

NOTATKA SŁÓŻBOWA
EGD ASI

Bartosz Gulla

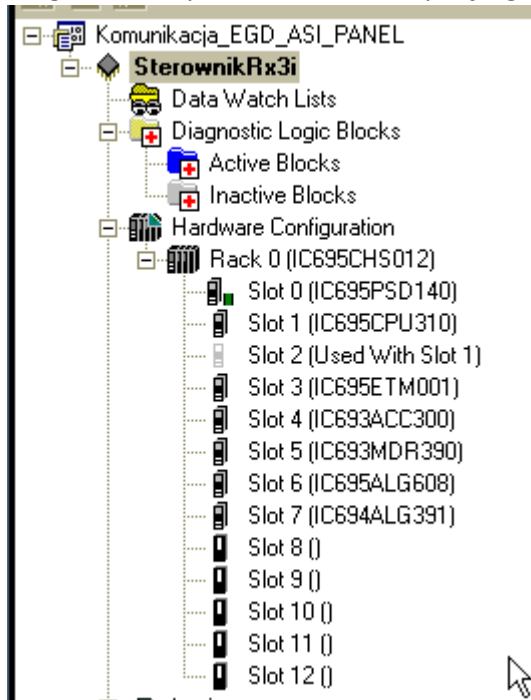
Poniedziałek 11-14

1. Cel ćwiczenia

Nauka korzystania z programu Proficy Machine Edition

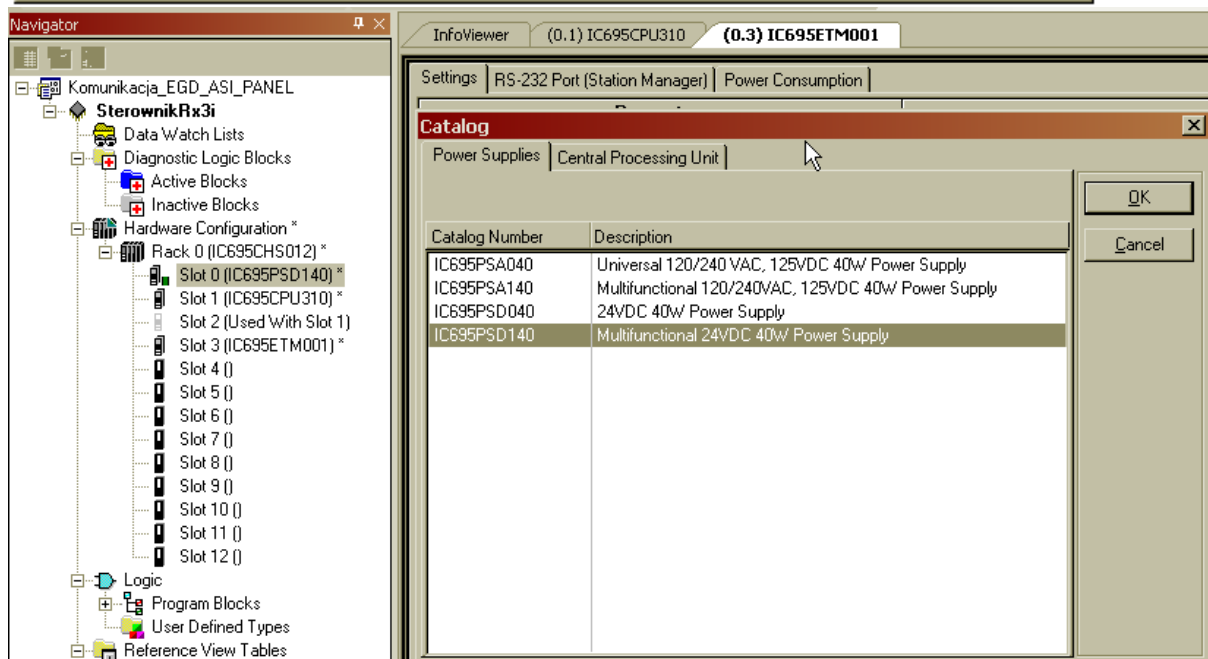
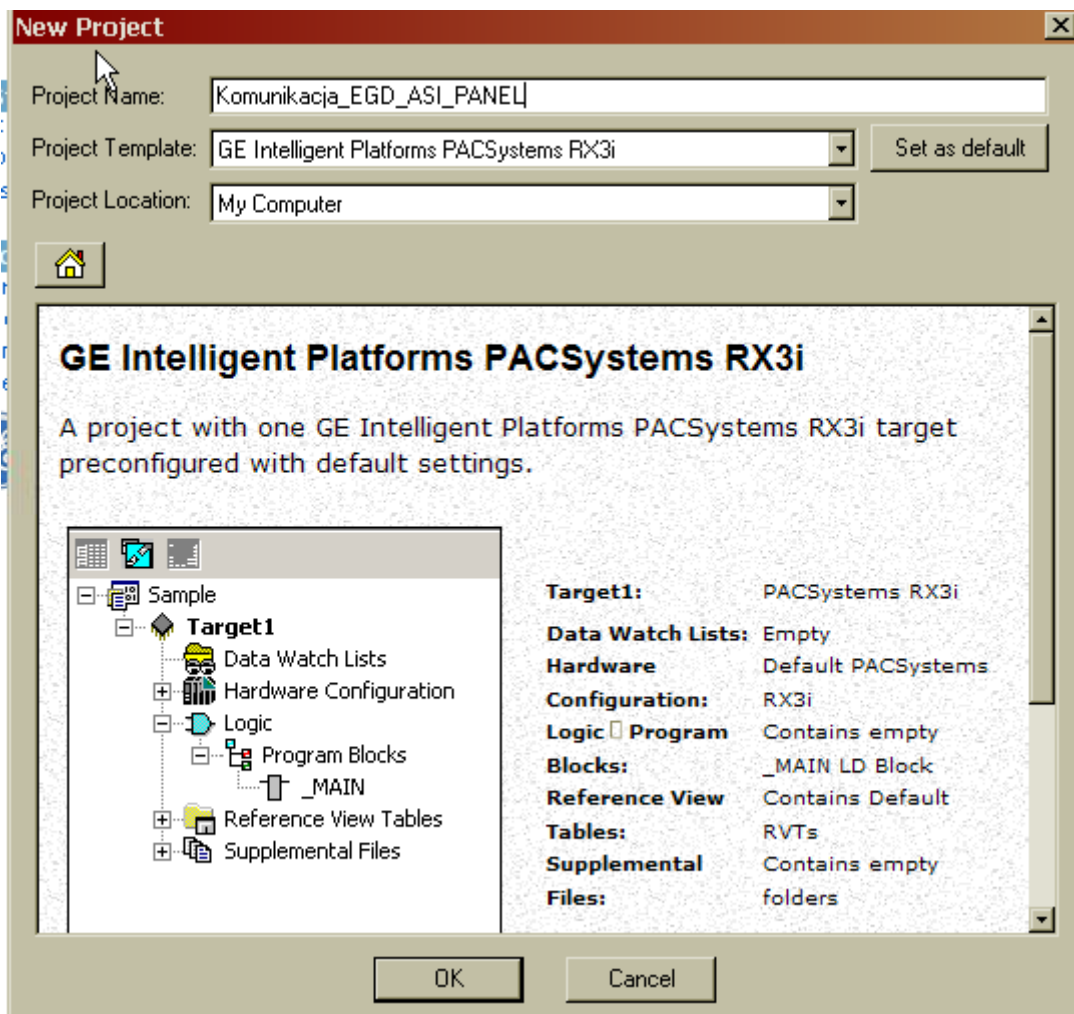
2. Sprzęt:

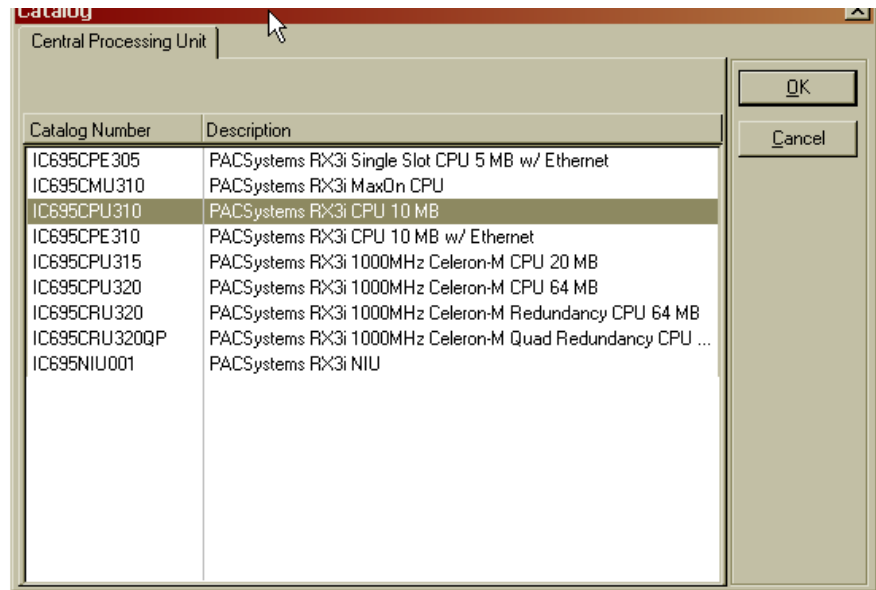
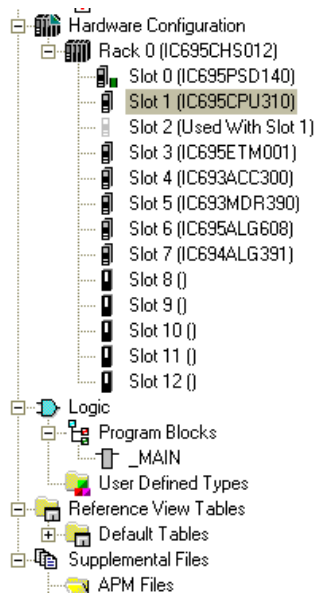
Program Proficy Machine Edition, sprzęt zgodnie z instrukcją.



3. Wykonane ćwiczenia:

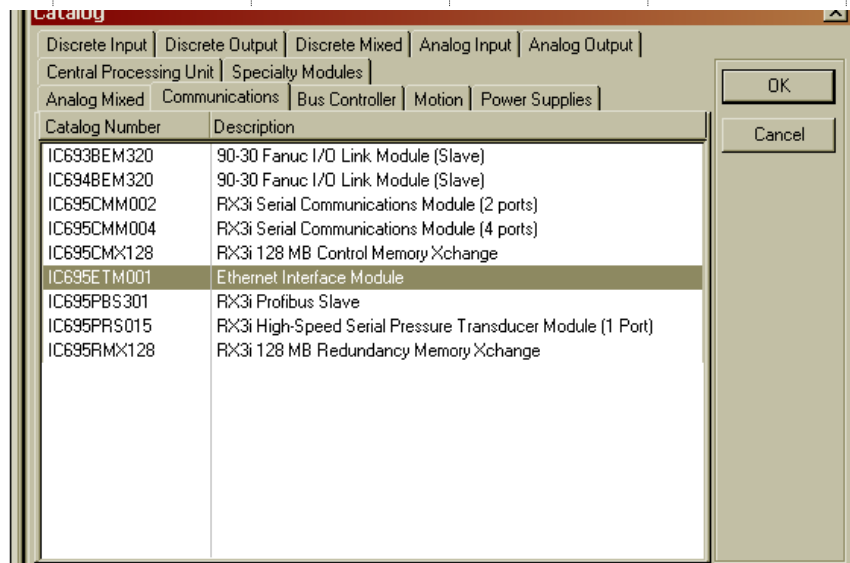
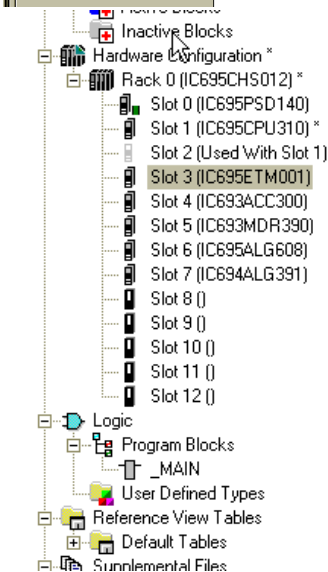
Stworzenie nowego projektu i skonfigurowanie sprzętu





Parameters	
Passwords	Enabled
Stop-Mode I/O Scanning	Disabled
Watchdog Timer (ms)	200
Logic/Configuration Power-up Source	Always RAM
Data Power-up Source	Always RAM
Run/Stop Switch	Enabled
Memory Protection Switch	Disabled
Power-up Mode	Last
Modbus Address Space Mapping Type	Standard Modbus Addressing

Number	Modbus Register	Start Address	End Address	Controller Memory Address	Length
1	3xxxx - Coil Table	1	32768	%Q00001	32768
2	1xxxx - Discrete Inputs Table	1	32768	%I00001	32768
3	3xxxx - Input Register Table	1	64	%AI00001	64
4	4xxxx - Holding Register Table	1	1024	%R00001	1024
5	5xxxx - Internal Tables	0	0	%W00001	0



Settings RS-232 Port (Station Manager) Power Consumption	
Parameters	
Configuration Mode	TCP/IP
Adapter Name	0.3
Use BOOTP for IP Address	False
IP Address	192.168.22.60
Subnet Mask	255.255.255.0
Gateway IP Address	0.0.0.0
Name Server IP Address	0.0.0.0
Max FTP Server Connections	0
Network Time Sync	None
Status Address	%I00105
Length	80
Redundant IP	Disable
I/O Scan Set	1

- SterownikRx3i**
 - Data Watch Lists
 - Diagnostic Logic Blocks
 - Active Blocks
 - Inactive Blocks
 - Hardware Configuration *
 - Rack 0 (IC695CHS012) *
 - Slot 0 (IC695PSD140)
 - Slot 1 (IC695CPU310)
 - Slot 2 (Used With Slot 1)
 - Slot 3 (IC695ETM001)
 - Slot 4 (IC693ACC300) *
 - Slot 5 ()
 - Slot 6 (IC695ALG608) *
 - Slot 7 ()
 - Slot 8 ()
 - Slot 9 ()
 - Slot 10 ()
 - Slot 11 ()
 - Slot 12 ()
 - Logic
 - Program Blocks
 - User Defined Types
 - Reference View Tables
 - Default Tables
 - Supplemental Files

Parameters	
Reference Address	%I00185

Catalog	
Analog Mixed Communications Bus Controller Motion Power Supplies Central Processing Unit Specialty Modules Discrete Input Discrete Output Discrete Mixed Analog Input Analog Output	
Catalog Number	Description
IN 16	16 Circuit Input Generic
IN 32	32 Circuit Input Generic
IN 8	8 Circuit Input Generic
IC693ACC300	Input Simulator Module
IC693MDL230	8 Circuit Input 120 VAC Isolated
IC693MDL231	8 Circuit Input 240 VAC Isolated
IC693MDL240	16 Circuit Input 120 VAC
IC693MDL241	16 Circuit Input 24 VDC
IC693MDL250	90-30 16 Point Isolated Input 120 VAC
IC693MDL260	90-30 32 Circuit Input 120VAC
IC693MDL632	8 Circuit Input 125 VDC Positive / Negative Logic
IC693MDL634	8 Circuit Input 24 VDC Positive / Negative Logic
IC693MDL635	16 Circuit Input 125 VDC Positive / Negative Logic
IC693MDL645	16 Circuit Input 24 VDC Positive / Negative Logic
IC693MDL646	16 Circuit Input 24 VDC Positive / Negative Logic Fast
IC693MDL648	16 Circuit Input 48VDC Positive / Negative Logic Fast
IC693MDL654	32 Circuit Input 5/12 VDC Positive / Negative Logic

Inactive Blocks

Hardware Configuration *

Rack 0 (IC695CHS012) *

Slot 0 (IC695PSD140)

Slot 1 (IC695CPU310)

Slot 2 (Used With Slot 1)

Slot 3 (IC695ETM001)

Slot 4 (IC693ACC300) *

Slot 5 (IC693MDR390) *

Slot 6 (IC695ALG608) *

Slot 7 ()

Slot 8 ()

Slot 9 ()

Slot 10 ()

Slot 11 ()

Slot 12 ()

Logic

Program Blocks

User Defined Types

Reference View Tables

Default Tables

Supplemental Files

APM Files

ALP Files

Catalog

Analog Mixed | Communications | Bus Controller | Motion | Power Supplies |

Central Processing Unit | Specialty Modules |

Discrete Input | Discrete Output | Discrete Mixed | Analog Input | Analog Output |

Catalog Number	Description
IN OUT 32	32 Circuit Generic Input / Output
IN OUT 64	64 Circuit Generic Input / Output
IN OUT 8	8 Circuit Generic Input / Output
IC693MAR590	8 Circuit Mixed 120 VAC Input / Relay Output
IC693MDR390	8 Circuit Mixed 24 VDC Input / Relay Output
IC694MDR390	8 Circuit Mixed 24 VDC Input / Relay Output

OK

Cancel

Navigator

Komunikacja_EGD_ASL_PANEL

SterownikRx3i

Data Watch Lists

Diagnostic Logic Blocks

Active Blocks

Inactive Blocks

Hardware Configuration *

Rack 0 (IC695CHS012) *

Slot 0 (IC695PSD140)

Slot 1 (IC695CPU310)

Slot 2 (Used With Slot 1)

Slot 3 (IC695ETM001)

Slot 4 (IC695ALG608) *

Slot 5 ()

Slot 6 ()

Slot 7 ()

Slot 8 ()

Slot 9 ()

Slot 10 ()

Slot 11 ()

Slot 12 ()

Logic

Program Blocks

User Defined Types

Reference View Tables

Default Tables

Supplemental Files

APM Files

ALP Files

InfoViewer

(0.0) IC695PSD140 | (0.1) IC695CPU310 | (0.3) IC695ETM001 | (0.4) IC695ALG608

Settings | Channel 1 | Channel 2 | Channel 3 | Channel 4 | Channel 5 | Channel 6 | Channel 7 | Channel 8 | Pow

Parameters	
Range Type	Voltage/Current
4mA to 20mA	

Catalog

Analog Mixed | Communications | Bus Controller | Motion | Power Supplies |

Central Processing Unit | Specialty Modules |

Discrete Input | Discrete Output | Discrete Mixed | Analog Input | Analog Output |

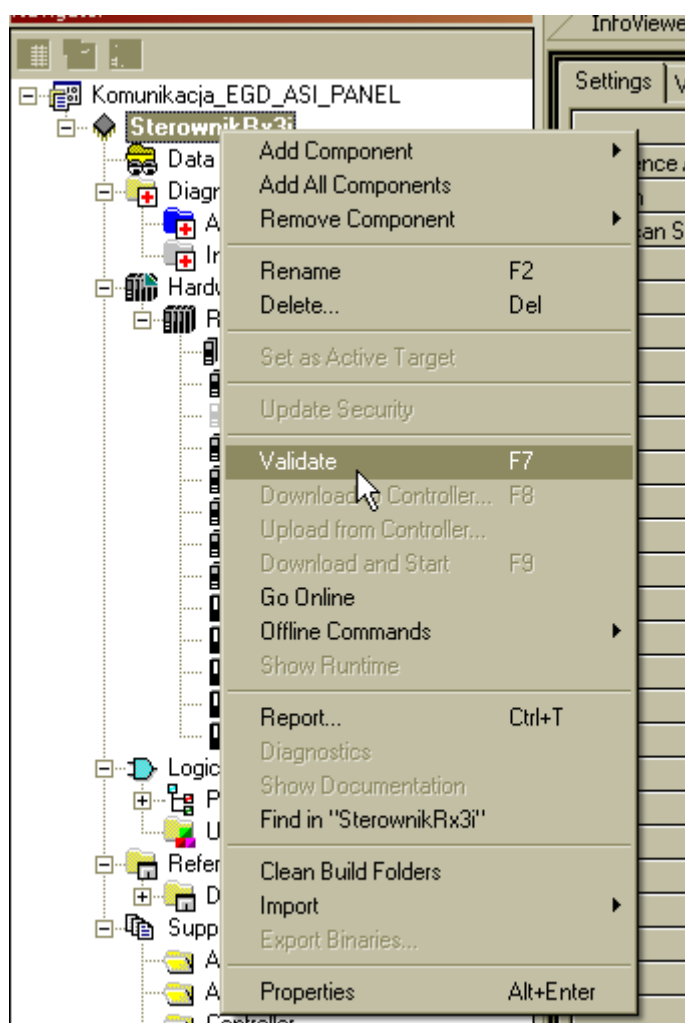
Catalog Number	Description
IC693ALG221	4 Circuit Input Analog Current
IC693ALG222	16 Circuit Input Analog Voltage
IC693ALG223	16 Circuit Input Analog Current
IC694ALG220	4 Circuit Input Analog Voltage
IC694ALG221	4 Circuit Input Analog Current
IC694ALG222	16 Circuit Input Analog Voltage
IC694ALG223	16 Circuit Input Analog Current
IC694ALG232	Advanced Diagnostics 16 Circuit Input Analog Voltage
IC694ALG233	Advanced Diagnostics 16 Circuit Input Analog Current
IC695ALG106	RX3i 6 Channel Isolated Analog Input
IC695ALG112	RX3i 12 Channel Isolated Analog Input
IC695ALG306	RX3i Isolated Thermocouple Module (6 Channel)
IC695ALG312	RX3i Isolated Thermocouple Module (12 Channel)
IC695ALG412	RX3i Isolated High Speed Thermocouple Module (12 Channel)
IC695ALG508	RX3i Isolated RTD Module (8 Channel)
IC695ALG600	RX3i Universal Analog Input
IC695ALG608	RX3i 8 Channel Input Analog Voltage/Current

OK

Cancel

Settings	Channel 1	Channel 2	Channel 3	Channel 4	Channel 5	Channel 6	Channel 7	Channel 8	Pos
Parameters									
<i>Range Type</i>					Voltage/Current				
<i>Range</i>					4mA to 20mA				
<i>Channel Value Format</i>					16 Bit Integer				
High Scale Value (Eng Units)					20000				
Low Scale Value (Eng Units)					4000				
High Scale Value (A/D Units)					Editable Range Variable: Low Limit = -32768, High Limit = 32767				
Low Scale Value (A/D Units)					4.0				
Positive Rate of Change Limit (Eng Units / Second)					0.0				
Negative Rate of Change Limit (Eng Units / Second)					0.0				
Rate of Change Sampling Rate (Seconds)					0.0				
High-High Alarm (Eng Units)					20000				
High Alarm (Eng Units)					20000				
Low Alarm (Eng Units)					4000				
Low-Low Alarm (Eng Units)					4000				
High-High Alarm Dead Band (Eng Units)					1000				
High Alarm Dead Band (Eng Units)					1000				
Low Alarm Dead Band (Eng Units)					1000				
Low-Low Alarm Dead Band (Eng Units)					1000				
User Offset (Eng Units)					0				
Software Filtering					Disabled				
Integration Time (ms)					0				

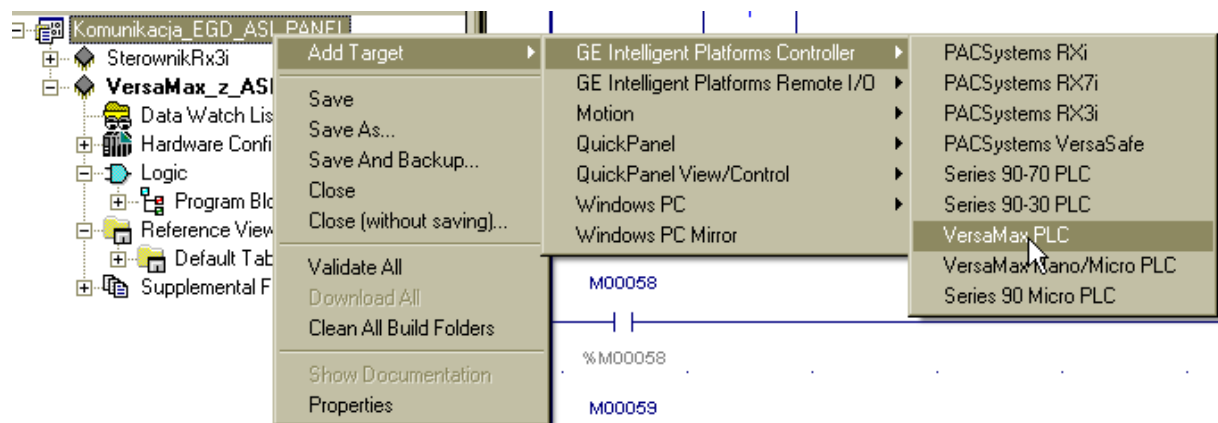
Walidacja konfiguracji

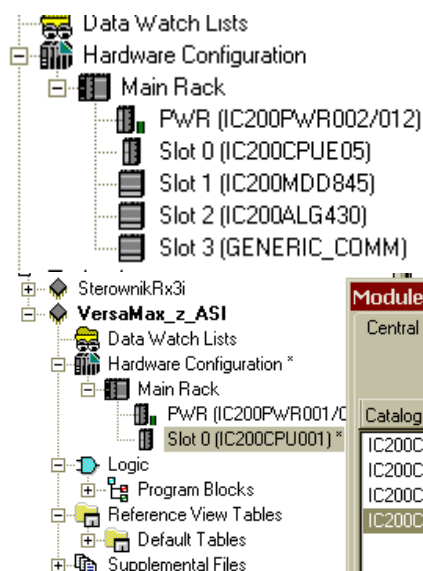


Napisanie programów w języku drabinkowym zgodnie z instrukcją



Dodanie drugiego celu aby skonfigurować sterownik VersaMax z ASI





Module Catalog	
Central Processing Unit (CPU)	
Catalog Number	Description
IC200CPU001	CPU Cfg User Memory Port 1 RS232 Port 2 RS485
IC200CPU002	CPU Cfg User Memory Port 1 RS232 Port 2 RS485
IC200CPU005	CPU Cfg User Memory Port 1 RS232 Port 2 RS485
IC200CPU05	CPU w/ENET Cfg User Memory Port 1 RS232 Port 2 RS485

Parameters	Values
I/O Scan-Stop:	No
Power Up Mode:	Last
Logic / Configuration From:	RAM
Registers:	RAM
Passwords:	Disabled
Checksum Words:	8
Default Modem Turnaround Time (.01	0
Default Idle Time (Sec):	10
SFC Timer Faults:	Disabled
SNP ID:	
Switch Run / Stop:	Enabled
Switch Memory Protect:	Disabled
Diagnostics:	Enabled
Fatal Fault Override:	Disabled
EZ Program Store:	RAM Only

Hardware Configuration *

Main Rack

PWR (IC200PWR001/011) *

Slot 0 (IC200CPUE05) *

Slot 1 (IC200MDD845) *

Slot 2 (IC200ALG430) *

Slot 3 ()

Logic

Program Blocks

Reference View Tables

Reference Address: %AI00001

Len

Module Catalog

Communication

Bus Controller

Catalog Number	Description
IC200BEM002	PLC Network Communication Profibus-DP
IC200BEM103	DeviceNet Network Master/Slave
GENERIC_COMM	Generic Communication Module

x3i]

_MAIN [SterownikRx3i]

(0.1) IC695CPU310 [SterownikRx3i]

(0.0)

Settings

Module Parameters

Input Parameters

Output Parameters

Wiring

Power Consumption

Parameters	Values
Reference Address:	%I00001
Length:	16
Reference Address:	%Q00001
Length:	8

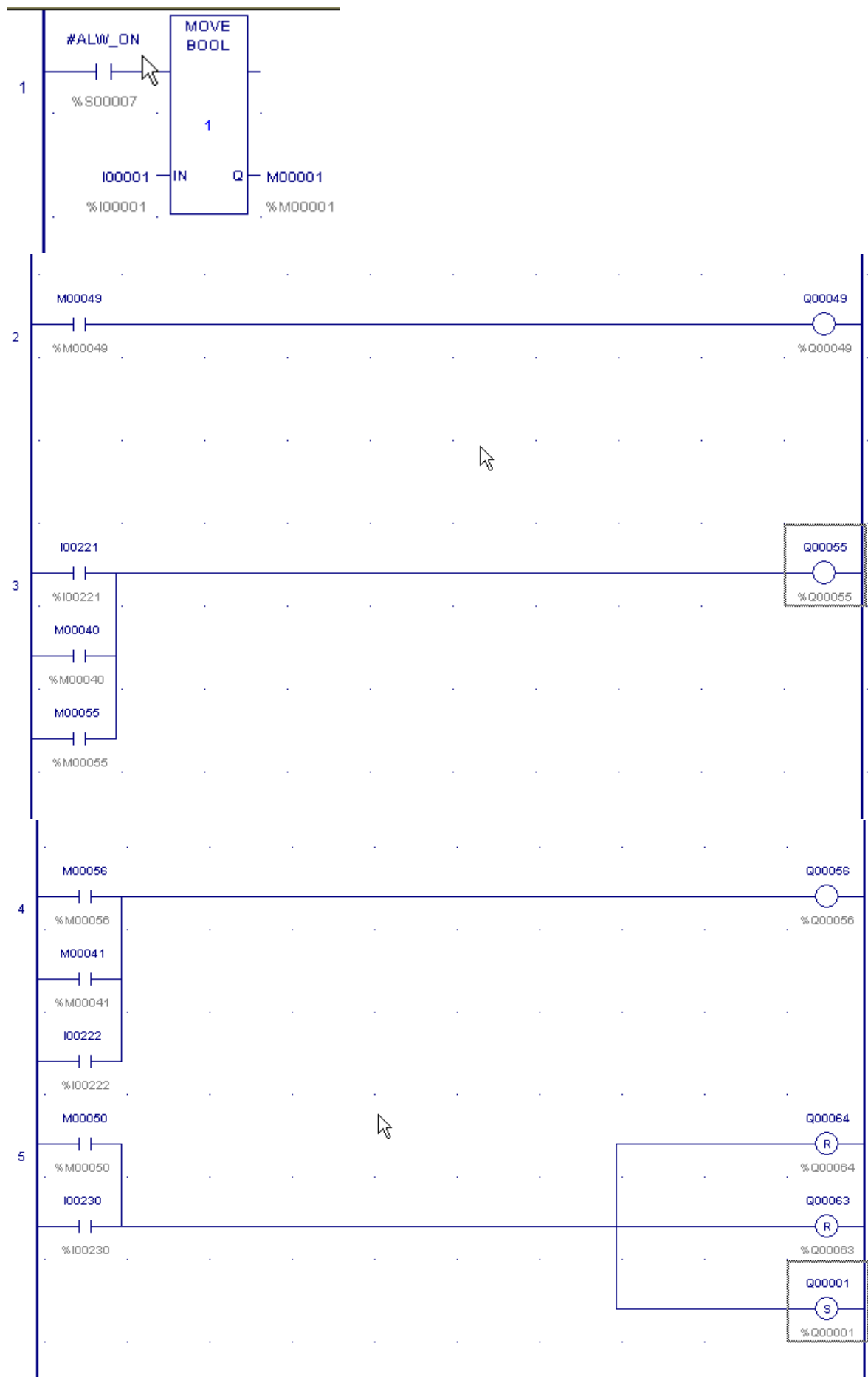
Settings

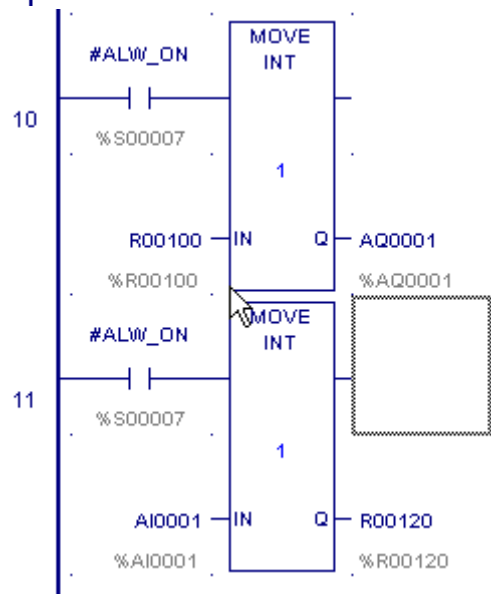
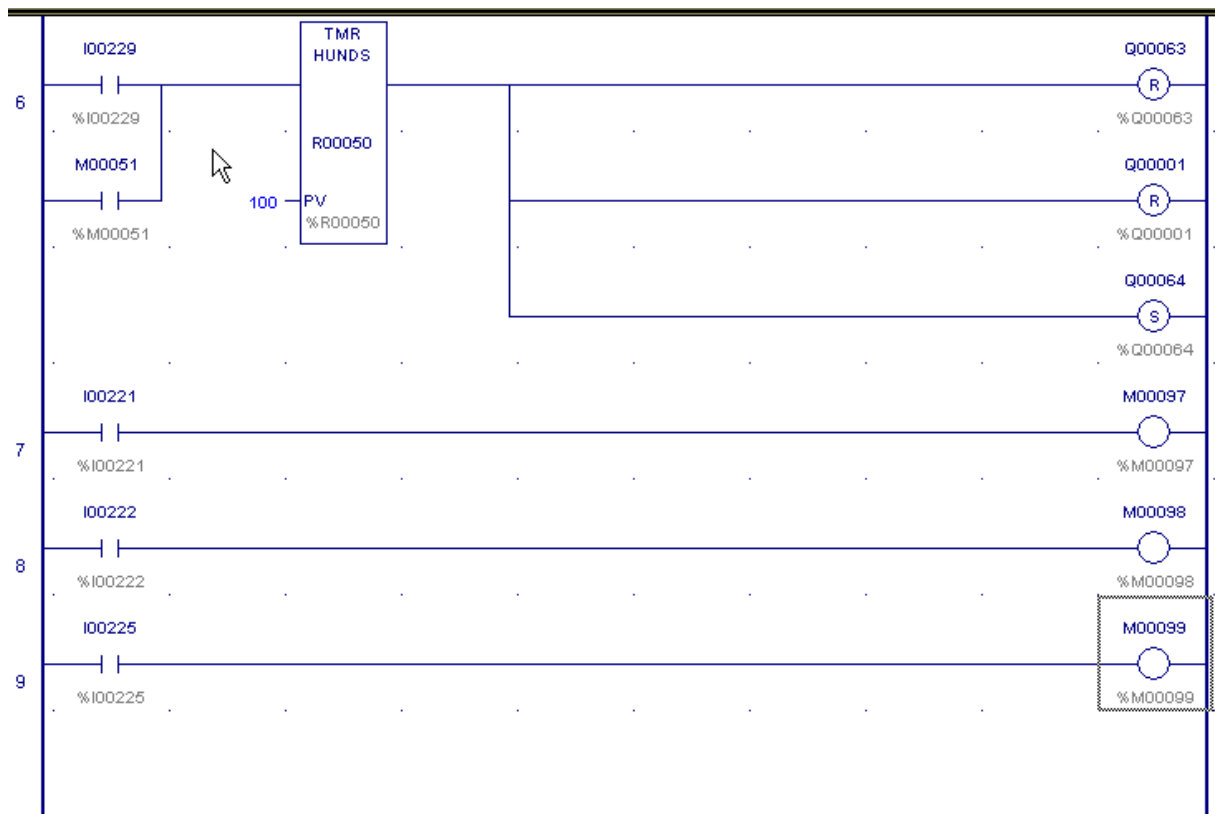
Wiring

Power Consumption

Parameters	Values
Reference Address:	%I00185
Length:	160
Reference Address:	%Q00017
Length:	160
Reference Address:	%AI0001
Length:	0
Reference Address:	%AQ0001
Length:	0
Module ID:	FFFF9809

Napisanie programu zgodnie z instrukcją





Dodanie globalnych danych ethernetowych

Komunikacja_EGD_ASI_PANEL

SterownikP

VersaMax

Data V

Hardw

Ma

Logic

Pro

Refer

De

Supple

Add Component

Add All Components

Remove Component

Rename F2

Delete... Del

Set as Active Target

Update Security

Validate F7

Download to Controller... F8

Upload from Controller...

Download and Start F9

Go Online

Offline Commands

Show Runtime

Report... Ctrl+T

Diagnostics

Show Documentation

Find in "SterownikRx3i"

Ethernet Global Data

Motion

PACMotion

I00221

I00222

%I00222

I00225

%I00225

#ALW_ON

%S00007

MOVE INT

1

R00100

IN

Q

AQ00

%R00100

%AQ

#ALW_ON

MOVE INT

Inspector	
Produced Exchange	
Name	do_VersaMax_z_ASI_ID2
Exchange ID	2
Adapter Name	0.3
Destination Type	Unicast
Destination	192.168.22.15
Produced Period	200
Reply Rate	0
Send Type	Always
Run Mode Store Enabled	False

Offset (Byte.Bit)	Variable	Ref Address	Ignore	Length	Type	Description
Status		%I00217	False	16	BIT	kod błędu w ramach EGD
TimeStamp		NOT USED	False	0	BYTE	
0.0		%M00049	False	8	BIT	wejścia %1 do %8 sterownika
1.0		%M00057	False	16	BIT	stany wejść/wyjść z sieci ASI
3.0		%R00120	False	1	WORD	

Offset (Byte.Bit)	Variable	Ref Address	Ignore	Length	Type	Description
Status		%I00165	False	16	BIT	
0.0		%M00001	N/A	8	BIT	
1.0		%R00100	N/A	1	WORD	
3.0		%R00001	N/A	3	WORD	

Data Watch Lists
Diagnostic Logic E
Ethernet Global D
Consumed Exc
Produced Exc
Hardware Configur
Logic
Reference View T
Default Tables
Supplemental Files
APM Files
AUP Files

Inspector

Ethernet Global Data	
Local Producer ID	192.168.22.60
Local Producer ID (Number)	1008117952
Use Configuration Server	False

Procedurę powtórzono dla drugiego sterownika:

Offset (Byte.Bit)	Variable	Ref Address	Ignore	Length	Type	Description
Status		%I00361	False	16	BIT	
0.0		%M00001	N/A	8	BIT	
1.0		%M00097	N/A	16	BIT	
3.0		%R00120	N/A	1	WORD	

Offset (Byte.Bit)	Variable	Ref Address	Ignore	Length	Type	Description
Status		%I00345	False	16	BIT	
TimeStamp		NOT USED	False	0	BYTE	
0.0		%M00049	False	8	BIT	
1.0		%R00100	False	1	WORD	
3.0		%R00001	False	3	WORD	

Podsystem „Quick Panel View”

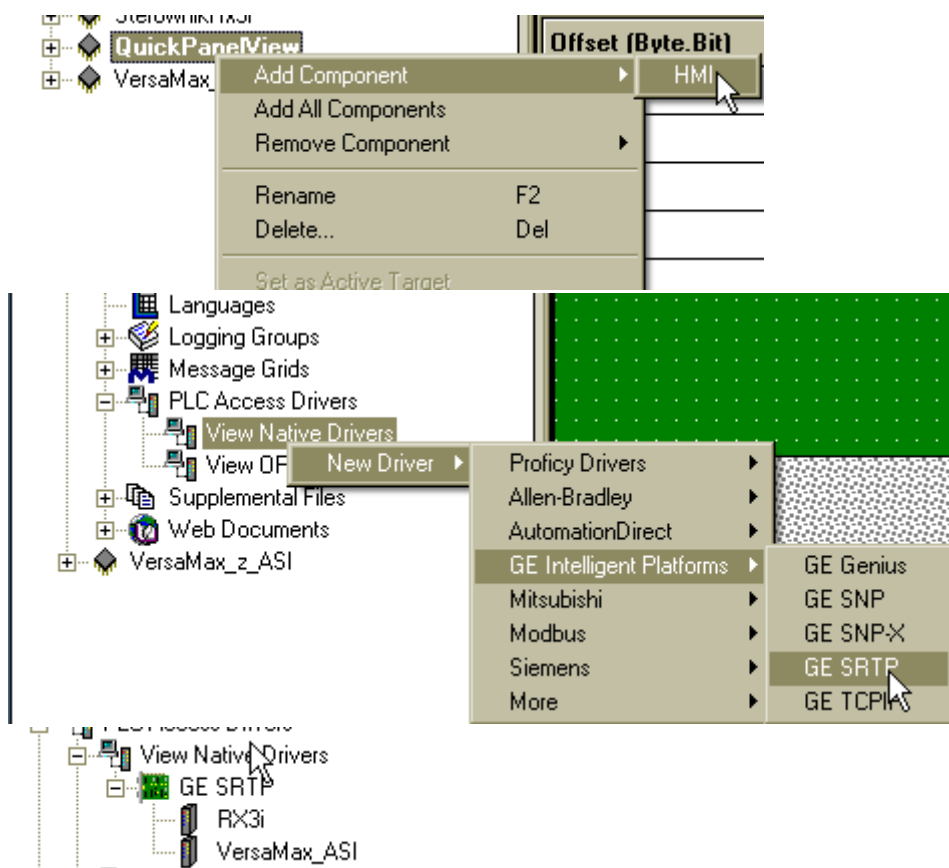
Komunikacja
Sterowniki
VersaSafe

Add Target
Save
Save As...
Save And Backup...
Close
Close (without saving)...
Validate All
Download All
Clean All Build Folders
Show Documentation
Properties

GE Intelligent Platforms Controller
GE Intelligent Platforms Remote I/O
Motion
QuickPanel
QuickPanel View/Control
Windows PC
Windows PC Mirror

Length (Bytes): 5

Variable	Ref Address
	%I00361
QP Control 15" TFT (IC754Cxx15Cxx)	
QP Control 12" TFT (IC754Cxx12Cxx)	
QP Control 8" TFT (IC754Cxx08Cxx)	
QP Control 6" TFT (IC754Cxx06Cxx)	
QP Control 6" Mono (IC754Cxx06Mxx)	
QP View 15" TFT (IC754Vxx15Cxx)	
QP View 12" TFT (IC754Vxx12Cxx)	
QP View 8" TFT (IC754Vxx08Cxx)	
QP View 6" TFT (IC754Vxx06Cxx)	
QP View 6" Mono (IC754Vxx06Mxx)	
QP View 12" TFT (IC754Vxl12Cxx)	
QP View 12" Mono (IC754Vxl12Mxx)	
QP View 10" Mono (IC754Vxl10Mxx)	
QP View 8" TFT (IC754Vxl08Cxx)	
QP View 6" STN (IC754Vxl06STx)	
QP View 6" STN + Keypad (IC754Vxl06SKx)	
QP View 6" Mono (IC754Vxl06Mxx)	
QP View 6" TFT (IC754VxB06Cxx)	
QP View 6" Mono (IC754VxB06Mxx)	
VersaSafe QP View 12" TFT (IC754Vxx12Cxx)	



Inspector


Device	
Name	VersaMax_ASI
Scan Rate	1000
Enable Conditional Scann	False
PLC Target	<None>
IP Address	192.168.22.15
Transaction Timeout	3000
Retries	3
Channel	1

Inspector

Device	
Name	RX3i
Scan Rate	1000
Enable Conditional Scann	False
PLC Target	<None>
IP Address	192.168.22.60
Transaction Timeout	3000
Retries	3
Channel	1


Konfiguracja panelu

Inspector [X]

Graphical Panel	
Name	Test_EGD_ASI
Top	0
Left	0
Width	320
Height	240
Background Color	 Silver [Dropdown] [More Colors]
Visible At Startup	True
Thick Border	True
Caption	False
Panel Type	replace
Security	0
Publish	False
Keypad Assignment	Click Here ->

Inspector

aw | **Tools** | Window | Help

 [Icon] | [Icon] | aMac

Toolbars		Default
Navigator	Shift+F4	Logic Developer - PC
Control I/O	Shift+F5	Motion Developer
Feedback Zone	Shift+F6	Logic Developer - PLC
Inspector	Shift+F7	View [Mouse]

