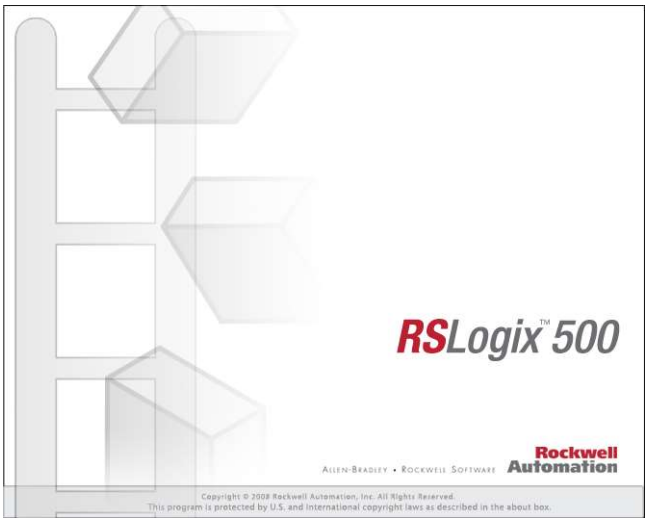
RSLogix Micro Project Report



Processor Information

Processor Type: Bul.1763 MicroLogix 1100 Series B

Processor Name: UNTITLED

Total Memory Used: 234 Instruction Words Used - 70 Data Table Words Used

Total Memory Left: 6422 Instruction Words Left

Program Files: 5

Data Files: 9

Program ID: 2104

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	5	No	86
IO	3	LADDER	4	No	74
KALIBRIERU	4	LADDER	15	No	655

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	1	1	B3:0
TIMER	4	T	Global	No	12	4	T4:3
COUNTER	5	C	Global	No	3	1	C5:0
CONTROL	6	R	Global	No	3	1	R6:0
INTEGER	7	N	Global	No	9	9	N7:8
FLOAT	8	F	Global	No	12	6	F8:5

PROJEKTBESCHREIBUNG: DIESES PROJEKT IST EIN AUTOMATISIERTES SAUERSTOFF-MESSSYSTEM, DAS IN EINEM BERGWERK EINGESETZT WIRD. IN EINEM BERGWERK IST ES LEBENSWICHTIG, DEN SAUERSTOFFGEHALT IN DER LUFT GENAU ZU ÜBERWACHEN. EIN SENSOR MISST KONTINUIERLICH DEN SAUERSTOFFANTEIL IN DER UMGEBUNGSLUFT. DA DIESER SENSOR MIT DER ZEIT UNGENAU WIRD, MUSS ER REGELMÄSSIG KALIBRIERT WERDEN.ZUR KALIBRIERUNG VERFÜGT DAS SYSTEM ÜBER ZWEI REFERENZGASE: EINES MIT 0 % SAUERSTOFF UND EINES MIT 30 %. IN EINEM SPEZIELLEN KALIBRIERUNGSMODUS ÖFFNET DAS SYSTEM NACHEINANDER ZWEI VENTILE – ZUERST DAS FÜR 0 %-GAS, DANN DAS FÜR 30 %-GAS – UND MISST JEWEILS 30 SEKUNDEN LANG DIE SENSORWERTE. AUS DIESEN MESSUNGEN BERECHNET DAS SYSTEM AUTOMATISCH KORREKTURWERTE, UM SPÄTERE SAUERSTOFFMESSUNGEN WIEDER KORREKT ANZEIGEN ZU KÖNNEN.

0000

First Pass
S:1
15

MOV
Move
Source 40.0
40.0<
Dest F8:3
0.0<

MOV
Move
Source 30.0
30.0<
Dest F8:4
0.0<

Kalibriermodus
0 = 0 % Kalibriergas
30 = 30 %
Kalibriergas
1 = Idle Modus

MOV
Move
Source 1
1<
Dest N7:7
0<

DA DIESES PROJEKT AUF RSLOGIX EMULATE UNTERSUCHT WURDE, WURDE DAS ANALOGE EINGANGSSIGNAL DURCH N7:0 ERSETZT. DER ZUGEWIESE SPEICHER IST WIE FOLGT:
N7:0 EINGANGSSIGNAL
B3:0/0 KALIBRIERTASTE
O:0/0 0% KALIBRIERGASVENTILAUSGANG
O:0/1 30% KALIBRIERGASVENTILAUSGANG
N7:1 GEMESSENE O2 KONZENTRATION [%]
N7:2 O2 INPUT MIN (SCP BEFEHL)
N7:3 O2 INPUT MAX (SCP BEFEHL)

0001

IO
JSR
Jump To Subroutine
SBR File Number U:3

0002

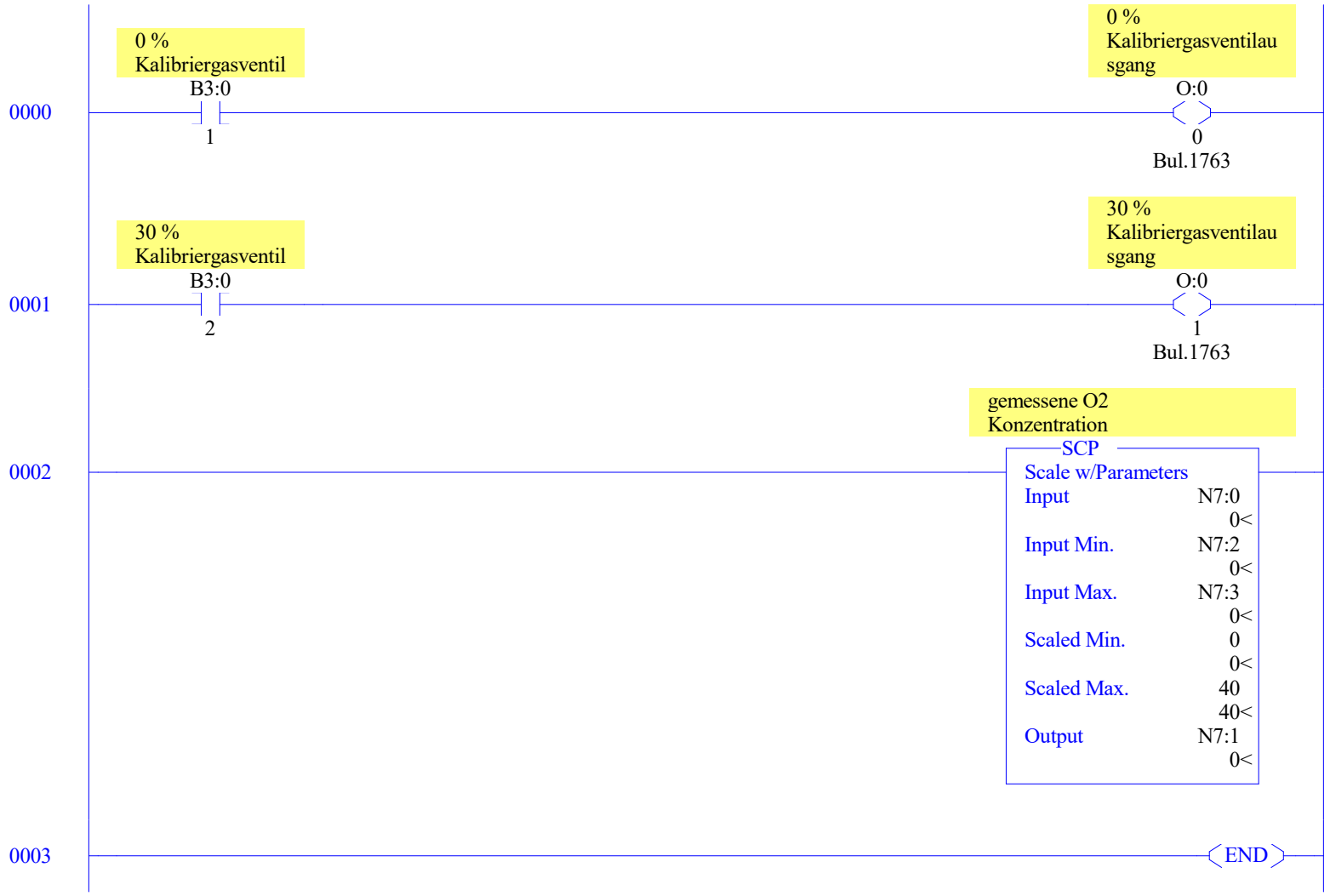
KALIBRIERUNG
JSR
Jump To Subroutine
SBR File Number U:4

0003

Overflow Trap
S:5
U
0

0004

END


0 %
Kalibriergasventil
B3:0
1
0000
0 %
Kalibriergasventilausgang
O:0
0
Bul.1763
30 %
Kalibriergasventil
B3:0
2
0001
30 %
Kalibriergasventilausgang
O:0
1
Bul.1763
gemessene O2
Konzentration
0002
SCP
Scale w/Parameters
Input N7:0
0<
Input Min. N7:2
0<
Input Max. N7:3
0<
Scaled Min. 0
0<
Scaled Max. 40
40<
Output N7:1
0<
0003
END

DA KEIN EINGANGSSIGNAL VORHANDEN IST, WURDE DIESES PROGRAM FÜR ZWEI FÄLLE GESCHRIEBEN:
1) DAS SENSOR FUNKTIONIERT EINWANDFREI UND MISST FÜR DIE WERTE ZWISCHEN N7:0 = 0 UND N7:0 = 16383 (0% BIS 40 %). HIERBEI SETZEN WIR ZUNÄCHST DEN WERT FÜR N7:0 = 0 BEIM GEÖFFNETEN VENTIL (0% KALIBRIERGAS) UND GEHEN DAVON AUS DASS DER DURCHSCHNITTWERT BEI 0 LIEGT. WEITERHIN SETZEN WIRD DEN WERT FÜR N7:0 = 12288 BEIM GEÖFFENTEN VENTIL (30 % KALIBRIERGAS) UND GEHEN DAVON AUS DASS DER DURCHSCHNITTSWERT BEI 12288 LIEGT. NACH DER KALIBRIERUNG MUSS N7:1 DEN WERT 30 ENTSPRECHEN (30%).
2) DAS SENSORWERTE WEICHEN AB. HIERBEI SETZEN WIR ZUNÄCHST DEN WERT FÜR N7:0 = 100 BEIM GEÖFFNETEN VENTIL (0% KALIBRIERGAS) UND GEHEN DAVON AUS DASS DER DURCHSCHNITTWERT BEI 100 LIEGT. WEITERHIN SETZEN WIRD DEN WERT FÜR N7:0 = 11000 BEIM GEÖFFENTEN VENTIL (30 % KALIBRIERGAS) UND GEHEN DAVON AUS DASS DER DURCHSCHNITTSWERT BEI 11000 LIEGT. NACH DER KALIBRIERUNG MUSS N7:1 DEN WERT 30 ENTSPRECHEN (30%).
NACH JEDEM KALIBRIERVORGANG FINDET EINE ANPASSUNG (RECHNUNG AM ENDE) DER MIN OUTPUT UND MAX OUTPUT FÜR SCP BEFEHL

0000

Kalibrierung-Taste B3:0 0

ONS B3:0 ONS 3

Kalibrierung-Trigger B3:0 4

0001

Kalibrierung-Trigger B3:0 4

Kalibriermodus
0 = 0 % Kalibriergas
30 = 30 %
Kalibriergas
1 = Idle Modus

MOV
Move Source 0 0<
Dest N7:7 0<

0002

Kalibriermodus
0 = 0 % Kalibriergas
30 = 30 %
Kalibriergas
1 = Idle Modus

EQU
Equal
Source A N7:7 0<
Source B 0 0<

0 %
Kalibriergasventil
ON TIMER

TON
Timer On Delay Timer T4:0
Time Base 1.0
Preset 30<
Accum 0<
EN
DN

ONS B3:0 ONS 8

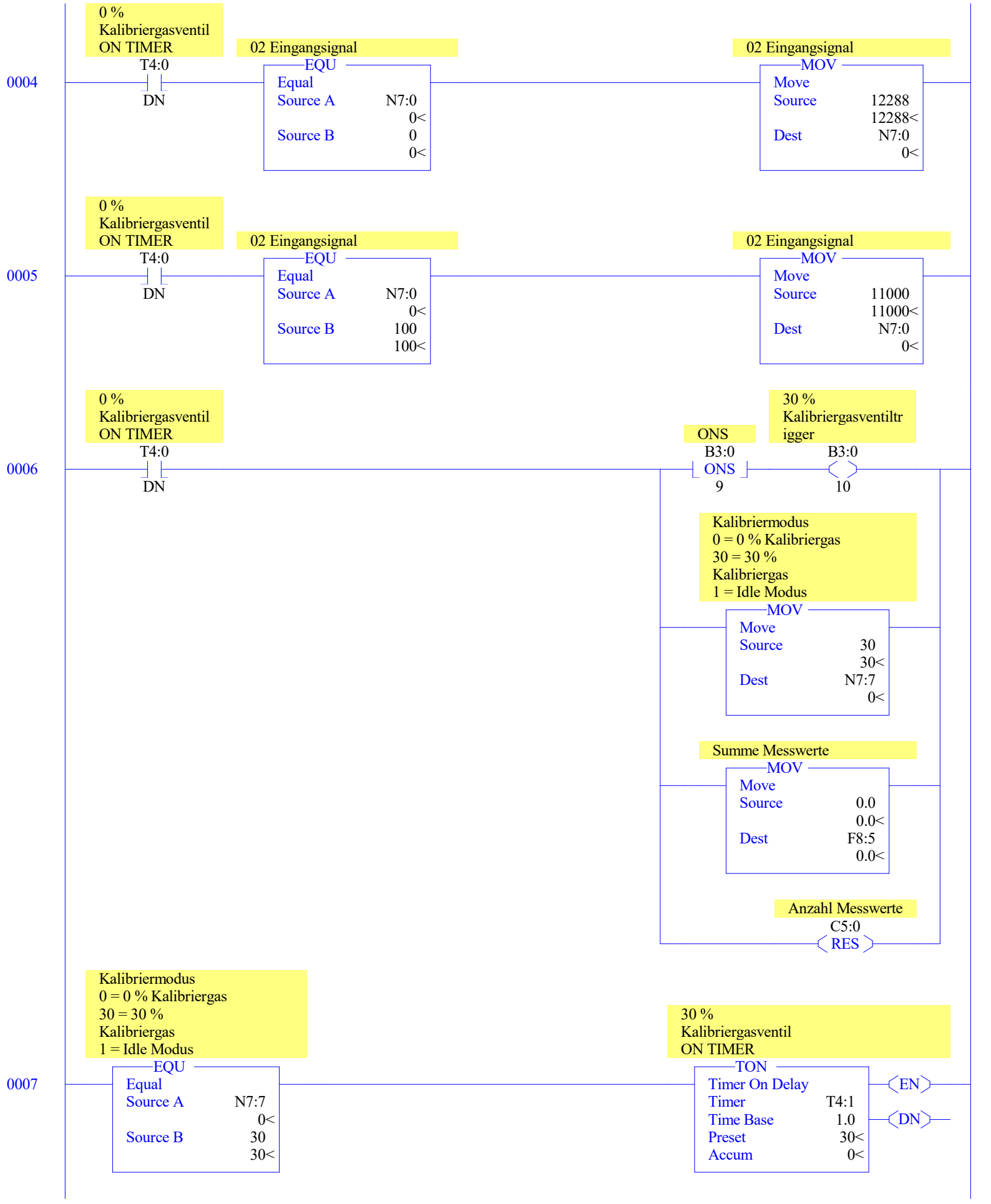
0 %
Kalibriergasventiltr
igger B3:0 7

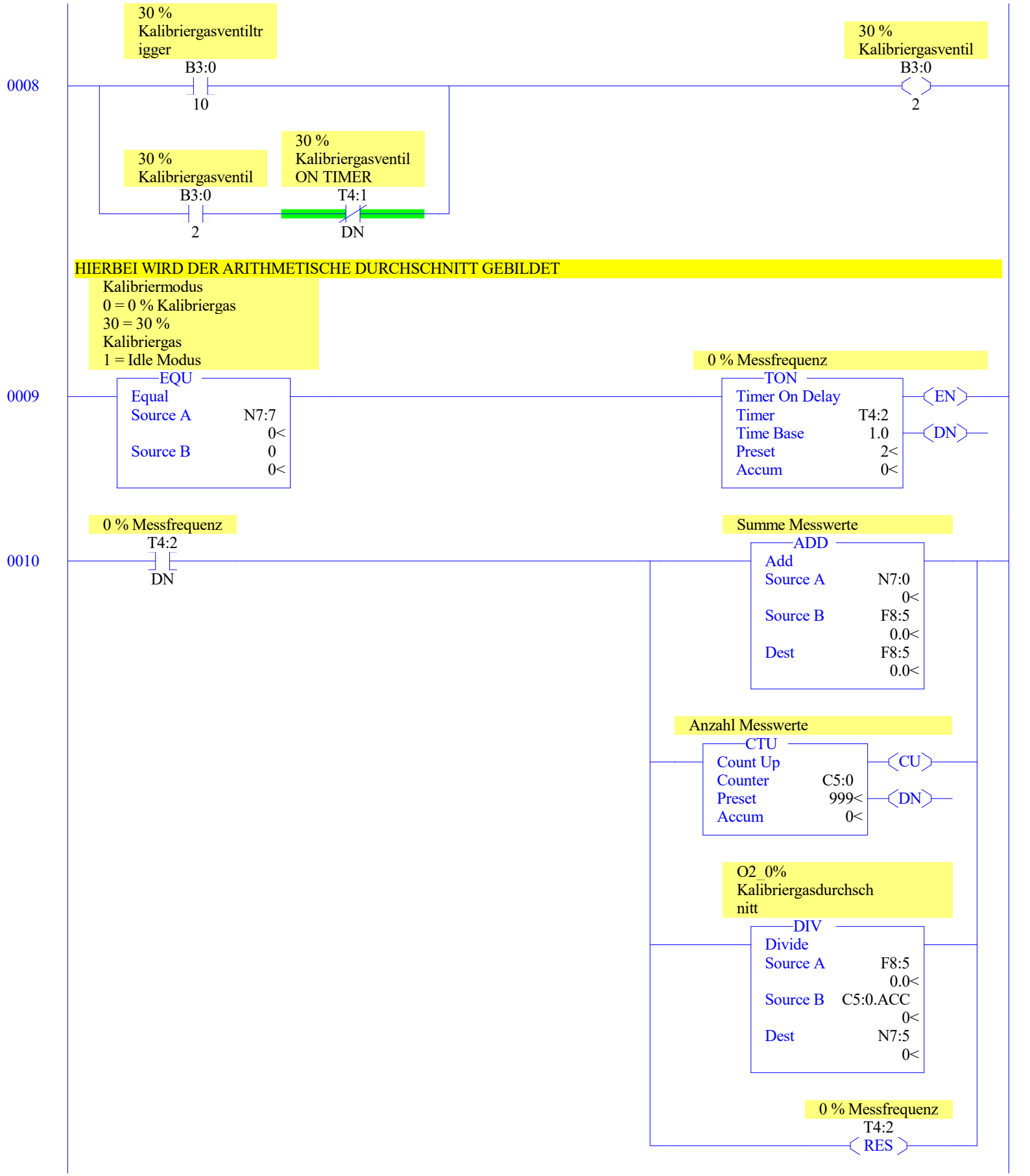
0003

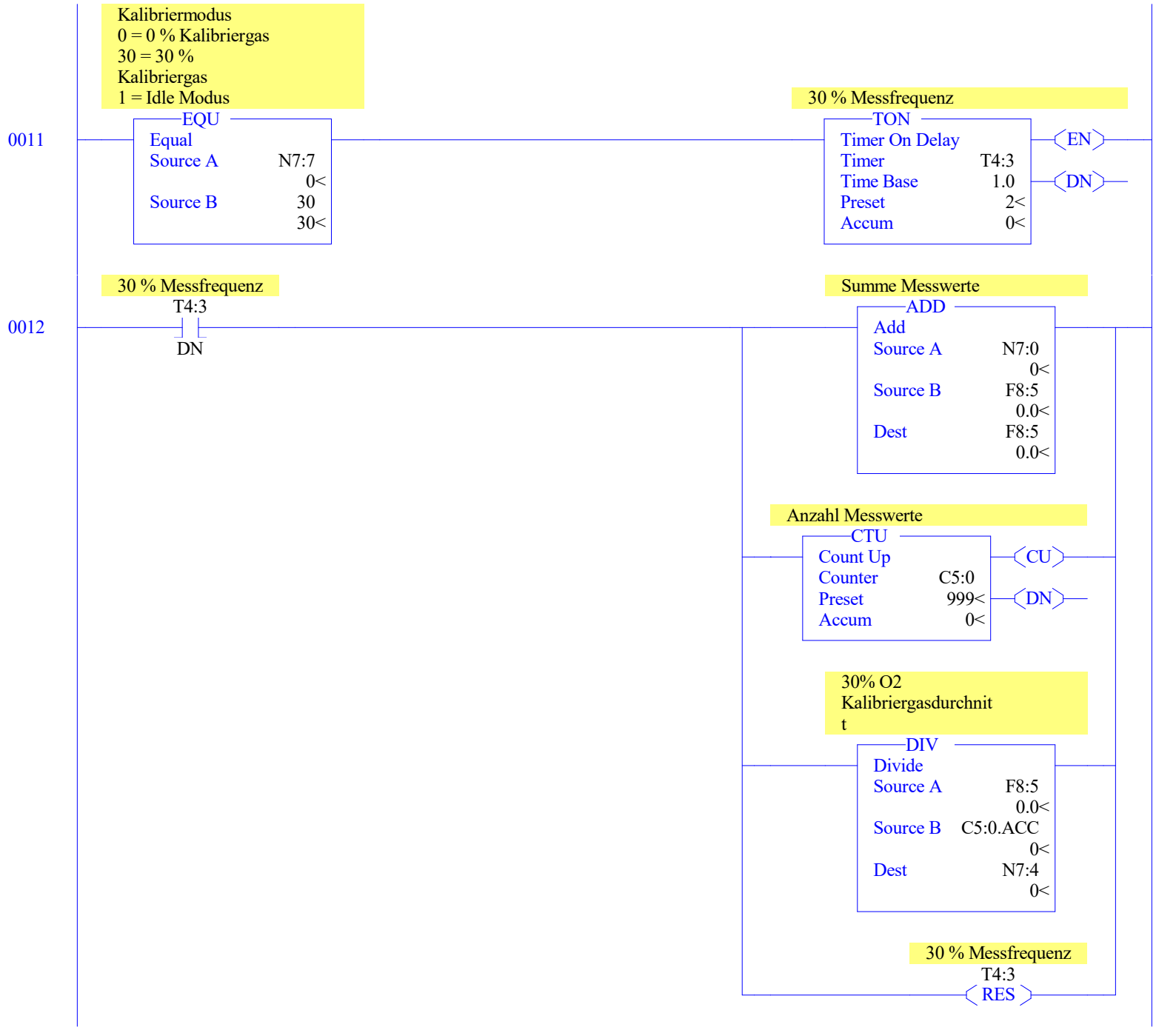
0 %
Kalibriergasventiltr
igger B3:0 7

0 %
Kalibriergasventil B3:0 1

0 %
Kalibriergasventil
ON TIMER T4:0 DN


0004
0 %
Kalibriergasventil
ON TIMER
T4:0
DN
02 Eingangsignal
EQU
Equal
Source A N7:0 0<
Source B 0 0<
02 Eingangsignal
MOV
Move
Source 12288 12288<
Dest N7:0 0<
0005
0 %
Kalibriergasventil
ON TIMER
T4:0
DN
02 Eingangsignal
EQU
Equal
Source A N7:0 0<
Source B 100 100<
02 Eingangsignal
MOV
Move
Source 11000 11000<
Dest N7:0 0<
0006
0 %
Kalibriergasventil
ON TIMER
T4:0
DN
ONS
B3:0
ONS
9
30 %
Kalibriergasventiltr
igger
B3:0
10
Kalibriermodus
0 = 0 % Kalibriergas
30 = 30 %
Kalibriergas
1 = Idle Modus
MOV
Move
Source 30 30<
Dest N7:7 0<
Summe Messwerte
MOV
Move
Source 0.0 0.0<
Dest F8:5 0.0<
Anzahl Messwerte
C5:0
RES
0007
Kalibriermodus
0 = 0 % Kalibriergas
30 = 30 %
Kalibriergas
1 = Idle Modus
EQU
Equal
Source A N7:7 0<
Source B 30 30<
30 %
Kalibriergasventil
ON TIMER
TON
Timer On Delay
Timer T4:1
Time Base 1.0
Preset 30<
Accum 0<
EN
DN


30 %
Kalibriergasventiltr
igger
B3:0
10
30 %
Kalibriergasventil
B3:0
2
0008
30 %
Kalibriergasventil
B3:0
2
30 %
Kalibriergasventil
ON TIMER
T4:1
DN
HIERBEI WIRD DER ARITHMETISCHE DURCHSCHNITT GEBILDET
Kalibriermodus
0 = 0 % Kalibriergas
30 = 30 %
Kalibriergas
1 = Idle Modus
0 % Messfrequenz
EQU
Equal
Source A N7:7
0<
Source B 0
0<
0009
TON
Timer On Delay
Timer T4:2
Time Base 1.0
Preset 2<
Accum 0<
EN
DN
0 % Messfrequenz
T4:2
DN
0010
Summe Messwerte
ADD
Add
Source A N7:0
0<
Source B F8:5
0.0<
Dest F8:5
0.0<
Anzahl Messwerte
CTU
Count Up
Counter C5:0
Preset 999<
Accum 0<
CU
DN
O2_0%
Kalibriergasdurchsch
nitt
DIV
Divide
Source A F8:5
0.0<
Source B C5:0.ACC
0<
Dest N7:5
0<
0 % Messfrequenz
T4:2
RES


Kalibriermodus
0 = 0 % Kalibriergas
30 = 30 %
Kalibriergas
1 = Idle Modus
0011
EQU
Equal
Source A N7:7 0<
Source B 30 30<
30 % Messfrequenz
TON
Timer On Delay
Timer T4:3
Time Base 1.0
Preset 2<
Accum 0<
EN
DN
30 % Messfrequenz
T4:3
DN
0012
Summe Messwerte
ADD
Add
Source A N7:0 0<
Source B F8:5 0.0<
Dest F8:5 0.0<
Anzahl Messwerte
CTU
Count Up
Counter C5:0
Preset 999<
Accum 0<
CU
DN
30% O2
Kalibriergasdurchnit
t
DIV
Divide
Source A F8:5 0.0<
Source B C5:0.ACC 0<
Dest N7:4 0<
30 % Messfrequenz
T4:3
RES

0013

30 %
Kalibriergasventil
ON TIMER

T4:1
DN

Kalibriermodus
0 = 0 % Kalibriergas
30 = 30 %
Kalibriergas
1 = Idle Modus

MOV
Move
Source 1
1<
Dest N7:7
0<

(O2 Max
Konzentration
/ O2
Kalibriergaskozentra
tion)

DIV
Divide
Source A F8:3
0.0<
Source B F8:4
0.0<
Dest F8:0
0.0<

SUB
Subtract
Source A N7:4
0<
Source B N7:5
0<
Dest F8:1
0.0<

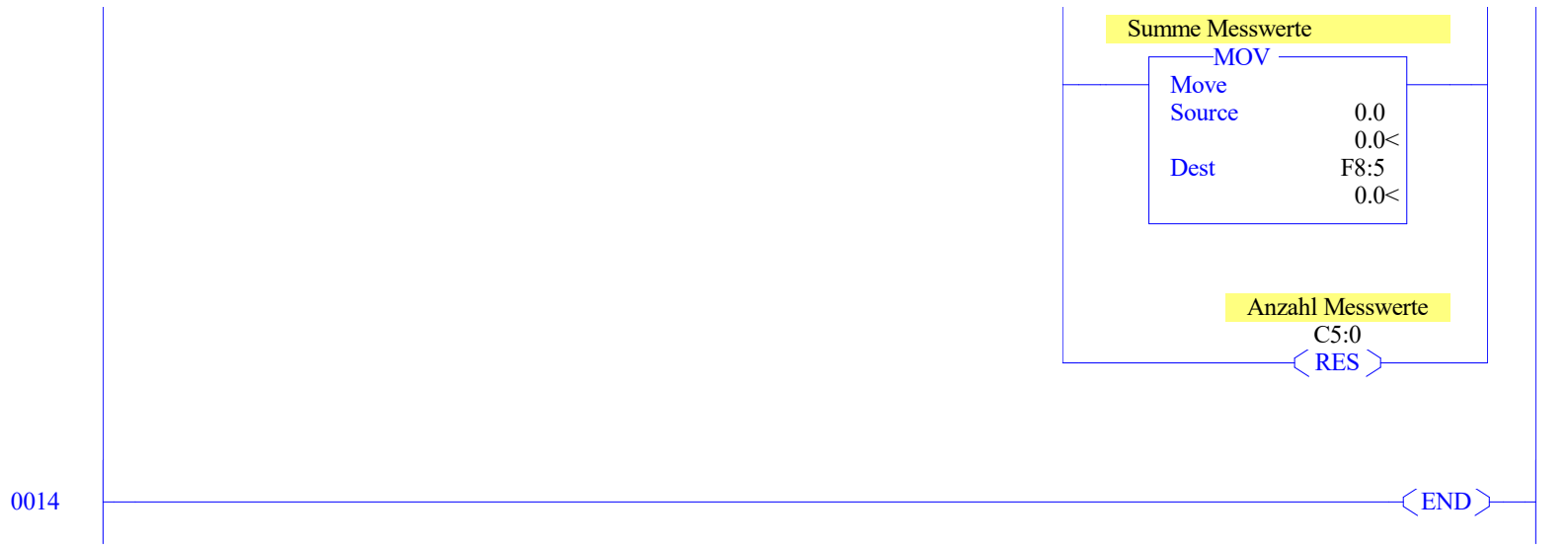
MUL
Multiply
Source A F8:0
0.0<
Source B F8:1
0.0<
Dest F8:2
0.0<

O2 Max

ADD
Add
Source A F8:2
0.0<
Source B N7:5
0<
Dest N7:3
0<

O2 Min

MOV
Move
Source N7:5
0<
Dest N7:2
0<


Summe Messwerte
MOV
Move
Source
0.0
0.0<
Dest
F8:5
0.0<
Anzahl Messwerte
C5:0
RES
0014
END

Data File O0 (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

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-Analo
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-Analo

Data File S2 (hex) -- STATUS

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

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

Chan 0

Processor Mode S:1/0- S:1/4 = Remote Program Mode
Node Address S:15 (low byte) = 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
Outgoing Msg Cmd Pending S:33/2 = 0

Debug

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

Errors

Fault Override At Power Up S:1/8 = 0
Startup Protection Fault S:1/9 = 0
Major Error Halt S:1/13 = 0
Overflow Trap S:5/0 = 0
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
Fault Routine S:29 = 0
Major Error S:6 = 0h
Error Description:

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

Data File B3 (bin) -- BINARY

Offset	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0	(Symbol)	Description
B3:0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		

Data File T4 -- TIMER

Offset	EN	TT	DN	BASE	PRE	ACC	(Symbol) Description
T4:0	0	0	0	1.0 sec	30	0	0 % Kalibriergasventil ON TIMER
T4:1	0	0	0	1.0 sec	30	0	30 % Kalibriergasventil ON TIMER
T4:2	0	0	0	1.0 sec	2	0	0 % Messfrequenz
T4:3	0	0	0	1.0 sec	2	0	30 % Messfrequenz

Data File C5 -- COUNTER

Offset	CU	CD	DN	OV	UN	UA	PRE	ACC	(Symbol)	Description
C5:0	0	0	0	0	0	0	999	0		Anzahl Messwerte

Data File R6 -- CONTROL

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	0	0	0	0	0	0	

Data File F8 -- FLOAT

Offset	0	1	2	3	4
F8:0	0	0	0	0	0
F8:5	0				

Address/Symbol Database

Address	Symbol	Scope	Description	Sym Group
B3:0/0			Kalibrierung-Taste	
B3:0/1			0 % Kalibriergasventil	
B3:0/2			30 % Kalibriergasventil	
B3:0/3			ONS	
B3:0/4			Kalibrierung-Trigger	
B3:0/5			Kalibrierung	
B3:0/6			Kalibrierung- Interrupt	
B3:0/7			0 % Kalibriergasventiltr igger	
B3:0/8			ONS	
B3:0/9			ONS	
B3:0/10			30 % Kalibriergasventiltr igger	
B3:0/11			ONS	
B3:0/12			ONS	
C5:0			Anzahl Messwerte	
C5:0.ACC				
F8:0			(O2 Max Konzentration / O2 Kalibriergaskozentra tion)	
F8:5			Summe Messwerte	
N7:0			02 Eingangsignal	
N7:1			gemessene O2 Konzentration	
N7:2			O2 Min	
N7:3			O2 Max	
N7:4			30% O2 Kalibriergasdurchnit t	
N7:5			O2_0% Kalibriergasdurchsch nitt	
N7:6			Input Max	
N7:7			Kalibriermodus 0 = 0 % Kalibriergas 30 = 30 % Kalibriergas 1 = Idle Modus	
N7:8			Summe Messwerte	
O:0/0			0 % Kalibriergasventilau sgang	
O:0/1			30 % Kalibriergasventilau sgang	
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	
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	

Address/Symbol Database

Address	Symbol	Scope	Description	Sym Group
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,Fl	
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	
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			0 % Kalibriergasventil ON TIMER	
T4:0/EN				
T4:1			30 % Kalibriergasventil ON TIMER	
T4:1/DN				
T4:2			0 % Messfrequenz	
T4:2/DN				
T4:3			30 % Messfrequenz	
U:3			IO	
U:4			KALIBRIERUNG	
U:5			Kalibrierungsrechnun g	

Instruction Comment Database

Address	Instruction	Description

Symbol Group Database

Group_Name	Description