish then clear the M3.1

```
M3.1
                               M3.1
                               -(R)
```

Network: 12

Clear the in position bit (M3.2) when a new SR or RS command is initiated

```
M3.2
M3.1
                M4.1
                -(<sub>P</sub>)-
                                                (R)
M3.0
```