Totally	Integ	grated
Automa	ation	Porta

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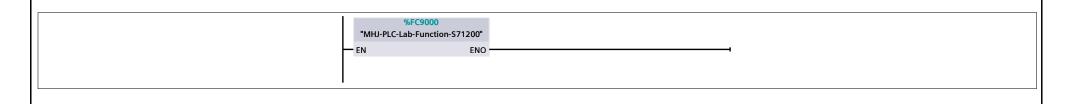
Program blocks

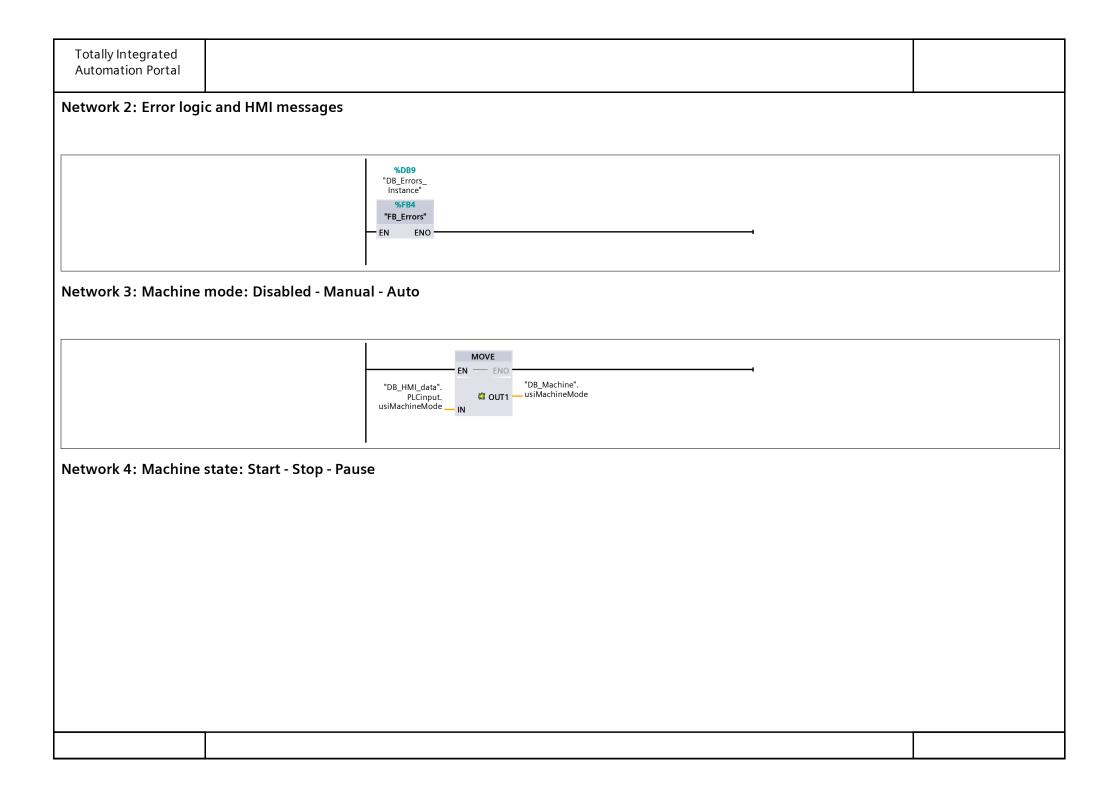
Main [OB1]

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

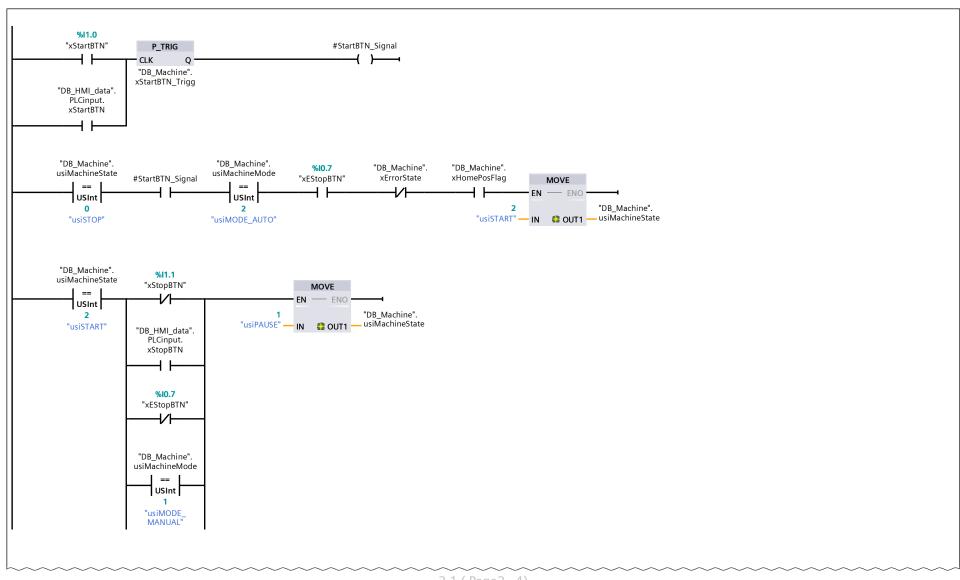
Name	Data type	Default value	Comment
▼ Input			
Initial_Call	Bool		Initial call of this OB
Remanence	Bool		=True, if remanent data are available
▼ Temp			
Temp1	Real		
Temp2	Real		
Temp3	Bool		
Block	Bool		
StartBTN_Signal	Bool		
TempUP	Real		
TempDown	Real		
Constant			

Network 1:





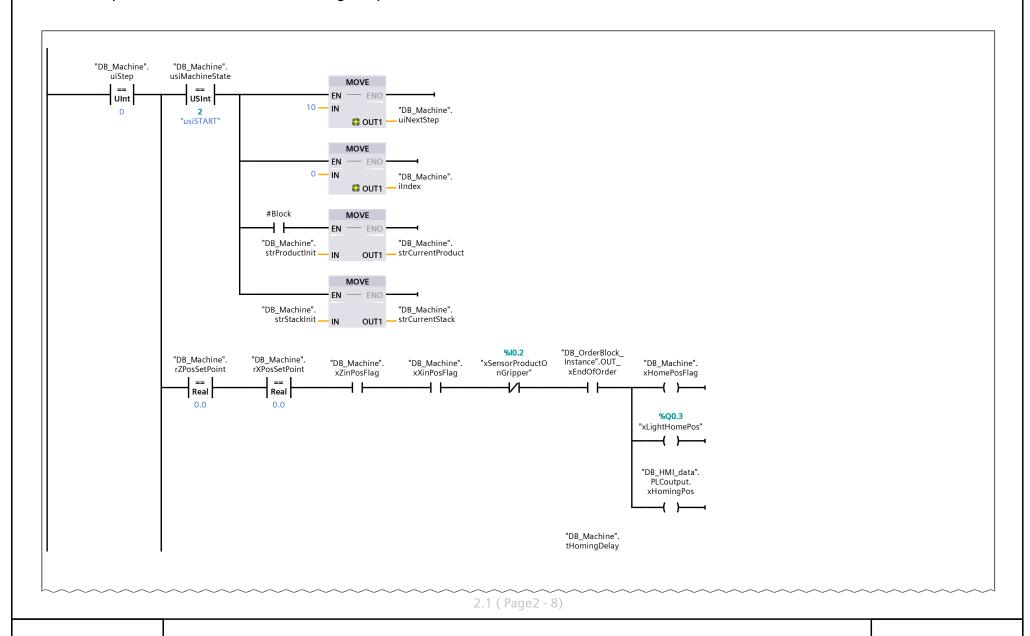
Network 4: Machine state: Start - Stop - Pause (1.1 / 3.1)



Fotally Integrated Automation Portal						
twork 4: Machine state: S	tart - Stop - Pause (3.1 / 3	3.1)			•	
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		2.1 (Page2 - 4)	~~~~~~	~~~~~	~~~~
	0 — IN	chine".				
		"DB_Machine".				
		"DB_Machine". xTransportStackFl ag R }				
	OVE	, ,				
"DB Machine".	"DB_HMI_data". PLCoutput. usiMachineState					
4	OUT1 — usiMachineState					
1						

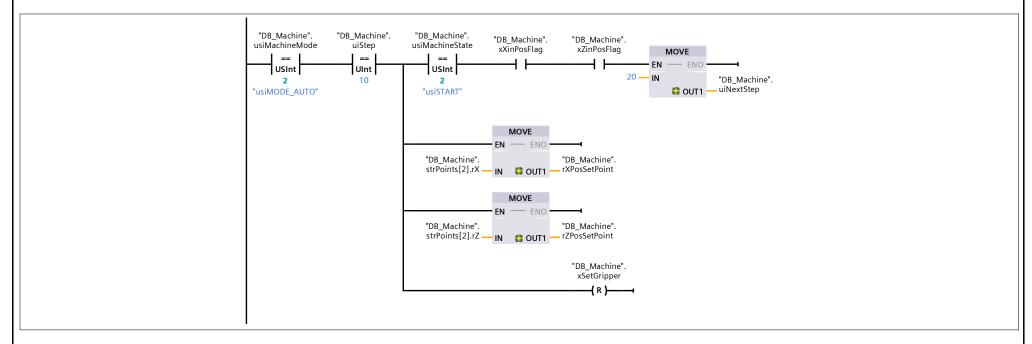
Totally Integrated Automation Portal										
Network 5: Step 00 -	Network 5: Step 00 - Robot initialization and homing axis positions									

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



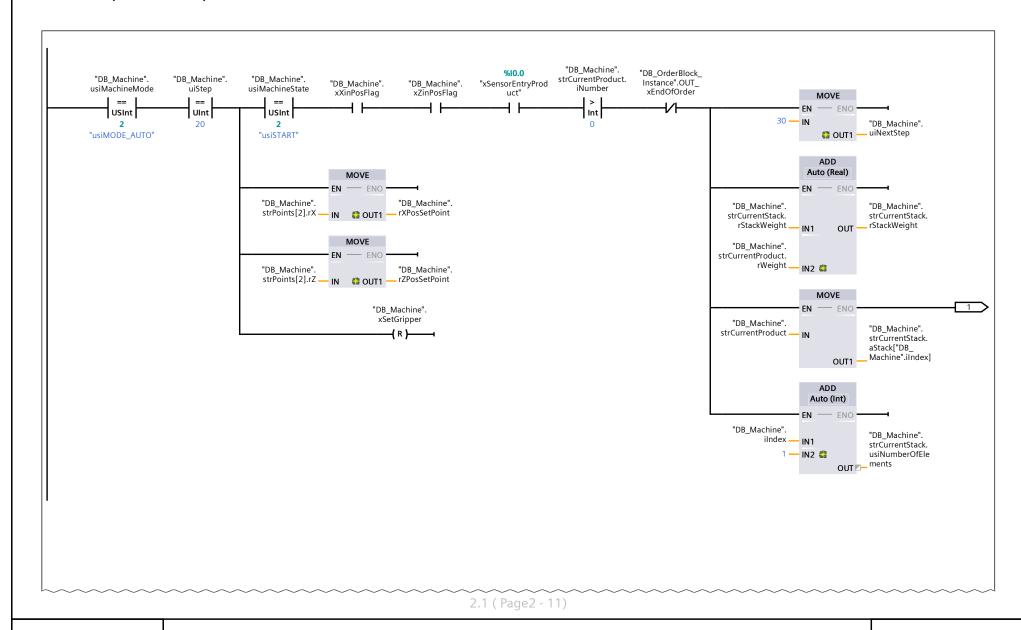
Totally Integrated **Automation Portal** Network 5: Step 00 - Robot initialization and homing axis positions (2.1 / 2.1) 1.1 (Page2 - 7) TON "DB_Machine". %10.3 "xHomingBTN" Time xZinPosFlag MOVE MOVE EN - ENO Q-EN - ENO ET — T#0ms T#100ms — PT "DB_Machine". "DB_Machine". "DB_Machine". "DB_Machine". strPoints[0].rZ — IN OUT1 — rZPosSetPoint strPoints[0].rX — IN OUT1 — rXPosSetPoint "DB_HMI_data". PLCinput. xHomingBTN "DB_Machine". xSetGripper –(R)——

Network 6: Step 10 - Move robot to entry conveyor



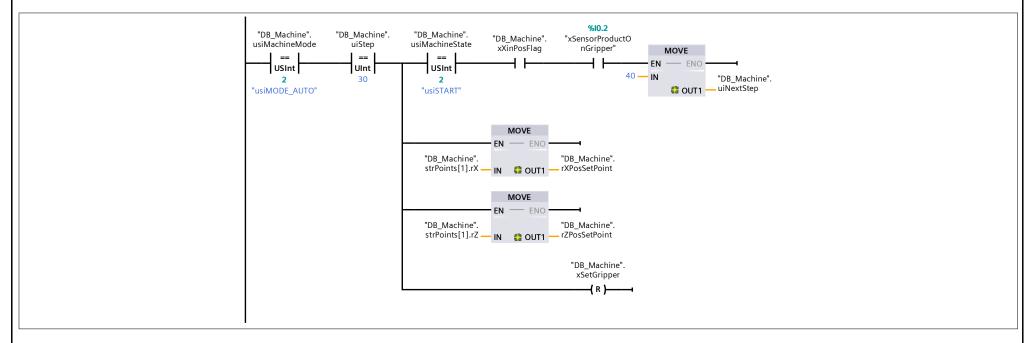
Network 7: Step 20 - Wait for product

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

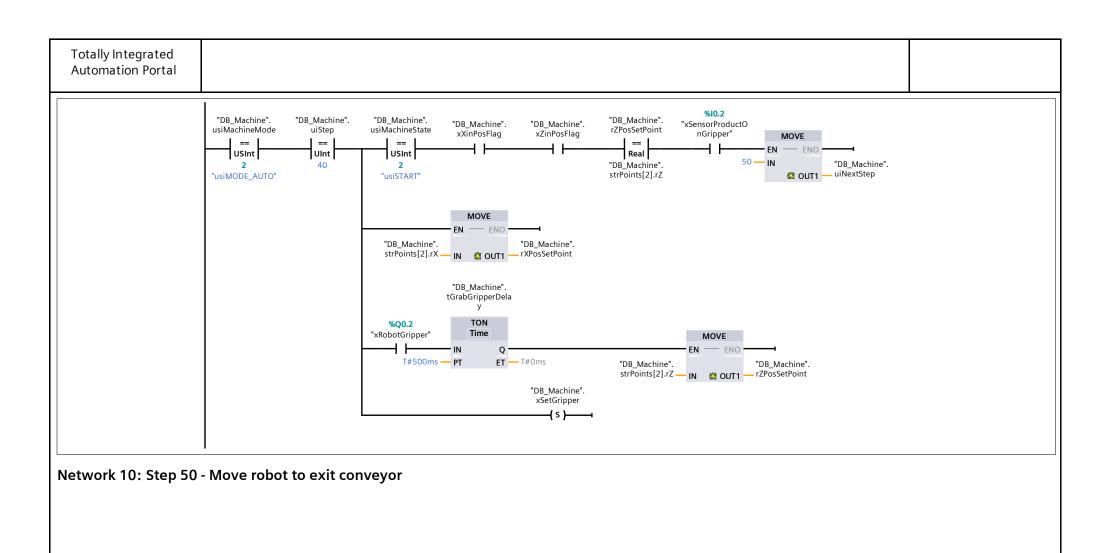


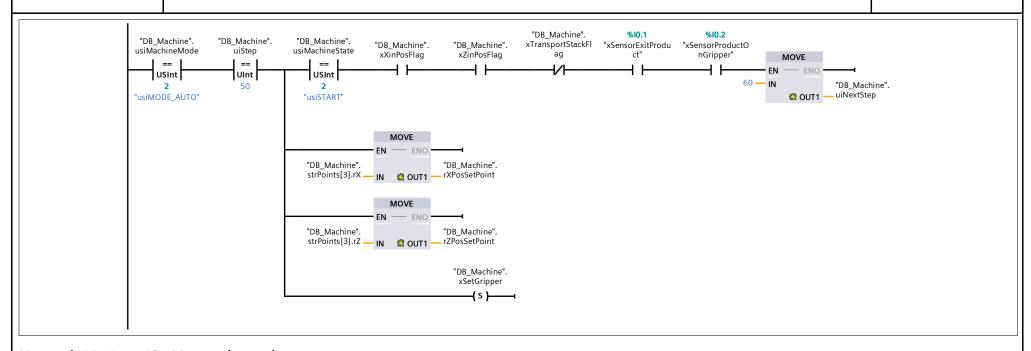
otally Integrated utomation Portal				
work 7: Step 20 - Wa	it for product (2.1 / 2.1)			
		1.1 (Page2 - 10)	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
	MOVE			
"DB Machine".	"DB Machine".			
"DB_Machine". strProductInit —	"DB_Machine". - IN OUT1 — strCurrentProduct			

Network 8: Step 30 - Move gripper to product

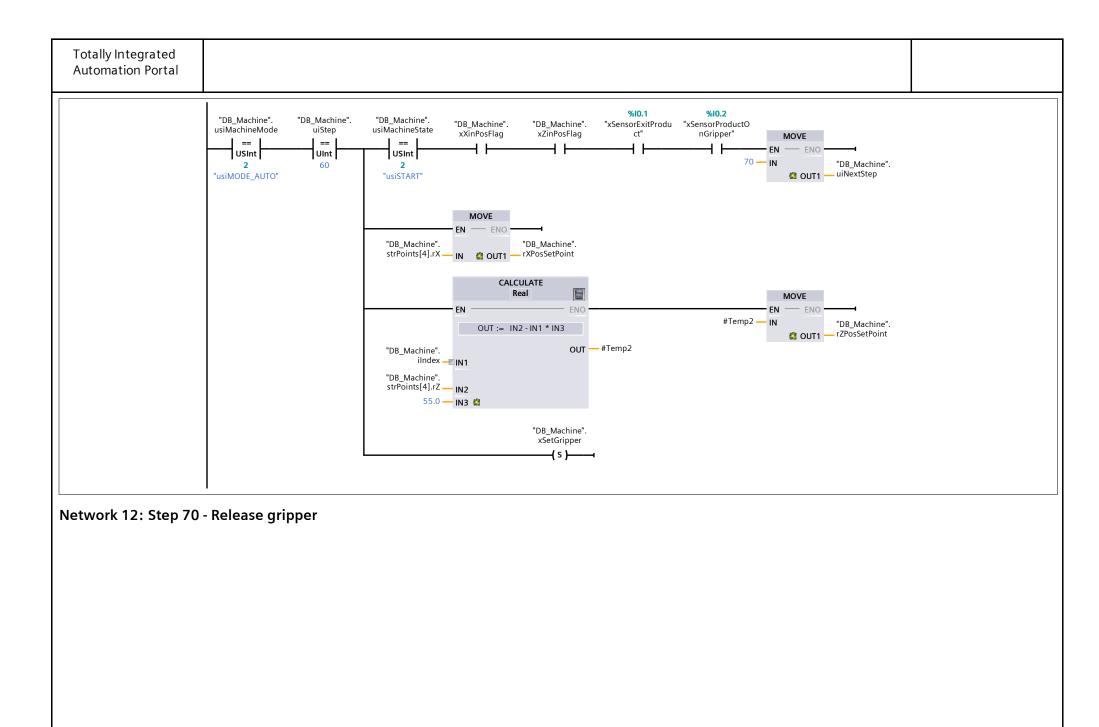


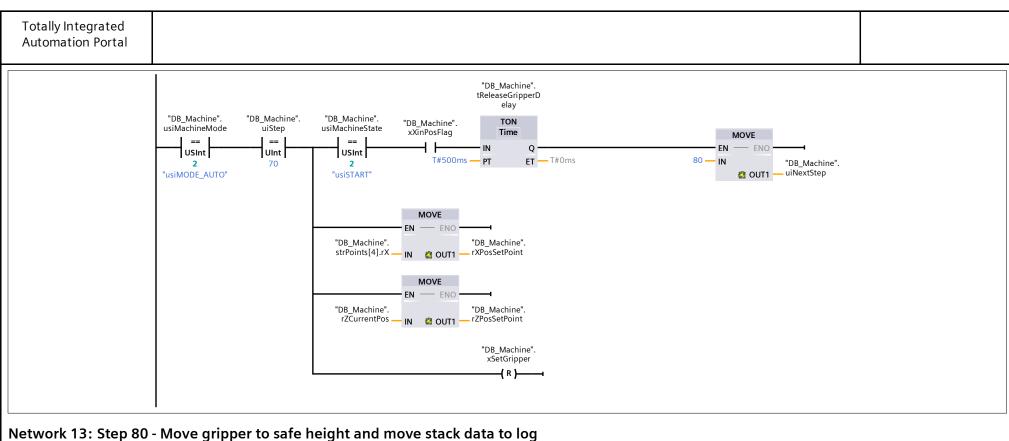
Network 9: Step 40 - Take the product and move gripper up



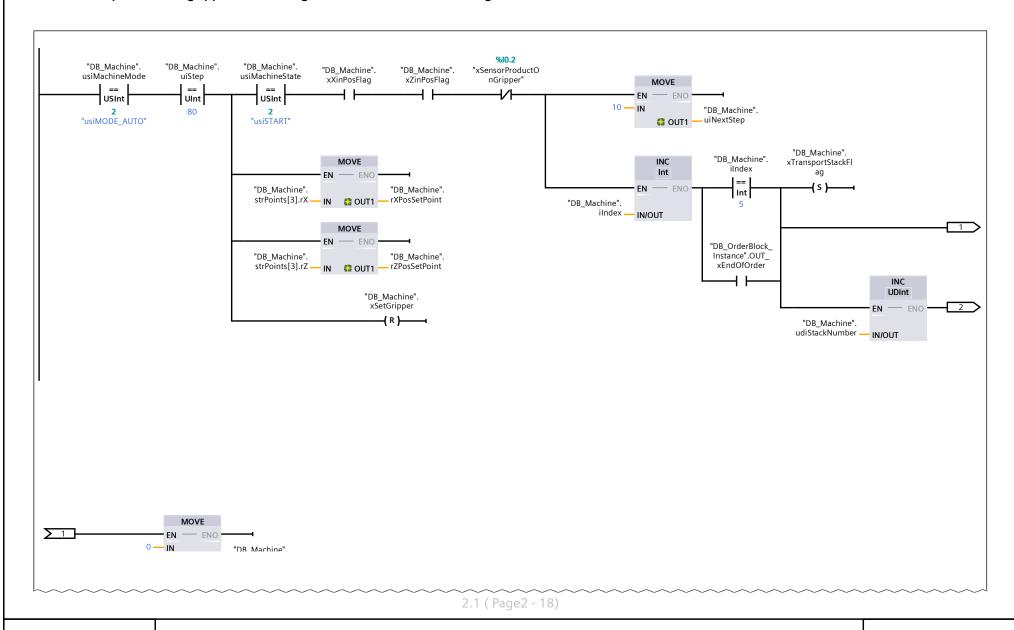


Network 11: Step 60 - Move gripper down





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

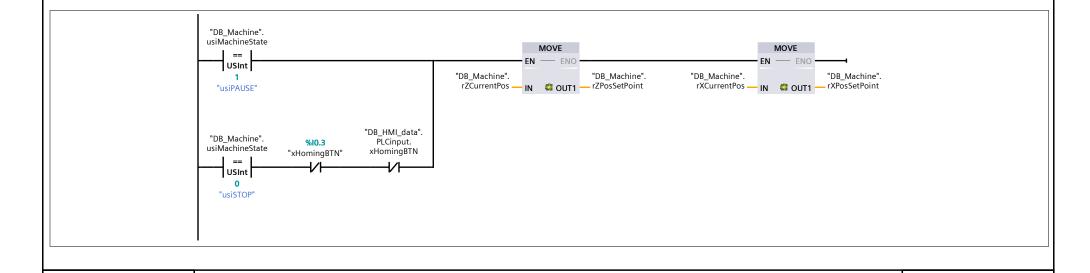


otally Integrated Automation Portal				
twork 13: Step 80 -	Move gripper to safe he	ight and move stack data to log (2.1	/ 2.1)	
		1.1 (Page	2 - 17)	
	OUT1 — iIndex			~~~~~~~
2	MOVE EN ENO	MOVE EN — ENO	MOVE EN — ENO	
"DB_Machine" udiStackNumber	UDD Adveloised	"DB_Machine".	"DB_Machine". "DB_Machine".	

Network 14: Gripper logic

```
"DB_Machine".
                  "DB_Machine".
xSetGripper
                                                                          %Q0.2
usiMachineMode
                                                                      "xRobotGripper"
                                                                           USInt
"usiMODE_AUTO"
                 "DB_HMI_data".
"DB_Machine".
                 strManualWork.
usiMachineMode
                    xGripper
   USInt
  "usiMODE_
  MANUAL"
```

Network 15: Disable robot axis movement while pause or stop

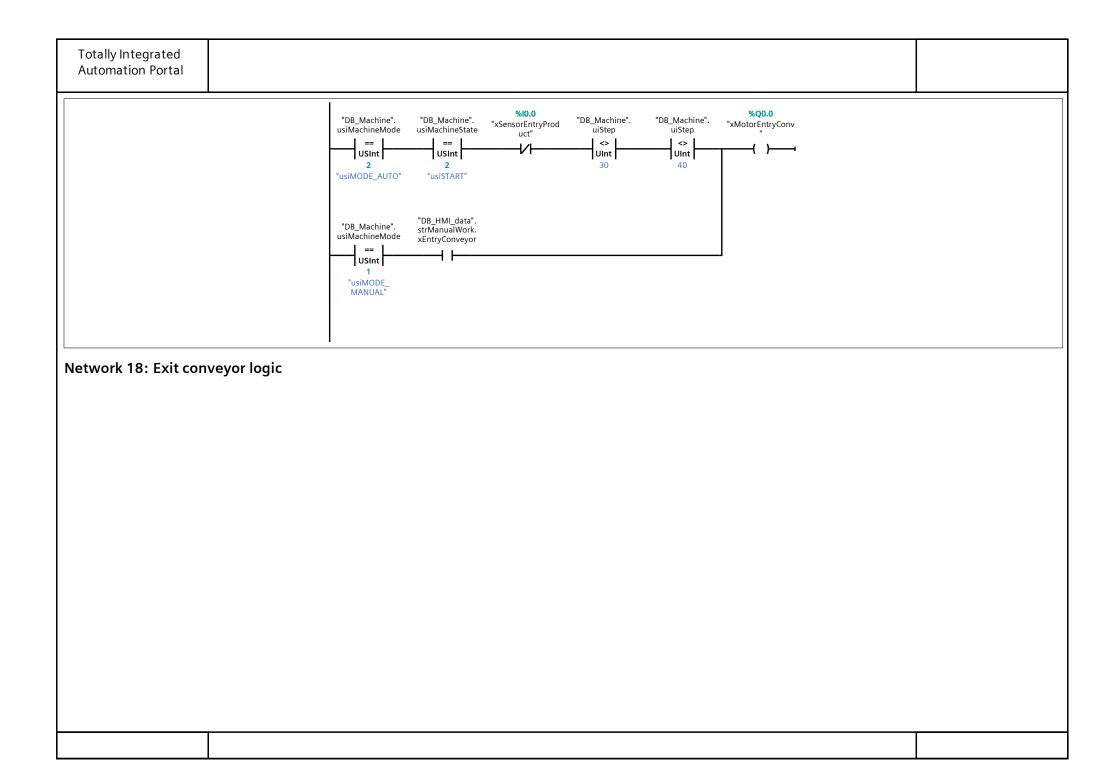


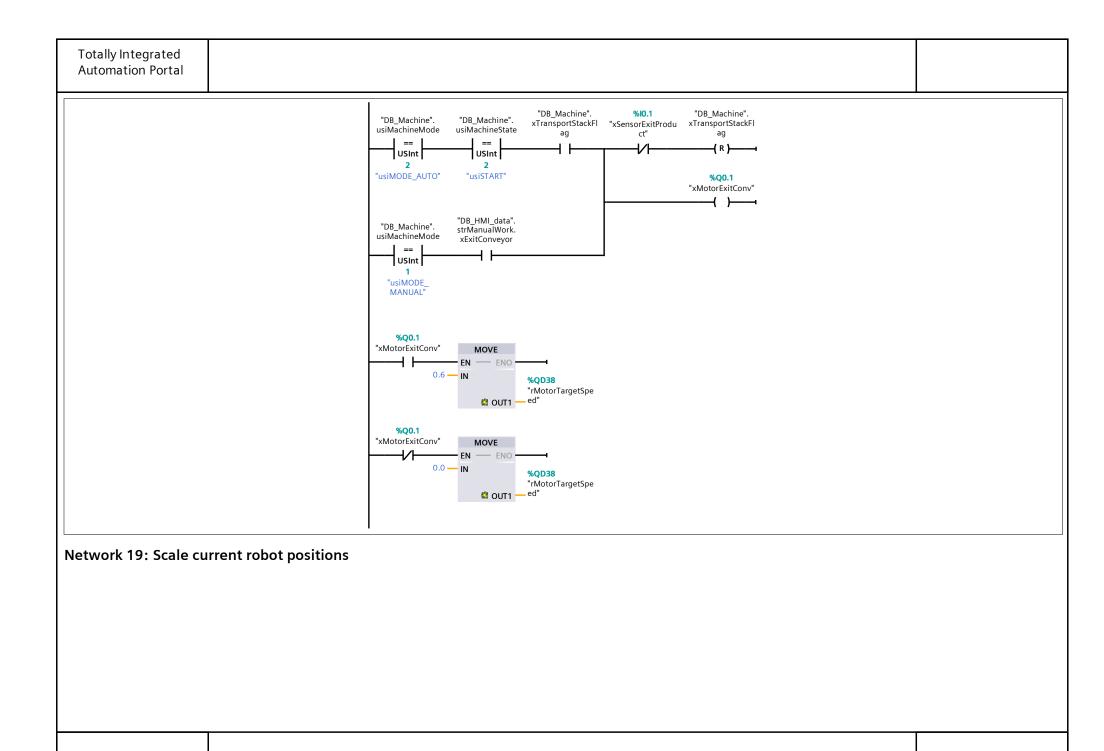
Network 16: Robot axis - manual mode logic

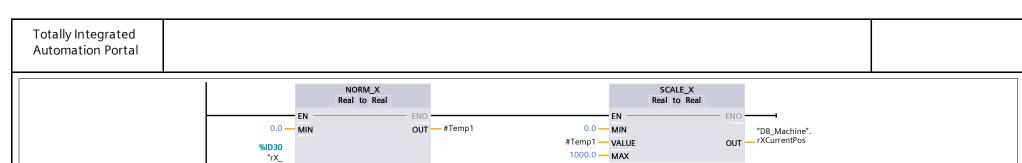
```
"DB_Machine".
usiMachineMode
                                        MOVE
     <>
                                     EN - ENO
   USInt
                     "DB_Machine".
                                                     "DB_HMI_data".
                     rZPosSetPoint — IN
  "usiMODE_
MANUAL"
                                                    strManualWork.
                                         COUT1 — rZSetpoint
                                        MOVE
                                     EN - ENO -
                     "DB_Machine".
                                                     "DB_HMI_data".
                     rXPosSetPoint — IN
                                         strManualWork.

OUT1 — rXSetPoint
                  "DB_HMI_data".
"DB_Machine".
                  strManualWork.
usiMachineMode
                    xZstartBTN
                                        MOVE
   USInt
                                                    "DB_Machine".
                    "DB_HMI_data".
                                         OUT1 — rZPosSetPoint
  "usiMODE_
                    strManualWork.
   MANUAL"
                        rZSetpoint ___ IN
                  "DB_HMI_data".
                  strManualWork.
                    xXstartBTN
                                        MOVE
                                     EN - ENO -
                    "DB_HMI_data".
strManualWork.
                                                     "DB_Machine".
                                         OUT1 — rXPosSetPoint
                        rXSetPoint __ IN
```

Network 17: Entry conveyor logic

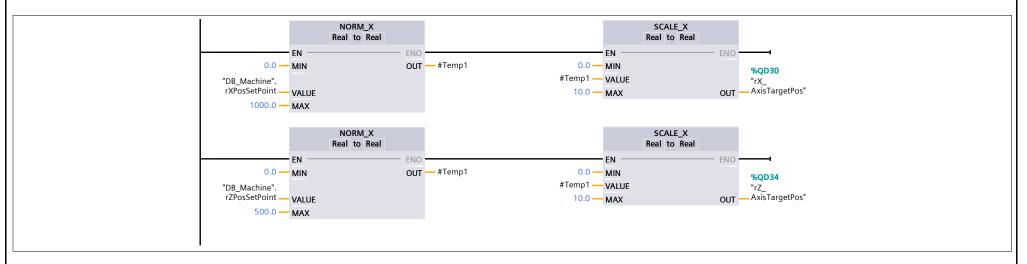








Network 20: Scale target robot positions



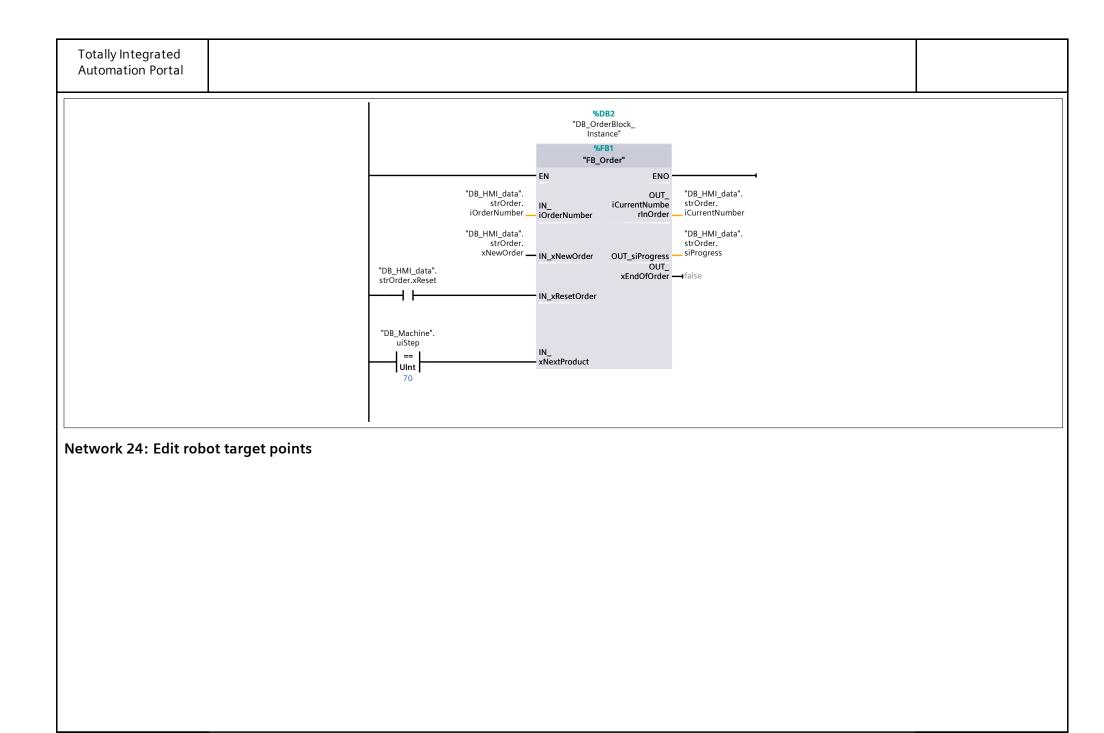
Network 21: Set up robot axis positions flags

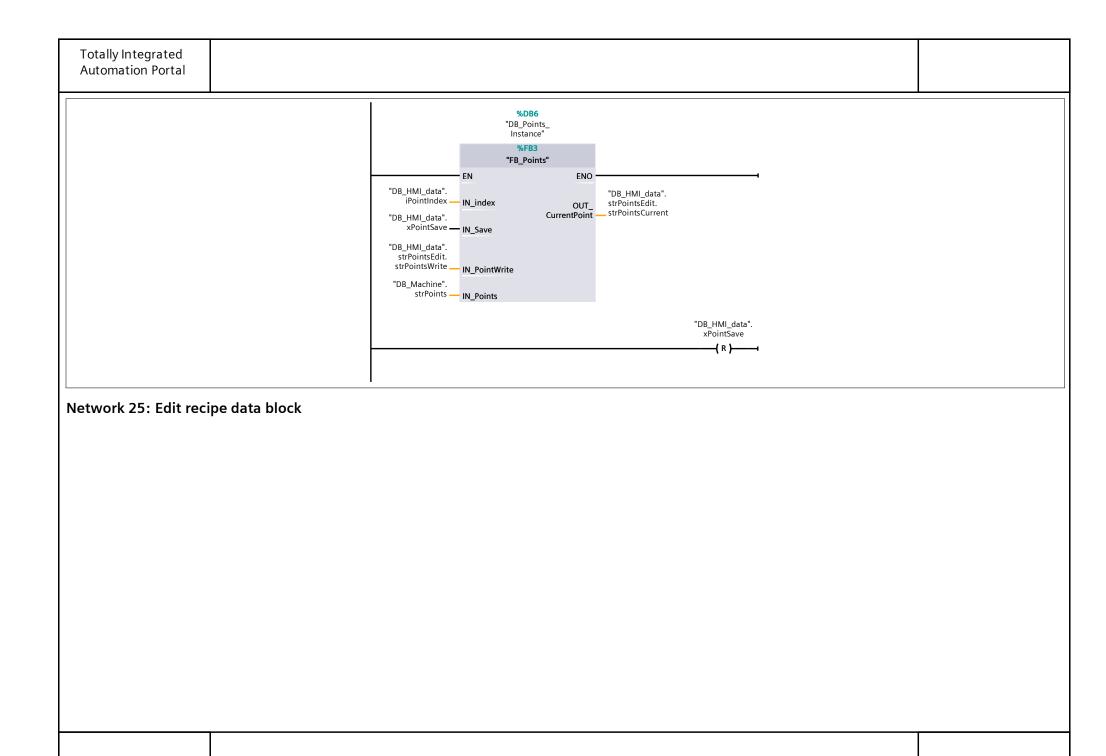
Totally Integrated **Automation Portal** "DB_Machine". usiMachineState "DB_Machine". ADD SUB IN_RANGE "DB_Machine". uiStep Auto (Real) Auto (Real) Real xXinPosFlag <> - ENO EN - ENO Ulnt USInt #TempDown — MIN OUT — #TempUP OUT — #TempDown "DB_Machine". 1 %QD30 %QD30 uiNextStep "usiPAUSE" "rX_ AxisTargetPos" — IN1 "rX_ AxisTargetPos" — IN1 %ID30 "rX_ AxisCurrentPos" — VAL 0.02 — IN2 😃 0.02 — IN2 #TempUP — MAX ADD SUB IN_RANGE "DB_Machine". Auto (Real) Auto (Real) Real xZinPosFlag OUT — #TempUP OUT — #TempDown #TempDown — MIN %QD34 %QD34 "rZ_ AxisTargetPos" — IN1 "rZ_ AxisTargetPos" — IN1 %ID34 "rZ_ AxisCurrentPos" — VAL 0.02 — IN2 😃 0.02 — IN2 #TempUP — MAX

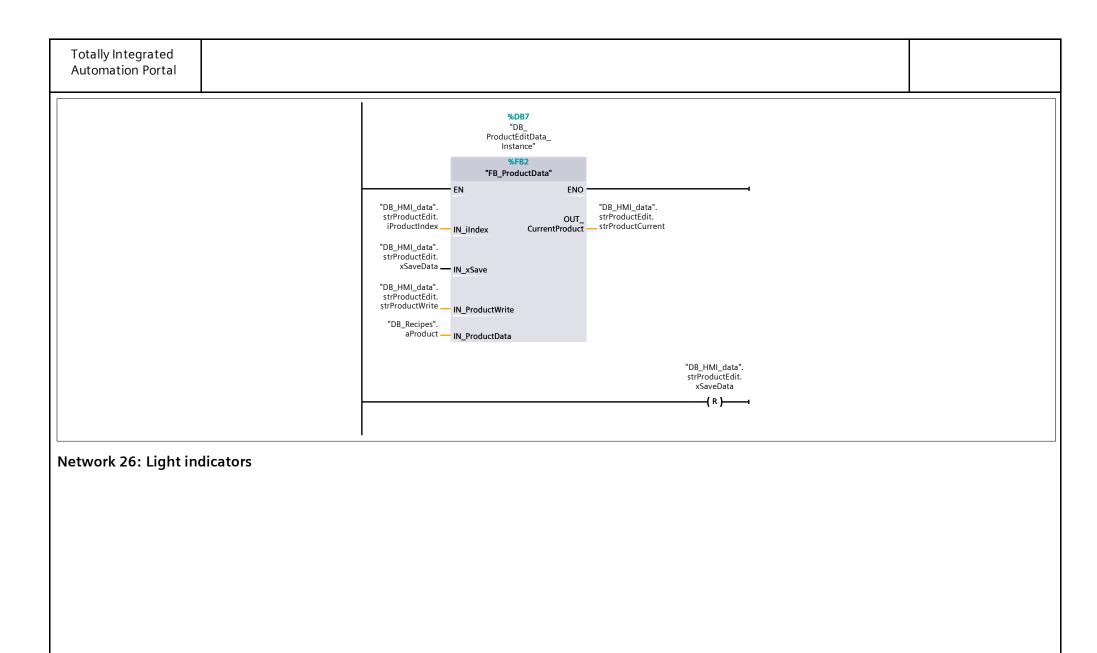
Network 22: Set next step

Totally Integrated **Automation Portal** "DB_HMI_data". PLCinput. xStepMode "DB_Machine". usiMachineMode MOVE EN - ENO -USInt "DB_Machine". "DB_Machine". 2 uiNextStep — IN 🙇 OUT1 — uiStep "usiMODE_AUTO" "DB_HMI_data". PLCinput. xStepMode "DB_HMI_data". PLCinput. xDoStepOnce "DB_HMI_data". PLCinput. xDoStepContinou 's "DB_HMI_data". PLCinput. xDoStepOnce

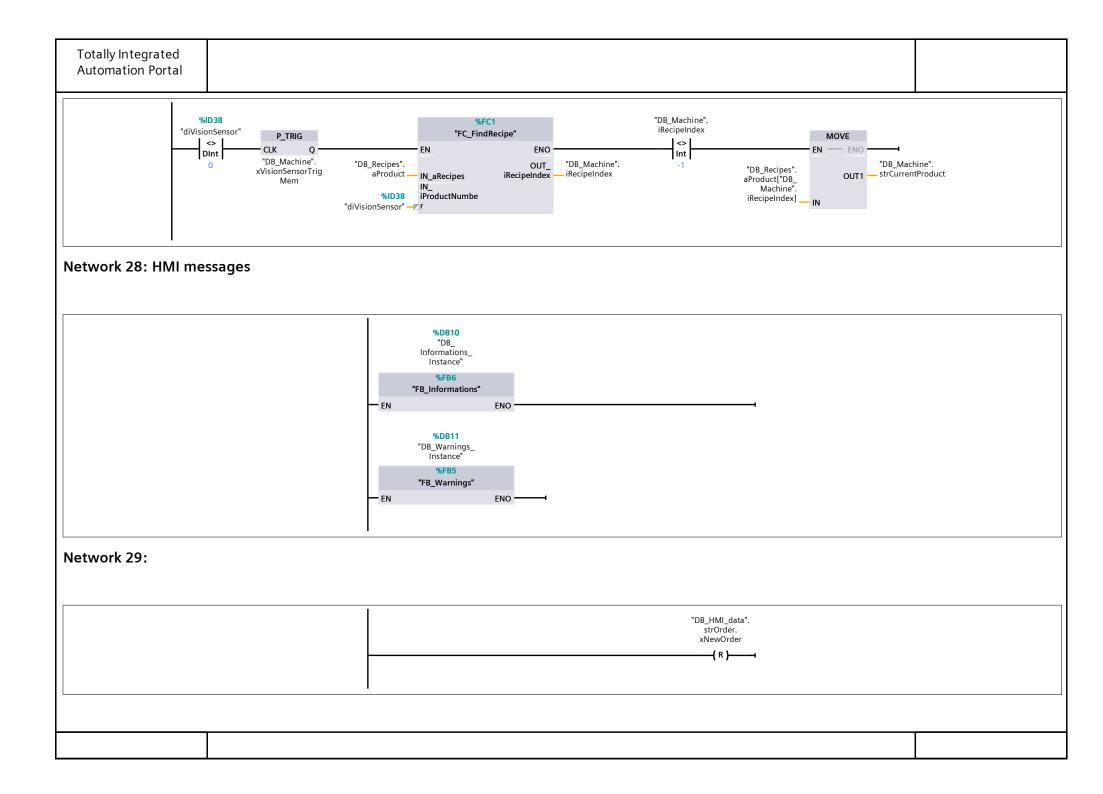
Network 23: Order







Totally Integrated **Automation Portal** "DB_Machine". usiMachineState **%Q0.5**"xStartBTN_Light" == USInt "usiSTART" "DB_Machine". usiMachineState %M0.5 "Clock_1Hz" Tusint F "usiPAUSE" "DB_Machine". usiMachineState **%Q0.7**"xStopBTN_Light" == USInt "usiSTOP" "DB_Machine". usiMachineState USInt "usiPAUSE" "DB_Machine". %M0.5 xErrorState "Clock_1Hz" Network 27: Scan and find recipe data



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Program blocks

DB_Machine [DB1]

DB_Machine Properties							
General							
Name	DB_Machine	Number	1	Туре	DB	Language	DB
Numbering	Automatic						
Information							
Title		Author		Comment		Family	
Version	0.1	User-defined ID					

Name	Data type	Start value	Retain	from	able	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		

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ame	Data type	Start value	Retain	Accessible from HMI/OPC UA/Web API	able	Visible in HMI engi- neering	Setpoint	Supervi- sion	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	П	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	П	False	True	True	True	False		
rWeight	Real	0.0	False	True	True	True	False		
▼ strCurrentStack	"UDT_StackDa- ta"		False	True	True	True	True		
▼ aStack	Array[04] 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	П	False	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	11	False	True	True		False		
rWeight	Real	0.0	False	True	True	True	False		

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Automation Portal

ne	Data type	Start value	Retain	from	able	Visible in HMI engi- neering	Setpoint	Supervi- sion	Comment
▼ aStack[2]	"UDT_Product- Properties"		False	True	True	True	False		
iNumber	Int	0	False	True	True	True	False		
sColor	String	П	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	П	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	П	False	True	True	True	False		
rWeight	Real	0.0	False	True	True	True	False		
us i Number Of Elements	USInt	0	False	True	True	True	True		
rStackWeight	Real	0.0	False	True	True	True	False		
udiStackNumber	UDInt	0	False	True	True	True	False		
▼ strStackInit	"UDT_StackDa- ta"		False	True	True	True	True		
▼ aStack	Array[04] 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	П	False	True	True	True	False		
rWeight	Real	0.0	False	True	True	True	False		
→ aStack[1]	"UDT_Product- Properties"		False	True	True	True	False		

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Name	Data type	Start value	Retain	Accessible from HMI/OPC UA/Web API	able	HMI engi- neering	Setpoint	Supervi- sion	Comment
iNumber	Int	0	False	True	True	True	False		
sColor	String	П	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	11	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	П	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	П	False	True	True	True	False		
rWeight	Real	0.0	False	True	True	True	False		
usiNumber Of Elements	USInt	0	False	True	True		True		
rStackWeight	Real	0.0	False	True	True	True	False		
udiStackNumber	UDInt	0	False	True	True	True	False		
▼ strPoints	Array[09] 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		

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ame	Data type	Start value	Retain	Accessible from HMI/OPC UA/Web API	able	Visible in HMI engi- neering	Setpoint	Supervi- sion	Comment
▼ strPoints[2]	"UDT_Point"		True	True	True	True	True		Move up - entry conveyor
rX	Real	0.0	True	True	True	True	False		
rZ	Real	80.0	True	True	True	True	False		
▼ strPoints[3]	"UDT_Point"		True	True	True	True	True		Move up - exit conveyor
rX	Real	1000.0	True	True	True	True	False		
rZ	Real	80.0	True	True	True	True	False		
▼ strPoints[4]	"UDT_Point"		True	True	True	True	True		Step 60 - place the product
rX	Real	1000.0	True	True	True	True	False		
rZ	Real	440.0	True	True	True	True	False		
▼ strPoints[5]	"UDT_Point"		True	True	True	True	True		
rX	Real	0.0	True	True	True	True	False		
rZ	Real	0.0	True	True	True	True	False		
▼ strPoints[6]	"UDT_Point"		True	True	True	True	True		
rX	Real	0.0	True	True	True	True	False		
rZ	Real	0.0	True	True	True	True	False		
▼ strPoints[7]	"UDT_Point"		True	True	True	True	True		
rX	Real	0.0	True	True	True	True	False		
rZ	Real	0.0	True	True	True	True	False		
▼ strPoints[8]	"UDT_Point"		True	True	True	True	True		
rX	Real	0.0	True	True	True	True	False		
rZ	Real	0.0	True	True	True	True	False		
▼ strPoints[9]	"UDT_Point"		True	True	True	True	True		
rX	Real	0.0	True	True	True	True	False		
rZ	Real	0.0	True	True	True	True	False		
▼ tStopMachine	TON_TIME		False	True	True	True	False		
PT	Time	T#0ms	False	True	True	True	False		

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Name	Data type	Start value	Retain	Accessible from HMI/OPC UA/Web API	able	Visible in HMI engi- neering	Setpoint	Supervi- sion	Comment
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		
▼ tGrabGripperDelay	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		
▼ tReleaseGripperDelay	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		
▼ tHomingDelay	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		

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DB_Recipes [DB3]

DB_Recipes Pro	perties						
General							
Name	DB_Recipes	Number	3	Туре	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	able	HMI engi- neering	Setpoint	Supervi- sion	Comment
▼ Static									
▼ aProduct	Array[09] 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	able	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	Ш	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	11	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	11	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	п	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	11	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		

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Name	Di	ata type	Start value	Accessible from HMI/OPC	able	HMI engi-	Setpoint	Supervi- sion	Comment	

valine	Data type	Start value		from	able	HMI engi- neering	Setpoint	sion	Comment
sColor	String	II .	True	True	True	True	False		
rWeight	Real	0.0	True	True	True	True	False		
	"UDT_Product- Properties"		True	True	True	True	True		
iNumber	Int	-1	True	True	True	True	False		
sColor	String	II	True	True	True	True	False		
rWeight	Real	0.0	True	True	True	True	False		

|--|

FC_FindRecipe [FC1]

FC_FindRecipe Properties							
General							
Name	FC_FindRecipe	Number	1	Туре	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[09] of "UDT_ProductProperties"			
▼ IN_aRecipes[0]	"UDT_ProductProper- ties"			
iNumber	Int			
sColor	String			
rWeight	Real			
▼ IN_aRecipes[1]	"UDT_ProductProper- ties"			
iNumber	Int			
sColor	String			
rWeight	Real			
▼ IN_aRecipes[2]	"UDT_ProductProper- ties"			
iNumber	Int			
sColor	String			
rWeight	Real			
▼ IN_aRecipes[3]	"UDT_ProductProper- ties"			
iNumber	Int			
sColor	String			

|--|--|--|--|--|

Name	Data type	Default value	Comment	
rWeight	Real			
▼ IN_aRecipes[4]	"UDT_ProductProper- ties"			
iNumber	Int			
sColor	String			
rWeight	Real			
▼ IN_aRecipes[5]	"UDT_ProductProper- ties"			
iNumber	Int			
sColor	String			
rWeight	Real			
▼ IN_aRecipes[6]	"UDT_ProductProper- ties"			
iNumber	Int			
sColor	String			
rWeight	Real			
▼ IN_aRecipes[7]	"UDT_ProductProper- ties"			
iNumber	Int			
sColor	String			
rWeight	Real			
▼ IN_aRecipes[8]	"UDT_ProductProper- ties"			
iNumber	Int			
sColor	String			
rWeight	Real			
▼ IN_aRecipes[9]	"UDT_ProductProper- ties"			
iNumber	Int			
sColor	String			
rWeight	Real			
IN_iProductNumber	Int			
 ✓ Output				
OUT_iRecipeIndex	Int			
InOut				

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Name ▼ Temp	Data type	Default value	Comment	
▼ Temp				
iCount	Int			
xFound	Bool			
Constant				
▼ Return				
FC_FindRecipe	Void			

```
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
      #OUT_iRecipeIndex := #iCount;
RETURN;
8000
0009
0010
       END_IF;
0011
0012 END_FOR;
0013
```

Symbol #iCount	Address	Туре	Comment
		Int	
#IN_aRecipes[*].iNumber #IN_iProductNumber		Int	
#IN_iProductNumber		Int	
#OUT_iRecipeIndex		Int	
#xFound		Bool	

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DB_StackLog [DB4]

DB_StackLog Properties							
General							
Name	DB_StackLog	Number	4	Туре	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	able	HMI engi- neering	Setpoint	Supervi- sion	Comment
▼ Static									
▼ aStack	Array[04] 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	П	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	п	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		

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Automation Portal

Name	Data type	Start value	Retain	Accessible from HMI/OPC UA/Web API	able	Visible in HMI engi- neering	Setpoint	Supervi- sion	Comment
sColor	String	П	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	П	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	11	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		

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Automation Porta

DB_HMI_data [DB5]

DB_HMI_data Pi	roperties						
General							
Name	DB_HMI_data	Number	5	Туре	DB	Language	DB
Numbering	Automatic						
Information							
Title		Author		Comment		Family	
Version	0.1	User-defined ID					

Name	Data type	Start value	Retain	from	able	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		
usi Machine Mode	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		
usi Machine State	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		

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Automation	Portal

Name	Data type	Start value	Retain	Accessible from HMI/OPC UA/Web API	able	Visible in HMI engi- neering	Setpoint	Supervi- sion	Comment
xNewOrder	Bool	false	False	True	True	True	False		
xReset	Bool	false	False	True	True	True	False		
iCurrentNumber	Int	0	False	True	True	True	False		
siProgress	SInt	0	False	True	True	True	False		
▼ strProductEdit	Struct		False	True	True	True	False		
▼ strProductCurrent	"UDT_Product- Properties"		False	True	True	True	False		
iNumber	Int	0	False	True	True	True	False		
sColor	String	П	False	True	True	True	False		
rWeight	Real	0.0	False	True	True	True	False		
▼ strProductWrite	"UDT_Product- Properties"		False	True	True	True	True		
iNumber	Int	0	False	True	True	True	False		
sColor	String	11	False	True	True	True	False		
rWeight	Real	0.0	False	True	True	True	False		
iProductIndex	Int	0	False	True	True	True	False		
xSaveData	Bool	false	False	True	True	True	False		
▼ strManualWork	Struct		False	True	True	True	False		
xEntryConveyor	Bool	false	False	True	True	True	False		
xExitConveyor	Bool	false	False	True	True	True	False		
xGripper	Bool	false	False	True	True	True	False		
xXstartBTN	Bool	false	False	True	True	True	False		
xZstartBTN	Bool	false	False	True	True	True	False		
rXSetPoint	Real	0.0	False	True	True		False		
rZSetpoint	Real	0.0	False	True	True		False		
▼ strPointsEdit	Struct		False	True	True	True	False		
▼ strPointsCurrent	"UDT_Point"		False	True	True	True	False		
rX	Real	0.0	False	True	True	True	False		

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Mama	Data tura	Ctart value	Dotoin	Acceptable Writ Visible in	C - 4 : - 4	C	Camanaant	

Name	Data type	Start value		from	able	Visible in HMI engi- neering	_	Supervi- sion	Comment
rZ	Real	0.0	False	True	True	True	False		
▼ strPointsWrite	"UDT_Point"		False	True	True	True	True		
rX	Real	0.0	False	True	True	True	False		
rZ	Real	0.0	False	True	True	True	False		
iPointIndex	Int	0	False	True	True	True	False		
xPointSave	Bool	false	False	True	True	True	False		

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Automation	Porta

Program blocks / Points

DB_Points_Instance [DB6]

DB_Points_Inst	DB_Points_Instance Properties											
General												
Name	DB_Points_Instance	Number	6	Туре	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	able	HMI engi- neering		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[09] of "UDT_Point"		False	False	False	False	False		
▼ Static									
OldIndex	Int	-1	False	True	True	True	False		

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Automation Portal

Program blocks / Points

FB_Points [FB3]

FB_Points Prope	rties						
General							
Name	FB_Points	Number	3	Туре	FB	Language	LAD
Numbering	Automatic						
Information							
Title		Author		Comment		Family	
Version	0.1	User-defined ID					

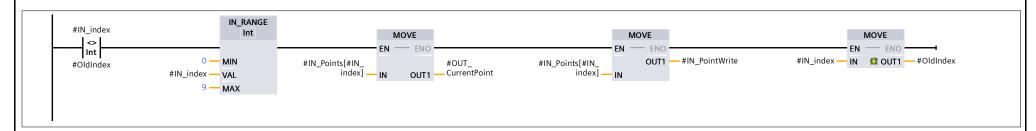
Name	Data type	Default value	Retain	Accessible from HMI/OPC UA/Web API	able	HMI engi- neering		Supervi- sion	Comment
▼ Input									
IN_index	Int	0	Non-retain	True	True	True	False		
IN_Save	Bool	false	Non-retain	True	True	True	False		
▼ Output									
▼ OUT_CurrentPoint	"UDT_Point"		Non-retain	True	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[09] of "UDT_Point"			False	False	False	False		
▼ IN_Points[0]	"UDT_Point"			False	False	False	False		
rX	Real			False	False	False	False		

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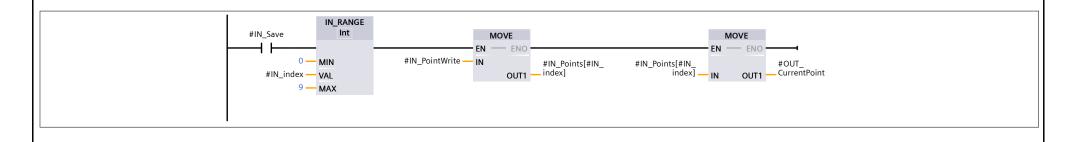
Name	Data type	Default value	Retain	Accessible from HMI/OPC UA/Web API	able from HMI/ OPC UA/ Web API	HMI engi- neering		Supervi- sion	Comment
rZ	Real			False		False	False		
▼ IN_Points[1]	"UDT_Point"			False	False	False	False		
rX	Real			False	False	False	False		
rZ	Real			False	False	False	False		
▼ 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		
▼ IN_Points[9]	"UDT_Point"			False	False	False	False		

Name	Data type	Default value		HMI/OPC UA/Web API	able	HMI engi- neering		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:



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Automation Porta	ı

Program blocks / Order

DB_OrderBlock_Instance [DB2]

DB_OrderBlock	_Instance Properties						
General							
Name	DB_OrderBlock_Instance	Number	2	Туре	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	able	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		

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Program blocks / Order

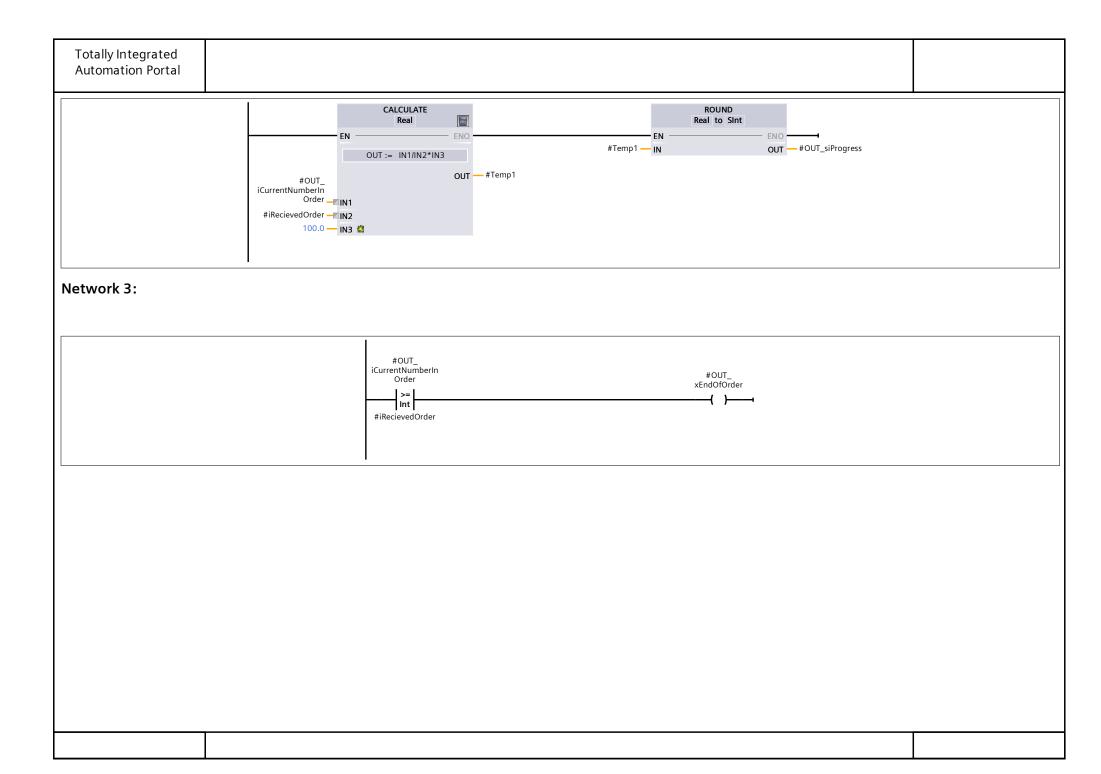
FB_Order [FB1]

FB_Order Prop	erties						
General							
Name	FB_Order	Number	1	Туре	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	able	Visible in HMI engi- neering	_	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									

Name	Data type	Default value	Retain	Writ- \ able H from r HMI/ OPC UA/ Web API	/isible in HMI engi- neering	Setpoint	Supervi- sion	Comment
Temp1	Real							
Constant								

Totally Integrated **Automation Portal** INC Int #IN_xNextProduct P_TRIG CLK Q - EN --- ENO --#Trig1 #OUT_ iCurrentNumberIn Order ___ IN/OUT #OUT_ xEndOfOrder #IN_xNewOrder MOVE EN - ENO ----#IN_ **© OUT1** — #iRecievedOrder iOrderNumber — IN MOVE EN - ENO -0 — IN #OUT_ iCurrentNumberIn COUT1 — Order #IN_xResetOrder MOVE - EN --- ENO ---0 — IN #OUT_ iCurrentNumberIn OUT1 — Order MOVE EN — ENO — 0 — IN 🚜 OUT1 — #iRecievedOrder Network 2:



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Program blocks / Product data

FB_ProductData [FB2]

FB_ProductDat	FB_ProductData Properties										
General											
Name	FB_ProductData	Number	2	Туре	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	able	HMI engi- neering		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	п	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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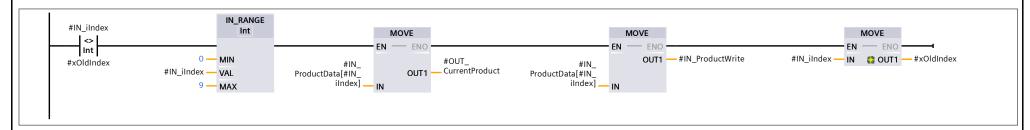
Name	Data type	Default value	Retain	Accessible from HMI/OPC UA/Web API	able	HMI engi- neering	Setpoint	Supervi- sion	Comment
▼ IN_ProductData	Array[09] of "UDT_Product- Properties"			False	False	False	False		
▼ IN_ProductData[0]	"UDT_Product- Properties"			False	False	False	False		
iNumber	Int			False	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		

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Automation Portal

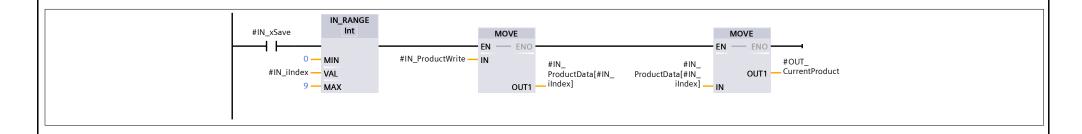
Name	Data type	Default value	Retain	Accessible from HMI/OPC UA/Web API	able	Visible in HMI engi- neering	Setpoint	Supervi- sion	Comment
iNumber	Int			False	False	False	False		
sColor	String			False	False	False	False		
rWeight	Real			False	False	False	False		
▼ IN_ProductData[6]	"UDT_Product- Properties"			False	False	False	False		
iNumber	Int			False	False	False	False		
sColor	String			False	False	False	False		
rWeight	Real			False	False	False	False		
▼ IN_ProductData[7]	"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[8]	"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[9]	"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		
▼ Static									
xOldIndex	Int	-1	Non-retain	True	True	True	False		
Temp									
Constant									

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Automation Portal

Network 1:



Network 2:



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Program blocks / Product data

DB_ProductEditData_Instance [DB7]

DB_ProductEditData_Instance Properties											
General											
Name	DB_ProductEditData_Instance	Number	7	Туре	DB	Language	DB				
Numbering	Automatic		•								
Information											
Title		Author		Comment		Family					
Version	0.1	User-defined ID									

Name	Data type	Start value	Retain	from	able		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	п	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[09] of "UDT_Product- Properties"		False	False	False	False	False		

Automation Portal									
Name	Data type	Start value	Retain	Accessible from HMI/OPC UA/Web API	Writable from HMI/OPCUA/Web	HMI engi- neering	Setpoint	Supervi- sion	Comment
▼ Static									
xOldIndex	Int	-1	False	True	True	True	False		

Program blocks / HMI messages

FB_Errors [FB4]

FB_Errors Properties											
General											
	FB_Errors	Number	4	Туре	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	able	HMI engi- neering		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		

	Data type	Default value	Retain	Accessible from HMI/OPC UA/Web API	able	Visible in HMI engi- neering	Setpoint	Supervi- sion	Comment
Temp					ALL				
Constant									
		Messages". xAcknowledge %I1.2 "xResetBTN"			#xErrorAc ge				
Network 2: Error 0: E	nergency Stop bu		Non Hall						
		#xErrorAcknowled ged	"DB_HMI_ Messages". vErrors.%X0 RS Q						
		%IO.7 "xEStopBTN"	1						

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

```
#xErrorAcknowled ged RS R Q T#10s IN Q T#10s PT ET T#0ms
```

Network 4: Error 2: Product lost in transport

```
"DB_HMI_
Messages".
wErrors.%X2
#xErrorAcknowled
                                                                                                                       RS
                                                                               #Timer2
                                                             %10.2
                      IN_RANGE
                                                                                 TON
                                           %Q0.2
                                                        "xSensorProductO
                        Ulnt
                                                            nGripper"
                                                                                 Time
                                      "xRobotGripper"
              40 — MIN
                                                                T#500ms — PT
                                                                                       ET — T#0ms
    "DB_Machine".
           uiStep — VAL
              60 — MAX
```

Network 5: Setting the system to an error state

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	"DB_HMI_ Messages". wErrors Start DB_Machine". xErrorState Word 0	

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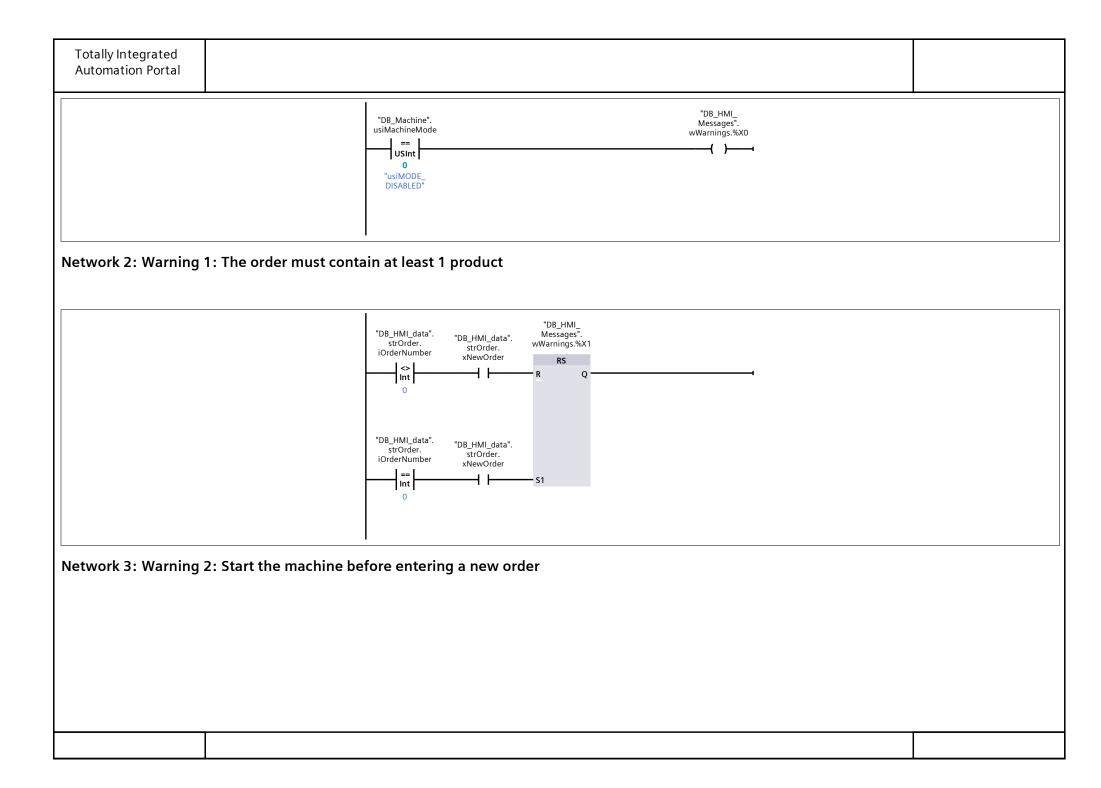
Program blocks / HMI messages

FB_Warnings [FB5]

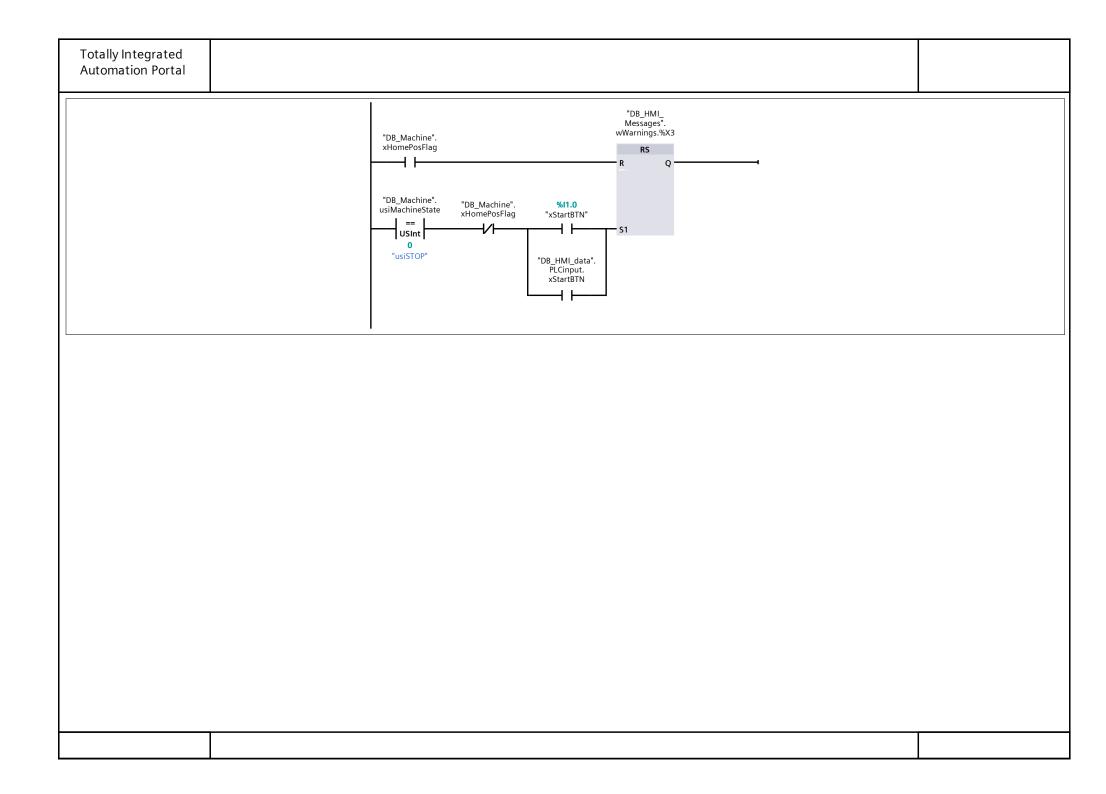
FB_Warnings Properties											
General											
Name	FB_Warnings	Number	5	Туре	FB	Language	LAD				
Numbering	Automatic										
Information											
Title		Author		Comment		Family					
Version	0.1	User-defined ID					•				

Name	Data type	Default value	HMI/OPC UA/Web API	able	HMI engi- neering	Supervi- sion	Comment
Input							
Output							
InOut							
Static							
Temp							
Constant							

Network 1: Warning 0: Machine disabled



Totally Integrated Automation Portal "DB_HMI_ Messages". wWarnings.%X2 "DB_Machine". usiMachineState RS USInt "usiSTART" "DB_HMI_data". "DB_HMI_data". strOrder. "DB_Machine". strOrder. usiMachineState i Order NumberxNewOrder <> Int USInt "usiSTOP" "DB_Machine". usiMachineState == USInt "usiPAUSE" Network 4: Warning 3: Homing process not finished



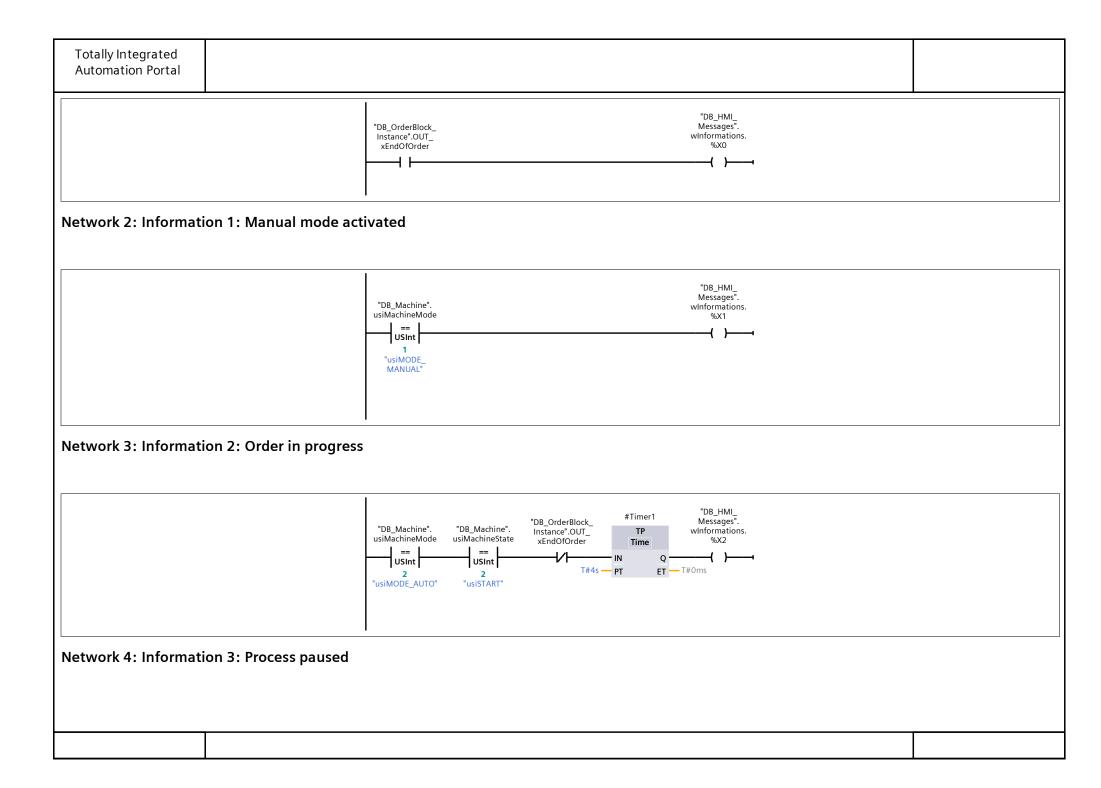
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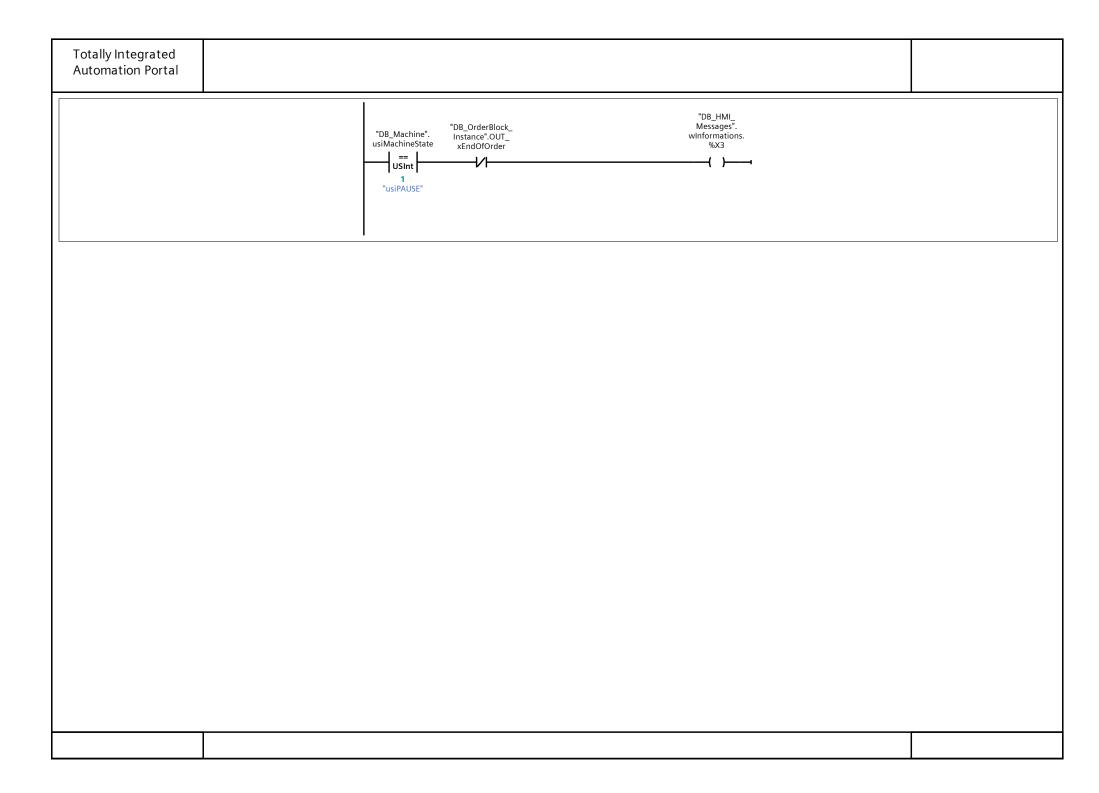
FB_Informations [FB6]

FB_Informatio	FB_Informations Properties									
General										
Name	FB_Informations	Number	6	Туре	FB	Language	LAD			
Numbering	Automatic									
Information										
Title		Author		Comment		Family				
Version	0.1	User-defined ID								

Name	Data type	Default value		HMI/OPC UA/Web API	able	HMI engi- neering		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





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DB_HMI_Messages [DB8]

DB_HMI_Messa	DB_HMI_Messages Properties									
General										
Name	DB_HMI_Messages	Number	8	Туре	DB	Language	DB			
Numbering	Automatic									
Information										
Title		Author		Comment		Family				
Version	0.1	User-defined ID			-					

Name	Data type	Start value	Retain		able	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		

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DB_Errors_Instance [DB9]

DB_Errors_Inst	DB_Errors_Instance Properties									
General										
Name	DB_Errors_Instance	Number	9	Туре	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	able	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		

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DB_Informations_Instance [DB10]

DB_Information	DB_Informations_Instance Properties									
General	General									
Name	DB_Informations_Instance	Number	10	Туре	DB	Language	DB			
Numbering	Automatic									
Information										
Title		Author		Comment		Family				
Version	0.1	User-defined ID					-			

Name	Data type	Start value	Retain		able	HMI engi- neering		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		

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DB_Warnings_Instance [DB11]

DB_Warnings_I	DB_Warnings_Instance Properties						
General							
Name	DB_Warnings_Instance	Number	11	Туре	DB	Language	DB
Numbering	Automatic						
Information							
Title		Author		Comment		Family	
Version	0.1	User-defined ID					

Name	Data type	Start value	HMI/OPC	able	HMI engi- neering	Supervi- sion	Comment
Input							
Output							
InOut							
Static							

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con	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	
1	Clock_0.5Hz	Bool	%M0.7		True	
<u> </u>	Clock_0.625Hz	Bool	%M0.6		True	
a	Clock_1.25Hz	Bool	%M0.4		True	
a	Clock_1Hz	Bool	%M0.5		True	
<u> </u>	Clock_2.5Hz	Bool	%M0.2		True	
<u> </u>	Clock_2Hz	Bool	%M0.3	True	True	
<u>−</u>	Clock_5Hz	Bool	%M0.1	True	True	
<u>−</u>	Clock_10Hz	Bool	%M0.0	True	True	
1	Clock_Byte	Byte	%MBO	True	True	
1	DiagStatusUpdate	Bool	%M1.1	True	True	
1	diVisionSensor	DInt	%ID38	True	True	
1	FirstScan	Bool	%M1.0	True	True	
1	rMotorTargetSpeed	Real	%QD38	True	True	
1	rX_AxisCurrentPos	Real	%ID30	True	True	
ा	rX_AxisTargetPos	Real	%QD30	True	True	
1	rZ_AxisCurrentPos	Real	%ID34	True	True	
1	rZ_AxisTargetPos	Real	%QD34	True	True	
1	System_Byte	Byte	%MB1	True	True	
1	xEStopBTN	Bool	%10.7	True	True	
1	xHomingBTN	Bool	%10.3	True	True	

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lcon	Name	Data type	Address	Visible in HMI engineering	Accessible from HMI/OPC UA/Web API	Comment
- 1	xLightHomePos	Bool	%Q0.3	True	True	
- 101	xMotorEntryConv	Bool	%Q0.0	True	True	
- 101	xMotorExitConv	Bool	%Q0.1	True	True	
- 10	xResetBTN	Bool	%I1.2	True	True	
-01	xResetBTN_Light	Bool	%Q0.6	True	True	
- 101	xRobotGripper	Bool	%Q0.2	True	True	
- 10	xSensorEntryProduct	Bool	%10.0	True	True	
- 10	xSensorExitProduct	Bool	%IO.1	True	True	
-01	xSensorProductOnGrip- per	Bool	%I0.2	True	True	
- ■	xStartBTN	Bool	%I1.0	True	True	
- ■	xStartBTN_Light	Bool	%Q0.5	True	True	
€ 01	xStopBTN	Bool	%I1.1	True	True	
1	xStopBTN_Light	Bool	%Q0.7	True	True	

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Standard-Variablentabelle [42]

con	Name	Data type	Address	Visible in HMI engineering		Comment
					UA/Web API	
गा	AlwaysFALSE	Bool	%M1.3	True	True	
701	AlwaysTRUE	Bool	%M1.2	True	True	
गा	Clock_0.5Hz	Bool	%M0.7	True	True	
गा	Clock_0.625Hz	Bool	%M0.6	True	True	
TOT .	Clock_1.25Hz	Bool	%M0.4	True	True	
गा	Clock_1Hz	Bool	%M0.5	True	True	
गा	Clock_2.5Hz	Bool	%M0.2	True	True	
TOT .	Clock_2Hz	Bool	%M0.3	True	True	
101	Clock_5Hz	Bool	%M0.1	True	True	
गा	Clock_10Hz	Bool	%M0.0	True	True	
गा	Clock_Byte	Byte	%MBO	True	True	
101	DiagStatusUpdate	Bool	%M1.1	True	True	
101	FirstScan	Bool	%M1.0	True	True	
וס	System_Byte	Byte	%MB1	True	True	

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CONST	ANTS [6]				
PLC tags					
lcon	Name	Data type	Address	Visible in HMI engineering Accessible from HMI/O UA/Web API	PC Comment
	T				

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Inputs [11]

PLC tags						
lcon	Name	Data type	Address	Visible in HMI engineering	Accessible from HMI/OPC UA/Web API	Comment
10	diVisionSensor	DInt	%ID38	True	True	
1	rX_AxisCurrentPos	Real	%ID30	True	True	
1	rZ_AxisCurrentPos	Real	%ID34	True	True	
1	xEStopBTN	Bool	%10.7	True	True	
10	xHomingBTN	Bool	%10.3	True	True	
1	xResetBTN	Bool	%I1.2	True	True	
1	xSensorEntryProduct	Bool	%10.0	True	True	
1	xSensorExitProduct	Bool	%IO.1	True	True	
1	xSensorProductOnGrip- per	Bool	%10.2	True	True	
1	xStartBTN	Bool	%I1.0	True	True	
√ 01	xStopBTN	Bool	%I1.1	True	True	

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Outputs [10]

PLC tags								
con	Name	Name Data type		Address Visible in HMI engineering		Comment		
TOT	rMotorTargetSpeed	Real	%QD38	True	True			
ा	rX_AxisTargetPos	Real	%QD30	True	True			
1	rZ_AxisTargetPos	Real	%QD34	True	True			
1	xLightHomePos	Bool	%Q0.3	True	True			
10	xMotorEntryConv	Bool	%Q0.0	True	True			
ा	xMotorExitConv	Bool	%Q0.1	True	True			
1	xResetBTN_Light	Bool	%Q0.6	True	True			
ा	xRobotGripper	Bool	%Q0.2	True	True			
1	xStartBTN_Light	Bool	%Q0.5	True	True			
1	xStopBTN_Light	Bool	%Q0.7	True	True			

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ı		

PLC data types

UDT_ProductProperties

UDT_ProductPro	perties Properties						
General							
Name	UDT_ProductProperties	Number	1	Туре	UDT	Language	
Numbering							
Information							
Title		Author		Comment		Family	
Version		User-defined ID					

Name	Data type	Default value	Accessible from HMI/OPC UA/Web API	able	neering	Setpoint	Comment
iNumber	Int	0	True	True	True	False	
sColor	String	11	True	True	True	False	
rWeight	Real	0.0	True	True	True	False	

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PLC data types

UDT_StackData

UDT_StackData F	Properties						
General							
Name	UDT_StackData	Number	2	Туре	UDT	Language	
Numbering							
Information							
Title		Author		Comment		Family	
Version		User-defined ID					

ame	Data type	Default value	Accessible from HMI/OPC UA/Web API	able	neering	Setpoint	Comment
▼ aStack	Array[04] of "UDT_ProductProperties"		True	True	True	False	
▼ aStack[0]	"UDT_ProductProperties"		True	True	True	False	
iNumber	Int	0	True	True	True	False	
sColor	String	П	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	п	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	П	True	True	True	False	
rWeight	Real	0.0	True	True	True	False	
▼ aStack[3]	"UDT_ProductProperties"		True	True	True	False	

ted rtal				
-------------	--	--	--	--

Name Da	ata type		from HMI/OPC	able	neering	Setpoint	Comment
iNumber Int	t	0	True	True	True	False	
sColor Str	ring	П	True	True	True	False	
rWeight Rea	eal (0.0	True	True	True	False	
▼ aStack[4] "UI	DT_ProductProperties"		True	True	True	False	
iNumber Int	t	0	True	True	True	False	
sColor Str	ring	II	True	True	True	False	
rWeight Rea	eal (0.0	True	True	True	False	
usiNumberOfElements US	SInt	0	True	True	True	True	
rStackWeight Rea	eal	0.0	True	True	True	False	
udiStackNumber UD	Olnt	0	True	True	True	False	

|--|--|

PLC data types

UDT_Point

UDT_Point Prope	rties								
General									
Name	UDT_Point	Number	3	Туре	UDT	Language			
Numbering									
Information									
Title Version		Author		Comment		Family			
Version		User-defined ID							

Name	Data type	Default value	Accessible from HMI/OPC UA/Web API	able	neering		Comment
rX	Real	0.0	True	True	True	False	
rZ	Real	0.0	True	True	True	False	

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PLC data types	
System data types	
his folder is empty.	