EtherNet/IP™

Communication Protocol of PUE HX5.EX Indicator

SOFTWARE MANUAL

ITKP-29-01-07-20-EN



JULY 2020

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1. DATA STRUCTURE

1.1. Input Address

1.1.1. Input variables

Variable	Offset	Length [WORD]	Data type
Platform 1 mass	0	2	float
Platform 1 tare	4	2	float
Platform 1 unit	8	1	word
Platform 1 status	10	1	word
Platform 1 LO threshold	12	2	float
Process status (Stop, Start)	64	1	word
Input state	66	1	word
Min	68	2	float
Max	72	2	float
Serial number	84	2	dword
Operator	88	1	word
Product	90	1	word
Customer	92	1	word
Packaging	94	1	word
Formulation	100	1	word
Dosing process	102	1	word

1.1.2. Input Registers

Platform mass – returns platform mass in a current unit.

Platform tare – returns platform tare in an adjustment unit.

Platform unit – determines a current mass unit of a given platform.

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

B1/7	B1/6	B1/5	B1/4	B1/3	B1/2	B1/1	B1/0	B0/7	B0/6	B0/5	B0/4	B0/3	B0/2	B0/1	B0/0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0

Read HEX value: 0x02. Binary form:

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

Platform status – determines state of a given weighing platform.

Status	s bits
0	Measurement correct (the weighing instrument does not report any error)
1	Measurement stable
2	Weighing instrument indicates zero
3	Weighing instrument tared
4	Weighing instrument in II weighing range
5	Weighing instrument in III weighing range
6	Weighing instrument reports NULL error
7	Weighing instrument reports LH error
8	Weighing instrument reports FULL error

Example:

Read HEX value: 0x13

B1/7	B1/6	B1/5	B1/4	B1/3	B1/2	B1/1	B1/0	B0/7	B0/6	B0/5	B0/4	B0/3	B0/2	B0/1	B0/0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1

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

LO threshold – returns value of platform's LO threshold in an adjustment unit.

Process status – determines status of the dosing\formulation:

- 0x00 process disabled
- 0x01 process activated
- 0x02 process aborted
- 0x03 process completed

Input state – bitmask of indicator inputs. 4 first least significant bits represent weighing indicator inputs.

Read HEX value: 0x000B

B1/7	B1/6	B1/5	B1/4	B1/3	B1/2	B1/1	B1/0	B0/7	B0/6	B0/5	B0/4	B0/3	B0/2	B0/1	B0/0
0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1

Inputs number 1, 2 and 3 take HI state.

MIN - returns MIN threshold value (in a current unit).

MAX - returns MAX threshold value (in a current unit).

Lot number – response: lot number. Numerical values exclusively! Any non-numerical values are neglected.

Operator - response: code of logged in operator.

Product - response: code of selected product.

Customer – response: code of selected customer.

Packaging - response: code of selected packaging.

Formulation – response: code of selected formulation.

Dosing process – returns the value of a selected dosing process code.

1.2. Output Address

Input variables:

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
Output state	14	1	word
Min	16	2	float
Max	20	2	float
Serial number	32	2	dword
Operator	36	1	word
Product	38	1	word

Customer	40	1	word
Packaging	42	1	word
Formulation	48	1	word
Dosing process	50	1	word

1.2.1. Output Registers

<u>Basic command</u> – record of the register via a given value triggers a respective operation:

Bit No.	Operation
0	Zero the platform
1	Tare the platform
2	Clear statistics
3	Save/Print
4	Process start
5	Process stop

Example:

Record of the register by value 0x02

B1/7	B1/6	B1/5	B1/4	B1/3	B1/2	B1/1	B1/0	B0/7	B0/6	B0/5	B0/4	B0/3	B0/2	B0/1	B0/0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0

Scale taring is triggered.



A command is executed once upon detecting that its bit has been set. If the command is to be executed more than once, it is necessary to zero the bit first, and reset it to the required value next.

<u>Complex command</u> – setting a respective value triggers performance of a given task, see the table:

Bit No.	Operation
0	Setting tare value for a given platform
1	Setting LO threshold value for a given platform
2	Setting series number
3	Setting output 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 process selection
12	Setting MAX threshold value

Complex command requires setting a respective parameter (offset from 4 to 50 – refer to output registers table)
A command with a parameter is executed once when its bit setting is detected. If the command is to be executed more than once, it is necessary to zero the bit first, and reset it to the required value next.

Sending tare of 1.0 value for platform 1 to the scale.

Performance of the command requires record of 3 registers:

offset 2 - command with parameter - value 0x01 - i.e. tare setting,

offset 4 – number of a platform to which tare is to be assigned - value 0x01 for platform 1,

offset 6 – tare value in float format - 1.0.

<u>**Platform**</u> – complex command parameter: platform number (1 or 2).

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

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

<u>**Output state**</u> – complex command parameter: status of weighing indicator and communication module outputs.

Setting high state for output 1 and 3 of the indicator.

Output mask:

B1/7	B1/6	B1/5	B1/4	B1/3	B1/2	B1/1	B1/0	B0/7	B0/6	B0/5	B0/4	B0/3	B0/2	B0/1	B0/0
0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1

After conversion to HEX it is 0x05.

Performance of the command requires record of 2 registers:

offset 2 - command with parameter - value 0x08 - i.e. output state record,

offset 14 - output mask 0x05.

This results with HI state of outputs number 1 and 3.

 $\underline{\text{MIN}}$ – complex command parameter: MIN threshold value (in the unit set for the active working mode).

MAX – complex command parameter: MAX threshold value (in the unit set for the active working mode).

<u>Lot number</u> – complex command parameter: serial number value. Numerical values exclusively! Any non-numerical values are neglected.

Operator – complex command parameter: operator code (digits only).

Product – complex command parameter: product code (digits only).

<u>Customer</u> – complex command parameter: customer code (digits only).

Packaging – complex command parameter: packaging code (digits only)

Formulation – complex command parameter: formulation code (digits only).

Dosing process – complex command parameter: dosing process code (digits only).

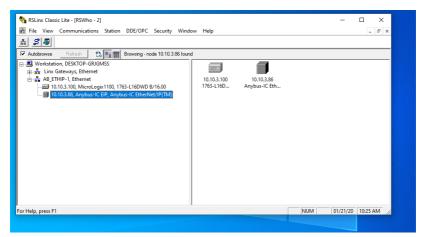
2. CONFIGURATION OF THE EtherNet/IP MODULE IN RS LOGIX ENVIRONMENT

2.1. RSLinxs CONFIGURATION

Start the operation in the environment by configuring the devices in RSLinx software. To do this, add EtherNet/IP module of the scale using EDS file and EDS Hardware Installation Tool.

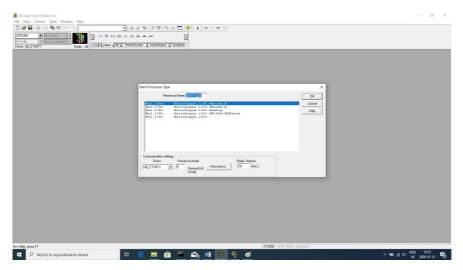
kwell Automation's EDS Wizard Registration Electronic Data Sheet file(s) will be add	ied to your system for use in Roc	kwell Automation applications.	×		
Register a single file Register a directory of EDS files Named:	Look in subfolders	Browse			
l l	Select an EDS file	Browse			
		en komputer > Pulpit > EDS files	ڻ ~	, Przeszukaj	
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	EDS files Pobrane rslogix 500 v10 update1	EDS_ABIC_EIP_V_3_0.eds	2012-02-24 14:30	Plik EDS	13 KI
	🔲 Ten komputer				
	HBCD PE X64 (D:)				

Upon connecting the scale and the Master controller to the network (make sure all devices and the PC are in the same subnet), they are visible as shown in the figure below.



2.2. RSLogix Project

Start operation in the environment, to do it create a new project. In the controller window select the PLC that is to communicate with the scale.



Confirm your choice and go to the project window. Next, configure the communication interface of the controller. To do that, select CHANNEL CONFIGURATION>CHANNEL 1 in the project tree.

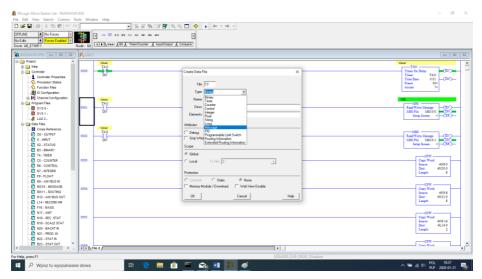
Here, you can declare the properties of this communication channel, e.g. IP address or subnet mask.

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	and som our == (11)	
ETHIP 1 Node: 0d	mer/Counter 🖌 mp	
the second s	General Dhannel 0 Ohannel 1	1
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and A 4 4 4 10 8 X 12 12	Linver tithemut	
Costroler		BET CONTRACTOR
A Controller Descention	Hardware Address ISS BAT 00 18 50 Network Link ID 0	CPW
Processor Status	IP Address 10 10 9 100	Copy Word Source #037.0
V Function Files		Deet #N12:20
III IO Configuration	Subnet Mask: 235 255 0	Length I
Channel Configuration	Gateway Address: 10 10 254 254	
Program Files	Default Doman Name	SET PACK
SYS0.	Prinary Name Server: 37 235 1 174	CPW Copy Word
		Source 40(58:0
# LAD 2-	Secondary Name Server: 250 0 0 0	Det #802:21
Data Files Cross Reference	Photocal Control	Length 1
OS - OUTPUT	F BOOTP Enable DHCP Enable Meg Connection Timeout (s 1mS): 15000	
H - NPUT	SMMP Server Enable I" SMTP Client Enable Mag Reply Tereout (x InS) 3000	SET BOUR WH
11 - NPUT 52 - STATUS 1049	CT WTTR Course Earths	Copy Word
83-8NARY	Inactivity Timeout (k Min) [30	Copy word Sectors #009-0
T4-TMER		Dest #N12:22
CS - COUNTER		Length 1
RE - CONTROL	Auto Negotiate	
N7 - NTEGER	Port Setting 10/100 Mbps Full Duplex/Half Duplex +	SET DEST WH
F8-RLOAT DETE		Copy Word
N9 - ANYBUS N	(A)	Source 40/60.0
NG10 - MESSAGE	Contact	Dest 40(12:25 Length 1
RIC11 - ROUTING	Lecation:	redu 1
N12 - ANYBUS OUT	and the second s	
N13 - TEMP		IET PORADOI
F14-NASS PL1 0001		Copy Ward
F15 - TARE PL1		Source #0651.0
N16-UNIT PL1 N17-STATUS PL1		Deal #N12-24 Length 1
N17 - STATUS PL1 P18 - LO PL1		radiu 1
F19-MAS5 PL2	OK Anala Zancas Ponoc	
F20-TARE PL2 (0)2		(END)
N21-UNIT PL2 *		(
> 4 > File 2 /	1.1	

Upon configuration, check if connection with the PLC (online) is possible and download the project.

Now add a new rung to the project ladder and create a MSG function enabling readout of data from the scale.

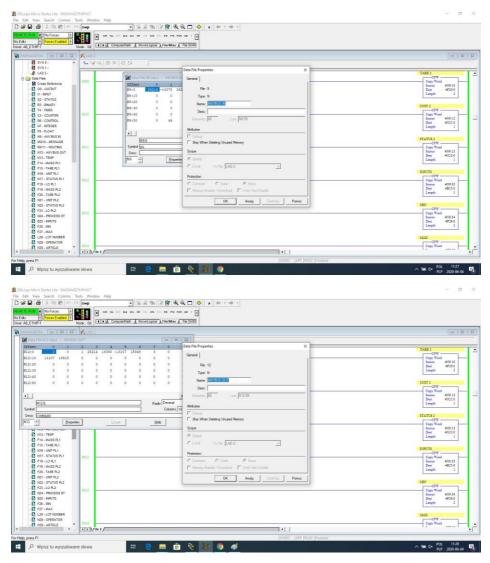
Prior to adding the function, add new data files in the project tree: two-element MG (message)



and RIX type files.

INE <th></th> <th></th> <th></th> <th></th>				
	3		npuolupu A Compare	
Project A	24000	timer		timer
e 🗀 Help		74.0		TON
Controller	0000		Create Data File X	Timer On Delay
Controller Properties		DN		Timer T4:0 Time Base 0.01 CDNO-
Nocessor Status			File: 13	Preset 30c
- 🚫 Function Files			Piec 13	Accom 7<
- ID Configuration			Type: Bruss	
E He Channel Configuration		timer	Name	142
Program Files		T4:0	Ine	
- SYS0.	0001	36	Desc. Control	Read Write Message (EN)
-SYS1-		DN	Elements Ploat	MSG File MG10:0 DN
# LAD2-			Floar	seep seven a contract
🗆 🥶 Data Files			Attribute: Long	
Cross Reference		timer		
- 00 - OUTPUT	0002	T40	Debug Browney shirt link Earthan	Read Write Message (EN)
- D H - NPUT		DN	Skip What Routing Information	MSG File MG10:1 DN
S2 - STATUS			Extended Risking Information Scope	Setup Screen <cer.)< td=""></cer.)<>
-B3 - BINARY				
T4 - TIMER			Global	CPW
C5 - COUNTER	0003		C Local ToFle: 2-	Copy Word
- R6 - CONTROL				Source #059:0 Dest #0520:0
- N7 - INTEGER			Protection	Leigh 8
-B-FLOAT				
- N9 - ANYBUS IN			C Constant C Static C None	C7W
- MG10 - MESSAGE	0004		Memory Module / Download Web View Disable	Copy Word
- RK11 - ROUTING			and and and and	Secree 4039:8
- N12 - ANYBUS OUT			OK Cancel Help	Dest #N21:0 Length 8
L14 - RECORD NR				Length 8
- F16 - MASS				
				CPW
- N18 - REC. STAT	0005			Copy Word Source #09:16
N19 - SCALE STAT				Dest #L14:0
N20 - BACHT IN				Length 2
N21 - PROD. IN				
- 0 822 - STAT N - 0 823 - STAT OUT				CPW
B23 - STAT OUT	TPN	tr 1 (()	Corer Wood
· · · ·	121210	- x /	•	Conce Wood

Add also two files of INTEGER type to store data read from the scale and data sent to the scale. In the example two files were created: ANYBUS IN (N9), 120 bytes, and ANYBUS OUT (N12), 120 bytes.



You can now add MSG functions, one for data readout and one for data record.

E RUN A No Fonces A	29.129.129.10,0,0,0 ↔ , + - + -	
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MAGETHE		00
MSG - MG10.0 : (1 Elements)		liner
Commit Multilup Send Data Receive Data 111 Condet Commit Multilup Send Data Receive Data 111 Condet Commit Muscle Processing Data Receive Data Data Reference Data Receive Data Taged Data Receive Data Newsong Trender Data Receive Data Load / Remote Data Load / Remote Data Data Reference Data Data Reference Data Data Reference Data Commit Muscle Data Data Reference Data	Control Tay	1000 C(2) Ten Base 200
Emil Decopion Ne entre		Copy Word 4000 Bores 4000 Length 2 TANE 1
Constanting n2 Constan		CPR Ford 6092 Data 471.0 Leaph 2 Data 6092 Data 471.0 Data 6092 Data 471.0 Data 6092 Data 471.0 Data 6092 Data 471.0 Data 471.0

Configuration procedure:

Channel – select 1 (integral), which corresponds to EtherNet/IP Communication Command – CIP Generic. Data Table Address – N9:0 – the file for data readout. Size in Bytes – 120 – size of the input registers table Extended Routing Info File – RIX11:0 – indicate RIX file Service: Read assembly. Instance: 64. MulitHop: Yes.

Go to the MultiHoop tab and enter IP address of the scale

間を空間のですwp	- 当時期以間或□ ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆	
* No Forces +	5 55 C)	
Forces Enabled +		
IP-1 Node: 0d	A User A Bit & Timer/Counter & Input/Output & Compare	
R. 401000		timed
N7 - NTEGER	40	TON
		Timer On Delay
N9 - ANYBUS N	DN 😥 MSG - MG100: (1 Bements)	Time Base 0.01
M010 - MESSAGE	General (Multhan) Send Data Receive Data	Preset 30c
RIX11 - ROUTING	come (model and a second a s	Accum 24<
N12 - ANYBUS OUT		
N13 - TEMP	10 Ins + Add Hop Del + Remove Hop	
F14 - MASS PL1 0001		
P15 - TAHE PL1 E	0 From Device From Post To Address Type To Address #12143 This Microbiosis Device 11 EthenNet/RP Device Init 1 0103101	
	500 (4-0)	
F19-NASS PL2 0002		Read Write Message
F10-MADD FL2		MISG File MISIO-0
N21 - UNIT PL2		Sartup Screen
N22 - STATUS PL2		
FR0 10 TH 0	nar l	
		MBG Read Write Menage
		3400 File 34510-1
N26 - UNIT PL3		Betup Screen <
N27 - STAT PL3		
F28 - L0 PL3		34351
FTD . MARK DIA	¢ 3	CPW
F30 - TARE PL4 0004		Copy Word
NO1 - UNIT PL4		Source #009 Dest #F14
N32 - STAT PL4		Length
F33 - LO PL4	1	
N34 - PROCESS ST		TARE 1
835 - NPUTS		CPW
F36 - MIN 0005		Copy Word
F37 - MAX		Source #00 Deat #F15
L38 - LOT NO		Length
N39 - OPERATOR		
N40 - ARTICLE		UNIT 1
N41 - CONTRACTOR Y		
> 4 + File 2 /		

Create functions for record of data in the scale (analogous set of actions):

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TE FUN 1 No Forces		64P Ru 200 BKB BBL BP. 201 BPS 701 PB PTB PSM 560 1	
Rs # Forces Enabled # AB_ETHIP-1	Node: 0d	K ComputeRlath & HoveLogical & File/Milec & File Shift)	
ADWAGETHL 0 01	1		0.0
-S SYSS-		(\$X 2)2	
SY51-	T 14 14 14	1 E A 14 A	
ALAD2-		timer Card	timer
Data Files	1 1 march 1	T4.0 28 MSG + MG10:1: (1 Bements)	Tone On Delay
- 📓 Cross Reference		DN General Muthing Send Date Receive Date	Timer T40
OD - OUTPUT		This Controller	Time Base 0.01 (DN)
II - INPUT			Preset 30c Access 16c
S2 - STATUS			Herean 10c
B3 - BNARY		Auditor Everifie EV/1	
T4 - TMER		T40 Size in Bytes (Receive) N/A (Send) 120	MG
CS - COUNTER	0991	Sale in lights (Percenter (N/A) (Sends (120))	Read Write Menare (EN)
R6 - CONTROL		DN Taget Device Message dove (DN)	MSG File MG10-0 CN
N7 - INTEGER		Message Timeout: 33 Message Transmitting (ST) 0	Betsp Screen <
P8-FLOAT		Message Enabled (EN)	
N9 - ANYBUS N		time	
MO10 - MESSAGE		T40 Local / Renote: Local MultiPop Yes	500
REC11 - ROUTING N12 - ANYBUS OUT	0002	DN Extended Routing Into FeleRitit (RD111) Environment	Read Write Message (EN) MSG File MG10:1 (DN)
N13 - TEMP		Service: Write Assembly Service Code Pexil 10 Encr CodePexil 0	Satisfy Screen and
F14 - MASS PL1		Class Peet 4 (dec) 4	
F15 - TARE PL1		Instance (hes) [96] (dec) [150]	
N16 - UNIT PL1		Attribute (hex): 3 (dec) 3	CPW
N17 - STATUS PL1	0002	Enor Description	Copy Word
F18-L0 PL1			Searce #009.0 Deat #F14.0
1 F19 - MASS PL2		No errar	Leigh 2
F20 - TARE PL2			
N21 - UNIT PL2			TARE 1
N22 - STATUS PL2		P	CPW
F23 - LO PL2	0004		Copy Word Source #09-2
N24 - PROCESS ST			Boards #009-2 Deat #F15.0
B25 - NPUTS			Leigh 2
- E F26 - MRI			
- E27 - MAX			UNIT 1
L28 - LOT NUMBER			CPW
N29 - OPERATOR	0005		Copy Ward Source #09-4
N30 - ARTICLE	×		Source #09.4
>	4 File 2		
p, press F1			
P Wpisz tu wyszukie		H 😑 🔚 🖨 🗞 🌆 🚳 🛷	∽ 9m d× POL 11:29 PLP 2020-05-04

Channel – select 1 (integral), which corresponds to EtherNet/IP Communication Command – CIP Generic. Data Table Address – N24:0 – the file for data record. Size in Bytes – 120 – size of the output registers table. Extended Routing Info File – RIX11:1 – set RIX file. Service: Read assembly. Instance: 96 MulitHop: Yes Go to the MultiHoop tab and enter the IP address of the scale.

In the example the functions are timer-triggered, this allows to control frequency of questions sent to the scale.

1 @ X & @ ~	swp - % # % B @ @ ⊂ ♦ + +	
No Forces	4 11 31 () () () () () () () () () () () () ()	
THIP-1	de: 0d () Muser) Bit (TimeriCounter (input/Output (Compare)	
	K. LAD 2	10
RE-CONTROL		
N7 - NTEGER	T40	timer TON
F8-FLOAT	0000	Timer On Delay MCCOV
N9 - ANYBUS IN	DN	Timer T4:0
MO10 - MESSAGE		Time Base 0.01 -(DN) Preset 300
RIK11 - ROUTING		Artum 24<
N12 - ANYBUS OUT		
N13 - TEMP		81
F14 - MASS PL1	0001	83
F15 - TARE PL1	0	0
N16 - UNIT PL1	Bul.1763	
N17 - STATUS PL1	time	5.55
F18-LO PL1	T4:0	
F19-MASS PL2	0002 3 5	Read Write Mesage (20)
F20 - TARE PL2	DN	3.555 File 3.5510.0 mmCDX
1 N21 - UNIT PL2		Betup Streen <
N22 - STATUS PL2		
F23-L0 PL2	timer	
F24 - MASS PL3	740	Raaf Weitz Menage (EN)
F25 - TARE PL3		Add Winte Disease C. A
128 - UNIT PL3		Setup Screen -CER
N27 - STAT PL3		
F28-LO PL3		36459 1
1 129 - MASS PL4	1999	
F30 - TARE PL4	0004	Copy Wast
1131 - UNIT PL4		Bosen #09.0 Dest #714.0
N32 - STAT PL4		Learth 2
F33-L0 PL4		
N34 - PROCESS ST		
B35 - NPUTS		TARE 1
736 - MN	0003	Copy Word
F37 - MAX		Sopera #09-2
138-LOT NO		Det 403.0
N29 - OPERATOR		Leigh 2
N40 - ARTICLE		
N41 - CONTRACTOR		UNIT 1
he1-CONTRACTOR	()) File 2 /	
		20003 APP (READ Doubled

Now you can upload program to the controller and run it. Upon connecting to the PLC (online) in the N9 file it is possible to carry out data readout, the MSG function should not return any errors.

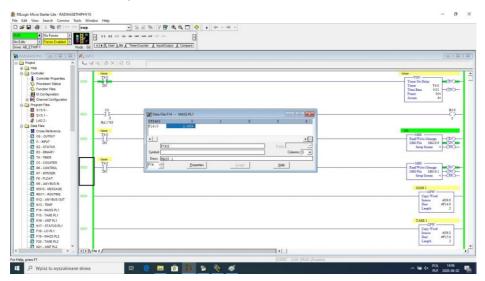
Swp	• 法言法 # 2 = 10 = 10 = 10 = 10 = 10 = 10 = 10 =		
4 Forces Fredhed +	empute/Vath & Hovel.ogical & FileMilac & File Shift		
11 1 1000 00 1 1 1 1 1 1 1 1 1 1 1 1 1			
11-1 0 0 3 1 10 10 10 10 10 10 10 10 10 10 10 10 1	V 104 40		
SYS1-			
LAD 2 - time T41			Timer
Cross Reference			Timer On Delay
DD- OUTPUT			Time T40 Time Base 0.01 CDN
H - NPUT			Preset 30×
52 - STATUS			Accum 1<
B3-BNARY			
T4 - TMER time	Data File NF (hex) ANYBUS IN	Inc. Inc.	300
CS - COUNTER 0001			Read Write Message
HB - CONTROL DN	Offset 0 1 2 3 4 5 6 81910 FEET CODE 6666 4006 2 F COCD	3840 0 0	MSG FEe MG10.0 -CDN
N7 - NTEGER F8 - FLOAT		0 0 0	Batup Screen <
N9 - ANYBUS N			
	319:20 0 0 0 0 0 0 0	0 0 0	
NO10 - MESSAGE T4: REX11 - ROUTING 000 000	89:30 0 0 0 8 0 0 3333	4053 0 0	Read Write Messare and EN
N12 - ANYBUS OUT DN	319:40 0 0 0 0 0 0	0 0 0	3490 File 34010-1 -CDN
N13 - TEMP	\$79150 0 2C 0 0 0 0	0 0 0	Ratup Scream
F14 - MASS PL1			
F15 - TARE PL1		-	434331(3)
N16-UNIT PL1 0003	[N3 0	Radix Hex/BCD V	Copy Word
N17 - STATUS PL1	Symbol (ys	Column 10 •	Septem 409.0
F18-LO PL1		Countre 110	Deat #F14.0
F19 - MASS PL2	Desc		Leigth 2
F20 - TARE PL2	N9 - Doperies	loope Help	
N21 - UNIT PL2 N22 - STATUS PL2	2		TABE 1
R22 - STATUS PL2 F23 - LO PL2			Cogy Word
N24 - PROCESS ST			Secree #209.2
B25 - INPUTS			Dest #F15.0 Letath 2
F26-MN			code: 1
F27 - MAX			
L28 - LOT NUMBER			UNIT I
N29 - OPERATOR 0003			Copy Word
N30 - ARTICLE			Source #N9-4
> () File 2		4	

For the sake of order, you can create separate files for each scale variable.

Data between N9, N24 and variable files are written using CPW function. Mass readout function:

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+ Forces + ETHP-1 No	13 14 >> </th <th></th>	
MAGETHL CO CO CO	LAD 2	
B35 - NPUTS A	44X 0 X 0 0	
- F36 - NN		
- 🚺 F37 - MAX	1 iner	
-138-LOT NO	140 5 C	Read Write Menage - CEND-
N39 - OPERATOR		MSG File MG10:1 CON
N40 - ARTICLE		Samp Senam <
N41 - CONTRACTOR		
N42 - PACKEGING		34489 1
N43 - SOURCE WH		SIGNI CPW
N44 - DEST WH	a	Copy Word
N45 - FORMOOS		Seurce #39:0
Net - COMMAND		Dest #F14.0 Length 2
N47 - COMPL COMM		radia 5
148 - SET PLAT		
F49 - SET TARE		TARE 1
		Copy Word
BS1 - SET OUT		Copy Ward Searce 45/9-2
F52 - SET MN		Dest #F15.0
P53 - SET MAX		Length 2
LS4 - SET LOT		
N55 - SET OPER		UNIT 1
D LOS OFTADDO		CPW
N57 - SET CONTR	A	Copy Word
NSB - SET PACK		Science #399-4 Deat #3/16-0
NS9 - SET SOU WH		Length 1
N60 - SET DES WH		
NE1 - SET FOR/DO		
NE2 - SWAPPED		STATUS 1
Data Logping	17	Cepy Werd
Configuration		Boarce 403-5
Status		Dest #017:0
		Leigh 1
RCP Configuration Files		
Force Files		L01
Do-OUTPUT		Cpw Copy Word
		Source all'04.6
Custom Data Nonitora 9) The 2 / 4	
ss F1		NEAD IDuabled

As a result, respective files contain correct data from the scale. Mass readout example:



By record of respective values in files that correspond to output registers, particular scale functions are triggered.

Scale zeroing example:

