PROFIBUS

Communication Protocol of PUE HX5.EX Indicator

SOFTWARE MANUAL

ITKP-03-01-08-18-EN



AUGUST 2018

CONTENTS

1.	DATA STRUCTURE	4
	1.1. Input Address	4
	1.2. Output Address	6
2.	CONFIGURATION OF PROFIBUS MODULE IN TIA PORTAL V13	9
	2.1. GSD Import	9
	2.2. Module Configuration	11
3.	PLC SOFTWARE SAMPLE	14

1. DATA STRUCTURE

1.1. Input Address

Input variables list:

Variable	Offset	Length [WORD]	Data type
Mass	0	2	float
Tare	4	2	float
Unit	8	1	word
Platform status	10	1	word
LO threshold	12	2	float
Process status (Stop, Start)	16	1	word
Inputs status	66	1	word
Min	68	2	float
Мах	72	2	float
Lot number	84	2	dword
Operator	88	1	word
Product	90	1	word
Customer	92	1	word
Packaging	94	1	word
Source warehouse	-	-	-
Target warehouse	-	-	-
Formulation/Dosing	100	1	word

Platform mass – response: platform mass in current unit.

Platform tare - response: platform tare in adjustment unit.

Platform unit – determines currently displayed mass unit of a platform.

Unit bit	Unit bits					
0	- gram [g]					
1	- kilogram [kg]					
2	- carat [ct]					
3	- pound [lb]					
4	- ounce [oz]					
5	- Newton [N]					

Example:

bit No.	B5	B4	B3	B2	B1	B0
value	0	0	0	0	1	0

The unit of the weighing instrument is kilogram [kg].

Platform status – determines status of a weighing platform.

Statu	Status bits							
0	- measurement correct (weighing instrument does not report an error)							
1	- stable measurement							
2	- weighing instrument indicates zero							
3	- weighing instrument is tared							
4	- weighing instrument is in II weighing range							
5	- weighing instrument is in III weighing range							
6	- weighing instrument reports NULL error							
7	- weighing instrument reports LH error							
8	- weighing instrument reports FULL error							

Example:

bit No.	B8	B7	B6	B5	B4	B3	B2	B1	B0
value	0	0	0	0	1	0	0	1	1

The weighing instrument does not report error, stable measurement in II weighing range.

LO threshold – response: LO threshold value of a platform in adjustment unit.

Process status – determines process status:

Decimal value	Process status	bit No.			
	FIOCESS Status	B1	B0		
0	process disabled	0	0		
1	process start	0	1		
2	process stop	1	0		
3	process completed	1	1		

Inputs status – response: status of set inputs:

Input No.	12	11	10	9	8	7	6	5	4	3	2	1
OFF	0	0	0	0	0	0	0	0	0	0	0	0
ON	1	1	1	1	1	1	1	1	1	1	1	1

Example:

Mask of set 2 and 4 inputs: 0000 0000 0000 1010

 $\underline{\text{MIN}}$ – response: **MIN** threshold value (in the current unit selected for active working mode).

 \underline{MAX} – response: **MAX** threshold value (in the current unit selected for active working mode).

Lot number – response: lot number.

Operator – response: code of logged in operator.

<u>Product</u> – response: code of selected product.

Customer – response: code of selected customer.

<u>Packaging</u> – response: code of selected packaging.

1.2. Output Address

Input variables list:

Variable	Offset	Length [WORD]	Data type
Command	0	1	word
Command with parameter	2	1	word
Platform	4	1	word
Tare	6	2	float
LO threshold	10	2	float
Outputs status	14	1	word
Min	16	2	float
Мах	20	2	float
Lot number	32	2	dword
Operator	36	1	word
Product	38	1	word
Customer	40	1	word
Packaging	42	1	word
Source warehouse	-	-	-
Target warehouse	-	-	-
Formulation/Dosing	48	1	word

 $\underline{\textbf{Basic command}}$ – setting respective value performs the task in accordance with the table:

Bit No.	Command
0	Zero the platform
1	Tare the platform
2	Delete statistics
3	Save/Print
4	Start
5	Stop (error)

Example:

0000 0000 0010 0000 - process start.

<u>**Complex command**</u> – setting respective value performs the task in accordance with the table:

Decimal value	Command
0	Setting the tare value for a given platform
1	Setting LO threshold value for a given platform
2	Setting lot number
3	Setting outputs status
4	Operator selection
5	Product selection
6	Packaging selection
7	Setting MIN threshold value
8	Customer selection
9	Source warehouse selection
10	Target warehouse selection
11	Dosing selection
12	Setting MAX threshold value



Complex command requires setting address of respective parameter (from 2 to 24 – refer to: 'Complex command parameters' table).

Example:

0000 0000 0000 0010 – command sets LO threshold to the value set in LO parameter (address 5 – refer to: 'Complex command parameters' table).

Platform – complex command parameter: weighing platform number.

Tare – complex command parameter: tare value (in adjustment unit).

LO threshold – complex command parameter: LO threshold value (in adjustment unit).

<u>Outputs status</u> – complex command parameter: determines status of weighing indicator outputs.

Output No.	12	11	10	9	8	7	6	5	4	3	2	1
OFF	0	0	0	0	0	0	0	0	0	0	0	0
ON	1	1	1	1	1	1	1	1	1	1	1	1

Example:

Mask of active 2 and 4 outputs: 0000 0000 0000 1010

<u>MIN</u> – complex command parameter: MIN threshold value (in the current unit selected for active working mode).

<u>MAX</u> – complex command parameter: MAX threshold value (in the current unit selected for active working mode).

Lot number – complex command parameter: lot number.

Operator – complex command parameter: code of logged in operator.

Product – complex command parameter: code of selected product.

<u>Customer</u> – complex command parameter: code of selected customer.

Packaging - complex command parameter: code of selected packaging.



A command or a command with parameter is executed once when its bit setting is detected. If the command with the same bit is to be executed again, zero the bit.

Example:

Command	
Taring	0000 0000 0000 0010
Command bits zeroing	0000 0000 0000 0000
Taring	0000 0000 0000 0010

2. CONFIGURATION OF PROFIBUS MODULE IN TIA PORTAL V13

Operating the environment has to be preceded with creating a new project in which the topology of the PROFIBUS network with MASTER PLC is determined (in this example: SIEMENS S7-300).



2.1. GSD Import

Using the included GSD configuration file add new device to the environment. Use OPTIONS tab first, MANAGE GENERAL STATION DESCRIPTION FILES (GSD) next and indicate the path to GSD file.

Manage general sta	ation description files X
Source path: C:\	Usersluser/Downloads/RadwaoProfibus3.5. V13. SP1 FXIAdditionalFiles/GSD
Content of import	ted p
File hms_1810.gsd	Info
<	OK Anuluj >

Upon successful adding of the file using list of devices, find Anybus-IC PDP module:

			Totally Integrated Auton	nation PORTAI
		_∎≡×	Hardware catalog	
opology view 🔒 Netwo	ork view	The vice view	Options	
Network overview	Connect	ions 4		
	connect			
Device		Туре	✓ Catalog	
S7300/ET200M st	ation_1	S7300/ET200M station	anybus	itig itif
▶ PLC_1		CPU 313C-2 DP	Filter	
 GSD device_1 		GSD device	Controllers	
HX5.EX-IM01		Anybus-IC PDP		
			C systems	
-			Drives & starters	
4			Network components	
			Detecting & Monitoring	
			Distributed I/O	
			Field devices	
			Other field devices	
			PROFINET IO	
			PROFIBUS DP	
			Drives	
			Encoders	
			Gateways	
		>	🕶 🧊 General	
Reperties	B Diagno	ostics	🗕 🔚 HMS Industrial Network	:s
			🗢 🛅 Anybus-IC PDP	
			Anybus-IC PDP	
			SIEMENS AG	
			Ident systems	
			PLCs	
loes not have any displayable pr	operties.			

Create a network consisting of one MASTER PLC and added SLAVE module:

RadwagProfibus3.5_V13_SP1 EX ➤ Device	ces & networks
Network Connections HMI connection	🔽 📰 🕄 🛨
PLC 1	
CPU 313C-2 DP	
PROFIL	115 1
PROFILE	03_1
	HX5.EX-IM01
	Anybus-IC PDP DP-NORM
	PLC_1

2.2. Module Configuration

Next, specify the address of the module. It has to be the same as the one set in the weighing instrument menu.

				•	S7300/ET200N	Astation_1	S7300/ET200M sta
PLC 1					PLC_1		CPU 313C-2 DP
CPU 313C-2 DP				•	GSD device_1		GSD device
					HX5.EX-IM0	01	Anybus-IC PDP
			-				
	PROFIBUS_1		•				
		-					
	HX5.EX-IM01						
	Anybus-IC PDP DP-NORM						
	PLC_1						
			-				
		\sim					
A 100	> 100%	- - - - -	1 - r	1			
	▶ 100%	•		۲.			
X5.EX-IM01 [Module]	► 100% ►		Prope	< erties	iii Info	🖳 Diagr	nostics 🛛 🗖 🗖
TX5.EX-IM01 [Module]	► 100% ▼, Ÿ em constants Texts		Prope	< erties	iii Linfo	🖳 Diagr	nostics 🗖 🗖
Image: State of the state o	► Toostants Texts PROFIBUS address		Prope	< erties	iii Info	迟 Diagr	nostics 📄 🖿 🖿
Constant in the second se	PROFIBUS address Itopface patiented with		Prope	< erties	iii Info	U Diagr	nostics 🖬 🖬
Control [Module] General IO tags Syst General Catalog information PROFIBUS address General Departmeters	▶ 100% em constants Texts PROFIBUS address		Prope	< erties	Info	Uiagr	nostics 🗖 E
AVS.EX-IM01 [Module] General IO tags Syst Catalog information PROFIGUS address General DP parameters Watchdog	PROFIBUS address Interface networked with Subnet: PROFIBUS 1		Prope	< erties	IIII	Diagr	nostics
ACS.EX-IM01 [Module] General IO tags Syst General Catalog information FORDBUS address General DP parameters Watchdog SYNC/REEZE			Prope	< erties	III Linfo	U Diagr	nostics 🔊 =
ACS.EX-IM01 [Module] General IO tags Syst General Catalog information FPOFIBUS address General DP parameters Watchdog SYNC/FREZE Diagnostics addresses			Prope	erties	III Linfo	U Diagr	nostics 🗖 E
Constant Section 2012 Constant Sect			Prope	< erties	III Linfo	U Diagr	nostics a construction of the second
Image: State			Prope	erties	iii	S Diagr	nostics
Image: State			Prope	erties	III	V Diagr	nostics =
ACS.EX-IM01 [Module] General IO tags Syst General Catalog information FPIOFIBUS address General DP parameters Watchdog SYNC/FREEZE Diagnostics addresses			Prope	< erties	info	U Diagr	nostics
Image: State			Prope	< erties		U Diagr	■ = = = = = = = = = = = = = = = = = = =

Proceed to module configuration. Start by determining the size and the starting address of input and output registers. To do this, select modules from the list of INPUT and OUTPUT modules as in the picture below. The maximum size of the input and output data is 116 bytes each. Default starting addresses were used in the project – 256 for INPUT module and 256 for OUTPUT module:

RadwagProfibus3.5_V13_SP	1 EX → PLC_1 [CPU 313C-2 DP]	→ Di	stributed	I/O ► DP-N	Aastersystem (1):	PROFIB	US_1 →	HX5.EX-IM	01	_ • •	×
					📱 Topology	view	h N	etwork view	🚺 De	vice view	٦
HX5.EX-IM01	🔽 🖽 🖾 🗮 🔍 ±	3	Device	overview							
		^		Module		Rack	Slot	I address	Q address	Туре	
				HX5.EX-	IM01	0	0	1022*		Anybus-I	^
2.100				INPUT:	32 Byte (16 word)_1	0	1	256287		INPUT:	
52				INPUT:	32 Byte (16 word)_2	0	2	288319		INPUT:	
~				INPUT:	32 Byte (16 word)_3	0	3	320351		INPUT:	-
				INPUT:	16 Byte (8 word)_1	0	4	352367		INPUT:	
				INPUT:	4 Byte (2 word)_1	0	5	368371		INPUT:	
		4		OUTPUT:	32 Byte (16 word)	0	6		256287	OUTPUT:	
	DP-NORM			OUTPUT	16 Byte (8 word)_1	0	7		288303	OUTPUT:	
		-		OUTPUT	4 Byte (2 word)_1	0	8		304307	OUTPUT:	
						0	9				
						0	10				
						0	11				
						0	12				
						0	13				
						0	14				
		~				0	15				-
< III > 100%	· · · · · · ·		<		в	1				>	



wagProfibus_V13_HX5.EX EX >	PLC_1 [CPU 313C-2	DP] 🕨	Distribut	ted I/O । DP-Mast	tersystem	(1): PR	OFIBUS_	_1 → HX5	5.EX-IM01	_ _ i	×
				2	Topology	view	🔥 Ne	twork vie	w 🚺 w	Device vie	w
HX5.EX-IM01	🖽 🖭 🖌 🖬 🕨	3	Device of	overview							
		^	** 1	Module		Rack	Slot	l address	Q address	Туре	
		_		HX5.EX-IM01		0	0	1022*		Anybus-IC F	· ^
1.100				INPUT: 32 Byte (16	5 word)_1	0	1	256287		INPUT: 32	
ASE .				INPUT: 32 Byte (16	5 word)_2	0	2	288319		INPUT: 32	🗉
W		-		INPUT: 32 Byte (16	5 word)_3	0	3	320351		INPUT: 32	
		4		INPUT: 16 Byte (8	word)_1	0	4	352367		INPUT: 16	
				INPUT: 4 Byte (2 v	word)_1	0	5	368371		INPUT: 4 E	3
		-		OUTPUT: 32 Byte (1	16 word)	0	6		256287	OUTPUT: 3.	
DP-	NORM			OUTPUT: 16 Byte (8 word)_1	0	7		288303	OUTPUT: 1.	
				OUTPUT: 4 Byte (2	2 word)_1	0	8		304307	OUTPUT: 4	
						0	9				
						0	10				
		~				0	11				~
ID0%	▼	1	<		11	1					>
OUTPUT: 32 Byte (16 word)_1 [Mo	odule]				🔍 Proper	ties	🗓 Info	追 🎖 Di	agnostics	, 1	•
General IO tags System	constants Tex	cts									
General	O addresses										^
I/O addresses	O addresses										
	Input/o	output ty	pe: Outpu							-	
	Manufacturer sp	ecific da	ata:								
			(max	14 byte hexadecimal.	separated	by com	ma				
			orspa	ice)		-,					
-	Output addresses										
	Sta	rt addre	ess: 256								
		Lend	th: 16		÷						

On this stage you can download hardware and software configuration to the device.

			🚆 Topolog	view	h N	letwork view	📑 🚺 De	vice view
HX5.EX-IM01	💌 🖽 🕅 🚮 🗮 🔍 ±		Device overview					
		^	YY Module	Rack	Slot	I address	Q address	Туре
			HX5.EX-IM01	0	0	1022*		Anybus-I
1-III			INPUT: 32 Byte (16 word)_1	0	1	256287		INPUT:
500			INPUT: 32 Byte (16 word)_2	0	2	288319		INPUT:
~		_	INPUT: 32 Byte (16 word)_3	0	з	320351		INPUT:
			INPUT: 16 Byte (8 word)_1	0	4	352367		INPUT:
			INPUT: 4 Byte (2 word)_1	0	5	368371		INPUT:
		4	OUTPUT: 32 Byte (16 word)	0	6		256287	OUTPUT:
			OUTPUT: 16 Byte (8 word)_1	0	7		288303	OUTPUT:
	Change device		OUTPUT: 4 Byte (2 word)_1	0	8		304307	OUTPUT:
	Start device tool			0	9			
	💥 Cut	Ctrl+X		0	10			
	🛅 Copy	Ctrl+C		0	11			
	🛅 Paste	Ctrl+V		0	12			
	¥ Delete	Del		0	13			
	Rename	F2		0	14			
	W. Contractor and an effort			0	15			
Ⅲ > 100%	Go to topology view		<	11	-	-		>
X5 FX-IM01 [Module]	Compile		Prope	rtios	1 Int	to Dia	apostics	
	Download to device		Hardware and software (only changes				JHOSTICS	
General IO tags S	o online	Ctrl+K	Hardware configuration					
General	Go offline	Ctrl+M	Software (only changes)					
Catalog information	Q Online & diagnostics	Ctrl+D	Software (all)					
PROFIBUS address	Assign device name							
General DP parameters	Receive alarms							
Watchdog	Update and display forced	operands	DFIBUS_1					-
SYNC/FREEZE	Cross-reference information	h Shift+F11	Add new subnet					
Diagnostics addresses								

Upon successful compilation and loading of the code, MASTER and SLAVE modules should establish communication. The next step will be to create program code.

3. PLC SOFTWARE SAMPLE

Start creating the application by determining symbolic names of input and output registers. The PROFINET module input and output registers are specified in HD_ProfibusInput and HD_ProfibusOutput tables in HARDWARE group in PROGRAM BLOCKS branch.



HD_ProfinetOutput and HD_ProfinetInput refer to the PROFIBUS module input/output registers on a weighing instrument. They look as follows:

A Siemens - C:/Users/user/Downloa	ds\Radwad	Pro	fibu	\$3.5	V13 SP1 EXRadwagP	rofibus3.5 V13 SP1	×			_	_	_	-
Project Still Manual Andrea	0	-											
Project Edit View Insert Online	Options	N	oois	W	ndow Help	-		-					
📑 🎦 🔚 Save project 🚢 🐰 💷	• X •) ±	C.	• 1	5 🛛 🖬 🖉 🖓 🖉	Go online 📝 Go offline	· 67	. 🖪 🗶 🖃	Ш.				
Project tree		R											
Devices		Г											
1900	🔲 🐋	Τ.	ο.	ø 1		0. = 18 💌							Ē
		ł.		0.0.	n er let er er er	Gy 💶 104 💽							
		÷		0_PT	oribusinput						Local Co.		
 RedwagProhouss.5_V15_SPTE 	^ <u>~</u> _^	١.		Nat	ne	Data type	offset	Start value	Monitor value	Retain	Visible in	Setpoint	
Paulices & patworks					Statuc	Basel	~~		0.000				
Devices a networks		4			mess	Real	0.0	0.0	0.969				
			2		tare	Real	*.0	0.0	0.0				
Device configuration		9			unit	word	8.0	16#0	16#0002	<u> </u>	<u> </u>		
Contine & diagnostics		5	-		status	Word	10.0	16#0	16#0003		<u> </u>		
• In Program blocks		0	<		10	Real	12.0	0.0	0.5		M		
Add new block		7	-	••	process_status	Word	16.0	16#0	16#0000				
- OB1 [OB1]		8	•	•	inputs	Word	18.0	16#0	16#0000				
Tardware	•	9	<	•	min	Real	20.0	0.0	0.0				
 Ea SaveInput 	•	10	0 🖪	•	max	Real	24.0	0.0	0.0				
HD_Profibusin		1	1 <	•	lot_number	DWord	28.0	16#0	16#0000_00DE				
🔻 🔚 SaveOutput	•	1	2 <	•	operator	Word	32.0	16#0	16#0000				
HD_ProfibusO.		1.	3 🗸		article	Word	34.0	16#0	16#0007				
System blocks		1	4 🤜	•	customer	Word	36.0	16#0	16#0002				
Technology objects		1	5 \prec	. •	packaging	Word	38.0	16#0	16#0008				
External source files		10	6 🖪		source_warehouse	Word	40.0	16#0	16#0000				
🔻 🌄 PLC tags		1	7 <	•	target_warehouse	Word	42.0	16#0	16#0000				
Show all tags		1	8 -		formulation	Word	44.0	16#0	16#0000				
Add new tao table	>	1	9	•						- ō	Ō		

M	Siemens - C:\Users\user\Downloads	s\RadwagF	Prof	ibus.	3.5_V13_SP1 EX\Radwagi	rofibus3.5_V1	13_SP1 6	х					
Pri	oject Edit View Insert Online	Options	То	ols	Window Help								
E	🛉 🎦 🔚 Save project 🔠 🐰 🔟 🗊	x	± ((ni ±	🐻 🖪 🖬 🗏 🖾 🚿	Go online 📝 🤇	So offline	A2 0	5 🖪 🛪 🖃				
	Project tree		Ra	dwa	igProfibus3.5_V13_SP1	EX → PLC_1 [CPU 31	3C-2 DP] 🕨 Program l	olocks 🕨 Hardware	► SaveOu	tput ► HD_	ProfibusO
	Devices						Go offi	ne					
	18.0.0			3 -43		a = 10	001						
	300	<u> </u>	3	1.00		B) III 112							
E				HD,	_ProfibusOutput								
	 RadwagProfibus3.5_V13_SP1 EX 	<u> </u>			Name	Data type		Offset	Start value	Monitor value	Retain	Visible in	Setpoint
2	Add new device		1		 Static 								
ē.	de Devices & networks	_	2	-	 command 	Word	_	0.0	16#0	16#0000			
ĉ	▼ [] PLC_1 [CPU 313C-2 DP]	_	3		special_command	Word	10	2.0	16#40	16#0040			
	Device configuration		4	-0	 platform 	Word		4.0	16#1	16#0001	_		~
	V Online & diagnostics		5	-0	set_tare	Real		6.0	2.0	2.0			
	🔻 😓 Program blocks		6	-0	set_lo	Real		10.0	0.5	0.5	_		
	📑 Add new block		7	-0	 outputs 	Word		14.0	16#0	16#0000	Image: A start and a start		
	OB1 [OB1]	•	8	-0	set_min	Real		16.0	1.1	1.1			
	👻 🔚 Hardware	•	9		set_max	Real		20.0	1.5	1.5			
	👻 🛅 SaveInput	•	10	-	set_lot	DWord		24.0	16#DE	16#0000_00DE			
	HD_ProfibusIn	•	11	-0	set_operator	Word		28.0	16#5	16#0005			
	Ta SaveOutput	•	12	-	set_article	Word		30.0	16#7	16#0007			
	HD_ProfibusO		13	-0	set customer	Word		32.0	16#2	16#0002			
	System blocks		14	-	set_packeging	Word		34.0	16#8	16#0008			
	Technology objects		15	-03	set_source_warehou	se Word		36.0	16#0	16#0000			
	External source files		16	-	set_target_warehous	e. Word		38.0	16#0	16#0000			Ā
	🕶 🌄 PLC tags		17	-03	 set_formulation_proc 	Word		40.0	16#0	16#0000			
	Show all tags		18		Add news								- ñ
	📫 Add new tao table	v											
	٤	>											
	✓ Details view												

In the main loop of the program create functions that rewrite the physical state of the weighing instrument registers into HD_ProfibusInput and HD_ProfibusOutput blocks registers. The functions may look as in the pictures presented below. The example shows the method of mass readout and saving 'command' and 'command with parameter' registers.

RadwagPr	ofibus3.5_V13_SP1 EX	PLC_1 [CPU 3	313C-2 DP])	Program block	s ▶ OB1 [OB1]	_ ₽ ≡×
<mark>ой</mark> н <mark>ой</mark> ⊒ ⁶ ОВ1	* # 🐁 🖿 🗖 🗖 💆) ∄ ± 	ڼ¢ ډ₀	🥼 🕬 🦊 📙		
Nam	ne	Data type	Offset	Default value	Comment	
	Temp		_			
	Temp_0	Byte	0.0			
-	iemp_i	Byte	1.0		1	
CALL						
 Netv 	vork 1:					2
Comm	nent					
1	CALL DPRD DAT					1
2	LADDR :=W#16	≇100			W#16#100	
3	RET_VAL :="err	read" DrofibusToput" m			SMW4 SDR3 DRD0	
5	RECORD RD_	Proribusinput .m	455		*DD2.0000	
6						
7						
9						
10						
Netv	work 2:					
Comm	nent					
1	CALL DPRD DAT					
2	LADDR :=W#16	\$104 			W#16#104	
4	RET_VAL :="err RECORD :="HD I	read" ProfibusInput".t	are		%MW4 %DB2.DBD4	
5						
6						
8						
9						
RadwagPr	rofibus3.5 V13 SP1 EX	▶ PLC 1 [CPU :	313C-2 DP]	Program bloc	ks) OR1 [OR1]	_ # = >
J						
ਲੇ ਲੇ	P 🖃 🖦 🖿 🚍 😨	🤊 🗶 ± 🚇 ± 🖂	وه 🕫 😥	🖑 🖓 🖓 I_	¥ 8 🚏 🔢	
OB1						
Nan	ne	Data type	Offset	Default value	Comment	
1 📶 🔻	Temp	-				-
2	Temp_0	Byte	0.0			
	icinp_1	oja				
CALL						_
1	CALL DPWR_DAT					-
2	LADDR :=W#16	#100 ProfibusOutrut "			W#16#100	
4	RET VAL :="err	write"	connario		*MW8	
5						
6						
8						
9						
10						
 Nets 	work 17:					
Comr	ment					
1	CALL DPWR_DAT					
2	LADDR :=W#16	#102			W#16#102	1
3	RECORD :="HD_ DET VAL .="	ProfibusOutput".	special_comm	and	% DB3. DBW2	
5	KPT_AWP :=ett	*****			41100	
6						
7						
8						
8						
8 9 10						

Upon compiling and loading the program to the device in the data block, you can read interesting output registers (MONITOR ALL) and save output registers (e.g. by changing START VALUE and LOAD START VALUES AS ACTUAL) of the SLAVE mode.



