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Program blocks

Main [OB1]

Main Properties							
General							
Name	Main	Number	1	Type	OB	Language	LAD
Numbering	Automatic						
Information							
Title	"Main Program Sweep (Cycle)"	Author		Comment		Family	
Version	0.1	User-defined ID					

Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
▼ Temp			
Temp1	Real		
Temp2	Real		
Temp3	Bool		
Block	Bool		
StartBTN_Signal	Bool		
TempUP	Real		
TempDown	Real		
Constant			

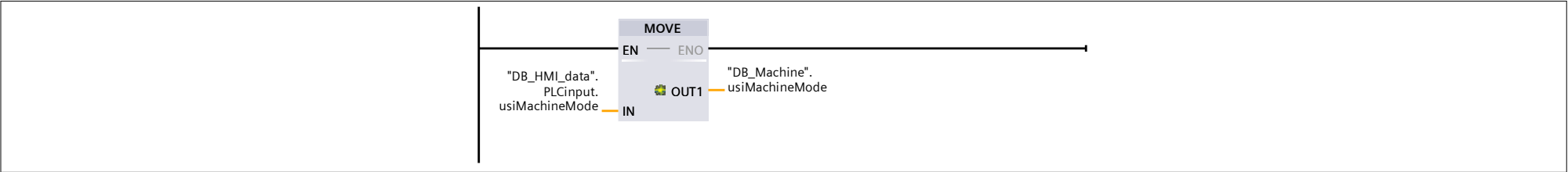
Network 1:



Network 2: Error logic and HMI messages

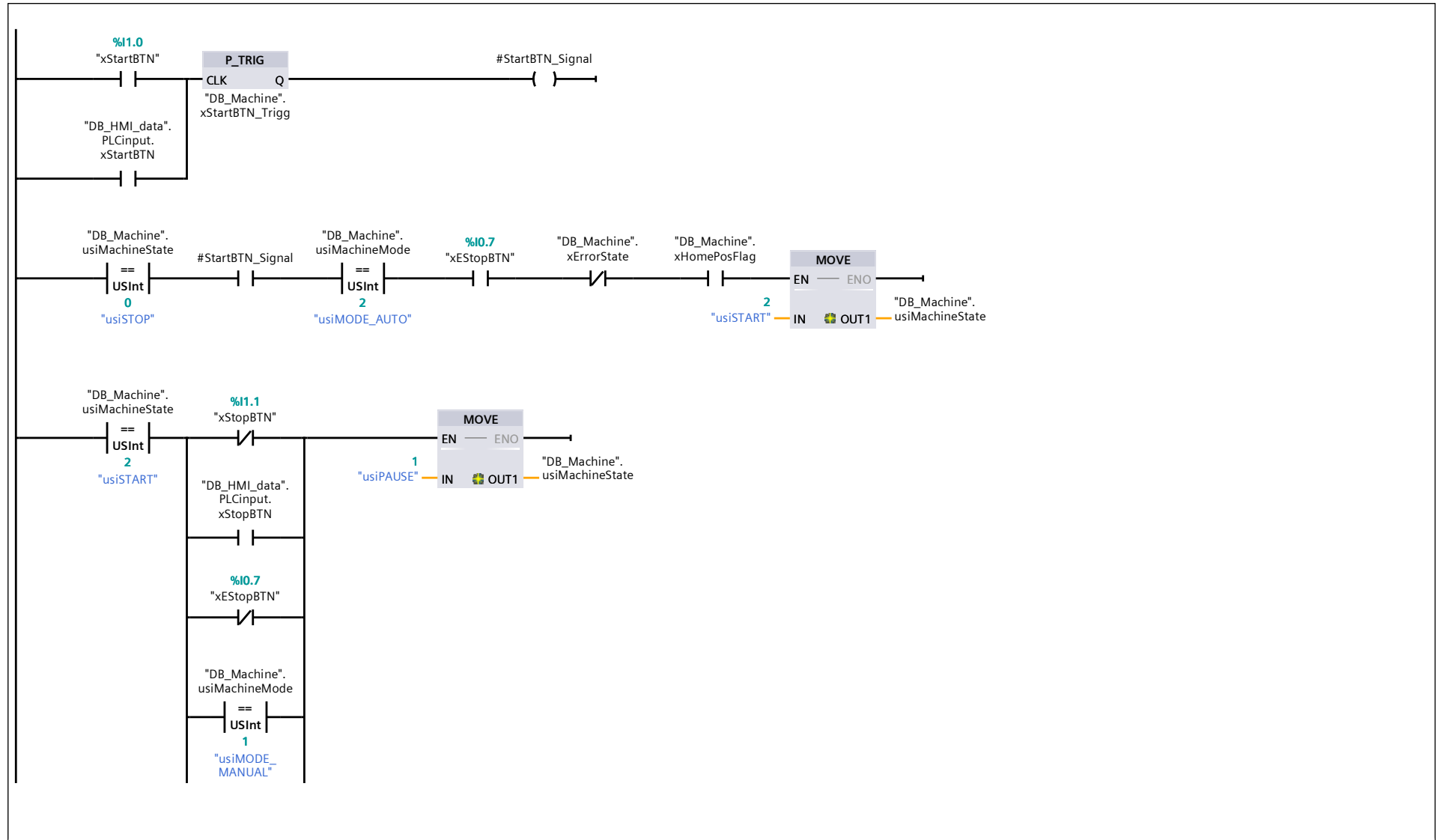


Network 3: Machine mode: Disabled - Manual - Auto



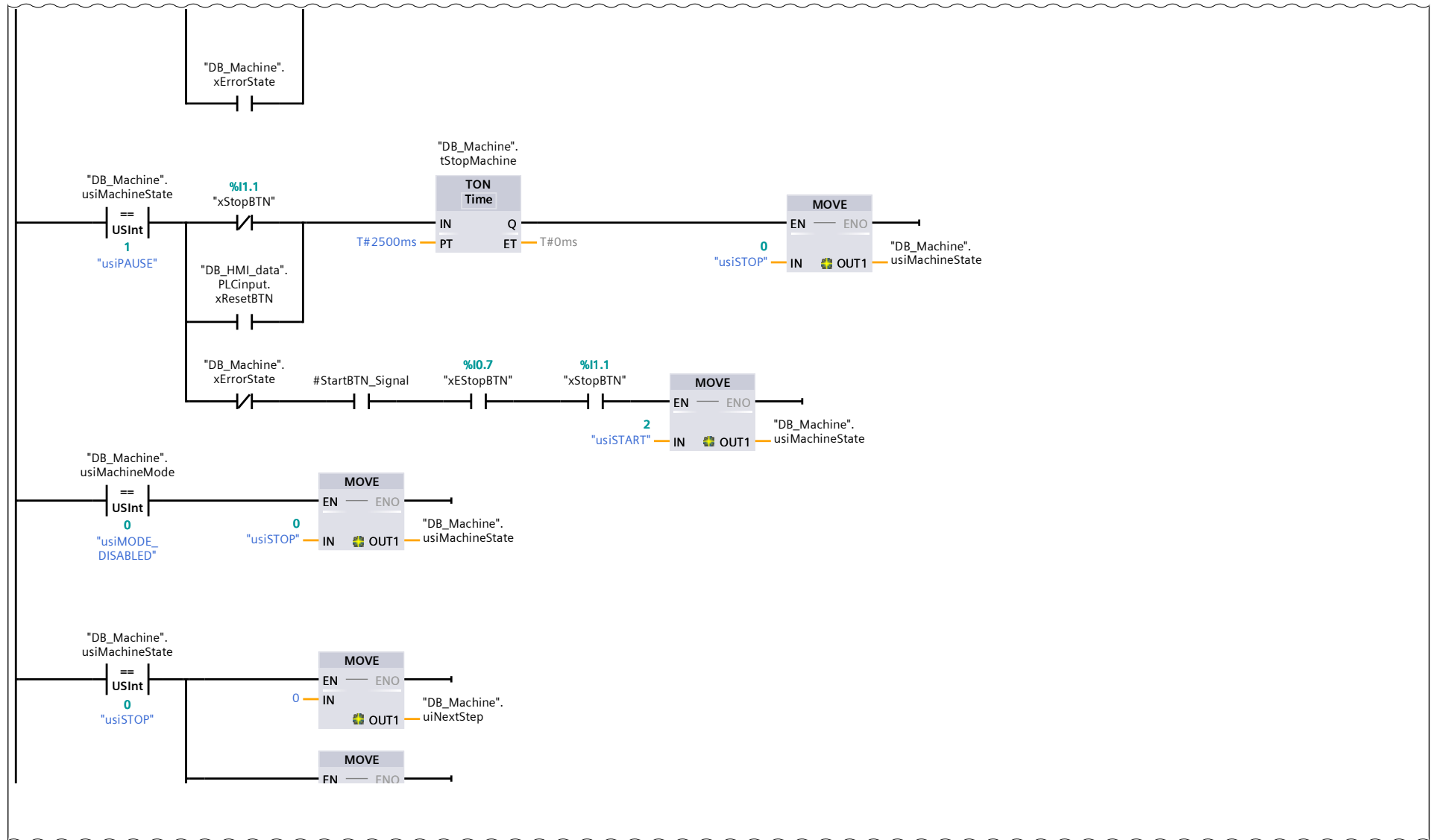
Network 4: Machine state: Start - Stop - Pause

Network 4: Machine state: Start - Stop - Pause (1.1 / 3.1)



Network 4: Machine state: Start - Stop - Pause (2.1 / 3.1)

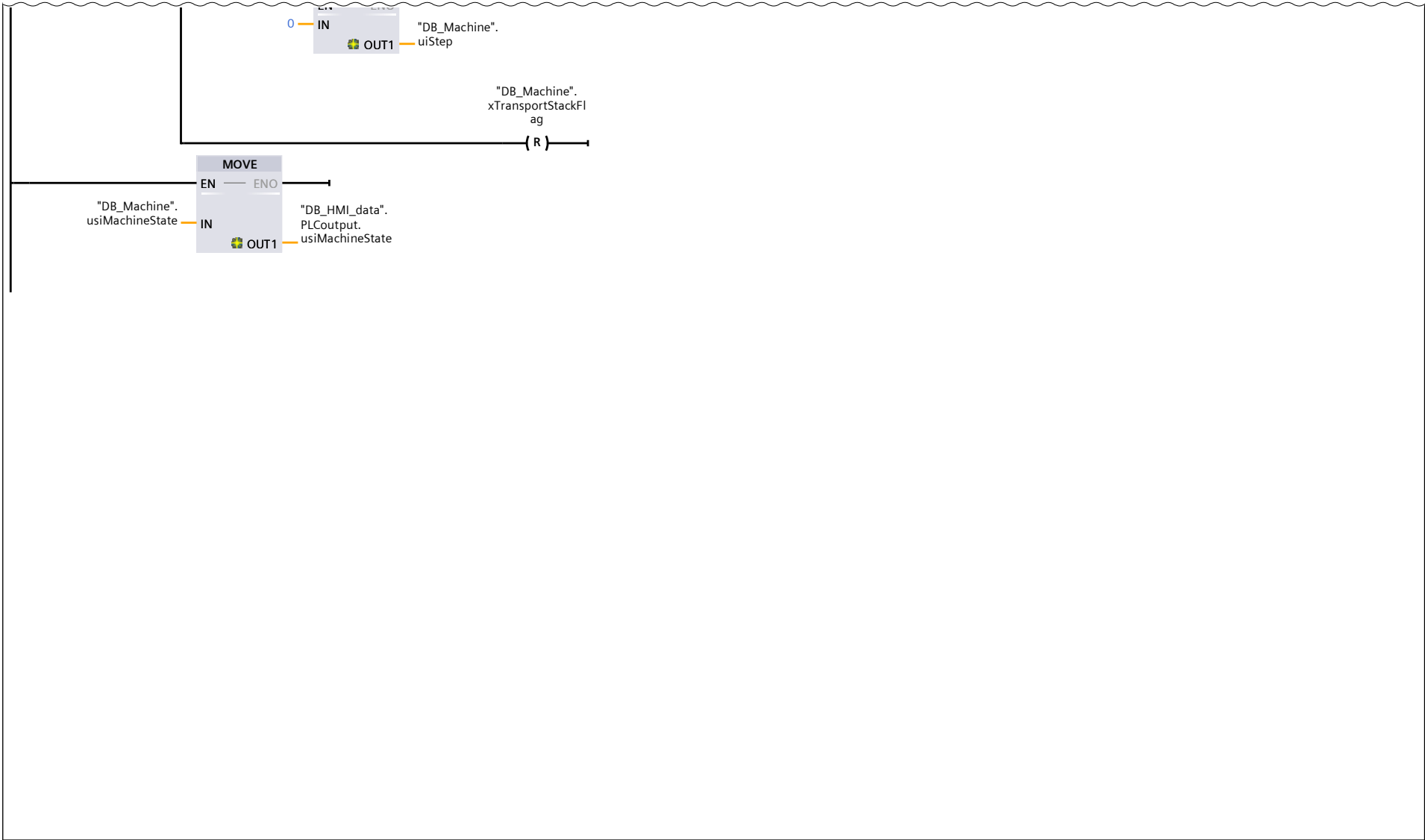
1.1 (Page2 - 3)



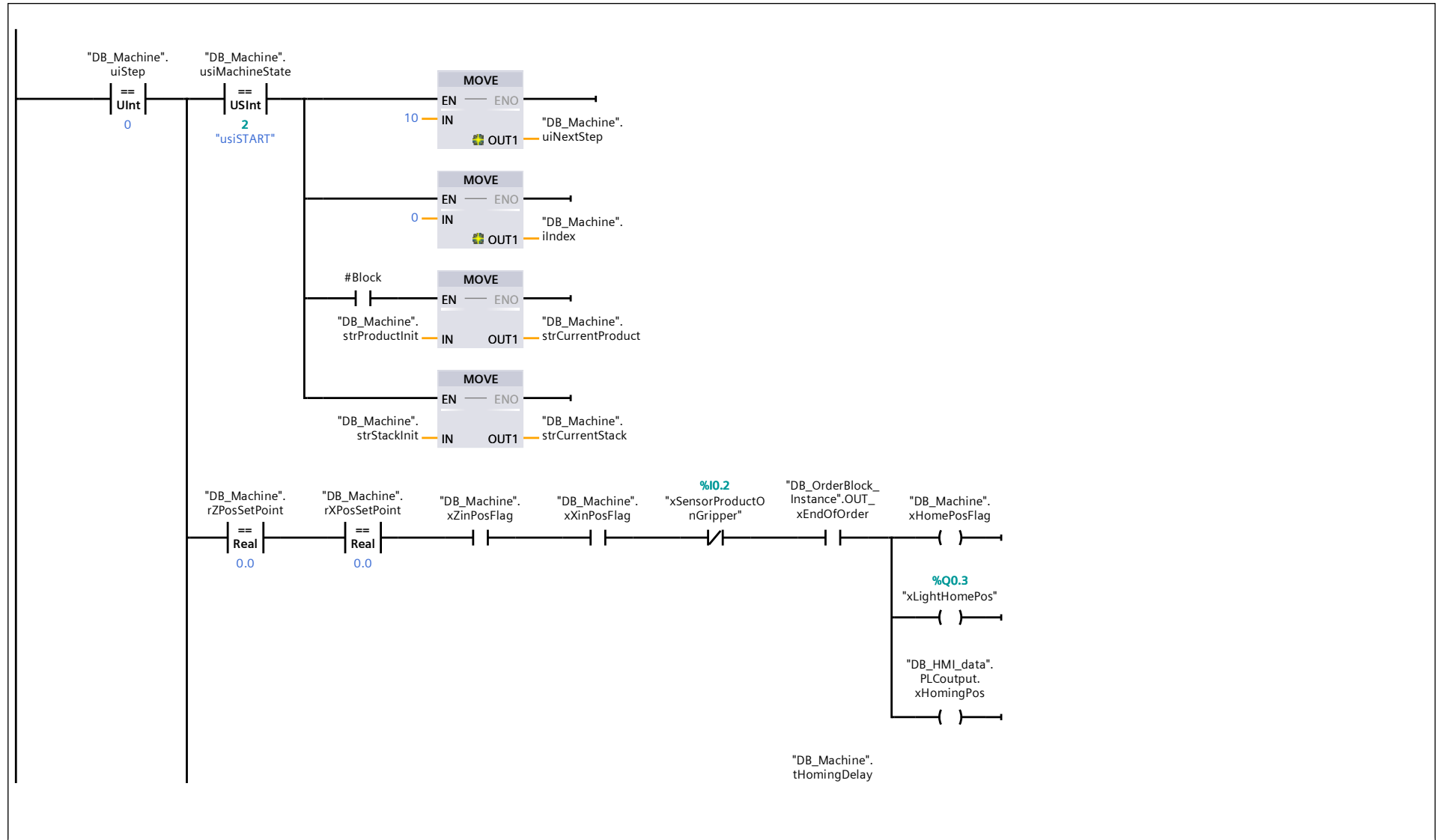
3.1 (Page2 - 5)

Network 4: Machine state: Start - Stop - Pause (3.1 / 3.1)

2.1 (Page2 - 4)

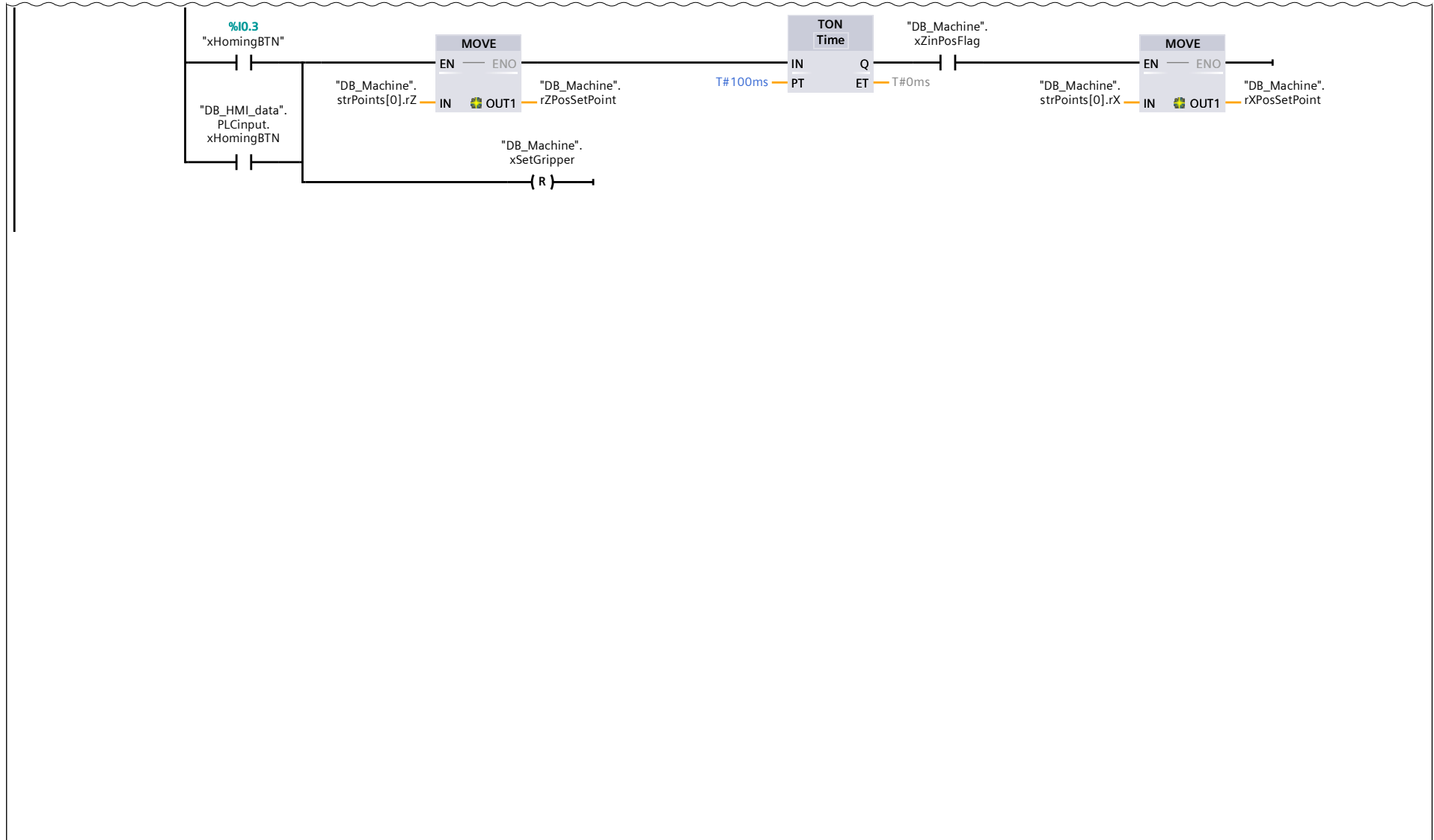


Network 5: Step 00 - Robot initialization and homing axis positions (1.1 / 2.1)

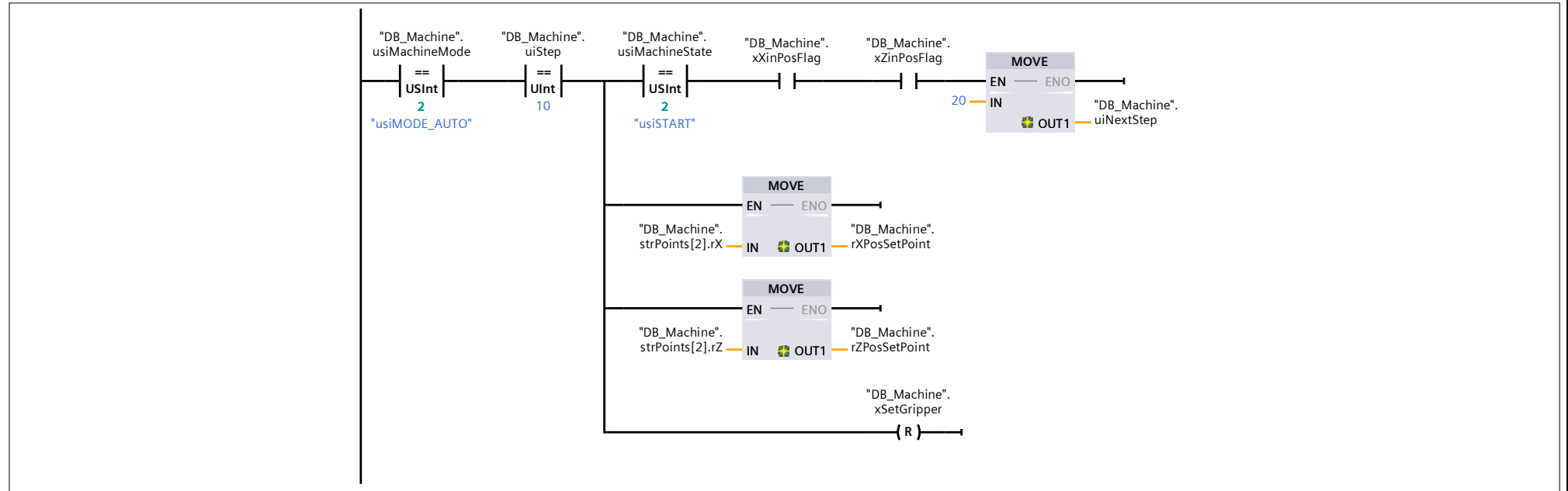


Network 5: Step 00 - Robot initialization and homing axis positions (2.1 / 2.1)

1.1 (Page2 - 7)

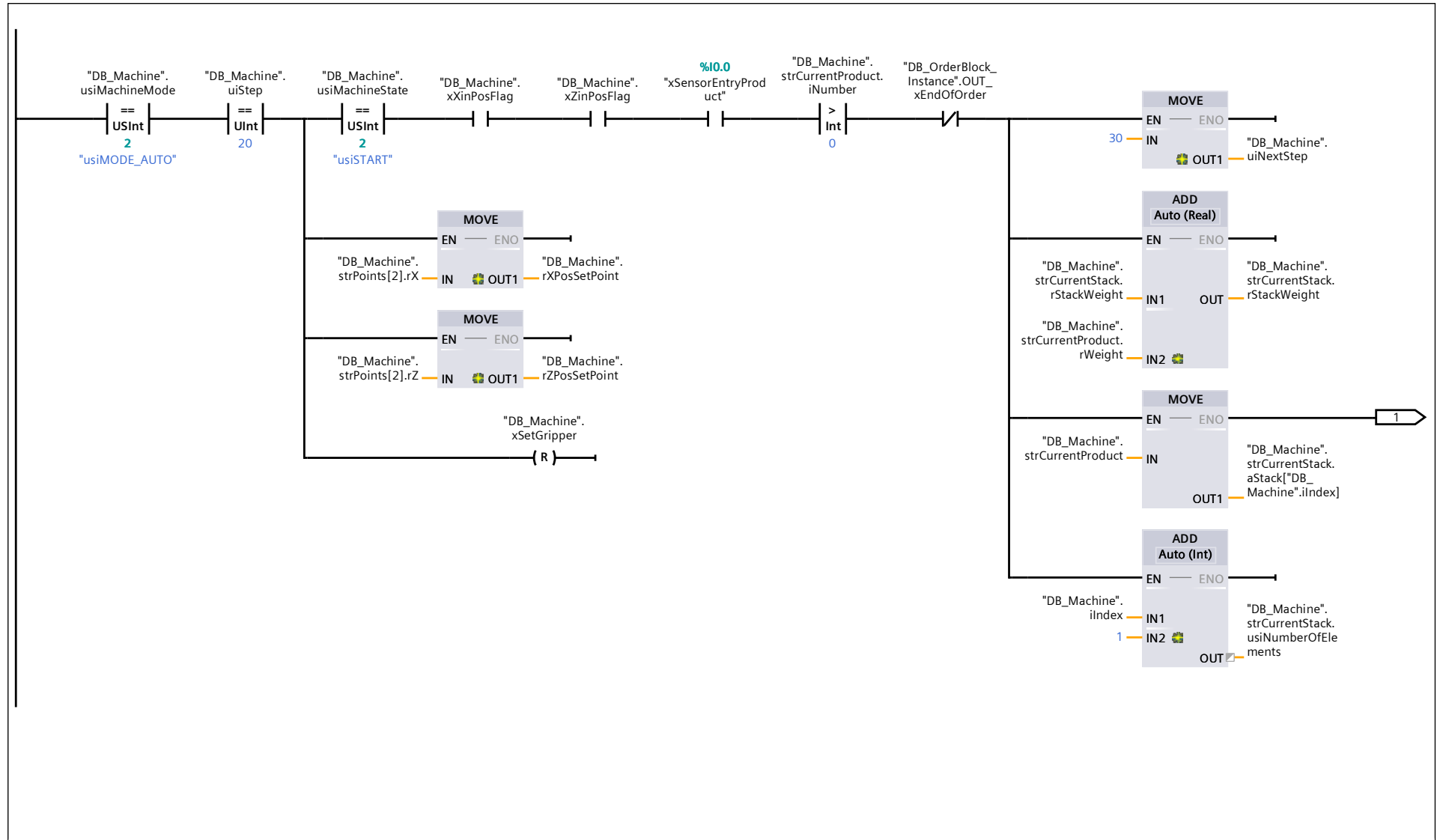


Network 6: Step 10 - Move robot to entry conveyor



Network 7: Step 20 - Wait for product

Network 7: Step 20 - Wait for product (1.1 / 2.1)

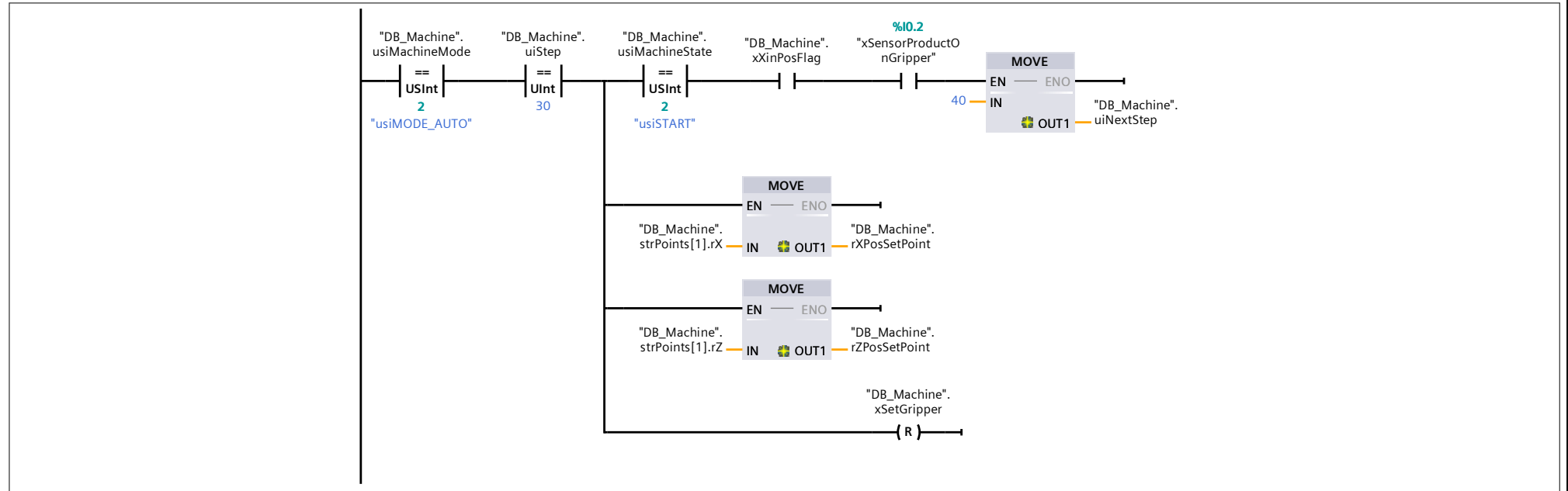


Network 7: Step 20 - Wait for product (2.1 / 2.1)

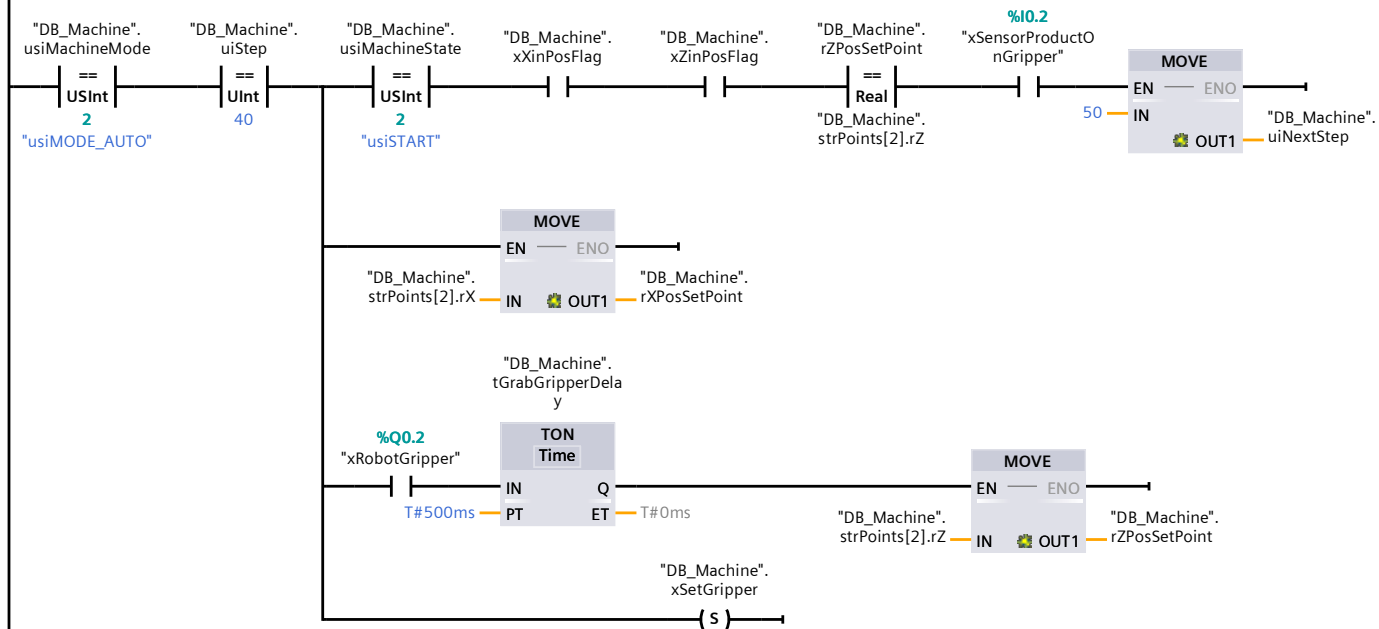
1.1 (Page2 - 10)



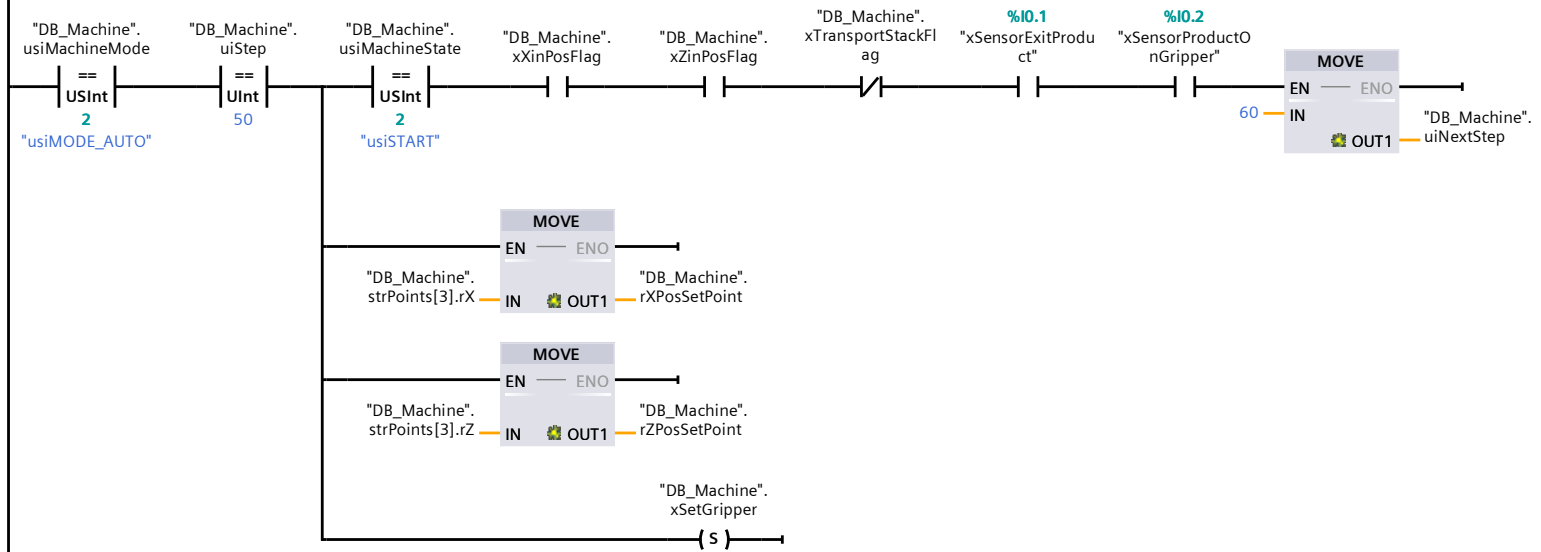
Network 8: Step 30 - Move gripper to product



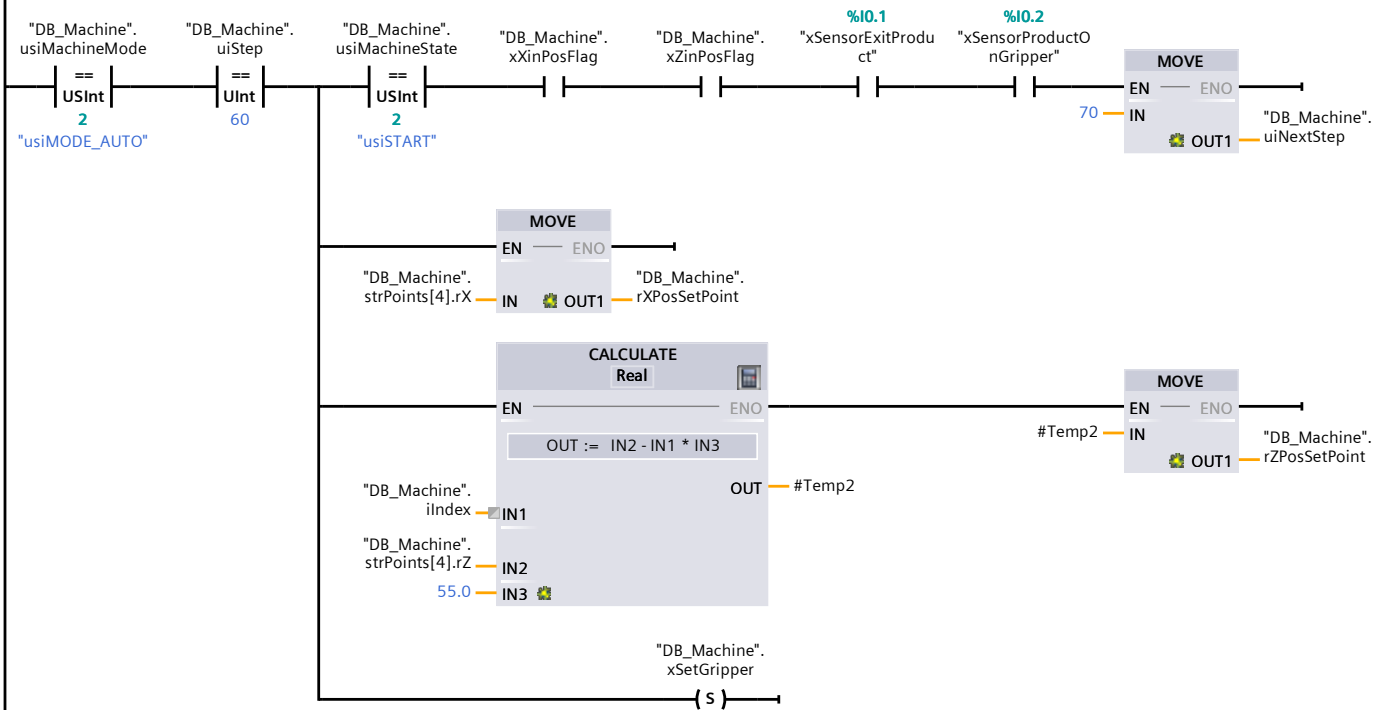
Network 9: Step 40 - Take the product and move gripper up



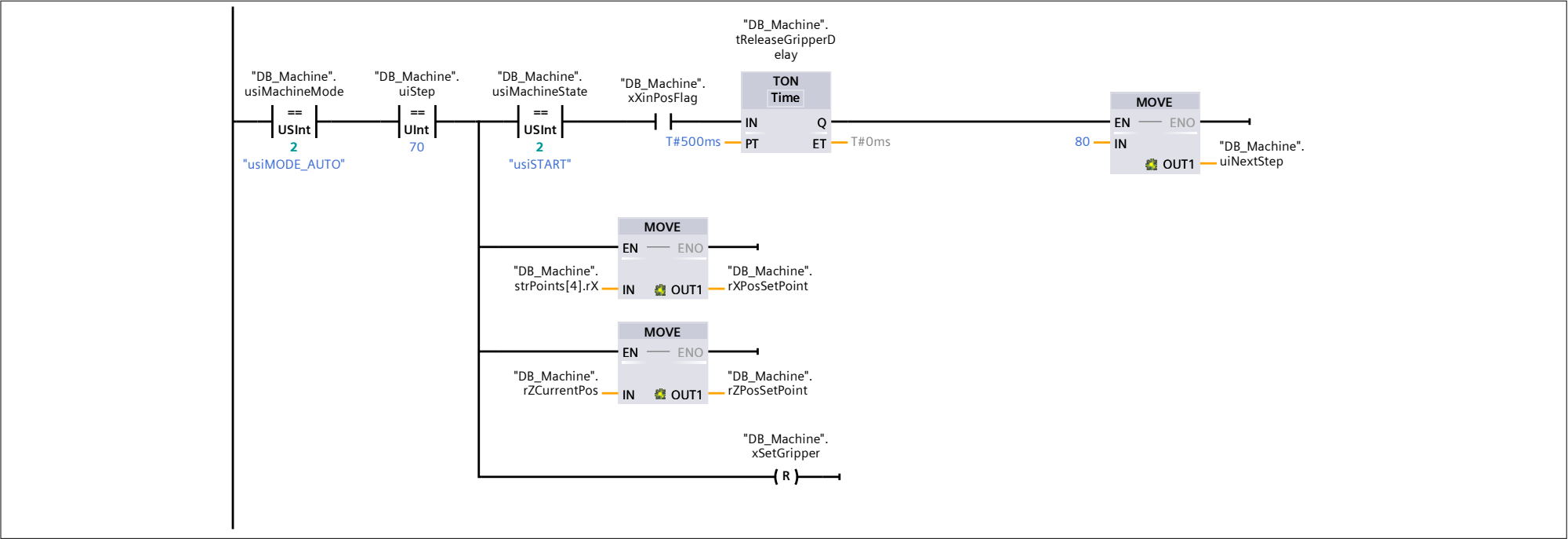
Network 10: Step 50 - Move robot to exit conveyor



Network 11: Step 60 - Move gripper down

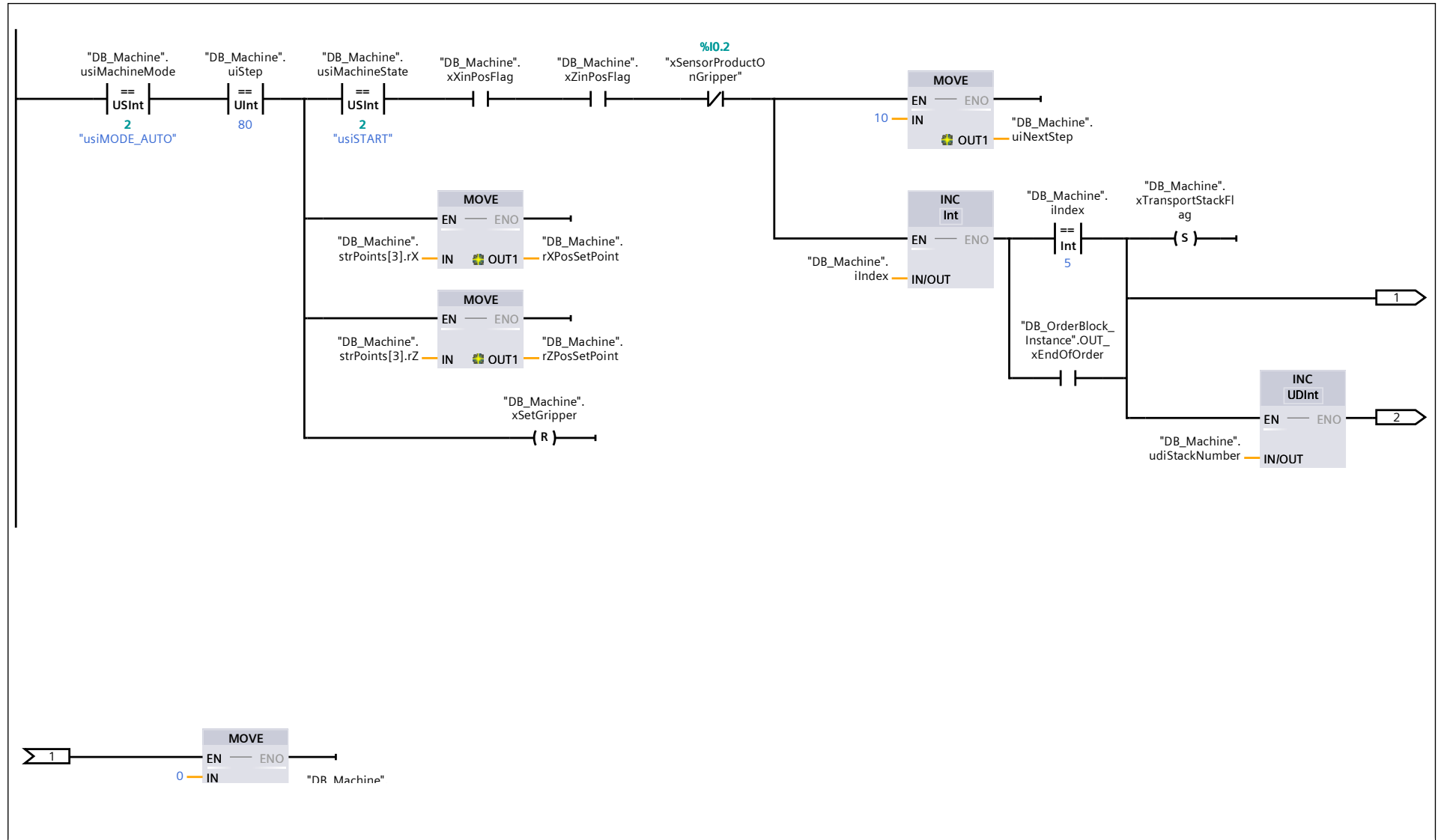


Network 12: Step 70 - Release gripper



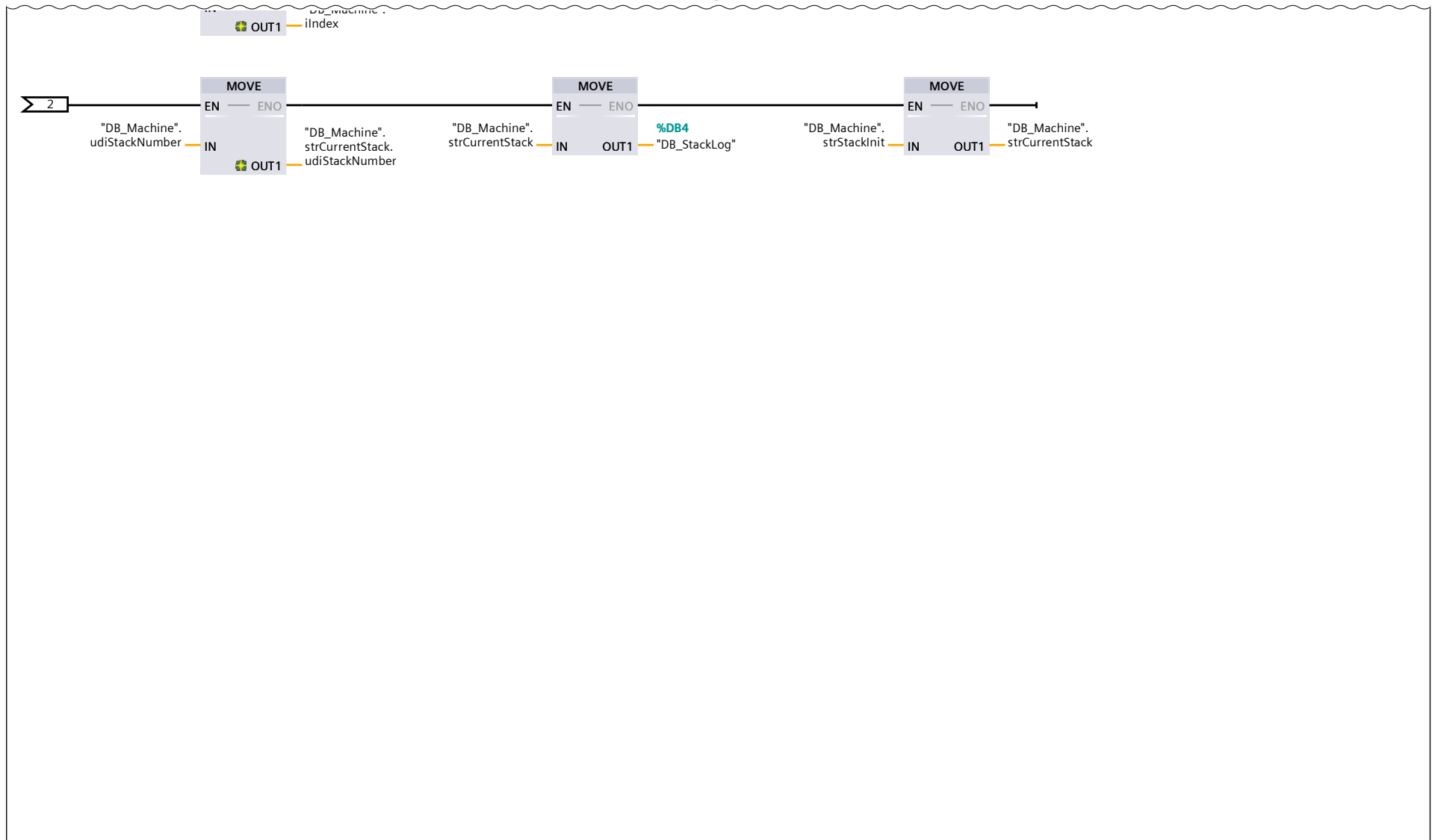
Network 13: Step 80 - Move gripper to safe height and move stack data to log

Network 13: Step 80 - Move gripper to safe height and move stack data to log (1.1 / 2.1)

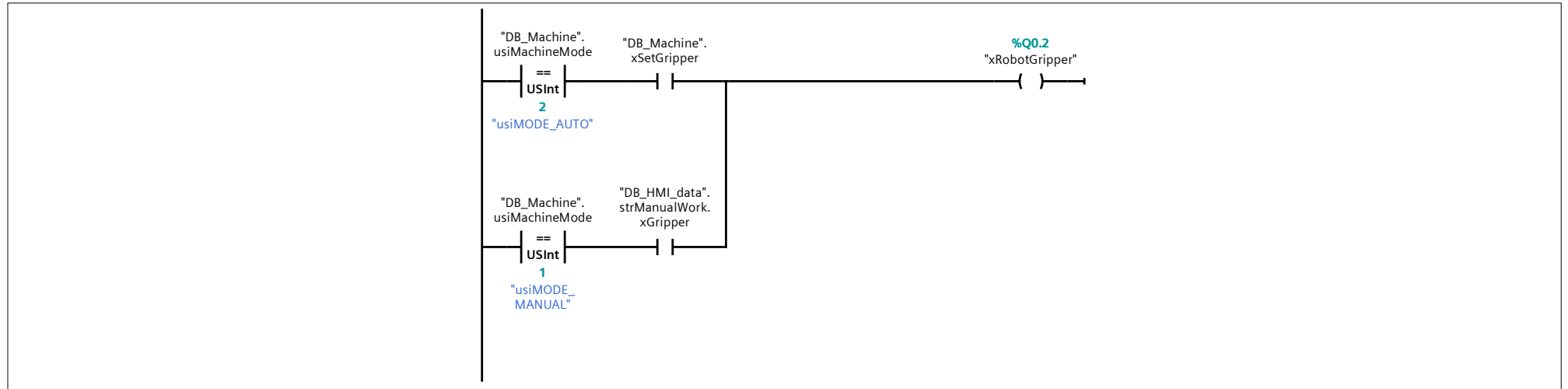


Network 13: Step 80 - Move gripper to safe height and move stack data to log (2.1 / 2.1)

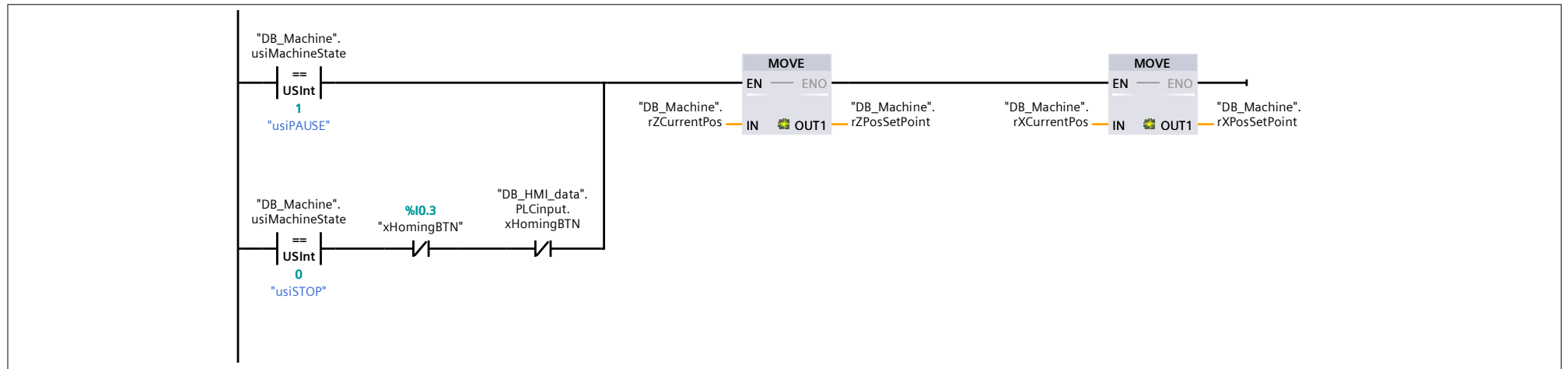
1.1 (Page2 - 17)



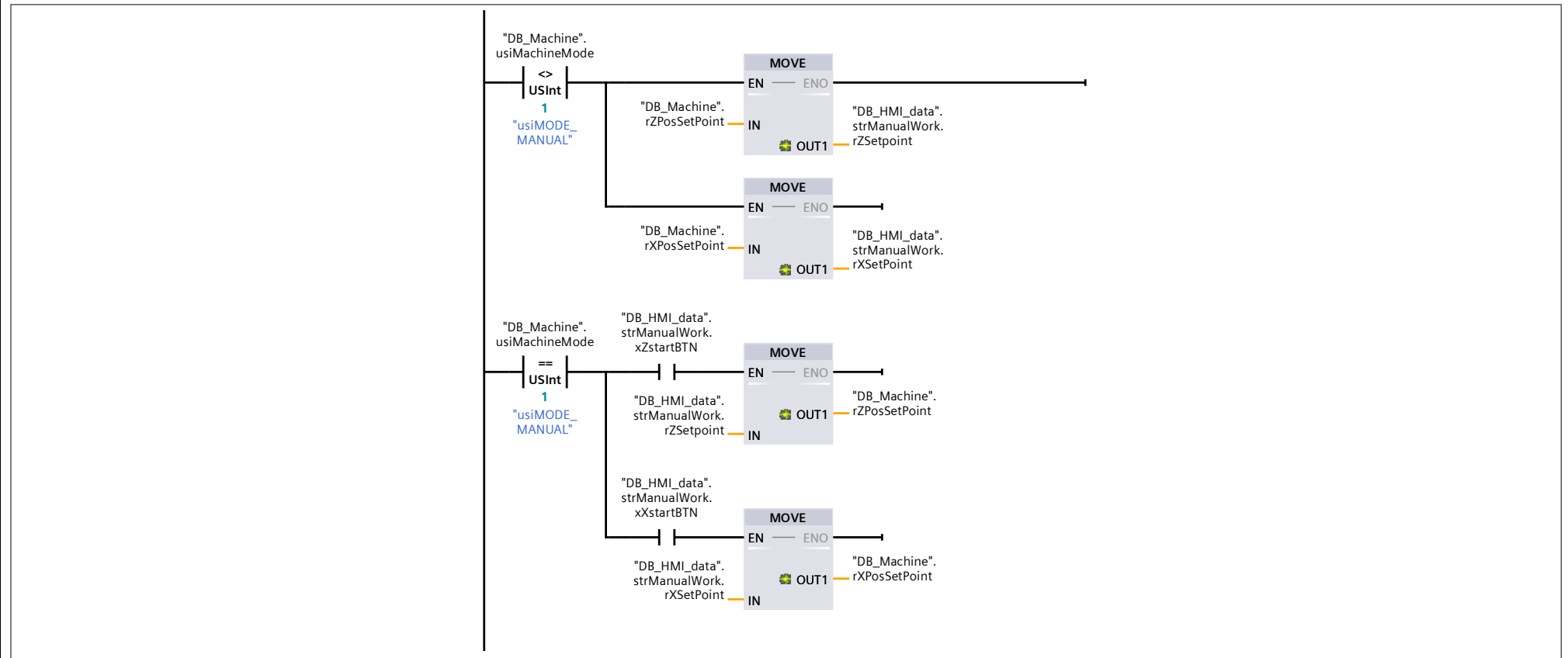
Network 14: Gripper logic



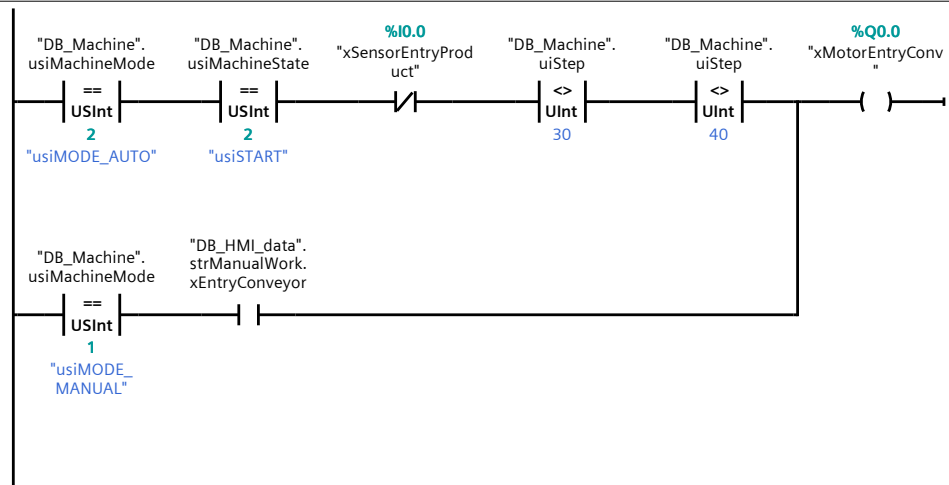
Network 15: Disable robot axis movement while pause or stop



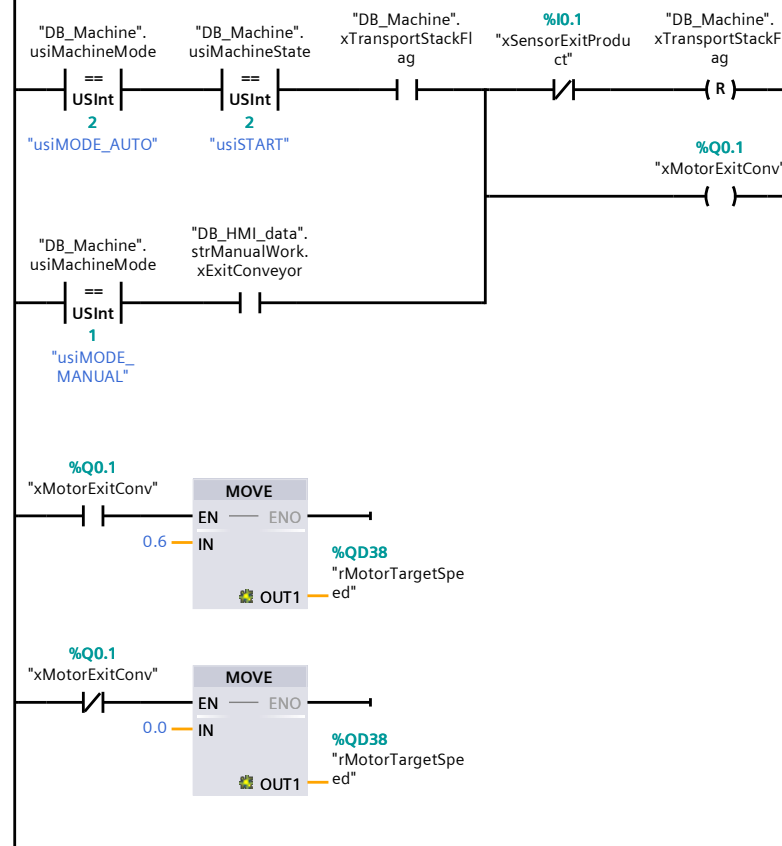
Network 16: Robot axis - manual mode logic



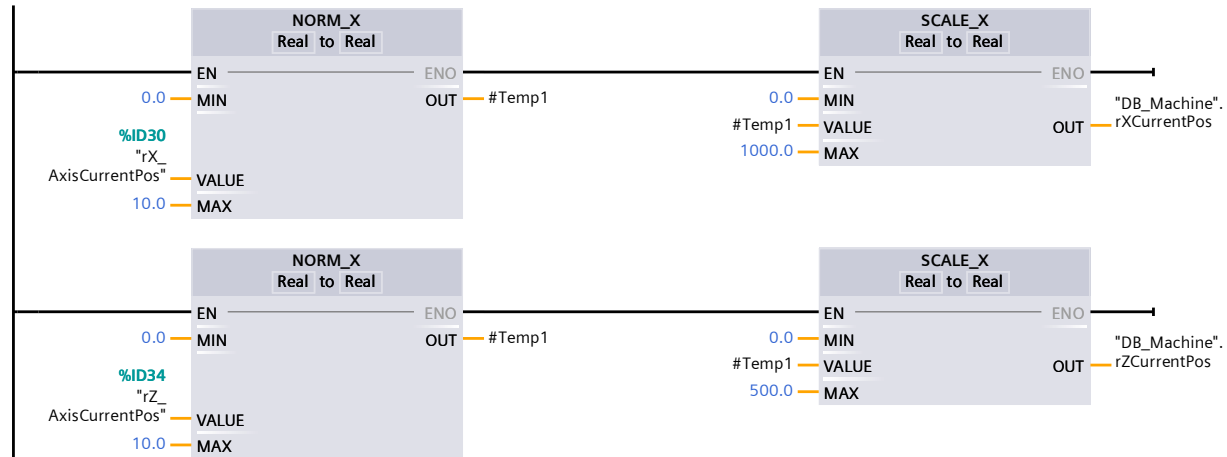
Network 17: Entry conveyor logic



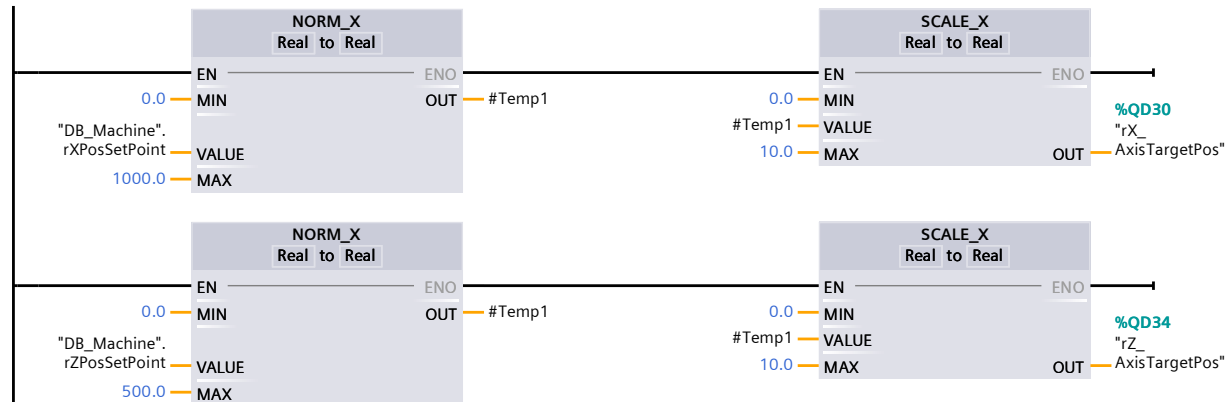
Network 18: Exit conveyor logic



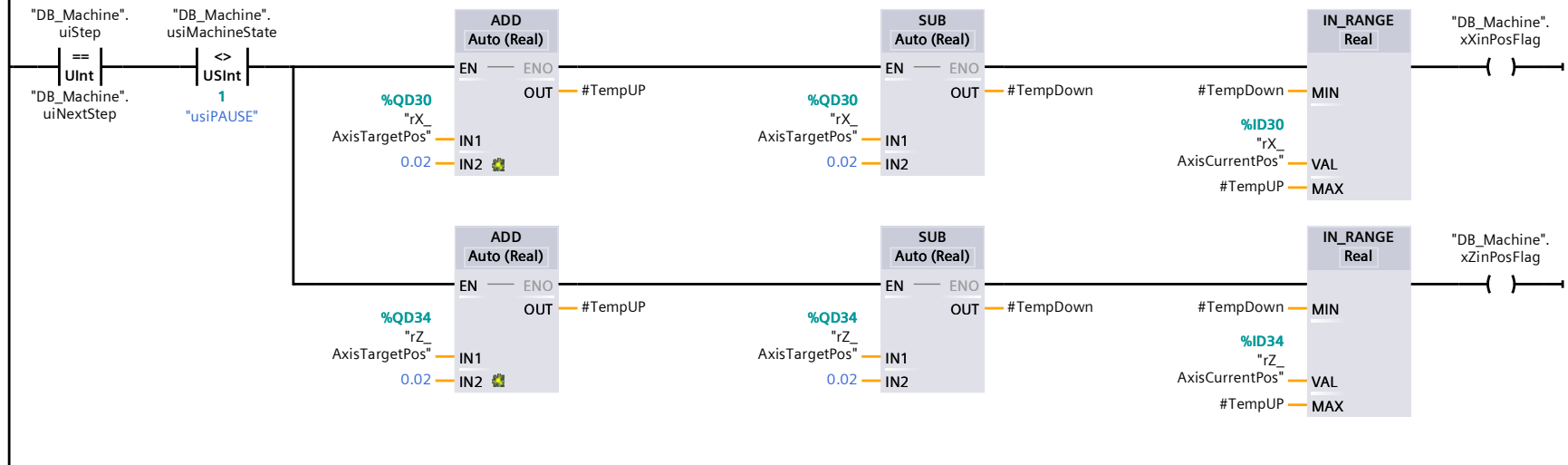
Network 19: Scale current robot positions



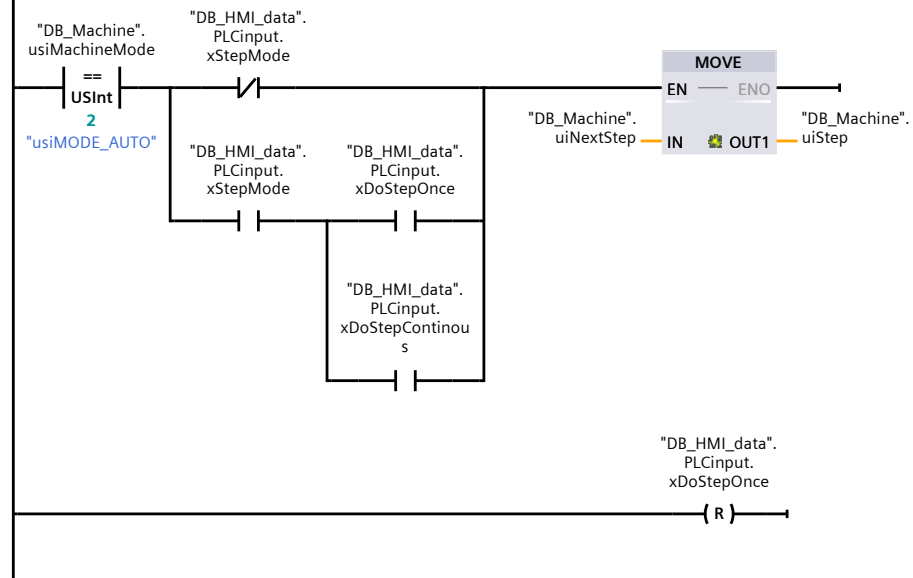
Network 20: Scale target robot positions



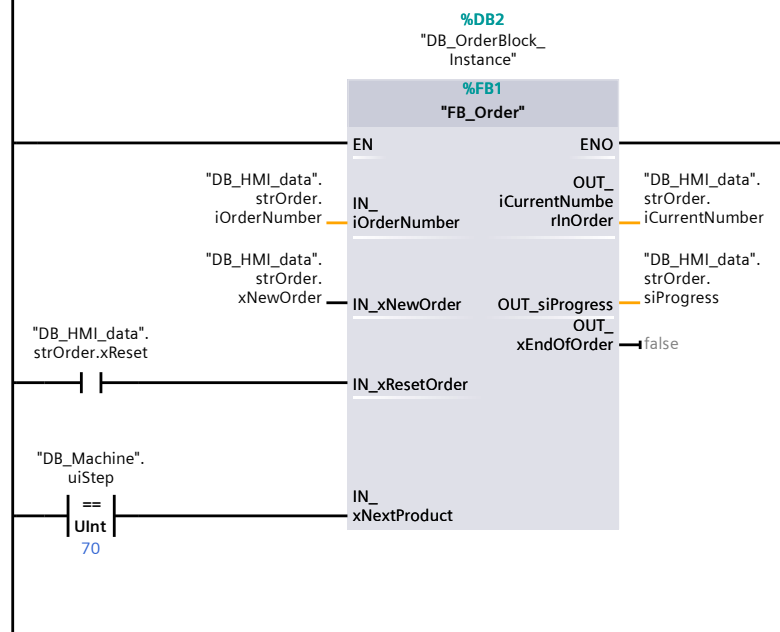
Network 21: Set up robot axis positions flags



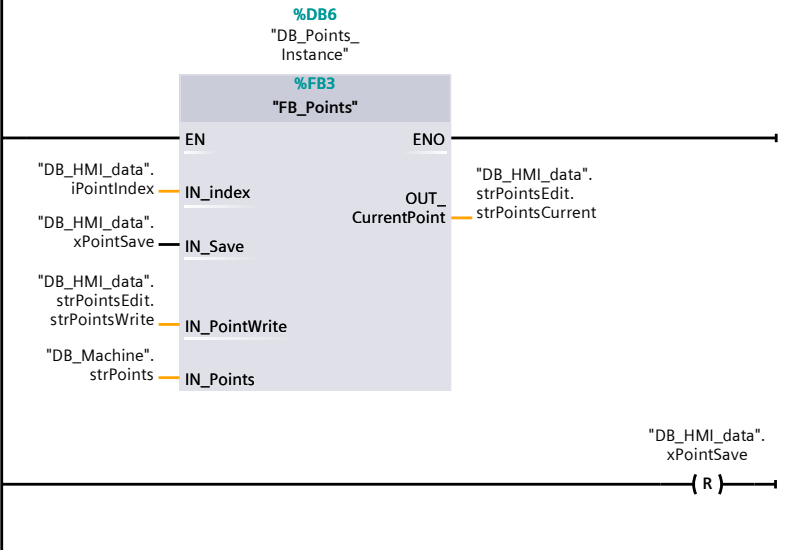
Network 22: Set next step



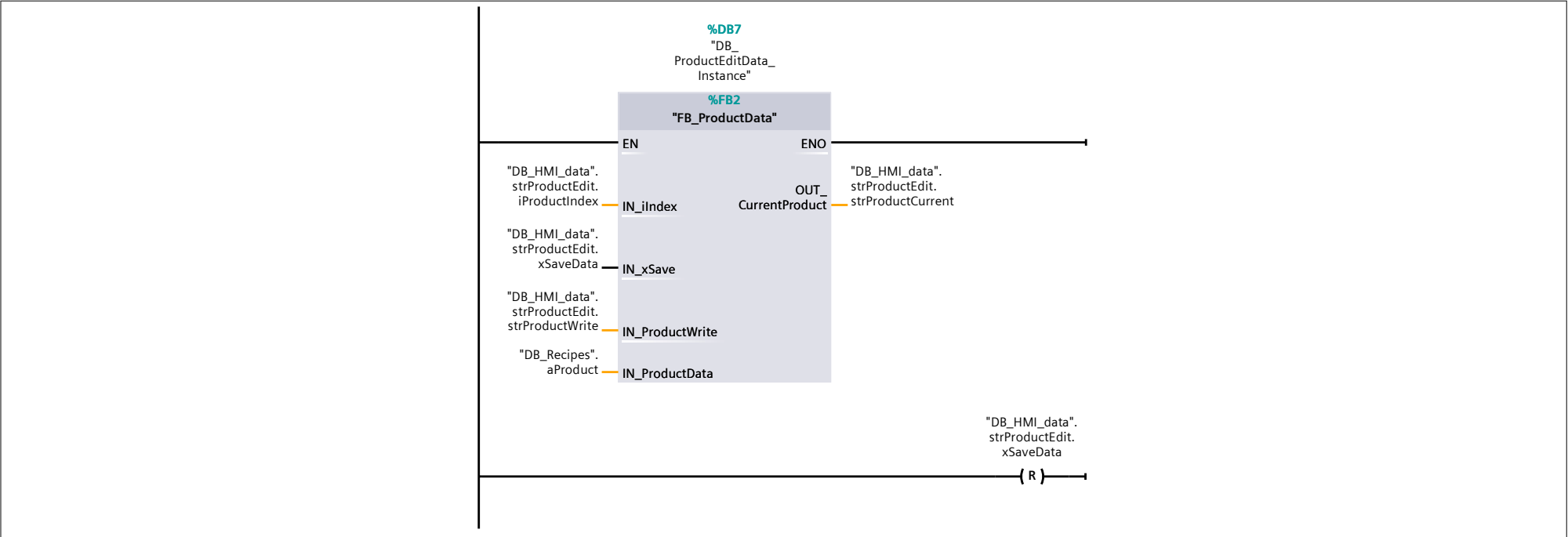
Network 23: Order



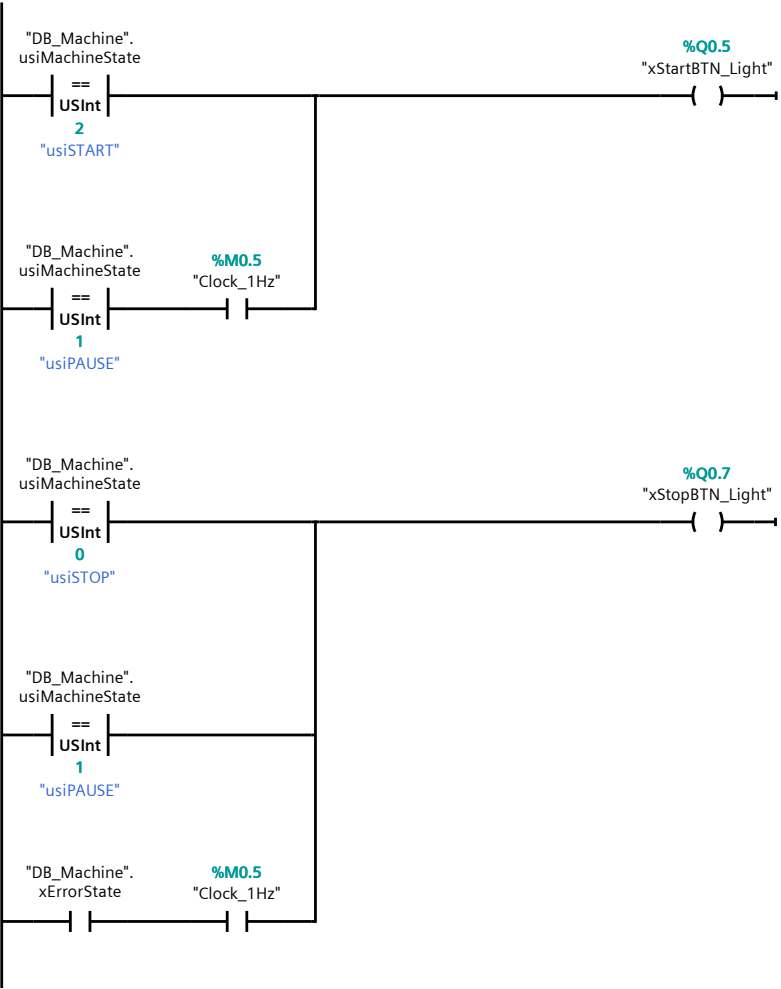
Network 24: Edit robot target points



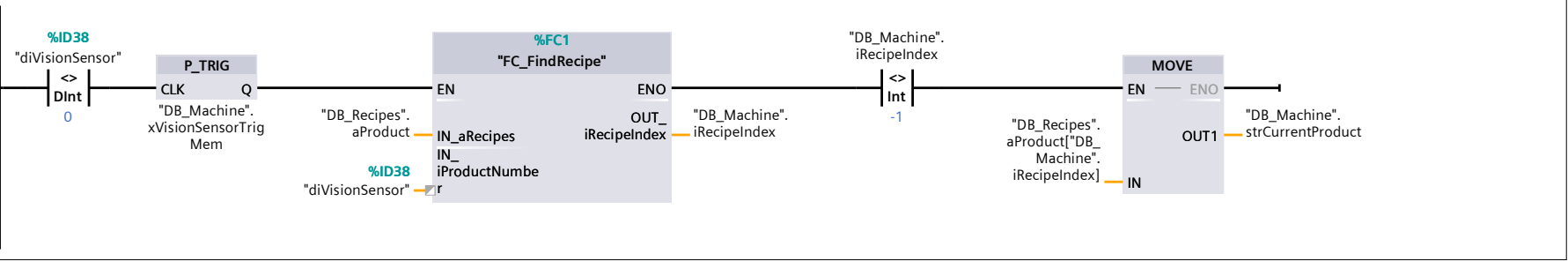
Network 25: Edit recipe data block



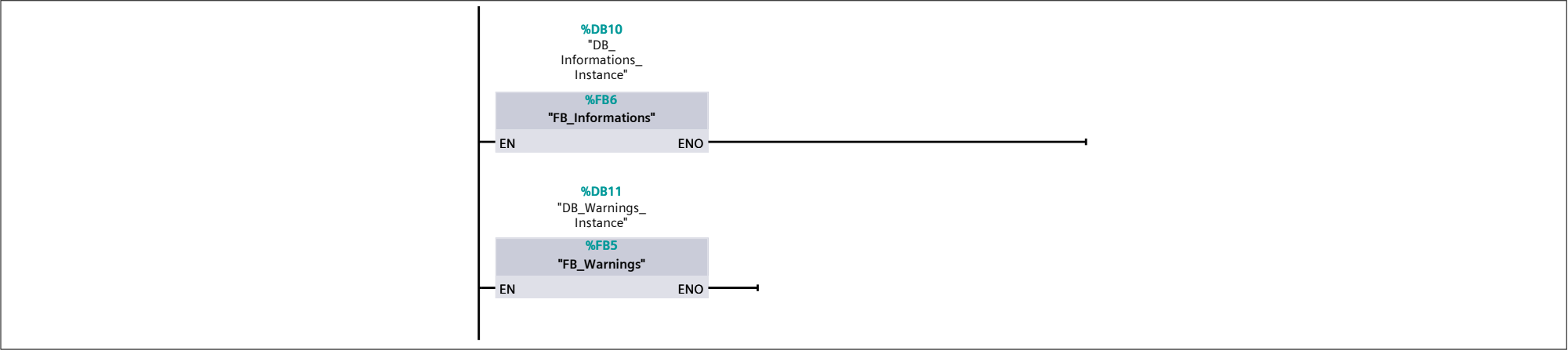
Network 26: Light indicators



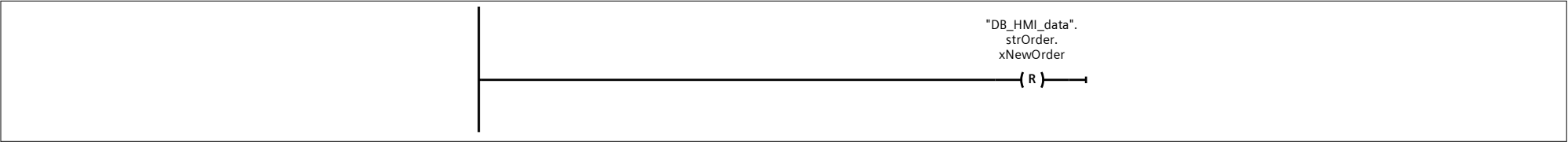
Network 27: Scan and find recipe data



Network 28: HMI messages



Network 29:



Program blocks

DB_Machine [DB1]

DB_Machine Properties

General

Name	DB_Machine	Number	1	Type	DB	Language	DB
Numbering	Automatic						

Information

Title		Author		Comment		Family	
Version	0.1	User-defined ID					

Name	Data type	Start value	Retain	Accessible from HMI/OPC UA/Web API	Writ-able from HMI/OPC UA/ Web API	Visible in HMI engi-neering	Setpoint	Supervi-sion	Comment
▼ Static									
rZPosSetPoint	Real	0.0	False	True	True	True	False		
rXPosSetPoint	Real	0.0	False	True	True	True	False		
rZCurrentPos	Real	0.0	False	True	True	True	False		
rXCurrentPos	Real	0.0	False	True	True	True	False		
xZinPosFlag	Bool	false	False	True	True	True	False		
xxInPosFlag	Bool	false	False	True	True	True	False		
xHomePosFlag	Bool	false	False	True	True	True	False		
xTransportStackFlag	Bool	false	False	True	True	True	False		
xVisionSensorTrigMem	Bool	false	False	True	True	True	False		
xSetGripper	Bool	false	False	True	True	True	False		
xStartBTN_Trigg	Bool	false	False	True	True	True	False		
xErrorState	Bool	false	False	True	True	True	False		
uiStep	UInt	0	False	True	True	True	False		
uiNextStep	UInt	0	False	True	True	True	False		
usiMachineState	USInt	0	False	True	True	True	False		

Totally Integrated Automation Portal									
Name	Data type	Start value	Retain	Accessible from HMI/OPC UA/Web API	Writable from HMI/OPC UA/Web API	Visible in HMI engineering	Setpoint	Supervision	Comment
usiMachineMode	USInt	0	False	True	True	True	False		
iIndex	Int	0	False	True	True	True	False		
iRecipeIndex	Int	0	False	True	True	True	False		
udiStackNumber	UDInt	0	True	True	True	True	False		
▼ strCurrentProduct	"UDT_Product-Properties"		False	True	True	True	False		
iNumber	Int	0	False	True	True	True	False		
sColor	String	"	False	True	True	True	False		
rWeight	Real	0.0	False	True	True	True	False		
▼ strProductInit	"UDT_Product-Properties"		False	True	True	True	True		
iNumber	Int	0	False	True	True	True	False		
sColor	String	"	False	True	True	True	False		
rWeight	Real	0.0	False	True	True	True	False		
▼ strCurrentStack	"UDT_StackData"		False	True	True	True	True		
▼ aStack	Array[0..4] of "UDT_Product-Properties"		False	True	True	True	False		
▼ aStack[0]	"UDT_Product-Properties"		False	True	True	True	False		
iNumber	Int	0	False	True	True	True	False		
sColor	String	"	False	True	True	True	False		
rWeight	Real	0.0	False	True	True	True	False		
▼ aStack[1]	"UDT_Product-Properties"		False	True	True	True	False		
iNumber	Int	0	False	True	True	True	False		
sColor	String	"	False	True	True	True	False		
rWeight	Real	0.0	False	True	True	True	False		

Totally Integrated Automation Portal										
Name	Data type	Start value	Retain	Accessible from HMI/OPC UA/Web API	Writ-able from HMI/OPC UA/ Web API	Visible in HMI engi-neering	Setpoint	Supervi-sion	Comment	
iNumber	Int	0	False	True	True	True	False			
sColor	String	"	False	True	True	True	False			
rWeight	Real	0.0	False	True	True	True	False			
▼ aStack[2]	"UDT_Product-Properties"		False	True	True	True	False			
iNumber	Int	0	False	True	True	True	False			
sColor	String	"	False	True	True	True	False			
rWeight	Real	0.0	False	True	True	True	False			
▼ aStack[3]	"UDT_Product-Properties"		False	True	True	True	False			
iNumber	Int	0	False	True	True	True	False			
sColor	String	"	False	True	True	True	False			
rWeight	Real	0.0	False	True	True	True	False			
▼ aStack[4]	"UDT_Product-Properties"		False	True	True	True	False			
iNumber	Int	0	False	True	True	True	False			
sColor	String	"	False	True	True	True	False			
rWeight	Real	0.0	False	True	True	True	False			
usiNumberOfElements	USInt	0	False	True	True	True	True			
rStackWeight	Real	0.0	False	True	True	True	False			
udiStackNumber	UDInt	0	False	True	True	True	False			
▼ strPoints	Array[0..9] of "UDT_Point"		True	True	True	True	True			
▼ strPoints[0]	"UDT_Point"		True	True	True	True	True		Home position	
rX	Real	0.0	True	True	True	True	False			
rZ	Real	0.0	True	True	True	True	False			
▼ strPoints[1]	"UDT_Point"		True	True	True	True	True		Step 30 - take the product	
rX	Real	0.0	True	True	True	True	False			
rZ	Real	466.0	True	True	True	True	False			

Totally Integrated Automation Portal

Program blocks

DB_Recipes [DB3]

DB_Recipes Properties

General

Name	DB_Recipes	Number	3	Type	DB	Language	DB
Numbering	Automatic						

Information

Title		Author		Comment		Family	
Version	0.1	User-defined ID					

Name	Data type	Start value	Retain	Accessible from HMI/OPC UA/Web API	Writ-able from HMI/OPC UA/ Web API	Visible in HMI engi-neering	Setpoint	Supervi-sion	Comment
▼ Static									
▼ aProduct	Array[0..9] of "UDT_Product-Properties"		True	True	True	True	True		
▼ aProduct[0]	"UDT_Product-Properties"		True	True	True	True	True		
iNumber	Int	4	True	True	True	True	False		
sColor	String	'Green'	True	True	True	True	False		
rWeight	Real	1.4	True	True	True	True	False		
▼ aProduct[1]	"UDT_Product-Properties"		True	True	True	True	True		
iNumber	Int	7	True	True	True	True	False		
sColor	String	'Grey'	True	True	True	True	False		
rWeight	Real	2.8	True	True	True	True	False		
▼ aProduct[2]	"UDT_Product-Properties"		True	True	True	True	True		
iNumber	Int	1	True	True	True	True	False		

Totally Integrated Automation Portal										
Name	Data type	Start value	Retain	Accessible from HMI/OPC UA/Web API	Writ-able from HMI/OPC UA/ Web API	Visible in HMI engi-neering	Setpoint	Supervi-sion	Comment	
sColor	String	'Blue'	True	True	True	True	False			
rWeight	Real	0.7	True	True	True	True	False			
▼ aProduct[3]	"UDT_Product-Properties"		True	True	True	True	True			
iNumber	Int	-1	True	True	True	True	False			
sColor	String	"	True	True	True	True	False			
rWeight	Real	0.0	True	True	True	True	False			
▼ aProduct[4]	"UDT_Product-Properties"		True	True	True	True	True			
iNumber	Int	-1	True	True	True	True	False			
sColor	String	"	True	True	True	True	False			
rWeight	Real	0.0	True	True	True	True	False			
▼ aProduct[5]	"UDT_Product-Properties"		True	True	True	True	True			
iNumber	Int	-1	True	True	True	True	False			
sColor	String	"	True	True	True	True	False			
rWeight	Real	0.0	True	True	True	True	False			
▼ aProduct[6]	"UDT_Product-Properties"		True	True	True	True	True			
iNumber	Int	-1	True	True	True	True	False			
sColor	String	"	True	True	True	True	False			
rWeight	Real	0.0	True	True	True	True	False			
▼ aProduct[7]	"UDT_Product-Properties"		True	True	True	True	True			
iNumber	Int	-1	True	True	True	True	False			
sColor	String	"	True	True	True	True	False			
rWeight	Real	0.0	True	True	True	True	False			
▼ aProduct[8]	"UDT_Product-Properties"		True	True	True	True	True			
iNumber	Int	-1	True	True	True	True	False			

Totally Integrated Automation Portal		
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Program blocks

FC_FindRecipe [FC1]

FC_FindRecipe Properties

General

Name	FC_FindRecipe	Number	1	Type	FC	Language	SCL
Numbering	Automatic						

Information

Title		Author		Comment		Family	
Version	0.1	User-defined ID					

Name	Data type	Default value	Comment
▼ Input			
▼ IN_aRecipes	Array[0..9] of "UDT_ProductProperties"		
▼ IN_aRecipes[0]	"UDT_ProductProperties"		
iNumber	Int		
sColor	String		
rWeight	Real		
▼ IN_aRecipes[1]	"UDT_ProductProperties"		
iNumber	Int		
sColor	String		
rWeight	Real		
▼ IN_aRecipes[2]	"UDT_ProductProperties"		
iNumber	Int		
sColor	String		
rWeight	Real		
▼ IN_aRecipes[3]	"UDT_ProductProperties"		
iNumber	Int		
sColor	String		

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Totally Integrated Automation Portal				
Name	Data type	Default value	Comment	
rWeight	Real			
▼ IN_aRecipes[4]	"UDT_ProductProperties"			
iNumber	Int			
sColor	String			
rWeight	Real			
▼ IN_aRecipes[5]	"UDT_ProductProperties"			
iNumber	Int			
sColor	String			
rWeight	Real			
▼ IN_aRecipes[6]	"UDT_ProductProperties"			
iNumber	Int			
sColor	String			
rWeight	Real			
▼ IN_aRecipes[7]	"UDT_ProductProperties"			
iNumber	Int			
sColor	String			
rWeight	Real			
▼ IN_aRecipes[8]	"UDT_ProductProperties"			
iNumber	Int			
sColor	String			
rWeight	Real			
▼ IN_aRecipes[9]	"UDT_ProductProperties"			
iNumber	Int			
sColor	String			
rWeight	Real			
IN_iProductNumber	Int			
▼ Output				
OUT_iRecipeIndex	Int			
InOut				

Totally Integrated Automation Portal			
Name	Data type	Default value	Comment
▼ Temp			
iCount	Int		
xFound	Bool		
Constant			
▼ Return			
FC_FindRecipe	Void		
<pre>0001 #OUT_iRecipeIndex := -1; 0002 0003 FOR #iCount := 0 TO 9 DO 0004 0005 #xFound := #IN_aRecipes[#iCount].iNumber = #IN_iProductNumber; 0006 0007 IF #xFound THEN 0008 #OUT_iRecipeIndex := #iCount; 0009 RETURN; 0010 END_IF; 0011 0012 END_FOR; 0013</pre>			
Symbol	Address	Type	Comment
#iCount		Int	
#IN_aRecipes[*].iNumber		Int	
#IN_iProductNumber		Int	
#OUT_iRecipeIndex		Int	
#xFound		Bool	

Program blocks

DB_StackLog [DB4]

DB_StackLog Properties

General

Name	DB_StackLog	Number	4	Type	DB	Language	DB
Numbering	Automatic						

Information

Title		Author		Comment		Family	
Version	0.1	User-defined ID					

Name	Data type	Start value	Retain	Accessible from HMI/OPC UA/Web API	Writ-able from HMI/OPC UA/ Web API	Visible in HMI engi-neering	Setpoint	Supervi-sion	Comment
▼ Static									
▼ aStack	Array[0..4] of "UDT_Product-Properties"		False	True	True	True	False		
▼ aStack[0]	"UDT_Product-Properties"		False	True	True	True	False		
iNumber	Int	0	False	True	True	True	False		
sColor	String	"	False	True	True	True	False		
rWeight	Real	0.0	False	True	True	True	False		
▼ aStack[1]	"UDT_Product-Properties"		False	True	True	True	False		
iNumber	Int	0	False	True	True	True	False		
sColor	String	"	False	True	True	True	False		
rWeight	Real	0.0	False	True	True	True	False		
▼ aStack[2]	"UDT_Product-Properties"		False	True	True	True	False		
iNumber	Int	0	False	True	True	True	False		

Name	Data type	Start value	Retain	Accessible from HMI/OPC UA/Web API	Writ-able from HMI/OPC UA/ Web API	Visible in HMI engi-neering	Setpoint	Supervi-sion	Comment
sColor	String	"	False	True	True	True	False		
rWeight	Real	0.0	False	True	True	True	False		
▼ aStack[3]	"UDT_Product-Properties"		False	True	True	True	False		
iNumber	Int	0	False	True	True	True	False		
sColor	String	"	False	True	True	True	False		
rWeight	Real	0.0	False	True	True	True	False		
▼ aStack[4]	"UDT_Product-Properties"		False	True	True	True	False		
iNumber	Int	0	False	True	True	True	False		
sColor	String	"	False	True	True	True	False		
rWeight	Real	0.0	False	True	True	True	False		
usiNumberOfElements	USInt	0	False	True	True	True	True		
rStackWeight	Real	0.0	False	True	True	True	False		
udiStackNumber	UDInt	0	False	True	True	True	False		

Program blocks

DB_HMI_data [DB5]

DB_HMI_data Properties

General

Name	DB_HMI_data	Number	5	Type	DB	Language	DB
Numbering	Automatic						

Information

Title		Author		Comment		Family	
Version	0.1	User-defined ID					

Name	Data type	Start value	Retain	Accessible from HMI/OPC UA/Web API	Writ-able from HMI/OPC UA/ Web API	Visible in HMI engi-neering	Setpoint	Supervi-sion	Comment
▼ Static									
▼ PLCinput	Struct		False	True	True	True	False		
xStartBTN	Bool	false	False	True	True	True	False		
xStopBTN	Bool	false	False	True	True	True	False		
xResetBTN	Bool	false	False	True	True	True	False		
xHomingBTN	Bool	false	False	True	True	True	False		
usiMachineMode	USInt	0	False	True	True	True	False		
xStepMode	Bool	false	False	True	True	True	False		
xDoStepOnce	Bool	false	False	True	True	True	False		
xDoStepContinous	Bool	false	False	True	True	True	False		
▼ PLCoutput	Struct		False	True	True	True	False		
usiMachineState	USInt	0	False	True	True	True	False		
xHomingPos	Bool	false	False	True	True	True	False		
▼ strOrder	Struct		False	True	True	True	False		
iOrderNumber	Int	0	False	True	True	True	False		

Program blocks / Points

DB_Points_Instance [DB6]

DB_Points_Instance Properties

General

Name	DB_Points_Instance	Number	6	Type	DB	Language	DB
Numbering	Automatic						

Information

Title		Author		Comment		Family	
Version	0.1	User-defined ID					

Name	Data type	Start value	Retain	Accessible from HMI/OPC UA/Web API	Writ-able from HMI/OPC UA/ Web API	Visible in HMI engi-neering	Setpoint	Supervi-sion	Comment
▼ Input									
IN_index	Int	0	False	True	True	True	False		
IN_Save	Bool	false	False	True	True	True	False		
▼ Output									
▼ OUT_CurrentPoint	"UDT_Point"		False	True	True	True	False		
rX	Real	0.0	False	True	True	True	False		
rZ	Real	0.0	False	True	True	True	False		
▼ InOut									
IN_PointWrite	"UDT_Point"		False	False	False	False	False		
IN_Points	Array[0..9] of "UDT_Point"		False	False	False	False	False		
▼ Static									
OldIndex	Int	-1	False	True	True	True	False		

Program blocks / Points

FB_Points [FB3]

FB_Points Properties

General

Name	FB_Points	Number	3	Type	FB	Language	LAD
Numbering	Automatic						

Information

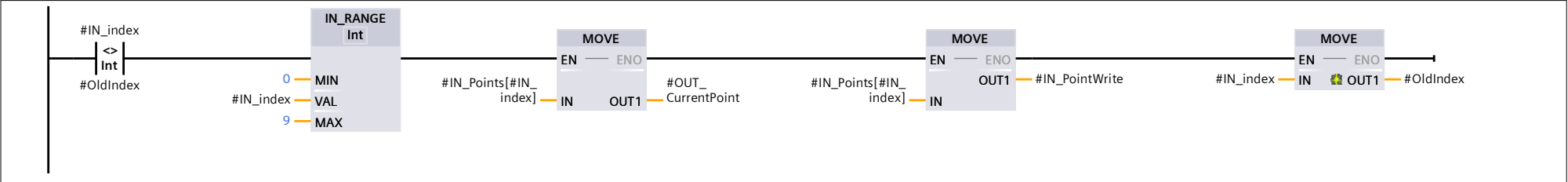
Title		Author		Comment		Family	
Version	0.1	User-defined ID					

Name	Data type	Default value	Retain	Accessible from HMI/OPC UA/Web API	Writ-able from HMI/OPC UA/ Web API	Visible in HMI engi-neering	Setpoint	Supervi-sion	Comment
▼ Input									
IN_index	Int	0	Non-retain	True	True	True	False		
IN_Save	Bool	false	Non-retain	True	True	True	False		
▼ Output									
▼ OUT_CurrentPoint	"UDT_Point"		Non-retain	True	True	True	False		
rX	Real	0.0	Non-retain	True	True	True	False		
rZ	Real	0.0	Non-retain	True	True	True	False		
▼ InOut									
▼ IN_PointWrite	"UDT_Point"			False	False	False	False		
rX	Real			False	False	False	False		
rZ	Real			False	False	False	False		
▼ IN_Points	Array[0..9] of "UDT_Point"			False	False	False	False		
▼ IN_Points[0]	"UDT_Point"			False	False	False	False		
rX	Real			False	False	False	False		

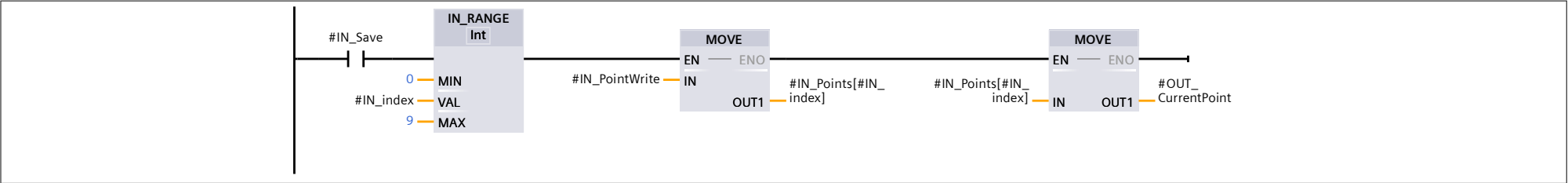
Totally Integrated Automation Portal										
Name	Data type	Default value	Retain	Accessible from HMI/OPC UA/Web API	Writ-able from HMI/OPC UA/ Web API	Visible in HMI engi-neering	Setpoint	Supervi-sion	Comment	
rZ	Real			False	False	False	False			
▼ IN_Points[1]	"UDT_Point"			False	False	False	False			
rX	Real			False	False	False	False			
rZ	Real			False	False	False	False			
▼ IN_Points[2]	"UDT_Point"			False	False	False	False			
rX	Real			False	False	False	False			
rZ	Real			False	False	False	False			
▼ IN_Points[3]	"UDT_Point"			False	False	False	False			
rX	Real			False	False	False	False			
rZ	Real			False	False	False	False			
▼ IN_Points[4]	"UDT_Point"			False	False	False	False			
rX	Real			False	False	False	False			
rZ	Real			False	False	False	False			
▼ IN_Points[5]	"UDT_Point"			False	False	False	False			
rX	Real			False	False	False	False			
rZ	Real			False	False	False	False			
▼ IN_Points[6]	"UDT_Point"			False	False	False	False			
rX	Real			False	False	False	False			
rZ	Real			False	False	False	False			
▼ IN_Points[7]	"UDT_Point"			False	False	False	False			
rX	Real			False	False	False	False			
rZ	Real			False	False	False	False			
▼ IN_Points[8]	"UDT_Point"			False	False	False	False			
rX	Real			False	False	False	False			
rZ	Real			False	False	False	False			
▼ IN_Points[9]	"UDT_Point"			False	False	False	False			

Name	Data type	Default value	Retain	Accessible from HMI/OPC UA/Web API	Writ-able from HMI/OPC UA/ Web API	Visible in HMI engi-neering	Setpoint	Supervi-sion	Comment
rX	Real			False	False	False	False		
rZ	Real			False	False	False	False		
▼ Static									
OldIndex	Int	-1	Non-retain	True	True	True	False		
Temp									
Constant									

Network 1:



Network 2:



Program blocks / Order

DB_OrderBlock_Instance [DB2]

DB_OrderBlock_Instance Properties

General

Name	DB_OrderBlock_Instance	Number	2	Type	DB	Language	DB
Numbering	Automatic						

Information

Title		Author		Comment		Family	
Version	0.1	User-defined ID					

Name	Data type	Start value	Retain	Accessible from HMI/OPC UA/Web API	Writ-able from HMI/OPC UA/ Web API	Visible in HMI engi-neering	Setpoint	Supervi-sion	Comment
▼ Input									
IN_iOrderNumber	Int	0	False	True	True	True	False		
IN_xNewOrder	Bool	false	False	True	True	True	False		
IN_xResetOrder	Bool	false	False	True	True	True	False		
IN_xNextProduct	Bool	false	False	True	True	True	False		
▼ Output									
OUT_iCurrentNumberInOrder	Int	0	False	True	True	True	False		
OUT_siProgress	SInt	0	False	True	True	True	False		
OUT_xEndOfOrder	Bool	false	False	True	True	True	False		
InOut									
▼ Static									
Trig1	Bool	false	False	True	True	True	False		
Static_1	Bool	false	False	True	True	True	False		
iRecievedOrder	Int	0	False	True	True	True	False		

Program blocks / Order

FB_Order [FB1]

FB_Order Properties

General

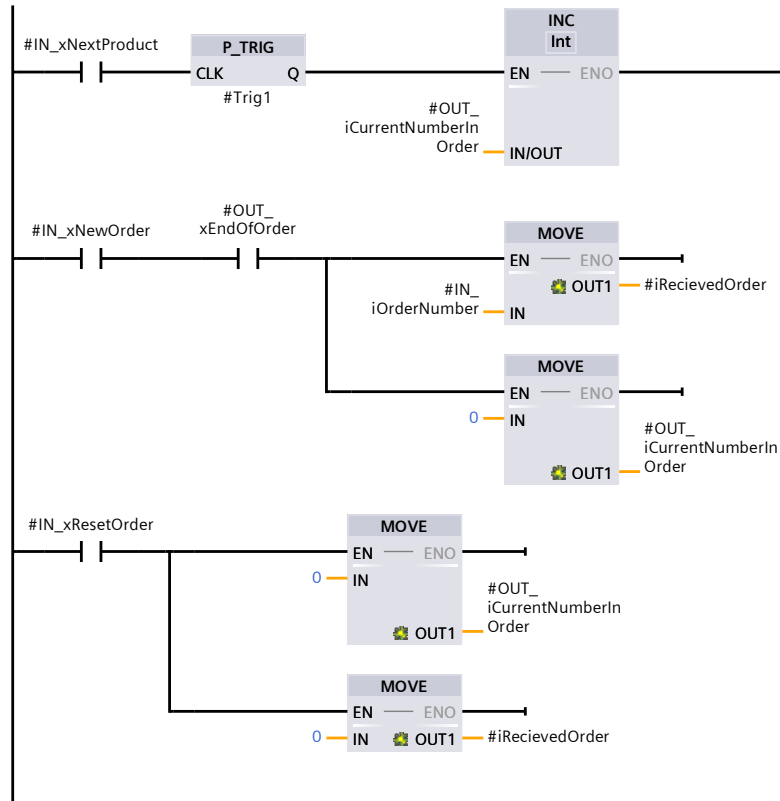
Name	FB_Order	Number	1	Type	FB	Language	LAD
Numbering	Automatic						

Information

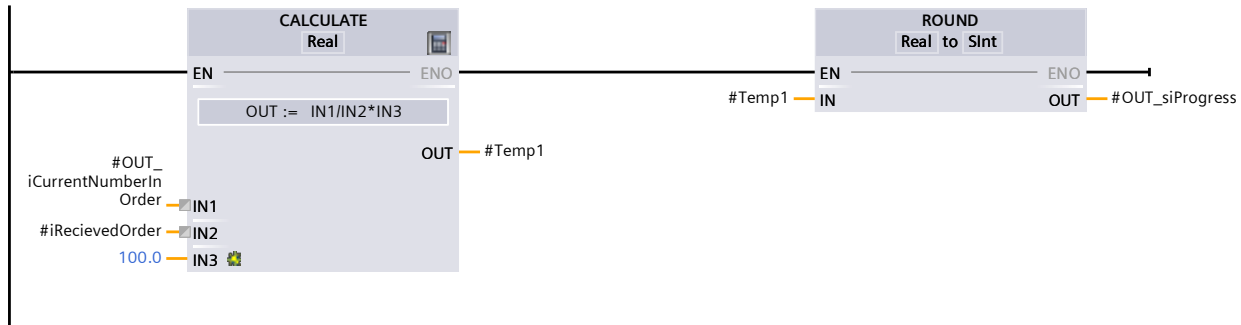
Title		Author		Comment		Family	
Version	0.1	User-defined ID					

Name	Data type	Default value	Retain	Accessible from HMI/OPC UA/Web API	Writ-able from HMI/ OPC UA/ Web API	Visible in HMI engi- neering	Setpoint	Supervi- sion	Comment
▼ Input									
IN_iOrderNumber	Int	0	Non-retain	True	True	True	False		
IN_xNewOrder	Bool	false	Non-retain	True	True	True	False		
IN_xResetOrder	Bool	false	Non-retain	True	True	True	False		
IN_xNextProduct	Bool	false	Non-retain	True	True	True	False		
▼ Output									
OUT_iCurrentNumberInOrder	Int	0	Non-retain	True	True	True	False		
OUT_siProgress	SInt	0	Non-retain	True	True	True	False		
OUT_xEndOfOrder	Bool	false	Non-retain	True	True	True	False		
InOut									
▼ Static									
Trig1	Bool	false	Non-retain	True	True	True	False		
Static_1	Bool	false	Non-retain	True	True	True	False		
iRecievedOrder	Int	0	Non-retain	True	True	True	False		
▼ Temp									

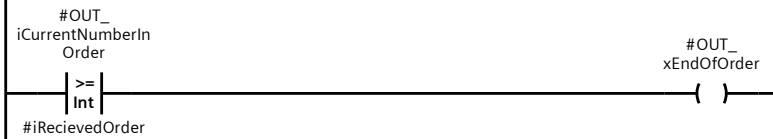
[illegible]



Network 2:



Network 3:



Program blocks / Product data

FB_ProductData [FB2]

FB_ProductData Properties

General

Name	FB_ProductData	Number	2	Type	FB	Language	LAD
Numbering	Automatic						

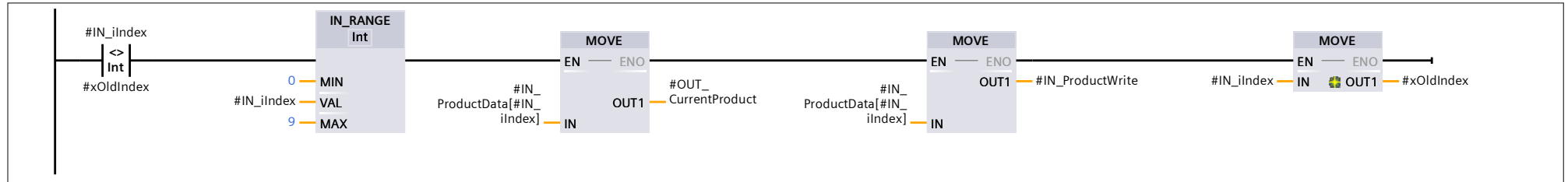
Information

Title		Author		Comment		Family	
Version	0.1	User-defined ID					

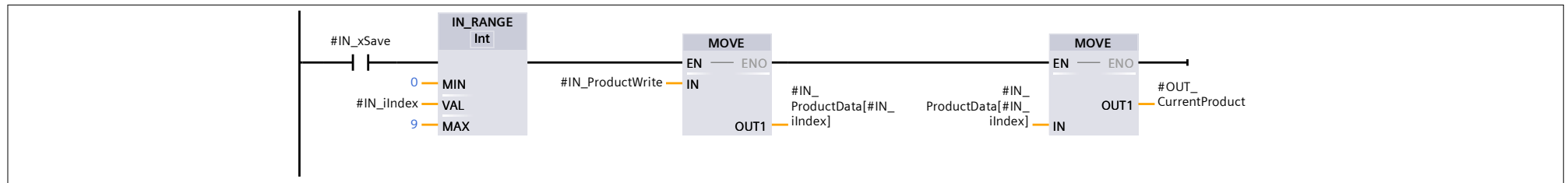
Name	Data type	Default value	Retain	Accessible from HMI/OPC UA/Web API	Writ-able from HMI/OPC UA/ Web API	Visible in HMI engi-neering	Setpoint	Supervi-sion	Comment
▼ Input									
IN_iIndex	Int	0	Non-retain	True	True	True	False		
IN_xSave	Bool	false	Non-retain	True	True	True	False		
▼ Output									
▼ OUT_CurrentProduct	"UDT_Product-Properties"		Non-retain	True	True	True	False		
iNumber	Int	0	Non-retain	True	True	True	False		
sColor	String	"	Non-retain	True	True	True	False		
rWeight	Real	0.0	Non-retain	True	True	True	False		
▼ InOut									
▼ IN_ProductWrite	"UDT_Product-Properties"			False	False	False	False		
iNumber	Int			False	False	False	False		
sColor	String			False	False	False	False		
rWeight	Real			False	False	False	False		

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Name	Data type	Default value	Retain	Accessible from HMI/OPC UA/Web API	Writ-able from HMI/ OPC UA/ Web API	Visible in HMI engi-neering	Setpoint	Supervi-sion	Comment
▼ IN_ProductData	Array[0..9] of "UDT_Product-Properties"			False	False	False	False		
▼ IN_ProductData[0]	"UDT_Product-Properties"			False	False	False	False		
iNumber	Int			False	False	False	False		
sColor	String			False	False	False	False		
rWeight	Real			False	False	False	False		
▼ IN_ProductData[1]	"UDT_Product-Properties"			False	False	False	False		
iNumber	Int			False	False	False	False		
sColor	String			False	False	False	False		
rWeight	Real			False	False	False	False		
▼ IN_ProductData[2]	"UDT_Product-Properties"			False	False	False	False		
iNumber	Int			False	False	False	False		
sColor	String			False	False	False	False		
rWeight	Real			False	False	False	False		
▼ IN_ProductData[3]	"UDT_Product-Properties"			False	False	False	False		
iNumber	Int			False	False	False	False		
sColor	String			False	False	False	False		
rWeight	Real			False	False	False	False		
▼ IN_ProductData[4]	"UDT_Product-Properties"			False	False	False	False		
iNumber	Int			False	False	False	False		
sColor	String			False	False	False	False		
rWeight	Real			False	False	False	False		
▼ IN_ProductData[5]	"UDT_Product-Properties"			False	False	False	False		

Network 1:



Network 2:



Program blocks / Product data

DB_ProductEditData_Instance [DB7]

DB_ProductEditData_Instance Properties

General

Name	DB_ProductEditData_Instance	Number	7	Type	DB	Language	DB
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Numbering	Automatic
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Information

Title		Author		Comment		Family	
Version	0.1	User-defined ID					

Name	Data type	Start value	Retain	Accessible from HMI/OPC UA/Web API	Writ-able from HMI/OPC UA/ Web API	Visible in HMI engi-neering	Setpoint	Supervi-sion	Comment
▼ Input									
IN_iIndex	Int	0	False	True	True	True	False		
IN_xSave	Bool	false	False	True	True	True	False		
▼ Output									
▼ OUT_CurrentProduct	"UDT_Product-Properties"		False	True	True	True	False		
iNumber	Int	0	False	True	True	True	False		
sColor	String	"	False	True	True	True	False		
rWeight	Real	0.0	False	True	True	True	False		
▼ InOut									
IN_ProductWrite	"UDT_Product-Properties"		False	False	False	False	False		
IN_ProductData	Array[0..9] of "UDT_Product-Properties"		False	False	False	False	False		

Program blocks / HMI messages

FB_Errors [FB4]

FB_Errors Properties

General

Name	FB_Errors	Number	4	Type	FB	Language	LAD
Numbering	Automatic						

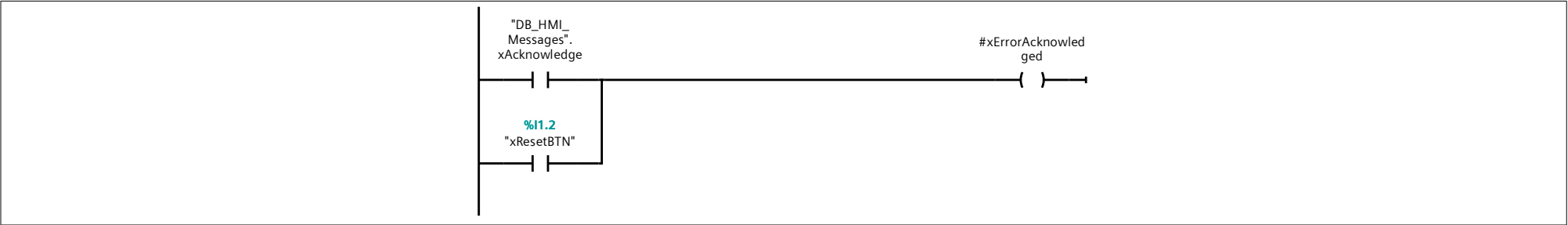
Information

Title		Author		Comment		Family	
Version	0.1	User-defined ID					

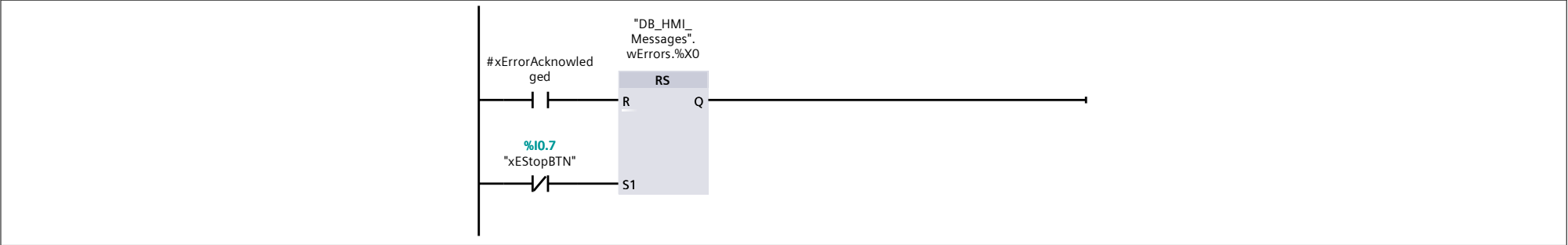
Name	Data type	Default value	Retain	Accessible from HMI/OPC UA/Web API	Writ-able from HMI/OPC UA/ Web API	Visible in HMI engi-neering	Setpoint	Supervi-sion	Comment
Input									
Output									
InOut									
▼ Static									
xErrorAcknowledged	Bool	false	Non-retain	True	True	True	False		
▼ Timer1	TON_TIME		Non-retain	True	True	True	True		
PT	Time	T#0ms	Non-retain	True	True	True	False		
ET	Time	T#0ms	Non-retain	True	False	True	False		
IN	Bool	false	Non-retain	True	True	True	False		
Q	Bool	false	Non-retain	True	False	True	False		
▼ Timer2	TON_TIME		Non-retain	True	True	True	True		
PT	Time	T#0ms	Non-retain	True	True	True	False		
ET	Time	T#0ms	Non-retain	True	False	True	False		
IN	Bool	false	Non-retain	True	True	True	False		
Q	Bool	false	Non-retain	True	False	True	False		

Name	Data type	Default value	Retain	Accessible from HMI/OPC UA/Web API	Writ-able from HMI/OPC UA/ Web API	Visible in HMI engi-neering	Setpoint	Supervi-sion	Comment
Temp									
Constant									

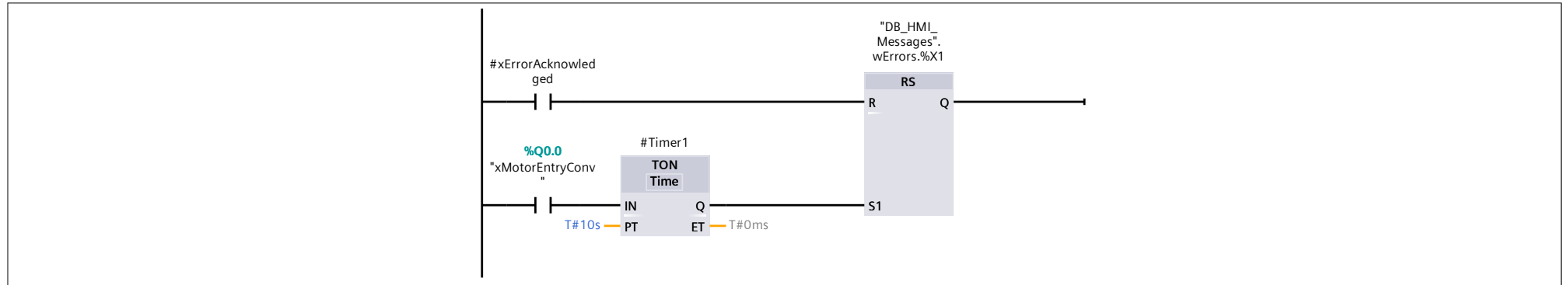
Network 1: Acknowledgment signal



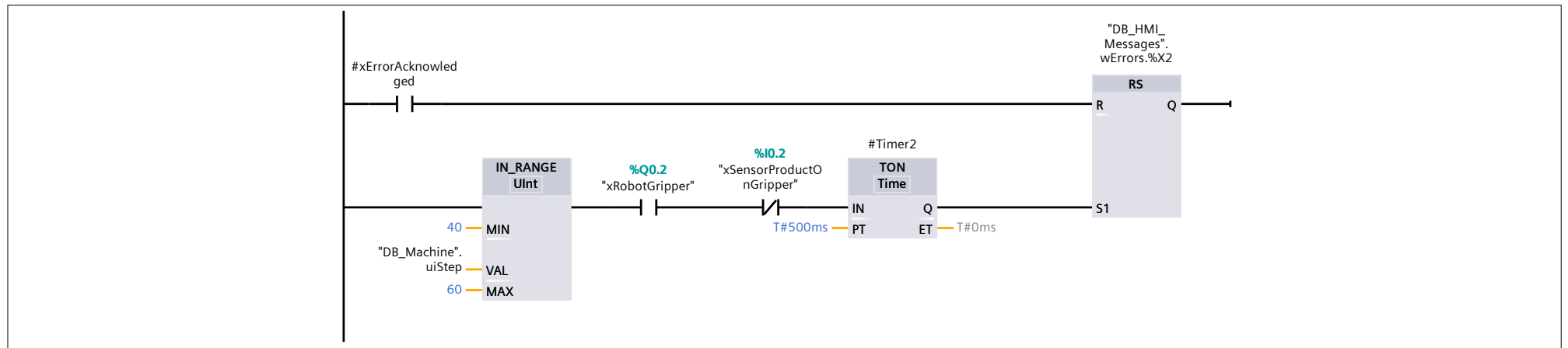
Network 2: Error 0: Emergency Stop button activated



Network 3: Error 1: The product wait time has been exceeded



Network 4: Error 2: Product lost in transport



Network 5: Setting the system to an error state

"DB_HMI_Messages".
wErrors
<>
Word
0

"DB_Machine".
xErrorState
()

Program blocks / HMI messages

FB_Warnings [FB5]

FB_Warnings Properties

General

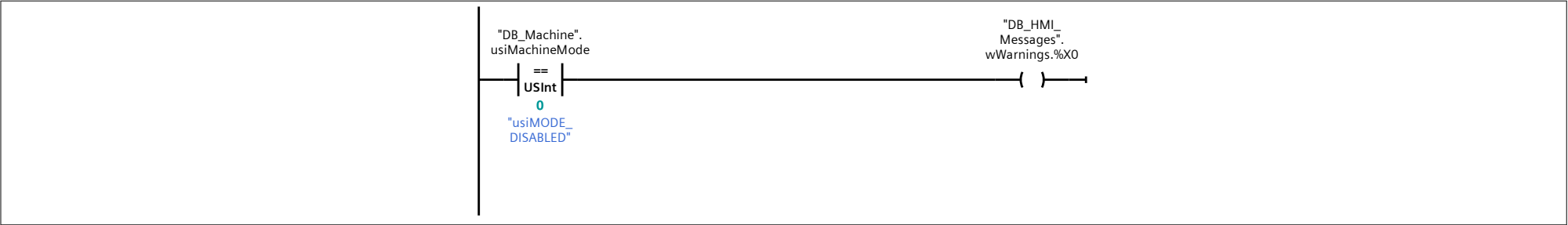
Name	FB_Warnings	Number	5	Type	FB	Language	LAD
Numbering	Automatic						

Information

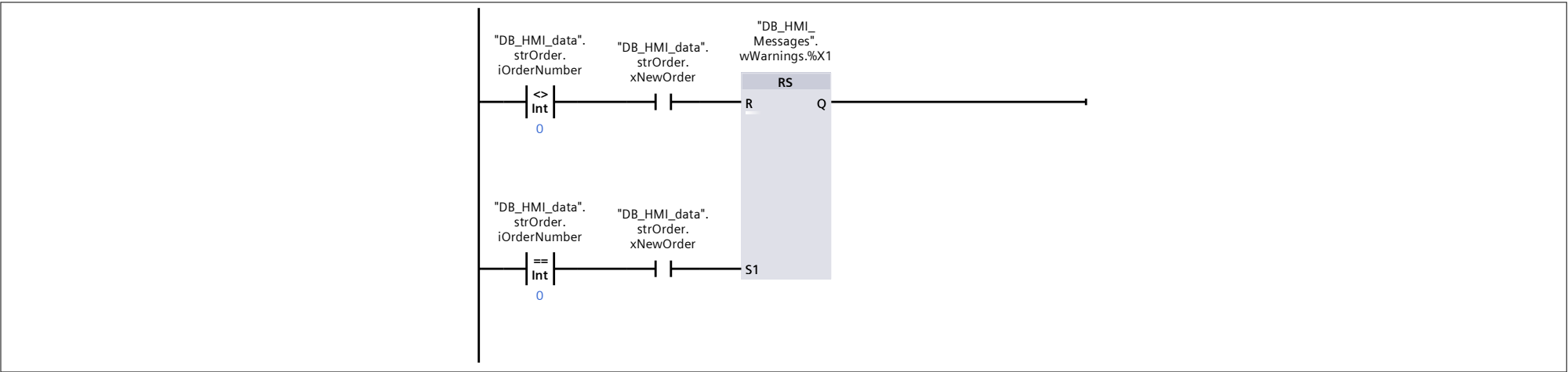
Title		Author		Comment		Family	
Version	0.1	User-defined ID					

Name	Data type	Default value	Retain	Accessible from HMI/OPC UA/Web API	Writ-able from HMI/OPC UA/ Web API	Visible in HMI engi-neering	Setpoint	Supervi-sion	Comment
Input									
Output									
InOut									
Static									
Temp									
Constant									

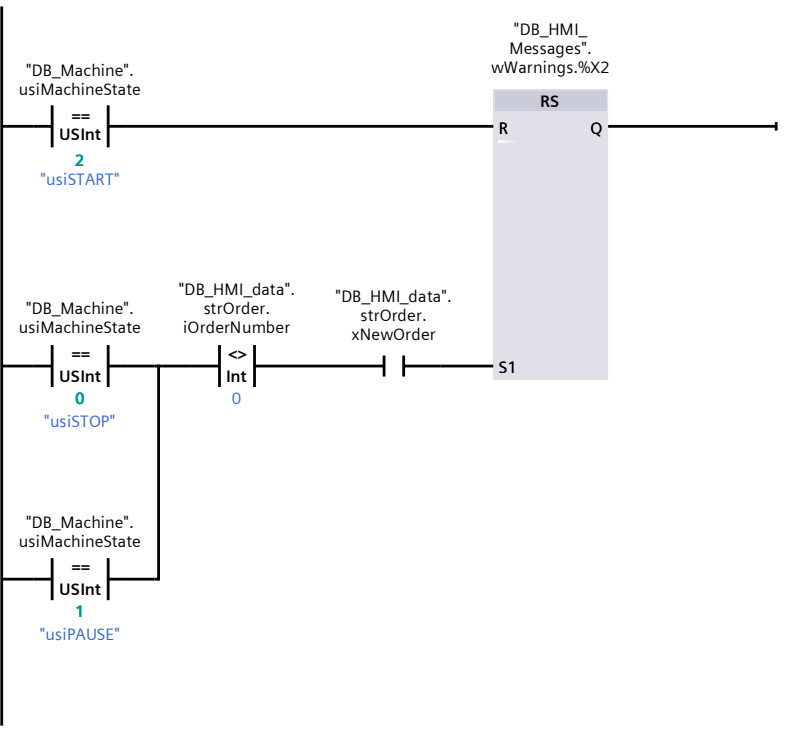
Network 1: Warning 0: Machine disabled



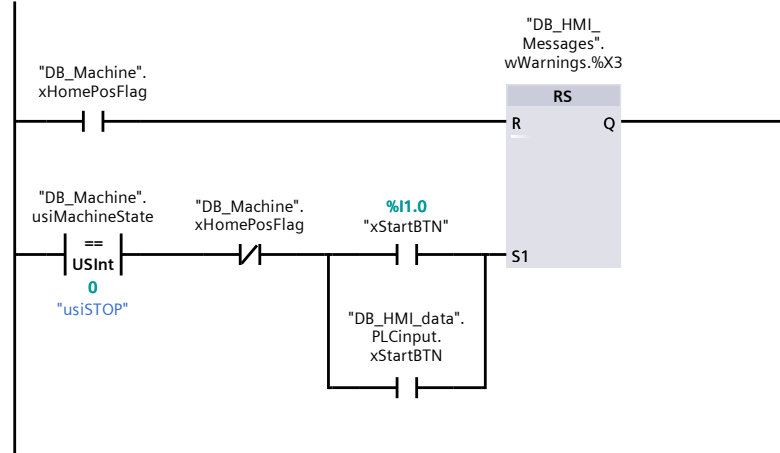
Network 2: Warning 1: The order must contain at least 1 product



Network 3: Warning 2: Start the machine before entering a new order



Network 4: Warning 3: Homing process not finished



Totally Integrated Automation Portal

Program blocks / HMI messages

FB_Information

FB_Information Properties

General

Name

FB_Information

Number

6

Type

FB

Language

LAD

Numbering

Automatic

Information

Title

Author

Comment

Family

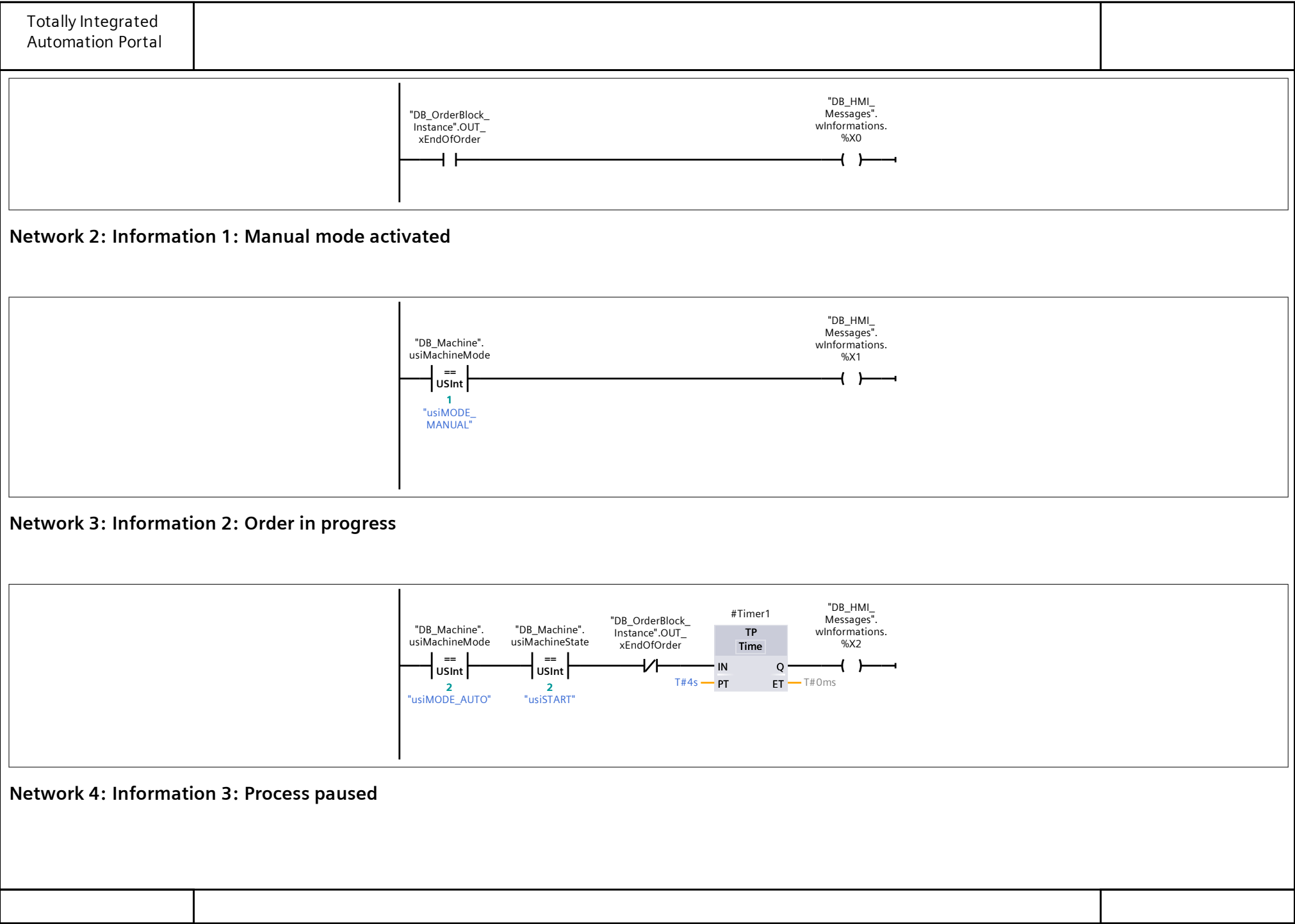
Version

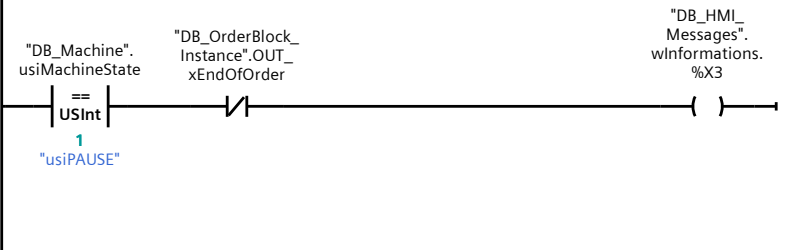
0.1

User-defined ID

Name	Data type	Default value	Retain	Accessible from HMI/OPC UA/Web API	Writ-able from HMI/OPC UA/ Web API	Visible in HMI engi-neering	Setpoint	Supervi-sion	Comment
Input									
Output									
InOut									
▼ Static									
▼ Timer1	TP_TIME		Non-retain	False	False	False	False		
PT	Time	T#0ms	Non-retain	False	False	False	False		
ET	Time	T#0ms	Non-retain	False	False	False	False		
IN	Bool	false	Non-retain	False	False	False	False		
Q	Bool	false	Non-retain	False	False	False	False		
Temp									
Constant									

Network 1: Information 0: Order complete - Enter new order





Program blocks / HMI messages

DB_HMI_Messages [DB8]

DB_HMI_Messages Properties

General

Name	DB_HMI_Messages	Number	8	Type	DB	Language	DB
Numbering	Automatic						

Information

Title		Author		Comment		Family	
Version	0.1	User-defined ID					

Name	Data type	Start value	Retain	Accessible from HMI/OPC UA/Web API	Writ-able from HMI/OPC UA/ Web API	Visible in HMI engi-neering	Setpoint	Supervi-sion	Comment
▼ Static									
wErrors	Word	16#0	False	True	True	True	False		
wWarnings	Word	16#0	False	True	True	True	False		
wInformations	Word	16#0	False	True	True	True	False		
xAcknowledge	Bool	false	False	True	True	True	False		
wErrorAcknowledge	Word	16#0	False	True	True	True	False		

Program blocks / HMI messages

DB_Errors_Instance [DB9]

DB_Errors_Instance Properties

General

Name	DB_Errors_Instance	Number	9	Type	DB	Language	DB
Numbering	Automatic						

Information

Title		Author		Comment		Family	
Version	0.1	User-defined ID					

Name	Data type	Start value	Retain	Accessible from HMI/OPC UA/Web API	Writ-able from HMI/OPC UA/ Web API	Visible in HMI engi-neering	Setpoint	Supervi-sion	Comment
Input									
Output									
InOut									
▼ Static									
xErrorAcknowledged	Bool	false	False	True	True	True	False		
▼ Timer1	TON_TIME		False	True	True	True	True		
PT	Time	T#0ms	False	True	True	True	False		
ET	Time	T#0ms	False	True	False	True	False		
IN	Bool	false	False	True	True	True	False		
Q	Bool	false	False	True	False	True	False		
▼ Timer2	TON_TIME		False	True	True	True	True		
PT	Time	T#0ms	False	True	True	True	False		
ET	Time	T#0ms	False	True	False	True	False		
IN	Bool	false	False	True	True	True	False		
Q	Bool	false	False	True	False	True	False		

Program blocks / HMI messages

DB_Information Instance [DB10]

DB_Information Instance Properties

General

Name	DB_Information Instance	Number	10	Type	DB	Language	DB
Numbering	Automatic						

Information

Title		Author		Comment		Family	
Version	0.1	User-defined ID					

Name	Data type	Start value	Retain	Accessible from HMI/OPC UA/Web API	Writ-able from HMI/OPC UA/ Web API	Visible in HMI engi-neering	Setpoint	Supervi-sion	Comment
Input									
Output									
InOut									
▼ Static									
▼ Timer1	TP_TIME		False	False	False	False	False		
PT	Time	T#0ms	False	False	False	False	False		
ET	Time	T#0ms	False	False	False	False	False		
IN	Bool	false	False	False	False	False	False		
Q	Bool	false	False	False	False	False	False		

Totally Integrated Automation Portal

Program blocks / HMI messages

DB_Warnings_Instance [DB11]

DB_Warnings_Instance Properties

General

Name	DB_Warnings_Instance	Number	11	Type	DB	Language	DB
Numbering	Automatic						























Information














Title		Author		Comment		Family	
Version	0.1	User-defined ID					

Name	Data type	Start value	Retain	Accessible from HMI/OPC UA/Web API	Writ-able from HMI/OPC UA/ Web API	Visible in HMI engi-neering	Setpoint	Supervi-sion	Comment
Input									
Output									
InOut									
Static									

PLC tags















PLC tags

Icon	Name	Data type	Address	Visible in HMI engineering	Accessible from HMI/OPC UA/Web API	Comment
	AlwaysFALSE	Bool	%M1.3	True	True	
	AlwaysTRUE	Bool	%M1.2	True	True	
	Clock_0.5Hz	Bool	%M0.7	True	True	
	Clock_0.625Hz	Bool	%M0.6	True	True	
	Clock_1.25Hz	Bool	%M0.4	True	True	
	Clock_1Hz	Bool	%M0.5	True	True	
	Clock_2.5Hz	Bool	%M0.2	True	True	
	Clock_2Hz	Bool	%M0.3	True	True	
	Clock_5Hz	Bool	%M0.1	True	True	
	Clock_10Hz	Bool	%M0.0	True	True	
	Clock_Byte	Byte	%MB0	True	True	
	DiagStatusUpdate	Bool	%M1.1	True	True	
	diVisionSensor	DInt	%ID38	True	True	
	FirstScan	Bool	%M1.0	True	True	
	rMotorTargetSpeed	Real	%QD38	True	True	
	rX_AxisCurrentPos	Real	%ID30	True	True	
	rX_AxisTargetPos	Real	%QD30	True	True	
	rZ_AxisCurrentPos	Real	%ID34	True	True	
	rZ_AxisTargetPos	Real	%QD34	True	True	
	System_Byte	Byte	%MB1	True	True	
	xEStopBTN	Bool	%IO.7	True	True	
	xHomingBTN	Bool	%IO.3	True	True	

Totally Integrated Automation Portal						
Icon	Name	Data type	Address	Visible in HMI engineering	Accessible from HMI/OPC UA/Web API	Comment
	xLightHomePos	Bool	%Q0.3	True	True	
	xMotorEntryConv	Bool	%Q0.0	True	True	
	xMotorExitConv	Bool	%Q0.1	True	True	
	xResetBTN	Bool	%I1.2	True	True	
	xResetBTN_Light	Bool	%Q0.6	True	True	
	xRobotGripper	Bool	%Q0.2	True	True	
	xSensorEntryProduct	Bool	%I0.0	True	True	
	xSensorExitProduct	Bool	%I0.1	True	True	
	xSensorProductOnGripper	Bool	%I0.2	True	True	
	xStartBTN	Bool	%I1.0	True	True	
	xStartBTN_Light	Bool	%Q0.5	True	True	
	xStopBTN	Bool	%I1.1	True	True	
	xStopBTN_Light	Bool	%Q0.7	True	True	

PLC tags

Standard-Variablentabelle [42]

PLC tags						
Icon	Name	Data type	Address	Visible in HMI engineering	Accessible from HMI/OPC UA/Web API	Comment
	AlwaysFALSE	Bool	%M1.3	True	True	
	AlwaysTRUE	Bool	%M1.2	True	True	
	Clock_0.5Hz	Bool	%M0.7	True	True	
	Clock_0.625Hz	Bool	%M0.6	True	True	
	Clock_1.25Hz	Bool	%M0.4	True	True	
	Clock_1Hz	Bool	%M0.5	True	True	
	Clock_2.5Hz	Bool	%M0.2	True	True	
	Clock_2Hz	Bool	%M0.3	True	True	
	Clock_5Hz	Bool	%M0.1	True	True	
	Clock_10Hz	Bool	%M0.0	True	True	
	Clock_Byte	Byte	%MB0	True	True	
	DiagStatusUpdate	Bool	%M1.1	True	True	
	FirstScan	Bool	%M1.0	True	True	
	System_Byte	Byte	%MB1	True	True	












Totally Integrated Automation Portal																											
<div>PLC tags</div> <div>CONSTANTS [6]</div> <table><tr><th colspan="7">PLC tags</th></tr><tr><th>Icon</th><th>Name</th><th>Data type</th><th>Address</th><th>Visible in HMI engineering</th><th>Accessible from HMI/OPC UA/Web API</th><th>Comment</th></tr><tr><td colspan="7"></td></tr></table>							PLC tags							Icon	Name	Data type	Address	Visible in HMI engineering	Accessible from HMI/OPC UA/Web API	Comment							
PLC tags																											
Icon	Name	Data type	Address	Visible in HMI engineering	Accessible from HMI/OPC UA/Web API	Comment																					

Totally Integrated Automation Portal

PLC tags

Inputs [11]

PLC tags











Icon	Name	Data type	Address	Visible in HMI engineering	Accessible from HMI/OPC UA/Web API	Comment
	diVisionSensor	DInt	%ID38	True	True	
	rX_AxisCurrentPos	Real	%ID30	True	True	
	rZ_AxisCurrentPos	Real	%ID34	True	True	
	xEStopBTN	Bool	%I0.7	True	True	
	xHomingBTN	Bool	%I0.3	True	True	
	xResetBTN	Bool	%I1.2	True	True	
	xSensorEntryProduct	Bool	%I0.0	True	True	
	xSensorExitProduct	Bool	%I0.1	True	True	
	xSensorProductOnGripper	Bool	%I0.2	True	True	
	xStartBTN	Bool	%I1.0	True	True	
	xStopBTN	Bool	%I1.1	True	True	

Totally Integrated Automation Portal

PLC tags

Outputs [10]

PLC tags

Icon	Name	Data type	Address	Visible in HMI engineering	Accessible from HMI/OPC UA/Web API	Comment
	rMotorTargetSpeed	Real	%QD38	True	True	
	rX_AxisTargetPos	Real	%QD30	True	True	
	rZ_AxisTargetPos	Real	%QD34	True	True	
	xLightHomePos	Bool	%Q0.3	True	True	
	xMotorEntryConv	Bool	%Q0.0	True	True	
	xMotorExitConv	Bool	%Q0.1	True	True	
	xResetBTN_Light	Bool	%Q0.6	True	True	
	xRobotGripper	Bool	%Q0.2	True	True	
	xStartBTN_Light	Bool	%Q0.5	True	True	
	xStopBTN_Light	Bool	%Q0.7	True	True	

Totally Integrated Automation Portal

PLC data types

UDT_ProductProperties

UDT_ProductProperties Properties

General

Name

UDT_ProductProperties

Number

1

Type

UDT

Language

Numbering

Information

Title

Author

Comment

Family

Version

User-defined ID

Name	Data type	Default value	Accessible from HMI/OPC UA/Web API	Writ-able from HMI/OPC UA/ Web API	Visible in HMI engi-neering	Setpoint	Comment
iNumber	Int	0	True	True	True	False	
sColor	String	"	True	True	True	False	
rWeight	Real	0.0	True	True	True	False	

PLC data types

UDT_StackData

UDT_StackData Properties

General

Name	UDT_StackData	Number	2	Type	UDT	Language	
Numbering							

Information

Title		Author		Comment		Family	
Version		User-defined ID					

Name	Data type	Default value	Accessible from HMI/OPC UA/Web API	Writ-able from HMI/OPC UA/ Web API	Visible in HMI engi-neering	Setpoint	Comment
▼ aStack	Array[0..4] of "UDT_ProductProperties"		True	True	True	False	
▼ aStack[0]	"UDT_ProductProperties"		True	True	True	False	
iNumber	Int	0	True	True	True	False	
sColor	String	"	True	True	True	False	
rWeight	Real	0.0	True	True	True	False	
▼ aStack[1]	"UDT_ProductProperties"		True	True	True	False	
iNumber	Int	0	True	True	True	False	
sColor	String	"	True	True	True	False	
rWeight	Real	0.0	True	True	True	False	
▼ aStack[2]	"UDT_ProductProperties"		True	True	True	False	
iNumber	Int	0	True	True	True	False	
sColor	String	"	True	True	True	False	
rWeight	Real	0.0	True	True	True	False	
▼ aStack[3]	"UDT_ProductProperties"		True	True	True	False	

Totally Integrated Automation Portal							
Name	Data type	Default value	Accessible from HMI/OPC UA/Web API	Writ-able from HMI/ OPC UA/ Web API	Visible in HMI engi-neering	Setpoint	Comment
iNumber	Int	0	True	True	True	False	
sColor	String	"	True	True	True	False	
rWeight	Real	0.0	True	True	True	False	
▼ aStack[4]	"UDT_ProductProperties"		True	True	True	False	
iNumber	Int	0	True	True	True	False	
sColor	String	"	True	True	True	False	
rWeight	Real	0.0	True	True	True	False	
usiNumberOfElements	USInt	0	True	True	True	True	
rStackWeight	Real	0.0	True	True	True	False	
udiStackNumber	UDInt	0	True	True	True	False	

Totally Integrated Automation Portal		
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PLC data types

UDT_Point

UDT_Point Properties

General

Name	UDT_Point	Number	3	Type	UDT	Language	
Numbering							

Information

Title		Author		Comment		Family	
Version		User-defined ID					

Name	Data type	Default value	Accessible from HMI/OPC UA/Web API	Writ-able from HMI/OPC UA/ Web API	Visible in HMI engi-neering	Setpoint	Comment
rX	Real	0.0	True	True	True	False	
rZ	Real	0.0	True	True	True	False	

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Totally Integrated Automation Portal		
<div>PLC data types</div> <div>System data types</div> <div>This folder is empty.</div>		