

**OB1 - <offline>**

" "

**Name:** **Familie:**  
**Autor:** **Version:** 0.1  
**Bausteinversion:** 2  
**Zeitstempel Code:** 13.07.2012 11:45:17  
**Interface:** 15.02.1996 16:51:12  
**Längen (Baustein / Code / Daten):** 00156 00044 00026

**Objekteigenschaften:**

S7\_language 7(1) Deutsch (Deutschland) 13.07.2012 16:05:16

Name	Datentyp	Adresse	Kommentar
TEMP		0.0	
OB1_EV_CLASS	Byte	0.0	Bits 0-3 = 1 (Coming event), Bits 4-7 = 1 (Event class 1)
OB1_SCAN_1	Byte	1.0	1 (Cold restart scan 1 of OB 1), 3 (Scan 2-n of OB 1)
OB1_PRIORITY	Byte	2.0	Priority of OB Execution
OB1_OB_NUMBR	Byte	3.0	1 (Organization block 1, OB1)
OB1_RESERVED_1	Byte	4.0	Reserved for system
OB1_RESERVED_2	Byte	5.0	Reserved for system
OB1_PREV_CYCLE	Int	6.0	Cycle time of previous OB1 scan (milliseconds)
OB1_MIN_CYCLE	Int	8.0	Minimum cycle time of OB1 (milliseconds)
OB1_MAX_CYCLE	Int	10.0	Maximum cycle time of OB1 (milliseconds)
OB1_DATE_TIME	Date_And_Time	12.0	Date and time OB1 started

**Baustein: OB1 "Main Program Sweep (Cycle)"**

Netzwerk: 1 Aufruf Dosierpumpe 1 Startadresse PEB/PAB 400

**Eingangsbeschreibung:**

**StartAdress:** Erstes Byte des Peripheriebereichs der Pumpe entsprechend der Einstellung in der Hardwarekonfiguration.  
**Reset:** Mit einem Impuls wird das Steuerbit "ResetFault" gesetzt. Die Dosierpumpe quittiert diese Steuerbit, wodurch es im FB zurückgesetzt wird.  
**Pulse:** Impuls-Signal zum Starten im Mode Batch. Die Dosierpumpe quittiert diese Steuerbit, wodurch es im FB zurückgesetzt wird.  
**Start:** Wenn die Pumpe Betriebsbereit ist, wird mit TRUE die Pumpe entsprechend des eingestellten Modus gestartet. Mit FALSE wird die Pumpe gestoppt.  
**Manual\_Batch:** Auswahl des Dosiermodus (0=Manual 1=Batch).

**Ausgangsbeschreibung:**

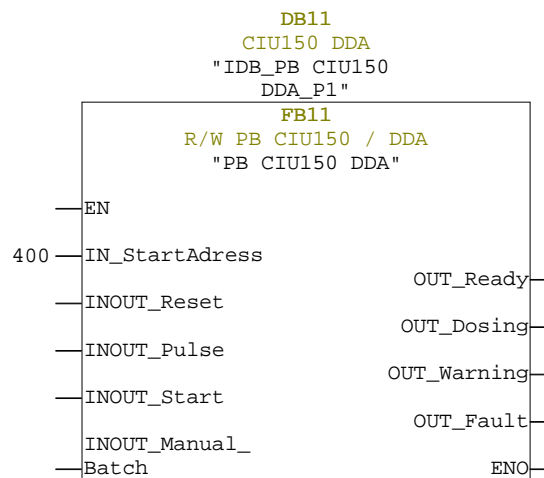
**Ready:** Gibt den Status des Bits "ActRemoteAccess" zurück.  
**Dosing:** Gibt den Status des Bits "Dosing" zurück.  
**Warning:** Gibt den Status des Bits "Warning" zurück.  
**Fault:** Gibt den Status des Bits "Fault" zurück.

Alle weiteren Daten können über einen Zugriff auf den DB direkt geschrieben bzw. gelesen werden.

Die Daten und deren Funktionen sind im Handbuch Grundfos "Profibus\_Funktionsprofil\_DDA" erklärt.

Warnungen und Störungen werden detailliert über eine numerische Schnittstelle

übergeben. Somit stehen in der Steuerung nur die letzte Störung und die letzte Warnung an. Da es aber oftmals nötig ist die einzelnen Meldungen als Bits zu verarbeiten, werden die beiden Codes im Standard-Baustein bereits decodiert und bitweise zur Verfügung gestellt.



**FB11 - <offline>**

"PB CIU150 DDA" R/W PB CIU150 / DDA  
**Name:** DDA **Familie:** Grundfos  
**Autor:** tiskens **Version:** 0.1  
**Bausteinversion:** 2  
**Zeitstempel Code:** 13.07.2012 16:04:39  
**Interface:** 15.06.2012 15:45:27  
**Längen (Baustein / Code / Daten):** 01032 00644 00002

**Objekteigenschaften:**

S7\_language 9(1) Englisch (USA) 13.07.2012 16:05:16

Name	Datentyp	Adresse	Anfangswert	Kommentar
IN		0.0		
IN_StartAddress	Int	0.0	0	IN: Start Address PIW/PQW
OUT		0.0		
OUT_Ready	Bool	2.0	FALSE	OUT: Ready:
OUT_Dosing	Bool	2.1	FALSE	OUT: Dosing:
OUT_Warning	Bool	2.2	FALSE	OUT: Warning:
OUT_Fault	Bool	2.3	FALSE	OUT: Fault:
IN_OUT		0.0		
INOUT_Reset	Bool	4.0	FALSE	INOUT: Fault reset
INOUT_Pulse	Bool	4.1	FALSE	INOUT: Pulse Start Batch
INOUT_Start	Bool	4.2	FALSE	INOUT: Start Dosing pump
INOUT_Manual_Batch	Bool	4.3	FALSE	INOUT: 0=Manual 1=Batch
STAT		0.0		
ControlModule	Struct	6.0		Control Module
RemoteAccessReq	Bool	6.0	TRUE	ControlModule: RemoteAccessReq
Deaerating	Bool	6.1	FALSE	ControlModule: Deaerating (100 %)
AnalogMode	Bool	6.2	TRUE	ControlModule: AnalogMode
TimerMode	Bool	6.3	FALSE	ControlModule: TimerMode
SlowMode	Bool	6.4	FALSE	ControlModule: SlowMode
Velocity	Bool	6.5	FALSE	ControlModule: Velocity
Res_06	Bool	6.6	FALSE	ControlModule:
Res_07	Bool	6.7	FALSE	ControlModule:
AutoDeaeratingEnable	Bool	7.0	FALSE	ControlModule: AutoDeaeratingEnable
FlowControlEnable	Bool	7.1	TRUE	ControlModule: FlowControlEnable
ProfiWatchdogEnable	Bool	7.2	TRUE	ControlModule: ProfiWatchdogEnable
AutoFlowAdaptEnable	Bool	7.3	TRUE	ControlModule: AutoFlowAdaptEnable
PulseMemoryEnable	Bool	7.4	FALSE	ControlModule: PulseMemoryEnable
Res_15	Bool	7.5	FALSE	ControlModule:
Res_16	Bool	7.6	FALSE	ControlModule:
Res_17	Bool	7.7	FALSE	ControlModule:
ResetFault	Bool	8.0	FALSE	ControlModule: ResetFault
Pulse	Bool	8.1	FALSE	ControlModule: Pulse:
ResetVolumeCounter	Bool	8.2	FALSE	ControlModule: ResetVolumeCounter
SetRTC	Bool	8.3	FALSE	ControlModule: SetRTC
Res_24	Bool	8.4	FALSE	ControlModule:
Res_25	Bool	8.5	FALSE	ControlModule:
Res_26	Bool	8.6	FALSE	ControlModule:
Res_27	Bool	8.7	FALSE	ControlModule:
ReqStartStop	Byte	9.0	B#16#1	ControlModule: ReqStartStop [enumeration]

Name	Datentyp	Adresse	Anfangswert	Kommentar
OperatingMode	Byte	10.0	B#16#0	ControlModule: OperatingMode [enumeration]
SetSetpointManual	Real	12.0	0.000000e+000	Set Value: [l/h] SetSetpointManual
SetBatchDosingVolume	Real	16.0	0.000000e+000	Set Value: [l] SetBatchDosingVolume
SetBatchDosingTime	DInt	20.0	L#0	Set Value: 0,1[s] SetBatchDosingTime
SetPressureMax	Real	24.0	0.000000e+000	Set Value: [bar] SetPressureMax
StatusModule	Struct	28.0		StatusModule
ActRemoteAccess	Bool	28.0	FALSE	StatusModule: ActRemoteAccess
ActDeaereating	Bool	28.1	FALSE	StatusModule: ActDeaereating (100 %)
ActAnalogMode	Bool	28.2	FALSE	StatusModule: ActAnalogMode
ActTimerMode	Bool	28.3	FALSE	StatusModule: ActTimerMode
ActSlowMode	Bool	28.4	FALSE	StatusModule: ActSlowMode
ActVelocity	Bool	28.5	FALSE	StatusModule: ActVelocity
Res_06	Bool	28.6	FALSE	StatusModule:
Res_07	Bool	28.7	FALSE	StatusModule:
ActAutoDeaereatingEnable	Bool	29.0	FALSE	StatusModule: ActAutoDeaereatingEnable
ActFlowControlEnable	Bool	29.1	FALSE	StatusModule: ActFlowControlEnable
ActProfiWatchdogEnable	Bool	29.2	FALSE	StatusModule: ActProfiWatchdogEnable
ActAutoFlowAdaptEnable	Bool	29.3	FALSE	StatusModule: ActAutoFlowAdaptEnable
ActPulseMemoryEnable	Bool	29.4	FALSE	StatusModule: ActPulseMemoryEnable
Res_15	Bool	29.5	FALSE	StatusModule:
Res_16	Bool	29.6	FALSE	StatusModule:
Res_17	Bool	29.7	FALSE	StatusModule:
ResetFaultAck	Bool	30.0	FALSE	StatusModule: ResetFaultAck
PulseAck	Bool	30.1	FALSE	StatusModule: PulseAck
ResetVolumeCounterAck	Bool	30.2	FALSE	StatusModule: ResetVolumeCounterAck
SetRTCAck	Bool	30.3	FALSE	StatusModule: SetRTCAck
Res_24	Bool	30.4	FALSE	StatusModule:
Res_25	Bool	30.5	FALSE	StatusModule:
Res_26	Bool	30.6	FALSE	StatusModule:
Res_27	Bool	30.7	FALSE	StatusModule:
Dosing	Bool	31.0	FALSE	StatusModule: Dosing (running)
Warning	Bool	31.1	FALSE	StatusModule: Warning
Fault	Bool	31.2	FALSE	StatusModule: Fault
BusControlLocallyEnabled	Bool	31.3	FALSE	StatusModule: BusControlLocallyEnabled
Res_34	Bool	31.4	FALSE	StatusModule:
Res_35	Bool	31.5	FALSE	StatusModule:
Res_36	Bool	31.6	FALSE	StatusModule:
Res_37	Bool	31.7	FALSE	StatusModule:
ActualStartStop	Byte	32.0	B#16#0	StatusModule: ActualStartStop [enumeration]
ActualOperatingMode	Byte	33.0	B#16#0	StatusModule: ActualOperatingMode [enumeration]
ActualSetpointManual	Real	34.0	0.000000e+000	Actual Value: [l/h] ActualSetpointManual
ActualBatchDosingVolume	Real	38.0	0.000000e+000	Actual Value: [l] ActualBatchDosingVolume
ActualBatchDosingTime	DInt	42.0	L#0	Actual Value: 0,1[s] ActualBatchDosingTime
ActualPressureMax	Real	46.0	0.000000e+000	Actual Value: [bar] ActualPressureMax

Name	Datentyp	Adresse	Anfangswert	Kommentar
FaultCode	Byte	50.0	B#16#0	Actual Code: FaultCode
WarningCode	Byte	51.0	B#16#0	Actual Code: WarningCode
DosingCapacityMax	Real	52.0	0.000000e+000	Actual Value: [l/h] DosingCapacityMax
DosingCapacityReference	Real	56.0	0.000000e+000	Actual Value: [l/h] DosingCapacityReference
MeasuredDosingCapacity	Real	60.0	0.000000e+000	Actual Value: [l/h] MeasuredDosingCapacity
MeasuredPressure	Real	64.0	0.000000e+000	Actual Value: [bar] MeasuredPressure
RemainingDosingVolume	Real	68.0	0.000000e+000	Actual Value: [l] RemainingDosingVolume
VolumeTripCounter	Real	72.0	0.000000e+000	Actual Value: [l] VolumeTripCounter
DigitalInputs	Struct	76.0		Actual State: Digital Inputs
LowLevelSignal	Bool	76.0	FALSE	DigitalInput: Low-level signal
EmptySignal	Bool	76.1	FALSE	DigitalInput: Empty signal
ExtrenalStop	Bool	76.2	FALSE	DigitalInput: Extrenal stop
Res_03	Bool	76.3	FALSE	DigitalInput:
Res_04	Bool	76.4	FALSE	DigitalInput:
Res_05	Bool	76.5	FALSE	DigitalInput:
Res_06	Bool	76.6	FALSE	DigitalInput:
Res_07	Bool	76.7	FALSE	DigitalInput:
Alarms	Struct	78.0		Alarms
ERR_MaxPressure	Bool	78.0	FALSE	Error: Maximum pressure limit exceeded. ActualPressureMax (module 16)(Code 210)
ERR_MinPressure	Bool	78.1	FALSE	Error: Backpressure too low. Fixed underpressure limit (1.5 bar)(Code 211)
ERR_BlockedMotor	Bool	78.2	FALSE	Error: Blocked motor/pump(Code 51)
ERR_EmptyTank	Bool	78.3	FALSE	Error: Empty tank (dry running)(Code 57)
ERR_DefectiveAnalog	Bool	78.4	FALSE	Error: Defective analog 4-20 mA cable(Code 47)
ERR_Profibus	Bool	78.5	FALSE	Error: Profibus communication fault (main network communication fault)(Code 15)
ERR_ExtensionBox	Bool	78.6	FALSE	Error: Extension box communication fault (GENIbus communicat. fault)(Code 152)
Warnings	Struct	80.0		Warnings
MSG_MinPressure	Bool	80.0	FALSE	Warning: Backpressure too low. Fixed underpressure limit (1.5 bar). (Code 211)
MSG_AirBubbles	Bool	80.1	FALSE	Warning: Air bubbles, gas in pump head, deaerating problem. (Code 35)
MSG_Cavitation	Bool	80.2	FALSE	Warning: Cavitation. (Code 208)
MSG_DischargeLeakage	Bool	80.3	FALSE	Warning: Discharge (pressure) valve leakage. (Code 36)
MSG_SuctionLeakage	Bool	80.4	FALSE	Warning: Suction valve leakage. (Code 37)
MSG_ServiceNow	Bool	80.5	FALSE	Warning: Service now (time for service exceeded). (Code 12)
MSG_ServiceSoon	Bool	80.6	FALSE	Warning: Soon time for service (general service information). (Code 33)
MSG_FlowDeviation	Bool	80.7	FALSE	Warning: Flow deviation (performance requirement not met). (Code 17)
MSG_LowLevel	Bool	81.0	FALSE	Warning: Low level in tank. (Code 206)

Name	Datentyp	Adresse	Anfangswert	Kommentar
MSG_CableBreakdown	Bool	81.1	FALSE	Warning: Cable breakdown on FlowControl. (Code 169)
SFP_Pulse	Bool	82.0	FALSE	Intern: Slope Flag Positive Pulse
SFP_Reset	Bool	82.1	FALSE	Intern: Slope Flag Positive Reset
Res_02	Bool	82.2	FALSE	Intern:
Res_03	Bool	82.3	FALSE	Intern:
Res_04	Bool	82.4	FALSE	Intern:
Res_05	Bool	82.5	FALSE	Intern:
Res_06	Bool	82.6	FALSE	Intern:
Res_07	Bool	82.7	FALSE	Intern:
TEMP		0.0		

**Baustein: FB11**

## Input description:

StartAddress: First byte in pump peripheral area corresponding to setting in hardware configuration.

Reset: The "ResetFault" control bit can be set with a pulse. The metering pump acknowledges this control bit, whereby it is reset in the FB.

Pulse: Pulse signal for starting in mode batch. The metering pump acknowledges this control bit, resetting it in the FB.

Start: When the pump is ready for operation, the pump can be started in the set mode with TRUE. The pump can be stopped with FALSE.

Manual\_Batch: Selection of metering mode (0=Manual 1=Batch).

## Output description:

Ready: Returns status of "ActRemoteAccess" bit.

Dosing: Returns status of "Dosing" bit.

Warning: Returns status of "Warning" bit.

Fault: Returns status of "Fault" bit.

All other data is written or read directly via access to the DB.

The data and their functions are explained in the Grundfos manual "Profibus\_Functionprofile\_DDA"

Warnings and faults are transferred in detailed form via a numerical interface. The last fault and last warning are therefore resident in the control. However, since it is frequently necessary to process the individual messages as bits, the two codes are already decoded in the standard modules and transferred in bit form.

**Netzwerk: 1** Read Inputs CIU 150 / DDA

Read in peripheral inputs and save in instance data module.  
It is mandatory to complete the settings in the hardware configuration according to specifications.

```

L      #IN_StartAddress      // e.g. INT-Value 400      #IN_StartAddress  -- IN: Start
                                Address PIW/PQW
SLD    3
LAR1                                // move Akkul with Byteaddress to AR1 [P#400.0]

L      PIB [AR1,P#0.0]        // PIB 400
T      DIB    28              // StatusModule Byte 1

L      PIB [AR1,P#1.0]        // PIB 401
T      DIB    29              // StatusModule Byte 2

L      PIB [AR1,P#2.0]        // PIB 402
T      DIB    30              // StatusModule Byte 3

L      PIB [AR1,P#3.0]        // PIB 403

```

T	DIB 31	// StatusModule Byte 4	
L	PIB [AR1,P#4.0]	// PIB 404	
T	DIB 32	// StatusModule Byte 5	
L	PIB [AR1,P#5.0]	// PIB 405	
T	DIB 33	// StatusModule Byte 6	
L	PID [AR1,P#6.0]	// PID 406	
T	#ActualSetpointManual		#ActualSetpointManual -- Actual Value: [l/h] ActualSetpointManual
L	PID [AR1,P#10.0]	// PID 410	
T	#ActualBatchDosingVolume		#ActualBatchDosingVolume -- Actual Value: [l] ActualBatchDosingVolume
L	PID [AR1,P#14.0]	// PID 414	
T	#ActualBatchDosingTime		#ActualBatchDosingTime -- Actual Value: 0,1[s] ActualBatchDosingTime
L	PID [AR1,P#18.0]	// PID 418	
T	#ActualPressureMax		#ActualPressureMax -- Actual Value: [bar] ActualPressureMax
L	PIB [AR1,P#22.0]	// PIB 422	
T	#FaultCode		#FaultCode -- Actual Code: FaultCode
L	PIB [AR1,P#23.0]	// PIB 423	
T	#WarningCode		#WarningCode -- Actual Code: WarningCode
L	PID [AR1,P#24.0]	// PID 424	
T	#DosingCapacityMax		#DosingCapacityMax -- Actual Value: [l/h] DosingCapacityMax
L	PID [AR1,P#28.0]	// PID 428	
T	#DosingCapacityReference		#DosingCapacityReference -- Actual Value: [l/h] DosingCapacityReference
L	PID [AR1,P#32.0]	// PID 432	
T	#MeasuredDosingCapacity		#MeasuredDosingCapacity -- Actual Value: [l/h] MeasuredDosingCapacity
L	PID [AR1,P#36.0]	// PID 436	
T	#MeasuredPressure		#MeasuredPressure -- Actual Value: [bar] MeasuredPressure
L	PID [AR1,P#40.0]	// PID 440	
T	#RemainingDosingVolume		#RemainingDosingVolume -- Actual Value: [l] RemainingDosingVolume
L	PID [AR1,P#44.0]	// PID 444	
T	#VolumeTripCounter		#VolumeTripCounter -- Actual Value: [l] VolumeTripCounter
L	PIB [AR1,P#48.0]	// PIB 448	
T	DIB 76	// Digital Inputs	

Netzwerk: 2	Decode FaultCode
The "FaultCode" is evaluated and the fault is provided as a bit message.	

L	#FaultCode		#FaultCode -- Actual Code: FaultCode
L	210	// Code 210	
==I			
=	#Alarms.ERR_MaxPressure		#Alarms.ERR_MaxPressure -- Error: Maximum pressure limit exceeded. ActualPressureMax (module 16)(Code 210)

```

L      #FaultCode                                #FaultCode      -- Actual
L      211                                // Code 211      Code: FaultCode
==I
=      #Alarms.ERR_MinPressure                #Alarms.ERR_MinPressure -- Er
                                         ror: Backpressure too low. F
                                         ixed underpressure limit (1.5
                                         bar)(Code 211)

L      #FaultCode                                #FaultCode      -- Actual
L      51                                // Code 51      Code: FaultCode
==I
=      #Alarms.ERR_BlockedMotor                #Alarms.ERR_BlockedMotor -- E
                                         rror: Blocked motor/pump(Code
                                         51)

L      #FaultCode                                #FaultCode      -- Actual
L      57                                // Code 57      Code: FaultCode
==I
=      #Alarms.ERR_EmptyTank                #Alarms.ERR_EmptyTank -- Erro
                                         r: Empty tank (dry running)(C
                                         ode 57)

L      #FaultCode                                #FaultCode      -- Actual
L      47                                // Code 47      Code: FaultCode
==I
=      #Alarms.ERR_DefectiveAnalog                #Alarms.ERR_DefectiveAnalog -
                                         - Error: Defective analog 4-2
                                         0 mA cable(Code 47)

L      #FaultCode                                #FaultCode      -- Actual
L      15                                // Code 15      Code: FaultCode
==I
=      #Alarms.ERR_Profibus                #Alarms.ERR_Profibus -- Error
                                         : Profibus communication faul
                                         t (main network communication
                                         fault)(Code 15)

L      #FaultCode                                #FaultCode      -- Actual
L      152                                // Code 152     Code: FaultCode
==I
=      #Alarms.ERR_ExtensionBox                #Alarms.ERR_ExtensionBox -- E
                                         rror: Extension box communica
                                         tion fault (GENIbus communica
                                         t. fault)(Code 152)

```

Netzwerk: 3	Decode WarningCode
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The "WarningCode" is evaluated and the warning is provided as a bit message.
--

```

L      #WarningCode                            #WarningCode    -- Actual
L      211                                // Code 211      Code: WarningCode
==I
=      #Warnings.MSG_MinPressure                #Warnings.MSG_MinPressure --
                                         Warning: Backpressure too l
                                         ow. Fixed underpressure lim
                                         it (1.5 bar). (Code 211)

L      #WarningCode                            #WarningCode    -- Actual
L      35                                // Code 35      Code: WarningCode
==I
=      #Warnings.MSG_AirBubbles                #Warnings.MSG_AirBubbles --
                                         Warning: Air bubbles, gas in
                                         pump head, deaerating probl
                                         em. (Code 35)

L      #WarningCode                            #WarningCode    -- Actual
L      208                                // Code 208     Code: WarningCode
==I

```

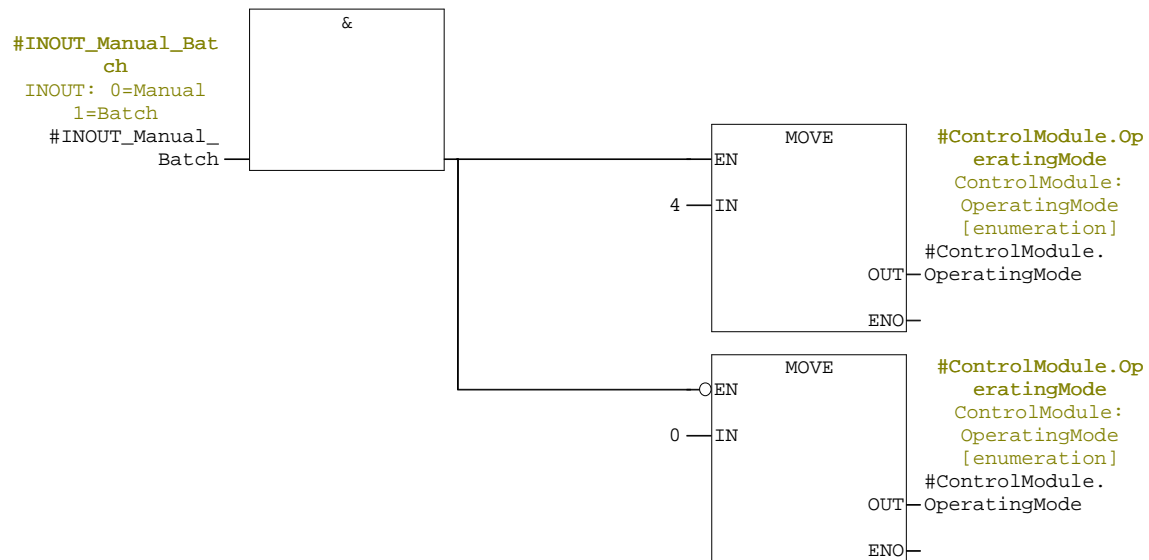


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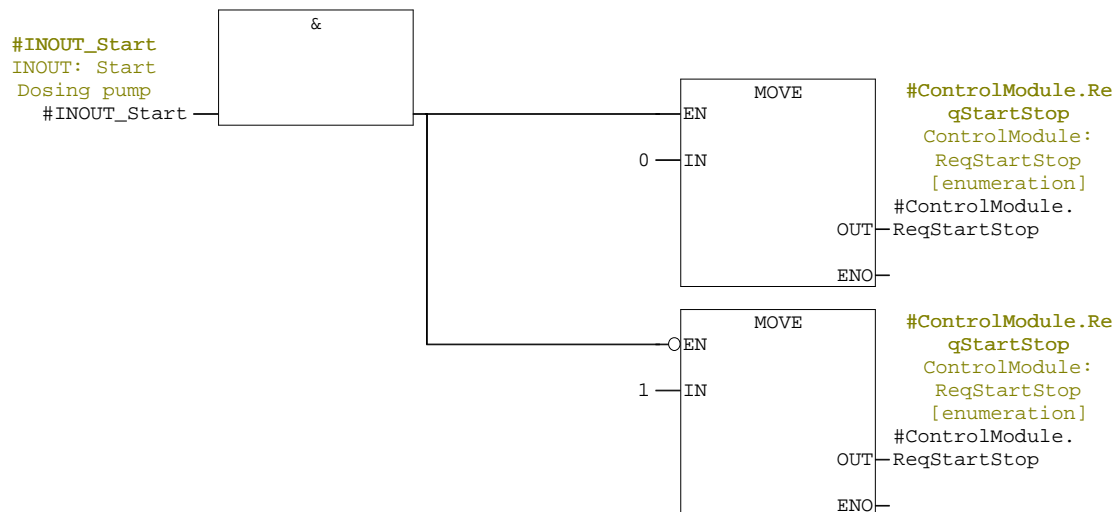
=	#Warnings.MSG_Cavitation		#Warnings.MSG_Cavitation -- Warning: Cavitation. (Code 208)
L	#WarningCode		#WarningCode -- Actual Code: WarningCode
L	36	// Code 36	
==I			
=	#Warnings.MSG_DischargeLeakage		#Warnings.MSG_DischargeLeakage -- Warning: Discharge (pressure) valve leakage. (Code 36)
L	#WarningCode		#WarningCode -- Actual Code: WarningCode
L	37	// Code 37	
==I			
=	#Warnings.MSG_SuctionLeakage		#Warnings.MSG_SuctionLeakage -- Warning: Suction valve leakage. (Code 37)
L	#WarningCode		#WarningCode -- Actual Code: WarningCode
L	12	// Code 12	
==I			
=	#Warnings.MSG_ServiceNow		#Warnings.MSG_ServiceNow -- Warning: Service now (time for service exceeded). (Code 12)
L	#WarningCode		#WarningCode -- Actual Code: WarningCode
L	33	// Code 33	
==I			
=	#Warnings.MSG_ServiceSoon		#Warnings.MSG_ServiceSoon -- Warning: Soon time for service (general service information). (Code 33)
L	#WarningCode		#WarningCode -- Actual Code: WarningCode
L	17	// Code 17	
==I			
=	#Warnings.MSG_FlowDeviation		#Warnings.MSG_FlowDeviation -- Warning: Flow deviation (performance requirement not met). (Code 17)
L	#WarningCode		#WarningCode -- Actual Code: WarningCode
L	206	// Code 206	
==I			
=	#Warnings.MSG_LowLevel		#Warnings.MSG_LowLevel -- Warning: Low level in tank. (Code 206)
L	#WarningCode		#WarningCode -- Actual Code: WarningCode
L	169	// Code 169	
==I			
=	#Warnings.MSG_CableBreakdown		#Warnings.MSG_CableBreakdown -- Warning: Cable breakdown on FlowControl. (Code 169)

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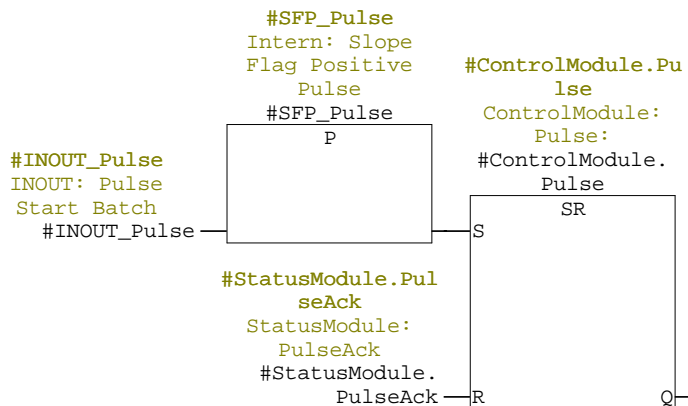
Netzwerk: 4	Set Dosing mode
Conversion of bit by bit operating mode selection in numerical selection.	



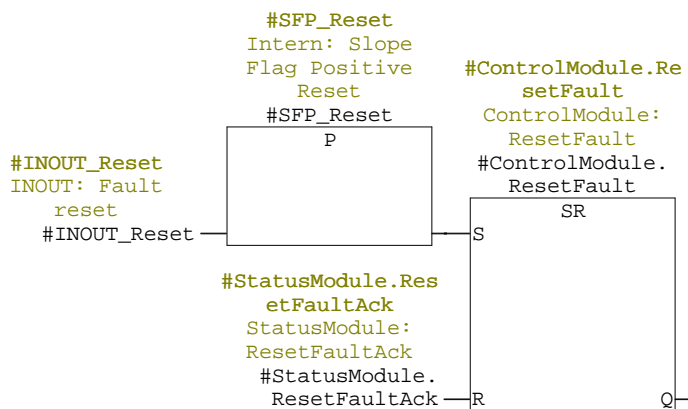
Netzwerk: 5	Start dosing
Conversion of bit by bit start command in numerical start command.	



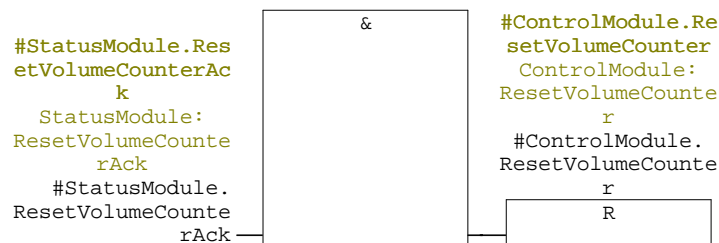
Netzwerk: 6	Pulse
Module input signal Pulse is saved and deleted by resetting metering pump.	



Netzwerk: 7	Fault reset
Module input signal Reset is saved and the control bit is deleted by resetting metering pump.	

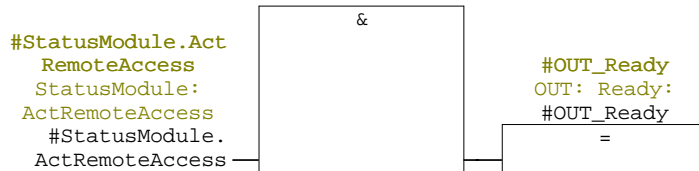


Netzwerk: 8	Reset Volume Counter
The control bit ResetVolumeCounter is deleted by resetting the metering pump.	



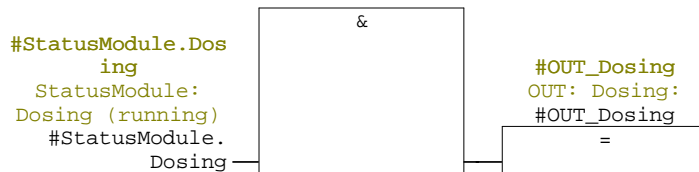
Netzwerk: 9      Write FB-Output Ready

The metering pump status Ready is transferred to the module output.



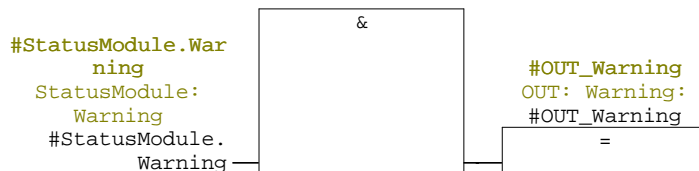
Netzwerk: 10      Write FB-Output Dosing

The metering pump status Dosing is transferred to the module output.



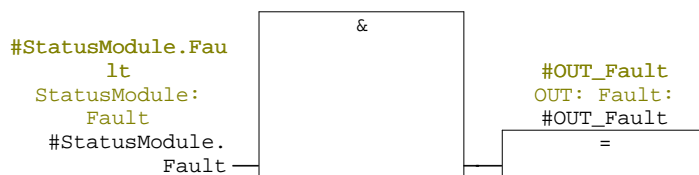
Netzwerk: 11      Write FB-Output Warning

The metering pump status Warning is transferred to the module output.



Netzwerk: 12      Write FB-Output Fault

The metering pump status Fault is transferred to the module output.



Netzwerk: 13      Write Outputs CIU 150 / DDA

Write peripheral outputs.  
It is mandatory to complete the settings in the hardware configuration according to specifications.

```

L   DIB   6           // ControlModule Byte 1
T   PQB [AR1,P#0.0]   // PQB 400

L   DIB   7           // ControlModule Byte 2
T   PQB [AR1,P#1.0]   // PQB 401

L   DIB   8           // ControlModule Byte 3
T   PQB [AR1,P#2.0]   // PQB 402

L   DIB   9           // ControlModule Byte 4
T   PQB [AR1,P#3.0]   // PQB 403

L   DIB   10          // ControlModule Byte 5

```

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T	PQB [AR1,P#4.0]	// PQB 404	
L	#SetSetpointManual		#SetSetpointManual -- Set Value: [1/h] SetSetpointManual
T	PQD [AR1,P#6.0]	// PQD 406	
L	#SetBatchDosingVolume		#SetBatchDosingVolume -- Set Value: [1] SetBatchDosingVolume
T	PQD [AR1,P#10.0]	// PQD 410	
L	#SetBatchDosingTime		#SetBatchDosingTime -- Set Value: : 0,1[s] SetBatchDosingTime
T	PQD [AR1,P#14.0]	// PQD 414	
L	#SetPressureMax		#SetPressureMax -- Set Value: [bar] SetPressureMax
T	PQD [AR1,P#18.0]	// PQD 418	

**DB11 - <offline>**

"IDB\_PB CIU150 DDA\_P1"

CIU150 DDA

**Datensicht****Typ des Datenbausteins:**

Instanzdatenbaustein zu FB11

**Name:****Familie:****Autor:****Version:**

0.0

**Bausteinversion:**

2

**Längen (Baustein / Daten ):**

00426 / 00084

**Zeitstempel****Code:**

15.06.2012 15:45:41

**Schnittstelle:**

15.06.2012 15:45:27

**Bausteinattribute:**

S7\_language

7(1) Deutsch (Deutschland)  
13.07.2012 12:31:42

Adresse	Deklaration	Name	Typ	Anfangswert	Aktualwert	Kommentar
0.0	in	IN_StartAddress	INT	0	0	IN: Start Address PIW/PQW
2.0	out	OUT_Ready	BOOL	FALSE	FALSE	OUT: Ready:
2.1	out	OUT_Dosing	BOOL	FALSE	FALSE	OUT: Dosing:
2.2	out	OUT_Warning	BOOL	FALSE	FALSE	OUT: Warning:
2.3	out	OUT_Fault	BOOL	FALSE	FALSE	OUT: Fault:
4.0	in_out	INOUT_Reset	BOOL	FALSE	FALSE	INOUT: Fault reset
4.1	in_out	INOUT_Pulse	BOOL	FALSE	FALSE	INOUT: Pulse Start Batch
4.2	in_out	INOUT_Start	BOOL	FALSE	FALSE	INOUT: Start Dosing pump
4.3	in_out	INOUT_Manual_Batch	BOOL	FALSE	FALSE	INOUT: 0=Manual 1=Batch
6.0	stat	ControlModule.RemoteAccessReq	BOOL	TRUE	TRUE	ControlModule: RemoteAccessReq
6.1	stat	ControlModule.Deaerating	BOOL	FALSE	FALSE	ControlModule: Deaerating (100 %)
6.2	stat	ControlModule.AnalogMode	BOOL	TRUE	TRUE	ControlModule: AnalogMode
6.3	stat	ControlModule.TimerMode	BOOL	FALSE	FALSE	ControlModule: TimerMode
6.4	stat	ControlModule.SlowMode	BOOL	FALSE	FALSE	ControlModule: SlowMode
6.5	stat	ControlModule.Velocity	BOOL	FALSE	FALSE	ControlModule: Velocity
6.6	stat	ControlModule.Res_06	BOOL	FALSE	FALSE	ControlModule:
6.7	stat	ControlModule.Res_07	BOOL	FALSE	FALSE	ControlModule:
7.0	stat	ControlModule.AutoDeaeratingEnable	BOOL	FALSE	FALSE	ControlModule: AutoDeaeratingEnable
7.1	stat	ControlModule.FlowControlEnable	BOOL	TRUE	TRUE	ControlModule: FlowControlEnable
7.2	stat	ControlModule.ProfiWatchdogEnable	BOOL	TRUE	TRUE	ControlModule: ProfiWatchdogEna...
7.3	stat	ControlModule.AutoFlowAdaptEnable	BOOL	TRUE	TRUE	ControlModule: AutoFlowAdaptEn...
7.4	stat	ControlModule.PulseMemoryEnable	BOOL	FALSE	FALSE	ControlModule: PulseMemoryEnable
7.5	stat	ControlModule.Res_15	BOOL	FALSE	FALSE	ControlModule:
7.6	stat	ControlModule.Res_16	BOOL	FALSE	FALSE	ControlModule:
7.7	stat	ControlModule.Res_17	BOOL	FALSE	FALSE	ControlModule:
8.0	stat	ControlModule.ResetFault	BOOL	FALSE	FALSE	ControlModule: ResetFault

Adresse	Deklaration	Name	Typ	Anfangswert	Aktualwert	Kommentar
8.1	stat	ControlModule.Pulse	BOOL	FALSE	FALSE	ControlModule: Pul...
8.2	stat	ControlModule.ResetVolumeCounter	BOOL	FALSE	FALSE	ControlModule: ResetVolumeCoun...
8.3	stat	ControlModule.SetRTC	BOOL	FALSE	FALSE	ControlModule: SetRTC
8.4	stat	ControlModule.Res_24	BOOL	FALSE	FALSE	ControlModule:
8.5	stat	ControlModule.Res_25	BOOL	FALSE	FALSE	ControlModule:
8.6	stat	ControlModule.Res_26	BOOL	FALSE	FALSE	ControlModule:
8.7	stat	ControlModule.Res_27	BOOL	FALSE	FALSE	ControlModule:
9.0	stat	ControlModule.ReqStartStop	BYTE	B#16#1	B#16#1	ControlModule: ReqStartStop [enumeration]
10.0	stat	ControlModule.OperatingMode	BYTE	B#16#0	B#16#0	ControlModule: OperatingMode [enumeration]
12.0	stat	SetSetpointManual	REAL	0.000000e+000	0.000000e+000	Set Value: [l/h] SetSetpointManual
16.0	stat	SetBatchDosingVolume	REAL	0.000000e+000	0.000000e+000	Set Value: [l] SetBatchDosingVolume
20.0	stat	SetBatchDosingTime	DINT	L#0	L#0	Set Value: 0,1[s] SetBatchDosingTi...
24.0	stat	SetPressureMax	REAL	0.000000e+000	0.000000e+000	Set Value: [bar] SetPressureMax
28.0	stat	StatusModule.ActRemoteAccess	BOOL	FALSE	FALSE	StatusModule: ActRemoteAccess
28.1	stat	StatusModule.ActDeaerating	BOOL	FALSE	FALSE	StatusModule: ActDeaerating (100 %)
28.2	stat	StatusModule.ActAnalogMode	BOOL	FALSE	FALSE	StatusModule: ActAnalogMode
28.3	stat	StatusModule.ActTimerMode	BOOL	FALSE	FALSE	StatusModule: ActTimerMode
28.4	stat	StatusModule.ActSlowMode	BOOL	FALSE	FALSE	StatusModule: ActSlowMode
28.5	stat	StatusModule.ActVelocity	BOOL	FALSE	FALSE	StatusModule: ActVelocity
28.6	stat	StatusModule.Res_06	BOOL	FALSE	FALSE	StatusModule:
28.7	stat	StatusModule.Res_07	BOOL	FALSE	FALSE	StatusModule:
29.0	stat	StatusModule.ActAutoDeaeratingEnable	BOOL	FALSE	FALSE	StatusModule: ActAutoDeaerating Enable
29.1	stat	StatusModule.ActFlowControlEnable	BOOL	FALSE	FALSE	StatusModule: ActFlowControlEn...
29.2	stat	StatusModule.ActProfiWatchdogEnable	BOOL	FALSE	FALSE	StatusModule: ActProfiWatchdogEnable
29.3	stat	StatusModule.ActAutoFlowAdaptEnable	BOOL	FALSE	FALSE	StatusModule: ActAutoFlowAdaptEnable
29.4	stat	StatusModule.ActPulseMemoryEnable	BOOL	FALSE	FALSE	StatusModule: ActPulseMemoryEnable
29.5	stat	StatusModule.Res_15	BOOL	FALSE	FALSE	StatusModule:
29.6	stat	StatusModule.Res_16	BOOL	FALSE	FALSE	StatusModule:
29.7	stat	StatusModule.Res_17	BOOL	FALSE	FALSE	StatusModule:
30.0	stat	StatusModule.ResetFaultAck	BOOL	FALSE	FALSE	StatusModule: ResetFaultAck
30.1	stat	StatusModule.PulseAck	BOOL	FALSE	FALSE	StatusModule: PulseAck
30.2	stat	StatusModule.ResetVolumeCounterAck	BOOL	FALSE	FALSE	StatusModule: ResetVolumeCounterAck
30.3	stat	StatusModule.SetRTCAck	BOOL	FALSE	FALSE	StatusModule: SetRTCAck
30.4	stat	StatusModule.Res_24	BOOL	FALSE	FALSE	StatusModule:
30.5	stat	StatusModule.Res_25	BOOL	FALSE	FALSE	StatusModule:
30.6	stat	StatusModule.Res_26	BOOL	FALSE	FALSE	StatusModule:
30.7	stat	StatusModule.Res_27	BOOL	FALSE	FALSE	StatusModule:

Adresse	Deklaration	Name	Typ	Anfangswert	Aktualwert	Kommentar
31.0	stat	StatusModule.Dosing	BOOL	FALSE	FALSE	StatusModule: Dosing (running)
31.1	stat	StatusModule.Warning	BOOL	FALSE	FALSE	StatusModule: Warning
31.2	stat	StatusModule.Fault	BOOL	FALSE	FALSE	StatusModule: Fault
31.3	stat	StatusModule.BusControl LocallyEnabled	BOOL	FALSE	FALSE	StatusModule: BusControlLocallyEn abled
31.4	stat	StatusModule.Res_34	BOOL	FALSE	FALSE	StatusModule:
31.5	stat	StatusModule.Res_35	BOOL	FALSE	FALSE	StatusModule:
31.6	stat	StatusModule.Res_36	BOOL	FALSE	FALSE	StatusModule:
31.7	stat	StatusModule.Res_37	BOOL	FALSE	FALSE	StatusModule:
32.0	stat	StatusModule.ActualStart Stop	BYTE	B#16#0	B#16#0	StatusModule: ActualStartStop [enumeration]
33.0	stat	StatusModule.ActualOper atingMode	BYTE	B#16#0	B#16#0	StatusModule: ActualOperatingMod e [enumeration]
34.0	stat	ActualSetpointManual	REAL	0.000000e+0 00	0.000000e+000	Actual Value: [l/h] ActualSetpointMan...
38.0	stat	ActualBatchDosingVolum e	REAL	0.000000e+0 00	0.000000e+000	Actual Value: [l] ActualBatchDosingV olume
42.0	stat	ActualBatchDosingTime	DINT	L#0	L#0	Actual Value: 0,1[s] ActualBatchDosingTi me
46.0	stat	ActualPressureMax	REAL	0.000000e+0 00	0.000000e+000	Actual Value: [bar] ActualPressureMax
50.0	stat	FaultCode	BYTE	B#16#0	B#16#0	Actual Code: FaultCode
51.0	stat	WarningCode	BYTE	B#16#0	B#16#0	Actual Code: WarningCode
52.0	stat	DosingCapacityMax	REAL	0.000000e+0 00	0.000000e+000	Actual Value: [l/h] DosingCapacityMax
56.0	stat	DosingCapacityReferenc e	REAL	0.000000e+0 00	0.000000e+000	Actual Value: [l/h] DosingCapacityRefe rence
60.0	stat	MeasuredDosingCapacity	REAL	0.000000e+0 00	0.000000e+000	Actual Value: [l/h] MeasuredDosingCap acity
64.0	stat	MeasuredPressure	REAL	0.000000e+0 00	0.000000e+000	Actual Value: [bar] MeasuredPressure
68.0	stat	RemainingDosingVolume	REAL	0.000000e+0 00	0.000000e+000	Actual Value: [l] RemainingDosingVol ume
72.0	stat	VolumeTripCounter	REAL	0.000000e+0 00	0.000000e+000	Actual Value: [l] VolumeTripCounter
76.0	stat	DigitalInputs.LowLevelSig nal	BOOL	FALSE	FALSE	DigitalInput: Low-level signal
76.1	stat	DigitalInputs.EmptySignal	BOOL	FALSE	FALSE	DigitalInput: Empty signal
76.2	stat	DigitalInputs.ExtrenalStop	BOOL	FALSE	FALSE	DigitalInput: Extrenal stop
76.3	stat	DigitalInputs.Res_03	BOOL	FALSE	FALSE	DigitalInput:
76.4	stat	DigitalInputs.Res_04	BOOL	FALSE	FALSE	DigitalInput:
76.5	stat	DigitalInputs.Res_05	BOOL	FALSE	FALSE	DigitalInput:
76.6	stat	DigitalInputs.Res_06	BOOL	FALSE	FALSE	DigitalInput:
76.7	stat	DigitalInputs.Res_07	BOOL	FALSE	FALSE	DigitalInput:
78.0	stat	Alarms.ERR_MaxPressur e	BOOL	FALSE	FALSE	Error: Maximum pressure limit exceeded. ActualPressureMax (module 16)(Code 210)
78.1	stat	Alarms.ERR_MinPressur e	BOOL	FALSE	FALSE	Error: Backpressure too low. Fixed underpressure limit (1.5 bar)(Code 211)
78.2	stat	Alarms.ERR_BlockedMot or	BOOL	FALSE	FALSE	Error: Blocked motor/pump(Code ...



Adresse	Deklaration	Name	Typ	Anfangswert	Aktualwert	Kommentar
78.3	stat	Alarms.ERR_EmptyTank	BOOL	FALSE	FALSE	Error: Empty tank (dry running)(Code...
78.4	stat	Alarms.ERR_DefectiveAnalog	BOOL	FALSE	FALSE	Error: Defective analog 4-20 mA cable(Code 47)
78.5	stat	Alarms.ERR_Profibus	BOOL	FALSE	FALSE	Error: Profibus communication fault (main network communication fault)(Code 15)
78.6	stat	Alarms.ERR_ExtensionBox	BOOL	FALSE	FALSE	Error: Extension box communication fault (GENIbus communicat. fault)(Code 152)
80.0	stat	Warnings.MSG_MinPressure	BOOL	FALSE	FALSE	Warning: Backpressure too low. Fixed underpressure limit (1.5 bar). (Code 211)
80.1	stat	Warnings.MSG_AirBubbles	BOOL	FALSE	FALSE	Warning: Air bubbles, gas in pump head, deaerating proble...
80.2	stat	Warnings.MSG_Cavitation	BOOL	FALSE	FALSE	Warning: Cavitation. (Code 208)
80.3	stat	Warnings.MSG_DischargeLeakage	BOOL	FALSE	FALSE	Warning: Discharge (pressure) valve leakage. (Code 36)
80.4	stat	Warnings.MSG_SuctionLeakage	BOOL	FALSE	FALSE	Warning: Suction valve leakage. (Code 37)
80.5	stat	Warnings.MSG_ServiceNow	BOOL	FALSE	FALSE	Warning: Service now (time for service exceeded). (Code ...)
80.6	stat	Warnings.MSG_ServiceSoon	BOOL	FALSE	FALSE	Warning: Soon time for service (general service information). (Code 33)
80.7	stat	Warnings.MSG_FlowDeviation	BOOL	FALSE	FALSE	Warning: Flow deviation (performance requirement not met). (Code 17)
81.0	stat	Warnings.MSG_LowLevel	BOOL	FALSE	FALSE	Warning: Low level in tank. (Code 206)
81.1	stat	Warnings.MSG_CableBreakdown	BOOL	FALSE	FALSE	Warning: Cable breakdown on FlowControl. (Code 169)
82.0	stat	SFP_Pulse	BOOL	FALSE	FALSE	Intern: Slope Flag Positive Pulse
82.1	stat	SFP_Reset	BOOL	FALSE	FALSE	Intern: Slope Flag Positive Reset
82.2	stat	Res_02	BOOL	FALSE	FALSE	Intern:
82.3	stat	Res_03	BOOL	FALSE	FALSE	Intern:
82.4	stat	Res_04	BOOL	FALSE	FALSE	Intern:
82.5	stat	Res_05	BOOL	FALSE	FALSE	Intern:
82.6	stat	Res_06	BOOL	FALSE	FALSE	Intern:
82.7	stat	Res_07	BOOL	FALSE	FALSE	Intern: