

RSLogix Micro Project Report



Processor Information

Processor Type: Bul.1763 MicroLogix 1100 Series B

Processor Name: UNTITLED

Total Memory Used: *

Total Memory Left: *

Program Files: 6

Data Files: 9

Program ID: 0

I/O Configuration

0	Bul.1763	MicroLogix 1100 Series B
1		
2		
3		
4		

Channel Configuration

CHANNEL 0 (SYSTEM) - Driver: DF1 Full Duplex

CHANNEL 0 (SYSTEM) - Driver: DF1 Full Duplex Edit Resource/Owner Timeout: 60
 CHANNEL 0 (SYSTEM) - Driver: DF1 Full Duplex Passthru Link ID: 1
 CHANNEL 0 (SYSTEM) - Driver: DF1 Full Duplex Write Protected: No
 CHANNEL 0 (SYSTEM) - Driver: DF1 Full Duplex Comms Servicing Selection: Yes
 CHANNEL 0 (SYSTEM) - Driver: DF1 Full Duplex Message Servicing Selection: Yes
 CHANNEL 0 (SYSTEM) - Driver: DF1 Full Duplex 1st AWA Append Character: \d
 CHANNEL 0 (SYSTEM) - Driver: DF1 Full Duplex 2nd AWA Append Character: \a

Source ID: 1 (decimal)
 Baud: 19200
 Parity: NONE
 Control Line : No Handshaking
 Error Detection: CRC
 Embedded Responses: Auto Detect
 Duplicate Packet Detect: Yes
 ACK Timeout(x20 ms): 50
 NAK Retries: 3
 ENQ Retries: 3

CHANNEL 1 (SYSTEM) - Driver: Ethernet

CHANNEL 1 (SYSTEM) - Driver: Ethernet Edit Resource/Owner Timeout: 60
 CHANNEL 1 (SYSTEM) - Driver: Ethernet Passthru Link ID: 1
 CHANNEL 1 (SYSTEM) - Driver: Ethernet Write Protected: No
 CHANNEL 1 (SYSTEM) - Driver: Ethernet Comms Servicing Selection: Yes
 CHANNEL 1 (SYSTEM) - Driver: Ethernet Message Servicing Selection: Yes

Hardware Address: 00:00:00:00:00:00
 IP Address: 0.0.0.0
 Subnet Mask: 0.0.0.0
 Gateway Address: 0.0.0.0
 Msg Connection Timeout (x 1mS): 15000
 Msg Reply Timeout (x mS): 3000
 Inactivity Timeout (x Min): 30
 Bootp Enable: Yes
 Dhcp Enable No
 SNMP Enable: No
 HTTP Enable: Yes
 Auto Negotiate Enable: Yes
 Port Speed Enable: 10/100 Mbps Full Duplex/Half Duplex
 Contact:
 Location:

Program File List

Name	Number	Type	Rungs	Debug	Bytes
[SYSTEM]	0	SYS	0	No	0
	1	SYS	0	No	0
MAIN	2	LADDER	4	No	30
IO	3	LADDER	7	No	99
CONTROL	4	LADDER	31	No	1064
POSITIONS	5	LADDER	6	No	218

REGELVENTIL_ZYKLUSSTEUERUNG.RSS							
Data File List							
Name	Number	Type	Scope	Debug	Words	Elements	Last
OUTPUT	0	O	Global	No	12	4	O:3
INPUT	1	I	Global	No	18	6	I:5
STATUS	2	S	Global	No	0	66	S:65
BINARY	3	B	Global	No	4	4	B3:3
TIMER	4	T	Global	No	9	3	T4:2
COUNTER	5	C	Global	No	3	1	C5:0
CONTROL	6	R	Global	No	3	1	R6:0
INTEGER	7	N	Global	No	3	3	N7:2
FLOAT	8	F	Global	No	2	1	F8:0

PROJEKTBESCHREIBUNG: IN DIESEM PROJEKT GEHT ES UM DIE STEUERUNG EINES REGELVENTILS. DER REGELVENTIL BESTEHT AUS EINEM NOCKENRAD, DER DURCH EINEN SERVOMOTOR ANGETRIEBEN WIRD. UM DEN NOCKENRAD HERUM SIND VIER SCHALTER IM UHRZEIGERSINN PLATZIERT: HOME-SCHALTER, FILL-SCHALTER, DRAIN-SCHALTER UND FLUSH-SCHALTER. DIE STARTPOSITION FÜR DEN NOCKENRAD IST HOME-SCHALTER. DER NOCKENRAD BEWEGT NUR IM UHRZEIGERSINN. DER SERVOMOTOR WIRD AN DIE SPS ANGESCHLOSSEN. DER REGELVENTIL IST TEIL EINES MODULARES WASSERAUFBEREITUNGSSYSTEM, DAS IM EXISITIERENDEN SYSTEM INTEGRIERT WIRD. DURCH DAS EXISTIERENDE SYSTEM KANN EIN ZYKLUSBEFEHL ERFOLGEN. ANHAND DIESES BEFEHLS WIRD EIN ZYKLUS DURCHGEFÜHRT. DER ZYKLUS DURCHLÄUFT FOLGENDE SCHRITTE:

- 1) FALLS NOCKENRAD SICH NICHT AN STARTPOSITION BEFINDET(HOME-SCHALTER NICHT EINGESCHALTET), DREHT DER NOCKENRAD BIS DER HOME-SCHALTER EINGESCHLATE IST:
- 2) DANN BEWEGT SICH DER NOCKENRAD BIS DER FILL-SCHALTER EINGESCHALTET IST UND DER FILLVORGANG WIRD FÜR 10 SEKUNDEN DURCHGEFÜHRT.
- 3) NACH 10 SEKUNDEN,DER NOCKENRAD BEWEGT SICH WEITER BIS DER DRAIN-SCHALTER EINGESCHALTET IST. DER DRAINVORGANG WIRD FÜR 20 SEKUNDEN DURCHGEFÜHRT.
- 4) NACH 20 SEKUNDEN, DER NOCKENRAD BEWEGT SICH WEITER BIS DER FLUSH-SCHALTET EINGESCHALTET IST. DER FLUSHVORGAGN WIRD FÜR 10 SEKUNDEN DURCHGEFÜHRT.
- 5) NACH 10 SEKUNDEN, DER NOCKENRAD DREHT SICH WEITER BIS DER HOME-SCHALTET WIEDER EINSCHALTET WIRD. DER ZYKLUS KOMMT ZUM ENDE.

FERNER HAT DAS PROGRAM DAS INTERRUPT-BIT B3:0/0. FALLS SIE AKTIV WIRD UND DER REGELVENTIL DEN ZYKLUS DURCHLÄUFT, WIRD DER ZYKLUS UNTERBROCHEN UND DER REGELVENTIL KOMMT ZUR STARTPOSITION:

I/O

JSR

Jump To Subroutine
SBR File Number

U:3

STEUERLOGIK

JSR

Jump To Subroutine
SBR File Number

U:4

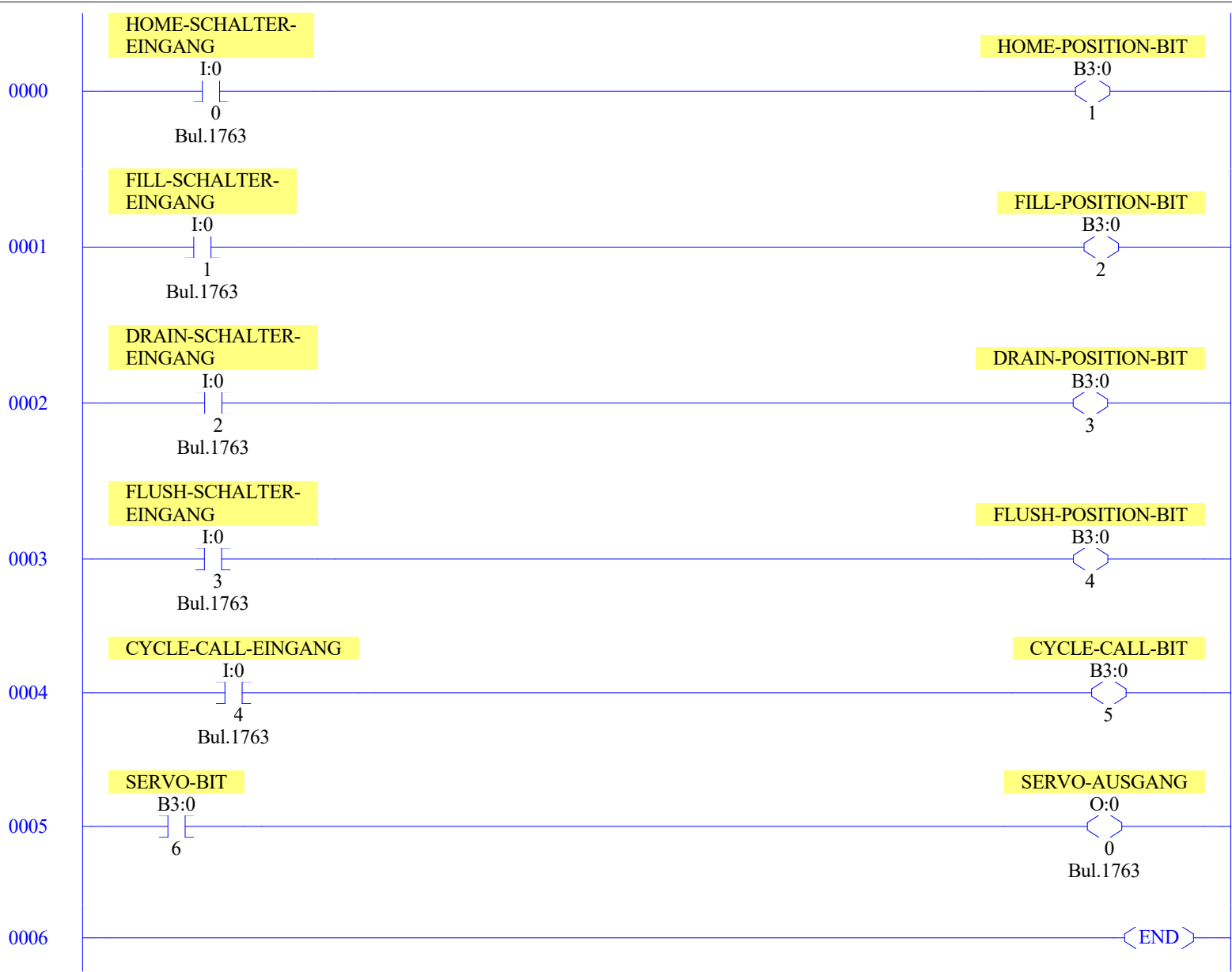
POSITIONEN

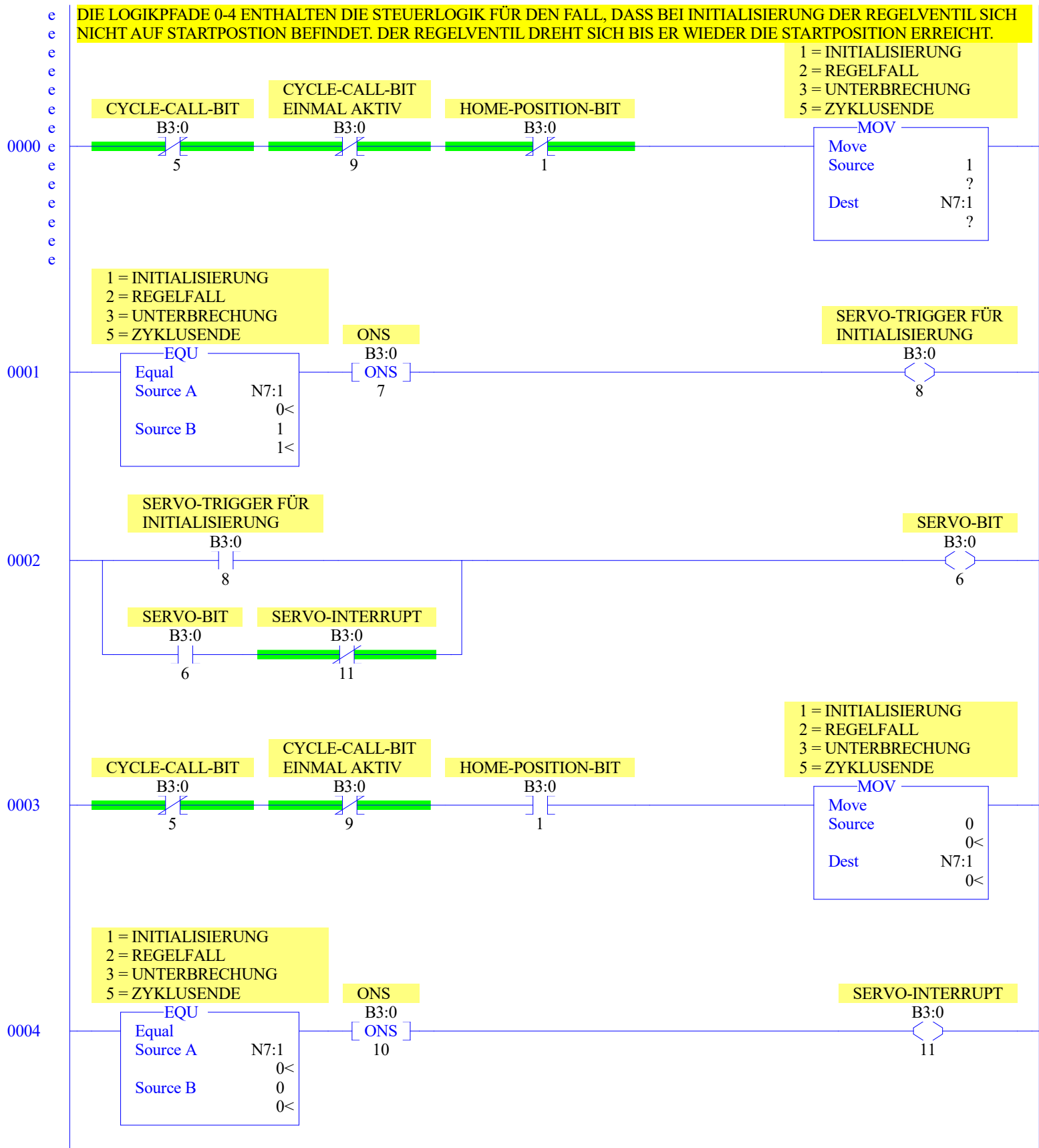
JSR

Jump To Subroutine
SBR File Number

U:5

⟨END⟩





DIE LOGIKPFADE 5-23 ENTHALTEN DIE STEUERLOGIK DAFÜR, WENN DER ZYKLUSBEFEHL AUS DEM EXISTIERENDEN SYSTEM ABGERUFEN WIRD. DER REGELVENTIL DURCHLÄUFT ALLE FÜNF SCHRITTE; DIE BEI DER PROJEKTBESCHREIBUNG IN MAIN PROGRAM FILE BESCHRIEBEN SIND.

1 = INITIALISIERUNG
2 = REGELFALL
3 = UNTERBRECHUNG
5 = ZYKLUSENDE

MOV
Move
Source 2
2<
Dest N7:1
0<

CYCLE-CALL-BIT
EINMAL AKTIV
B3:0

L
9

1 = INITIALISIERUNG
2 = REGELFALL
3 = UNTERBRECHUNG
5 = ZYKLUSENDE

EQU
Equal
Source A N7:1
0<
Source B 2
2<

CYCLE-CALL ABGERUFEN

B3:3
2

1 = INITIALISIERUNG
2 = REGELFALL
3 = UNTERBRECHUNG
5 = ZYKLUSENDE

EQU
Equal
Source A N7:1
0<
Source B 2
2<

ONS
B3:0
ONS
12

SERVO-TRIGGER FÜR
FILL

B3:0
13

SERVO-TRIGGER FÜR
FILL

B3:0
13

SERVO-BIT

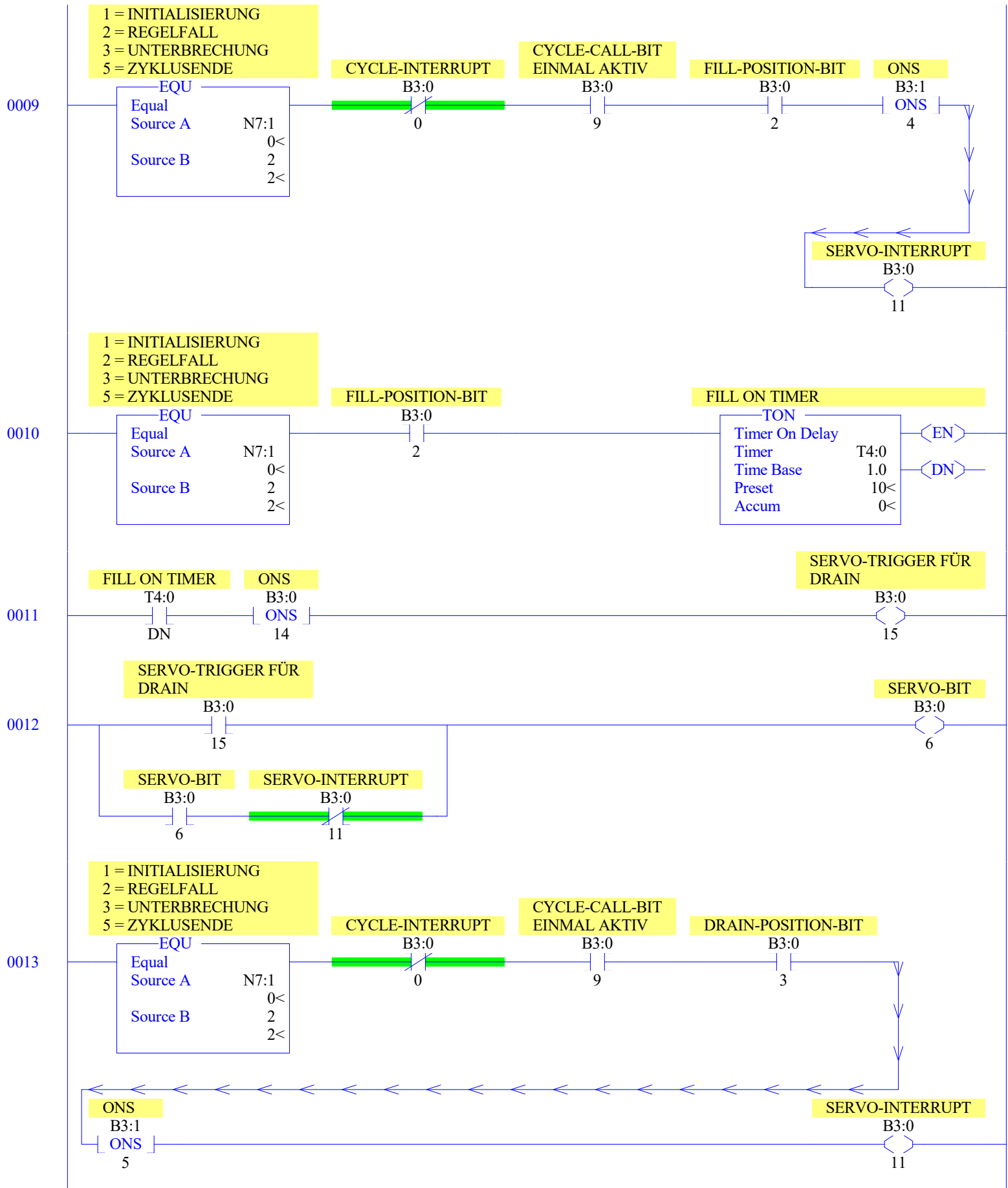
B3:0
6

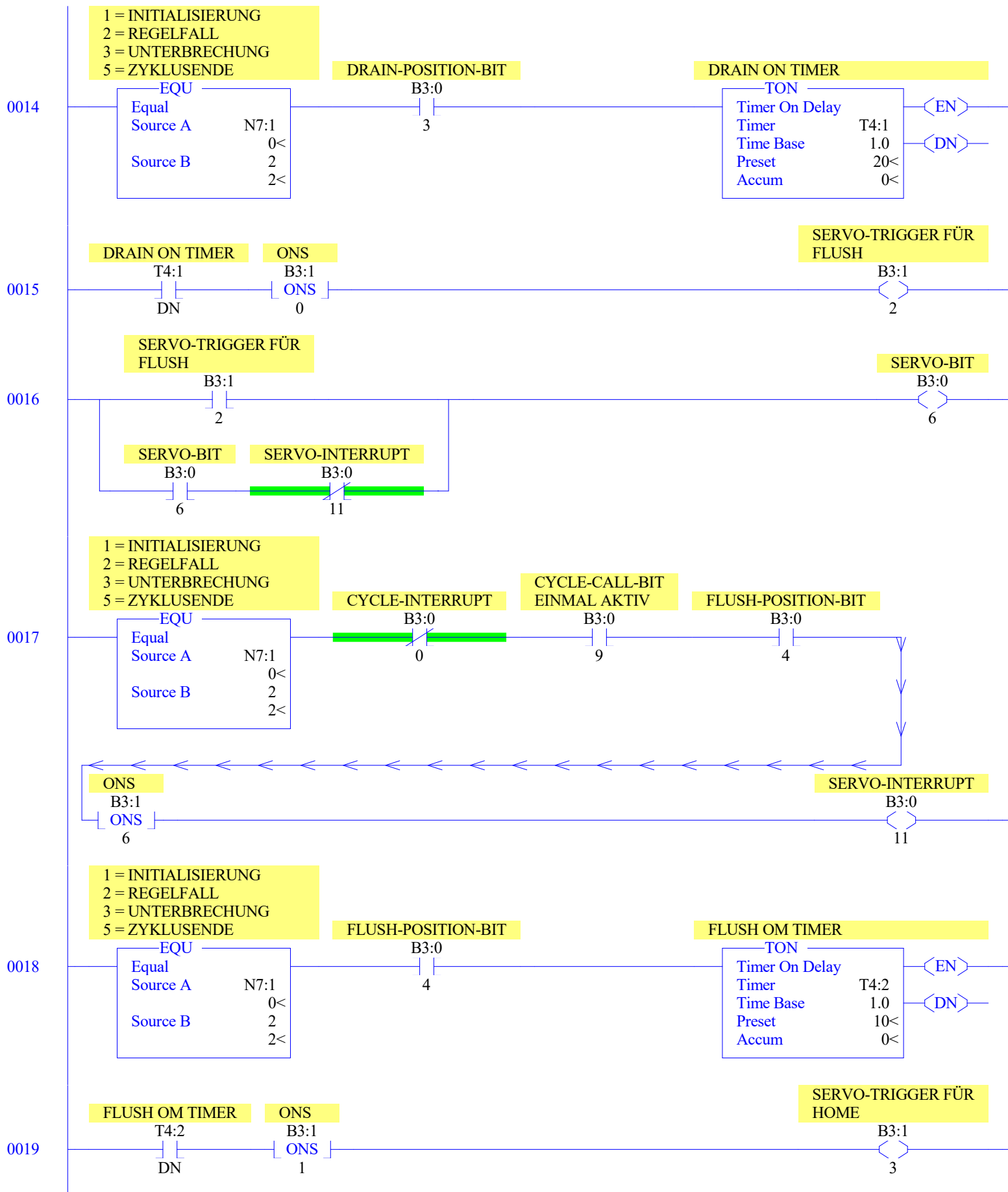
SERVO-INTERRUPT

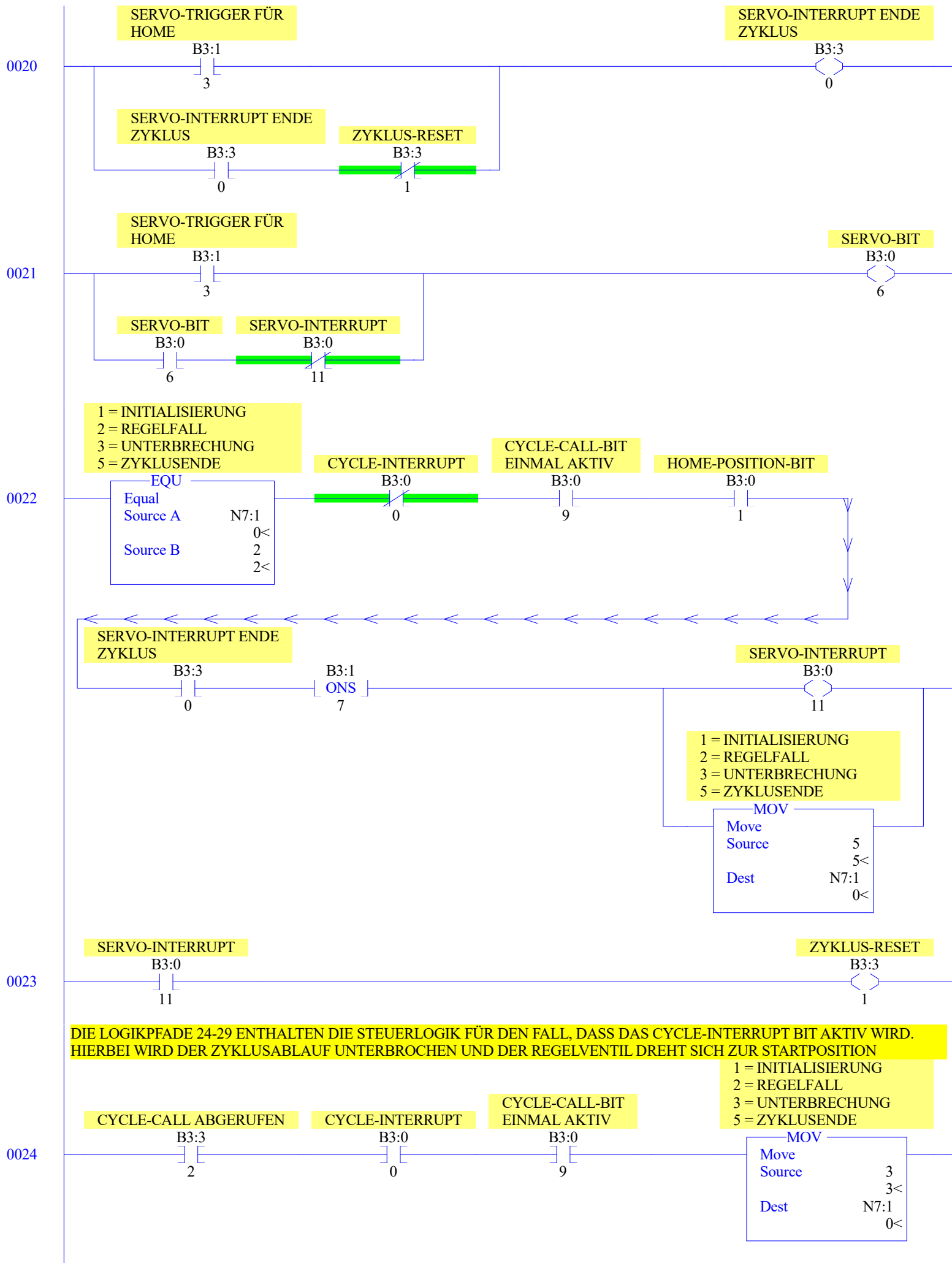
B3:0
11

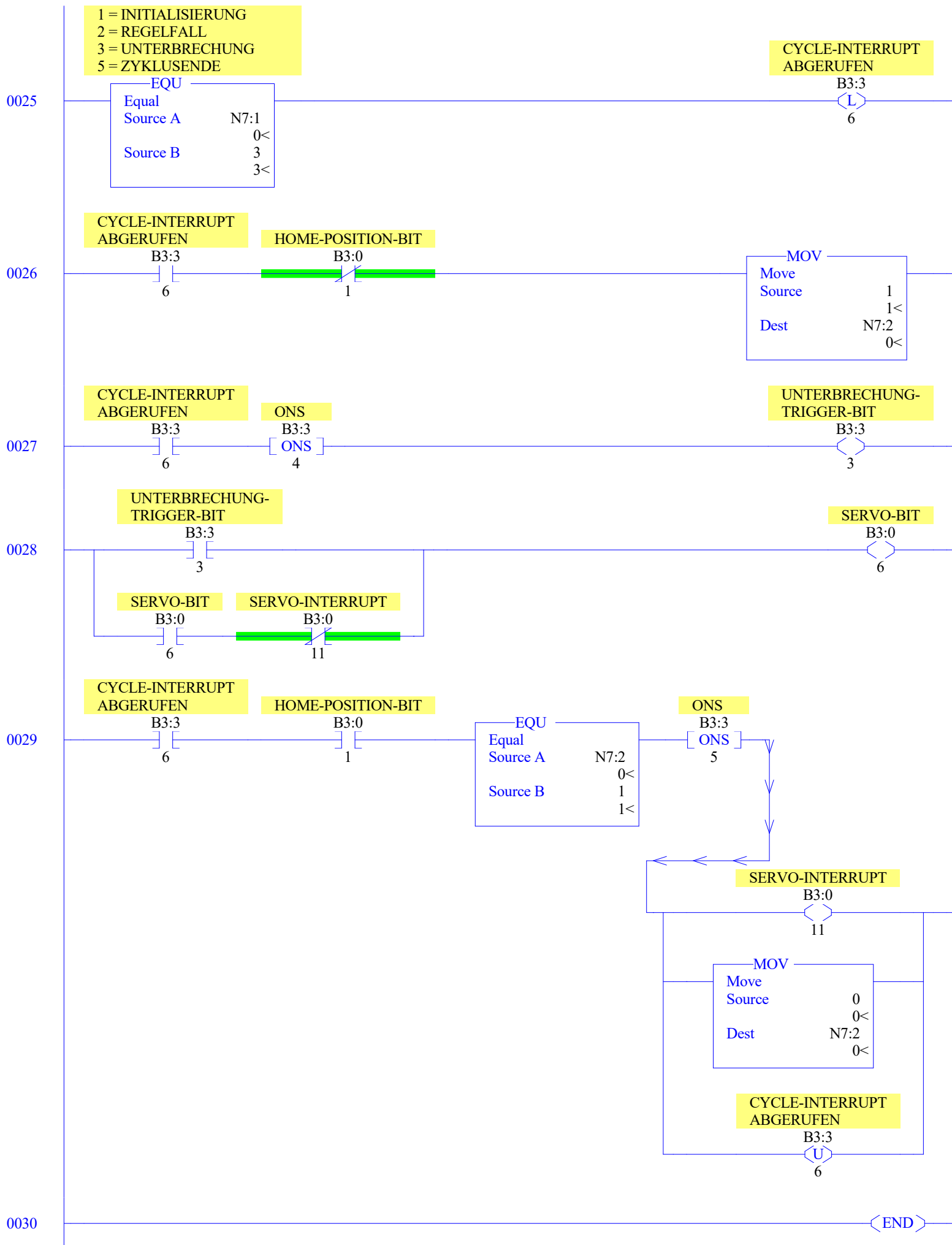
SERVO-BIT

B3:0
6



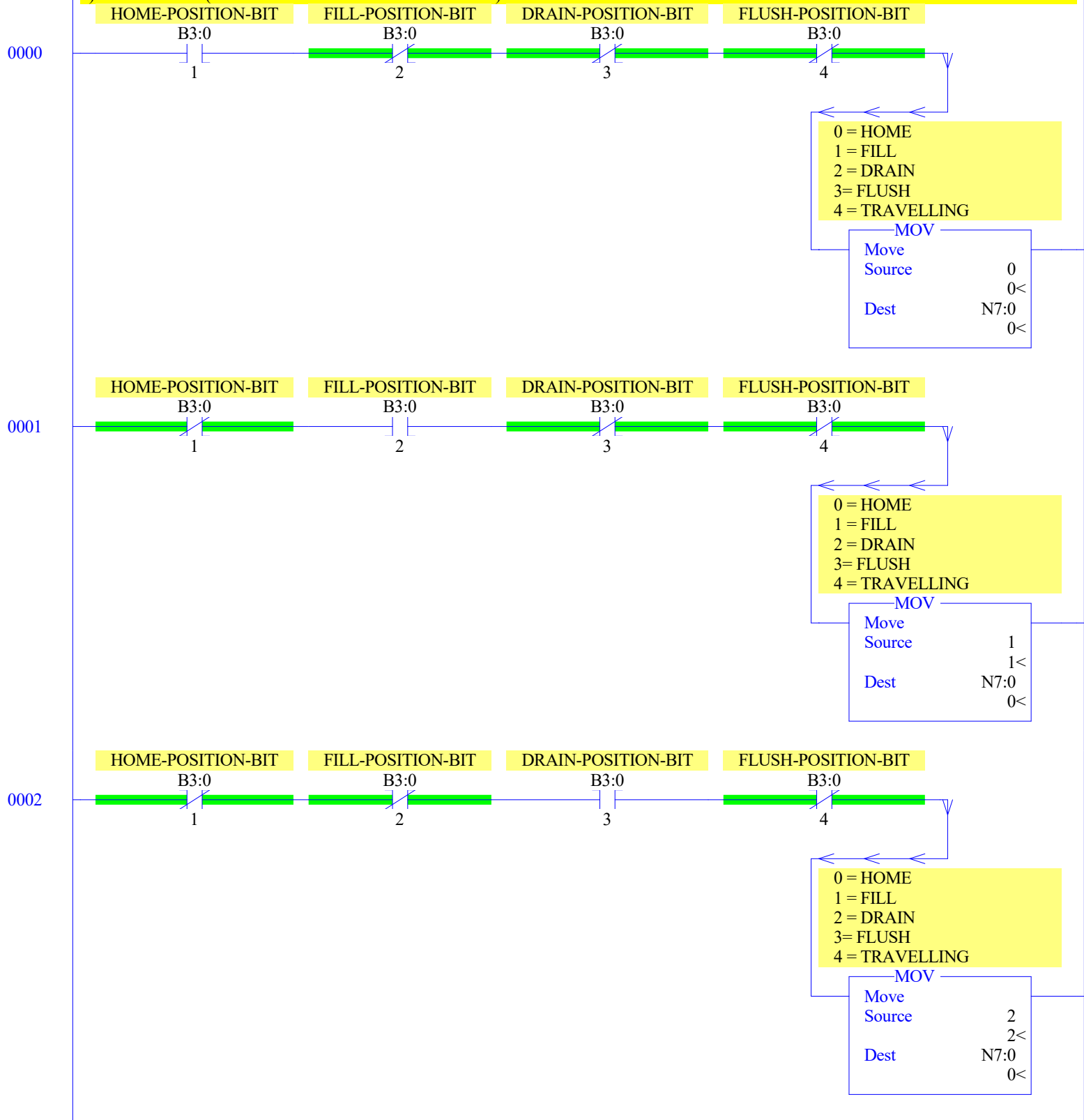


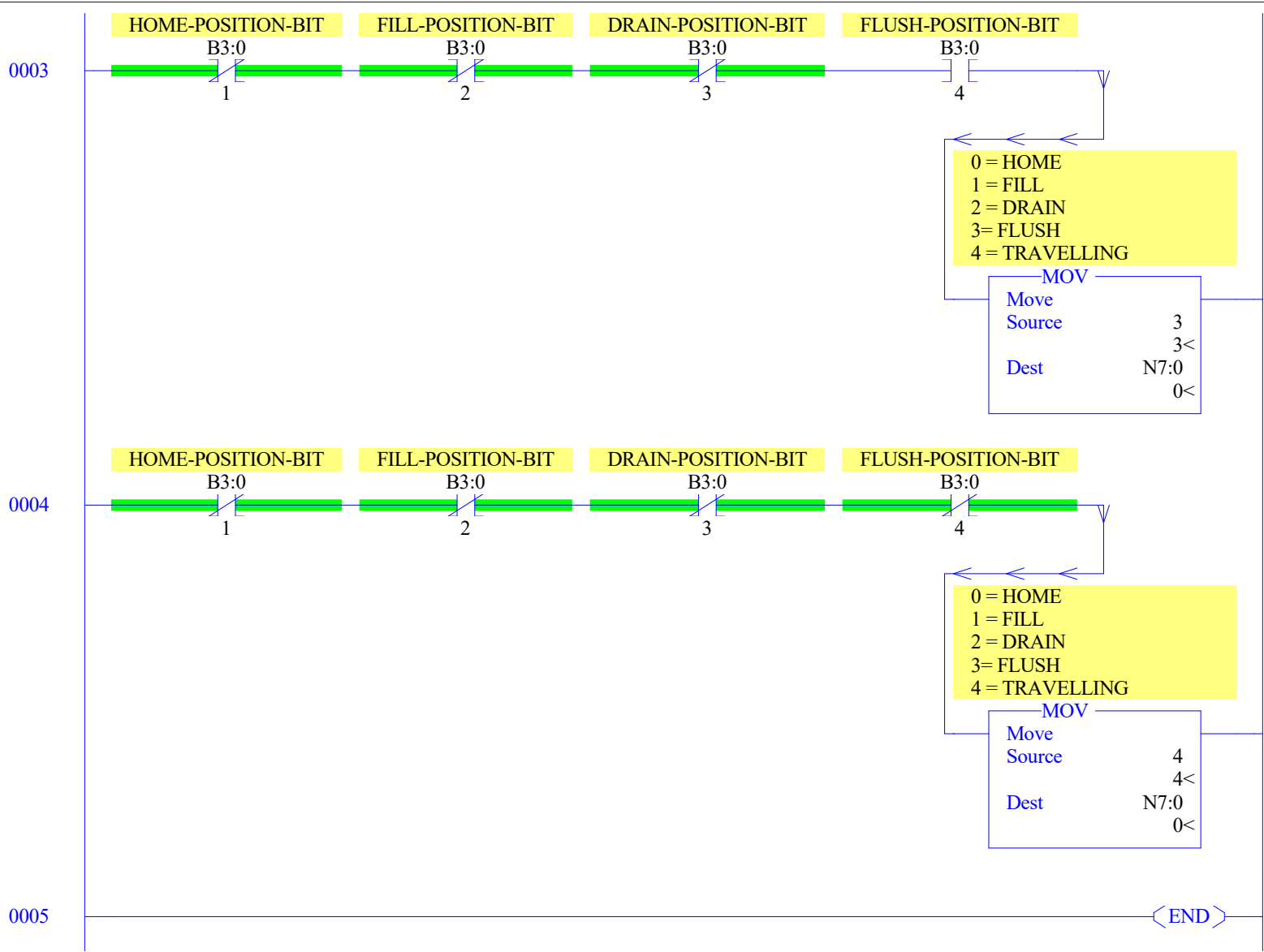




DIESES PROGRAM-FILE DEUTET AUF DIE MOMENTANE POSITION DES REGELVENTILS. DIE INTEGERZAHL 0-4 WEISEN AUF DIE FOLGENDEN POSITIONEN HIN:

- 0)HOME
- 1)FILL
- 2)DRAIN
- 3)FLUSH
- 4)TRAVELLING (ZWISCHEN JEWEILIGEN SCHALTER)





REGELVENTIL_ZYKLUSSTEUERUNG.RSS																	
Data File 00 (bin) -- OUTPUT																	
Offset	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	
O:0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1763 MicroLogix 1100 Series B
O:0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1763 MicroLogix 1100 Series B
O:0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1763 MicroLogix 1100 Series B
O:0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1763 MicroLogix 1100 Series B

REGELVENTIL_ZYKLUSSTEUERUNG.RSS																	
Data File I1 (bin) -- INPUT																	
Offset	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	
I:0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1763 MicroLogix 1100 Series B
I:0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1763 MicroLogix 1100 Series B
I:0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1763 MicroLogix 1100 Series B
I:0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1763 MicroLogix 1100 Series B
I:0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1763 MicroLogix 1100 Series B-Anal
I:0.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Bul.1763 MicroLogix 1100 Series B-Anal

Main

Processor Mode S:1/0 - S:1/4 = Remote Program Mode
On Power up Go To Run (Mode Behavior) S:1/12 = 0
First Pass S:1/15 = No
Free Running Clock S:4 = 0000-0000-0000-0000

Proc

OS Catalog Number S:57 = 1100 User Program Type S:63 = 8001h
OS Series S:58 = A Compiler Revision Number S:64 =
OS FRS S:59 =
Processor Catalog Number S:60 =
Processor Series S:61 = A
Processor FRN S:62 =

Scan Times

Maximum (x10 ms) S:22 = 0
Watchdog (x10 ms) S:3 (high byte) = 10
Last 100 uSec Scan Time S:35 = 0
Scan Toggle Bit S:33/9 = 0

Math

Math Overflow Selected S:2/14 = 0 Math Register (lo word) S:13 = 0
Overflow Trap S:5/0 = 0 Math Register (high word) S:14-S:13 = 0
Carry S:0/0 = 0 Math Register (32 Bit) S:14-S:13 = 0
Overflow S:0/1 = 0
Zero Bit S:0/2 = 0
Sign Bit S:0/3 = 0

Chan 0

Processor Mode S:1/0- S:1/4 = Remote Program Mode
Node Address S:15 (low byte) = 0 Outgoing Msg Cmd Pending S:33/2 = 0
Baud Rate S:15 (high byte) = ?
Channel Mode S:33/3 = 0
Comms Active S:33/4 = 0
Incoming Cmd Pending S:33/0 = 0
Msg Reply Pending S:33/1 = 0

Debug

Suspend Code S:7 = 0
Suspend File S:8 = 0

Errors

Fault Override At Power Up S:1/8 = 0 Fault Routine S:29 = 0
Startup Protection Fault S:1/9 = 0 Major Error S:6 = 0h
Major Error Halt S:1/13 = 0
Overflow Trap S:5/0 = 0 Error Description:
Control Register Error S:5/2 = 0
Major Error Executing User Fault Rtn. S:5/3 = 0
Battery Low S:5/11 = 0
Input Filter Selection Modified S:5/13 = 0
ASCII String Manipulation error S:5/15 = 0

Protection

Deny Future Access S:1/14 = No
Data File Overwrite Protection Lost S:36/10 = False

Mem Module

Memory Module Loaded On Boot S:5/8 = 0
Password Mismatch S:5/9 = 0
Load Memory Module On Memory Error S:1/10 = 0
Load Memory Module Always S:1/11 = 0
On Power up Go To Run (Mode Behavior) S:1/12 = 0
Program Compare S:2/9 = 0
Data File Overwrite Protection Lost S:36/10 = 0

Forces

Forces Enabled S:1/5 = Yes
Forces Installed S:1/6 = No

[illegible]

Offset	EN	TT	DN	BASE	PRE	ACC	(Symbol)	Description
T4:0	0	0	0	1.0 sec	10	0	FILL ON	TIMER
T4:1	0	0	0	1.0 sec	20	0	DRAIN ON	TIMER
T4:2	0	0	0	1.0 sec	10	0	FLUSH OM	TIMER

Offset	CU	CD	DN	OV	UN	UA	PRE	ACC	(Symbol)	Description
C5:0	0	0	0	0	0	0	0	0		

Offset	EN	EU	DN	EM	ER	UL	IN	FD	LEN	POS	(Symbol)	Description
R6:0	0	0	0	0	0	0	0	0	0	0		

Data File N7 (dec) -- INTEGER

Offset	0	1	2	3	4	5	6	7	8	9
N7:0	0	0	0							

Data File F8 -- FLOAT

Offset	0	1	2	3	4
F8:0	0				

Address/Symbol Database

Address	Symbol	Scope	Description	Sym Group	Dev. C
B3:0/0			CYCLE-INTERRUPT		
B3:0/1			HOME-POSITION-BIT		
B3:0/2			FILL-POSITION-BIT		
B3:0/3			DRAIN-POSITION-BIT		
B3:0/4			FLUSH-POSITION-BIT		
B3:0/5			CYCLE-CALL-BIT		
B3:0/6			SERVO-BIT		
B3:0/7			ONS		
B3:0/8			SERVO-TRIGGER FÜR INITIALISIERUNG		
B3:0/9			CYCLE-CALL-BIT EINMAL AKTIV		
B3:0/10			ONS		
B3:0/11			SERVO-INTERRUPT		
B3:0/12			ONS		
B3:0/13			SERVO-TRIGGER FÜR FILL		
B3:0/14			ONS		
B3:0/15			SERVO-TRIGGER FÜR DRAIN		
B3:1/0			ONS		
B3:1/1			ONS		
B3:1/2			SERVO-TRIGGER FÜR FLUSH		
B3:1/3			SERVO-TRIGGER FÜR HOME		
B3:1/4			ONS		
B3:1/5			ONS		
B3:1/6			ONS		
B3:1/8			SERVO-TRIGGER-BIT- FÜR DRAIN		
B3:1/9			SERVO-TRIGGER-BIT- FÜR FLUSH		
B3:1/10			SERVO-TRIGGER-BIT- FÜR HOME		
B3:1/11			SERVO-TRIGGER-BIT FÜR INTERRUPT		
B3:1/12			SERVO-TRIGGER-BIT FÜR INITIALISIERUNG		
B3:2/0			INITIALISIERUNGBIT		
B3:3/0			SERVO-INTERRUPT ENDE ZYKLUS		
B3:3/1			ZYKLUS-RESET		
B3:3/2			CYCLE-CALL ABGERUFEN		
B3:3/3			UNTERBRECHUNG- TRIGGER-BIT		
B3:3/4			ONS		
B3:3/5			ONS		
B3:3/6			CYCLE-INTERRUPT ABGERUFEN		
B3:3/7			STORAGE BIT		
I:0/0			HOME-SCHALTER- EINGANG		
I:0/1			FILL-SCHALTER- EINGANG		
I:0/2			DRAIN-SCHALTER- EINGANG		
I:0/3			FLUSH-SCHALTER- EINGANG		
I:0/4			CYCLE-CALL-EINGANG		
N7:0			0 = HOME 1 = FILL 2 = DRAIN 3= FLUSH 4 = TRAVELLING		
N7:1			1 = INITIALISIERUNG 2 = REGELFALL 3 = UNTERBRECHUNG 5 = ZYKLUSENDE		
N7:2					
O:0/0			SERVO-AUSGANG		
S:0			Arithmetic Flags		
S:0/0			Processor Arithmetic Carry Flag		
S:0/1			Processor Arithmetic Underflow/ Overflow Flag		
S:0/2			Processor Arithmetic Zero Flag		
S:0/3			Processor Arithmetic Sign Flag		
S:1			Processor Mode Status/ Control		
S:1/0			Processor Mode Bit 0		
S:1/1			Processor Mode Bit 1		
S:1/2			Processor Mode Bit 2		
S:1/3			Processor Mode Bit 3		
S:1/4			Processor Mode Bit 4		
S:1/5			Forces Enabled		
S:1/6			Forces Present		
S:1/7			Comms Active		
S:1/8			Fault Override at Powerup		
S:1/9			Startup Protection Fault		
S:1/10			Load Memory Module on Memory Error		
S:1/11			Load Memory Module Always		
S:1/12			Load Memory Module and RUN		
S:1/13			Major Error Halted		
S:1/14			Access Denied		
S:1/15			First Pass		
S:2/0			STI Pending		
S:2/1			STI Enabled		
S:2/2			STI Executing		
S:2/3			Index Addressing File Range		
S:2/4			Saved with Debug Single Step		
S:2/5			DH-485 Incoming Command Pending		
S:2/6			DH-485 Message Reply Pending		
S:2/7			DH-485 Outgoing Message Command Pending		
S:2/15			Comms Servicing Selection		
S:3			Current Scan Time/ Watchdog Scan Time		
S:4			Time Base		
S:5/0			Overflow Trap		
S:5/2			Control Register Error		
S:5/3			Major Err Detected Executing UserFault Routine		
S:5/4			M0-M1 Referenced on Disabled Slot		
S:5/8			Memory Module Boot		
S:5/9			Memory Module Password Mismatch		
S:5/10			STI Overflow		
S:5/11			Battery Low		
S:6			Major Error Fault Code		
S:7			Suspend Code		
S:8			Suspend File		

Address/Symbol Database

Address	Symbol	Scope	Description	Sym Group	Dev. C
S:9			Active Nodes		
S:10			Active Nodes		
S:11			I/O Slot Enables		
S:12			I/O Slot Enables		
S:13			Math Register		
S:14			Math Register		
S:15			Node Address/ Baud Rate		
S:16			Debug Single Step Rung		
S:17			Debug Single Step File		
S:18			Debug Single Step Breakpoint Rung		
S:19			Debug Single Step Breakpoint File		
S:20			Debug Fault/ Powerdown Rung		
S:21			Debug Fault/ Powerdown File		
S:22			Maximum Observed Scan Time		
S:23			Average Scan Time		
S:24			Index Register		
S:25			I/O Interrupt Pending		
S:26			I/O Interrupt Pending		
S:27			I/O Interrupt Enabled		
S:28			I/O Interrupt Enabled		
S:29			User Fault Routine File Number		
S:30			STI Setpoint		
S:31			STI File Number		
S:32			I/O Interrupt Executing		
S:33			Extended Proc Status Control Word		
S:33/0			Incoming Command Pending		
S:33/1			Message Reply Pending		
S:33/2			Outgoing Message Command Pending		
S:33/3			Selection Status User/DF1		
S:33/4			Communicat Active		
S:33/5			Communicat Servicing Selection		
S:33/6			Message Servicing Selection Channel 0		
S:33/7			Message Servicing Selection Channel 1		
S:33/8			Interrupt Latency Control Flag		
S:33/9			Scan Toggle Flag		
S:33/10			Discrete Input Interrupt Reconfigur Flag		
S:33/11			Online Edit Status		
S:33/12			Online Edit Status		
S:33/13			Scan Time Timebase Selection		
S:33/14			DTR Control Bit		
S:33/15			DTR Force Bit		
S:34			Pass-thru Disabled		
S:34/0			Pass-Thru Disabled Flag		
S:34/1			DH+ Active Node Table Enable Flag		
S:34/2			Floating Point Math Flag Disable,F1		
S:35			Last 1 ms Scan Time		
S:36			Extended Minor Error Bits		
S:36/8			DII Lost		
S:36/9			STI Lost		
S:36/10			Memory Module Data File Overwrite Protection		
S:37			Clock Calendar Year		
S:38			Clock Calendar Month		
S:39			Clock Calendar Day		
S:40			Clock Calendar Hours		
S:41			Clock Calendar Minutes		
S:42			Clock Calendar Seconds		
S:43			STI Interrupt Time		
S:44			I/O Event Interrupt Time		
S:45			DII Interrupt Time		
S:46			Discrete Input Interrupt- File Number		
S:47			Discrete Input Interrupt- Slot Number		
S:48			Discrete Input Interrupt- Bit Mask		
S:49			Discrete Input Interrupt- Compare Value		
S:50			Processor Catalog Number		
S:51			Discrete Input Interrupt- Return Number		
S:52			Discrete Input Interrupt- Accumulat		
S:53			Reserved/ Clock Calendar Day of the Week		
S:55			Last DII Scan Time		
S:56			Maximum Observed DII Scan Time		
S:57			Operating System Catalog Number		
S:58			Operating System Series		
S:59			Operating System FRN		
S:61			Processor Series		
S:62			Processor Revision		
S:63			User Program Type		
S:64			User Program Functional Index		
S:65			User RAM Size		
S:66			Flash EEPROM Size		
S:67			Channel 0 Active Nodes		
S:68			Channel 0 Active Nodes		
S:69			Channel 0 Active Nodes		
S:70			Channel 0 Active Nodes		
S:71			Channel 0 Active Nodes		
S:72			Channel 0 Active Nodes		
S:73			Channel 0 Active Nodes		
S:74			Channel 0 Active Nodes		
S:75			Channel 0 Active Nodes		
S:76			Channel 0 Active Nodes		
S:77			Channel 0 Active Nodes		
S:78			Channel 0 Active Nodes		

Address/Symbol Database

Address	Symbol	Scope	Description	Sym Group	Dev. C
S:79			Channel 0 Active Nodes		
S:80			Channel 0 Active Nodes		
S:81			Channel 0 Active Nodes		
S:82			Channel 0 Active Nodes		
S:83			DH+ Active Nodes		
S:84			DH+ Active Nodes		
S:85			DH+ Active Nodes		
S:86			DH+ Active Nodes		
T4:0			FILL ON TIMER		
T4:0/DN					
T4:1			DRAIN ON TIMER		
T4:1/DN					
T4:2			FLUSH OM TIMER		
T4:2/DN					
U:3			I/O		
U:4			STEUERLOGIK		
U:5			POSITIONEN		
U:6			REGELFALL		
U:7			UNTERBRECHUNG		
U:8			SONDERFALL		
U:9			INITIALISIERUNG		

Address	Instruction	Description
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Symbol Group Database

```
Group_Name  Description
```