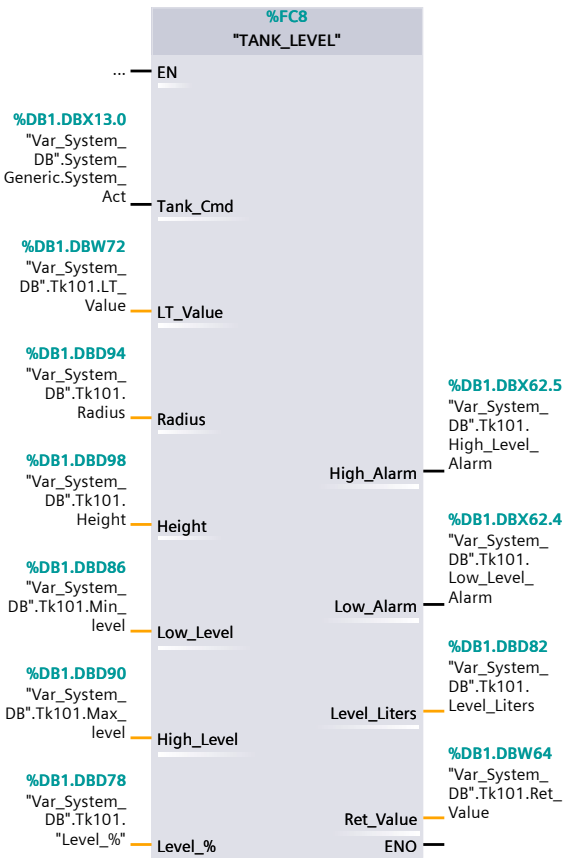
Energy_Drink_V15.1 / ENERGY_DRINK_PROC [CPU 314C-2 PN/DP] / Program blocks / 03-TANK MANAGEMENT

TANKS_MANAGEMENT [FC9]

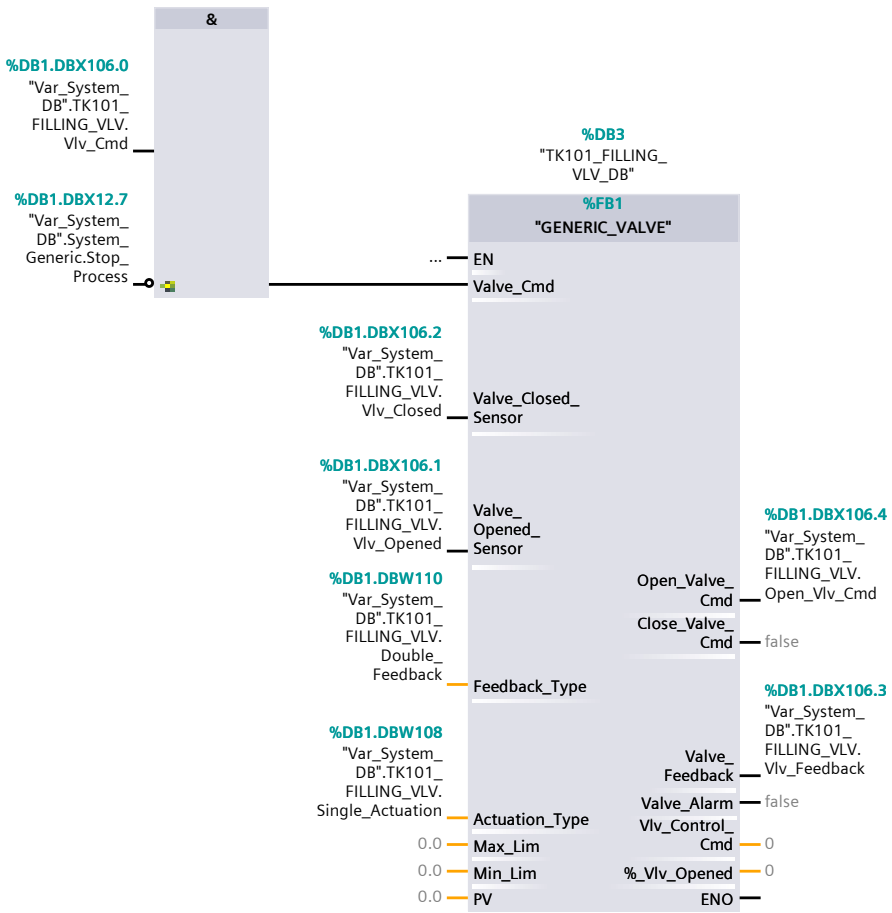
TANKS_MANAGEMENT Properties							
General							
Name	TANKS_MANAGEMENT	**Number**	9	**Type**	FC	**Language**	FBD
Numbering	Automatic						
Information							
Title		**Author**		**Comment**		**Family**	
Version	0.1	**User-defined ID**					

TANKS_MANAGEMENT				
Name	**Data type**	**Offset**	**Default value**	**Comment**
Input				
Output				
InOut				
Temp				
Constant				
▼ Return				
TANKS_MANAGEMENT	Void			

Network 1: /********TANK101 LEVEL **********/**



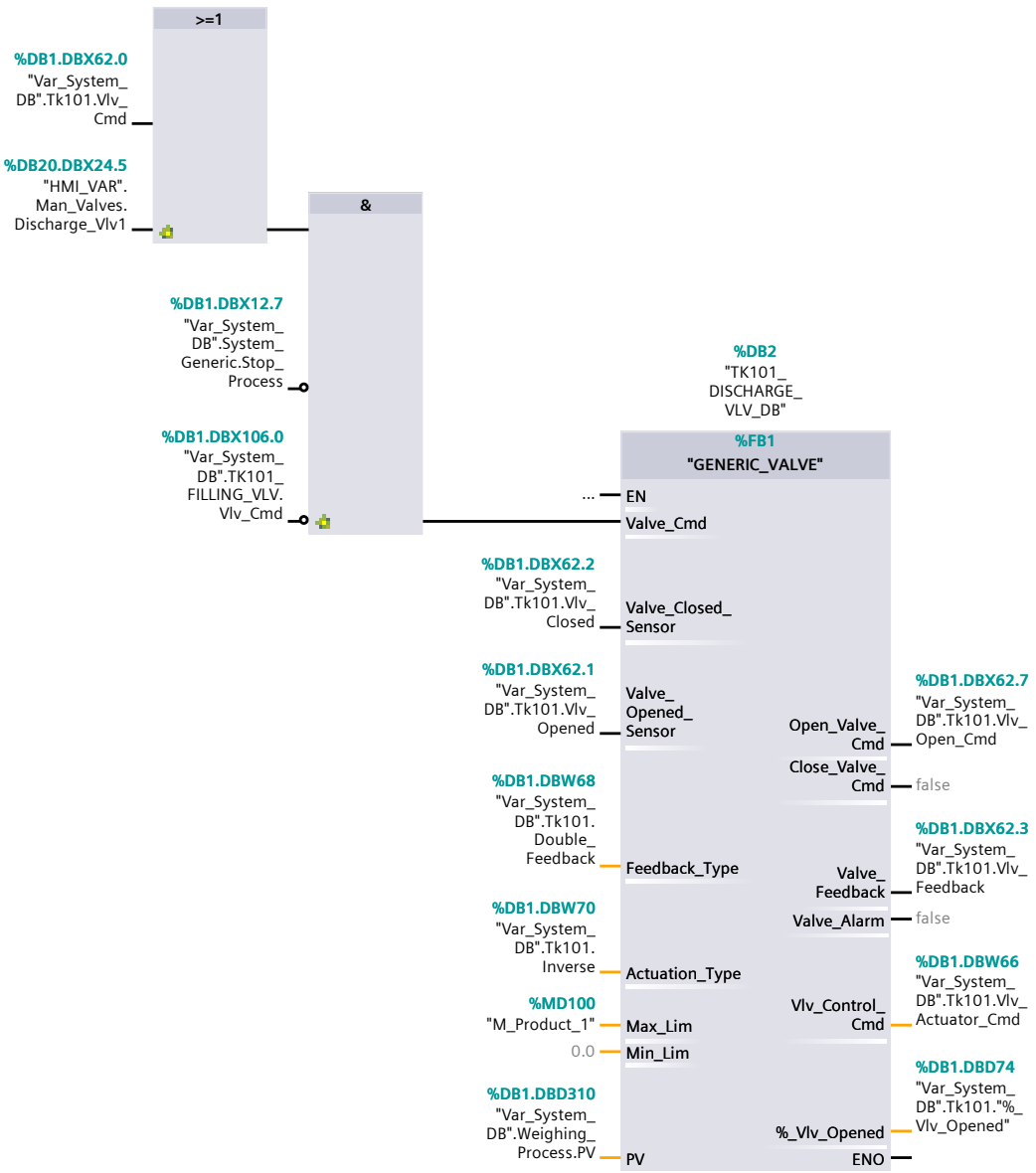
Network 2: /********TANK 101 FILLING VALVE**********/**



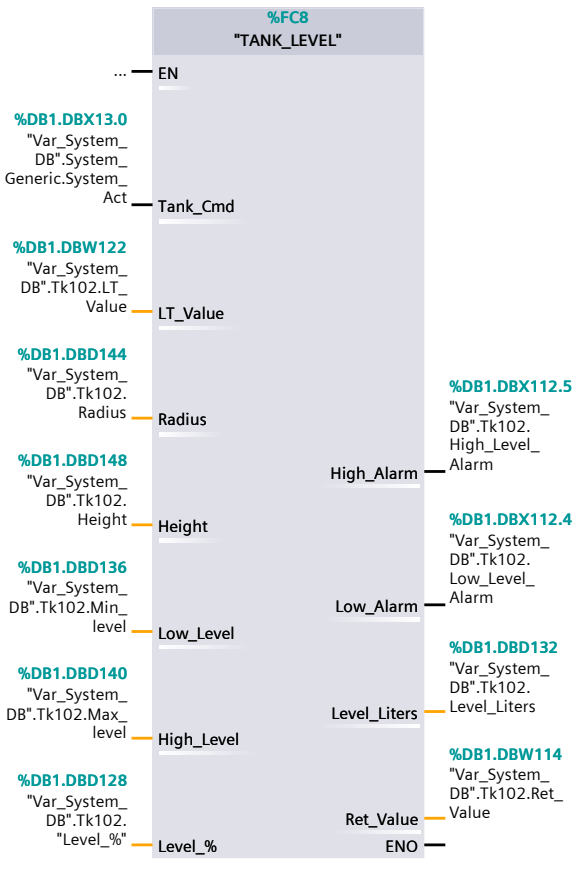
Network 3: **********************CONDITIONS TO FILL TANK 101**/**

```
0001 // IF SYSTEM IS ACTIVE => CHECK CONDITIONS
0002       U     "Var_System_DB".System_Generic.System_Act
0003 // IF LEVEL IS < 20% => SET FILLING TANK
0004       U(
0005       L     "Var_System_DB".Tk101."Level_%"
0006       L     20
0007       <=I
0008       )
0009       S     "Var_System_DB".TK101_FILLING_VLV.Vlv_Cmd// SET VLV_CMD
0010
0011 // IF LEVEL IS >= 90% => RESET FILLING TANK
0012       U(
0013       L     "Var_System_DB".Tk101."Level_%"
0014       L     90
0015       >=I
0016       )
0017       R     "Var_System_DB".TK101_FILLING_VLV.Vlv_Cmd// RESET VLV_CMD
```

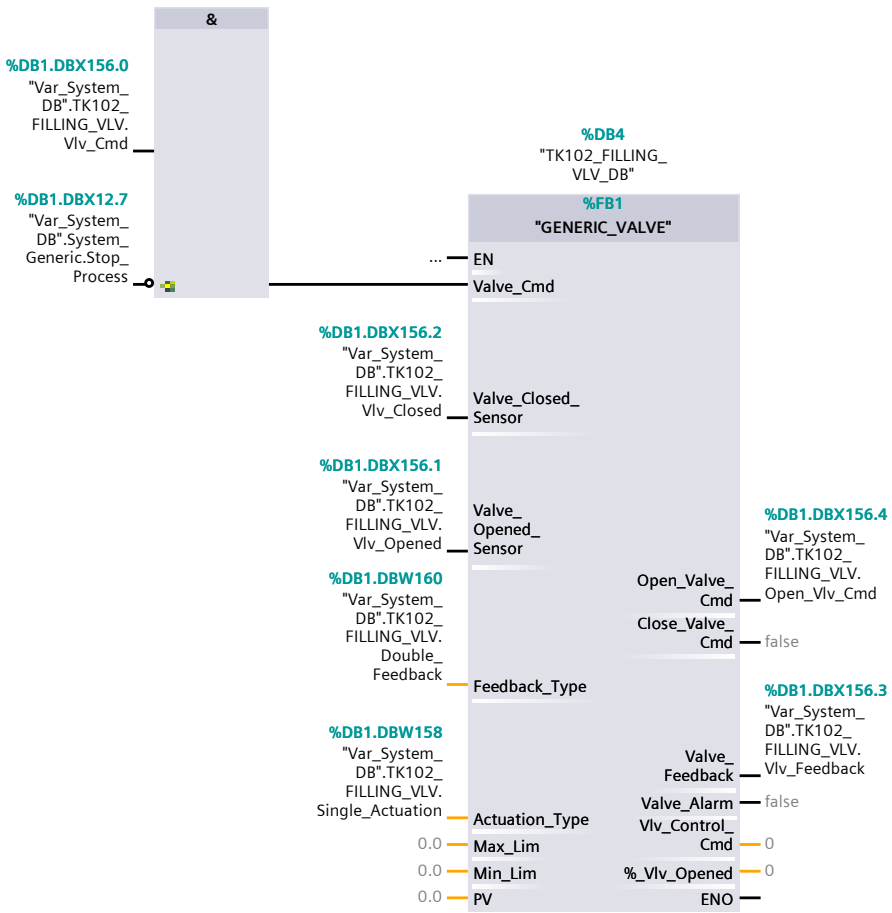
Network 4: /**********************TANK 101 DISCHARGE VALVE**/**



Network 5: /********TANK102 LEVEL **********/**



Network 6: /********TANK 102 FILLING VALVE**********/**



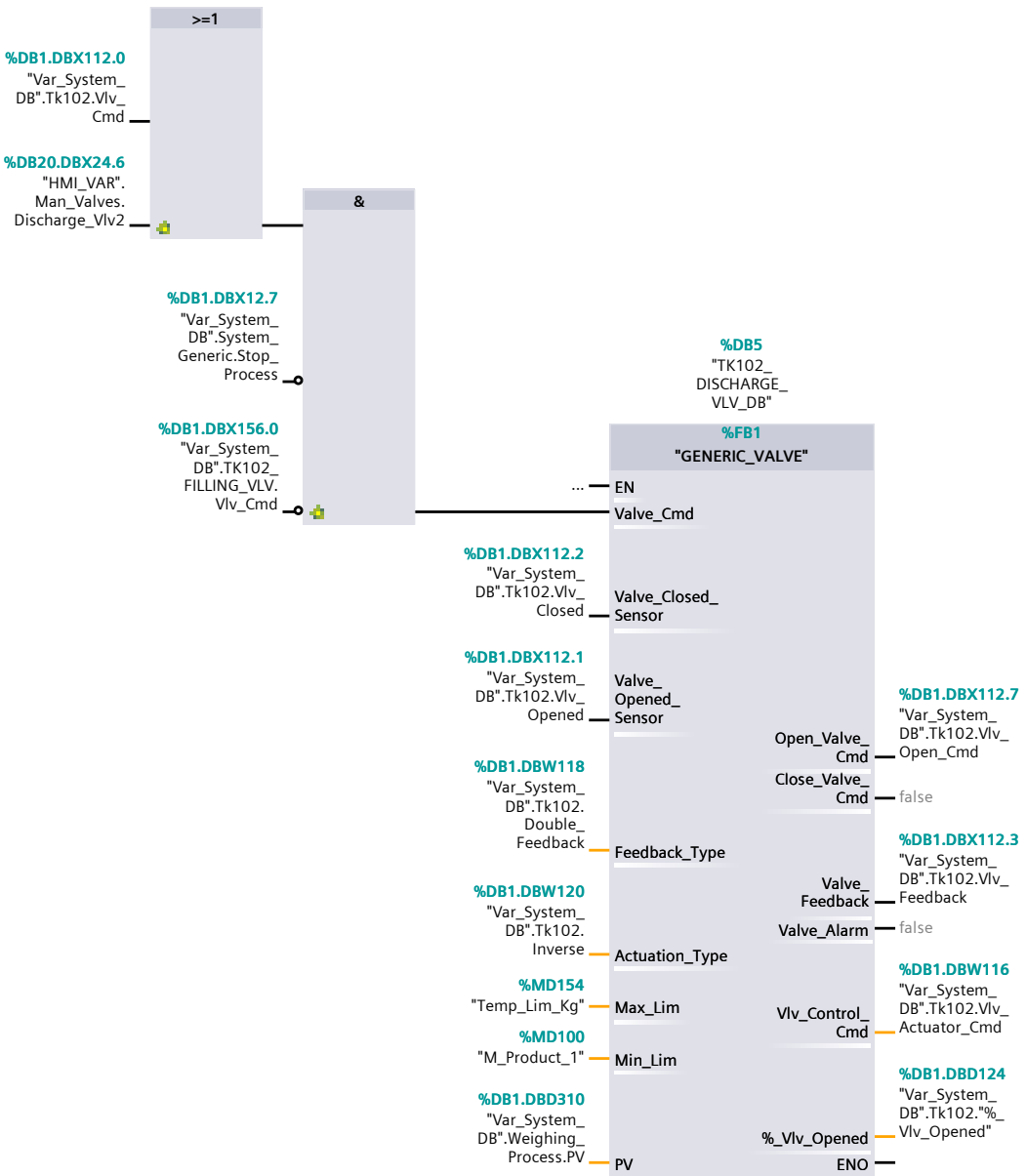
Network 7: **********CONDITIONS TO FILL TANK 102********/**

```
0001 // IF SYSTEM IS ACTIVE => CHECK CONDITIONS
0002       U     "Var_System_DB".System_Generic.System_Act
0003 // IF LEVEL IS < 20% => SET FILLING TANK
0004       U(
0005       L     "Var_System_DB".Tk102."Level_%"
0006       L     20
0007       <=I
0008       )
0009       S     "Var_System_DB".TK102_FILLING_VLV.Vlv_Cmd// SET VLV_CMD
0010
0011 // IF LEVEL IS >= 90% => RESET FILLING TANK
0012       U(
0013       L     "Var_System_DB".Tk102."Level_%"
0014       L     90
0015       >=I
0016       )
0017       R     "Var_System_DB".TK102_FILLING_VLV.Vlv_Cmd// RESET VLV_CMD
0018
```

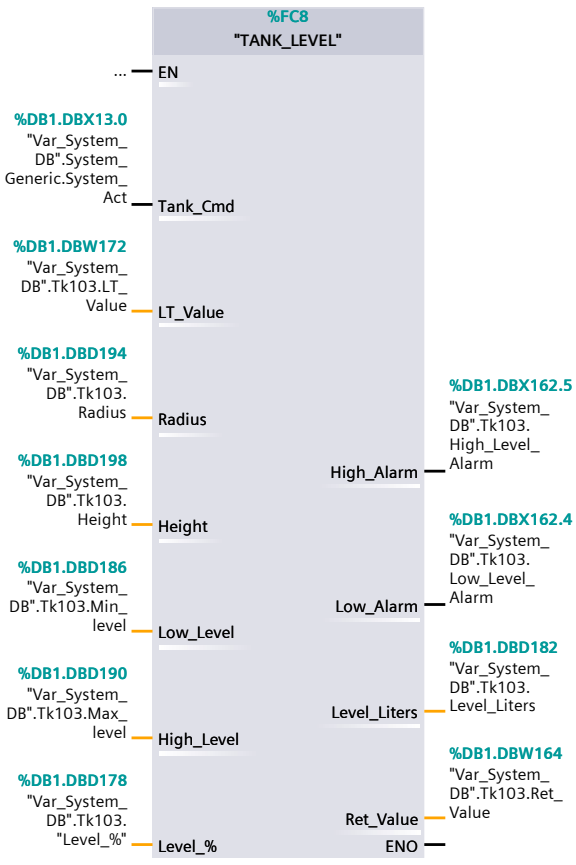
Network 8: /********DISCHARGE VLV 2 MAX LIMIT**********/**

```
0001 // SUM OF THE PRODUCT 1 AND 2 TO USE IT AS A MAX LIMIT FOR DISCHARGE VLV 2
0002       L     "M_Product_1"
0003       L     "M_Product_2"
0004       +R
0005       T     "Temp_Lim_Kg"        // DISCHARGE VLV 2 MAX LIMIT
0006
```

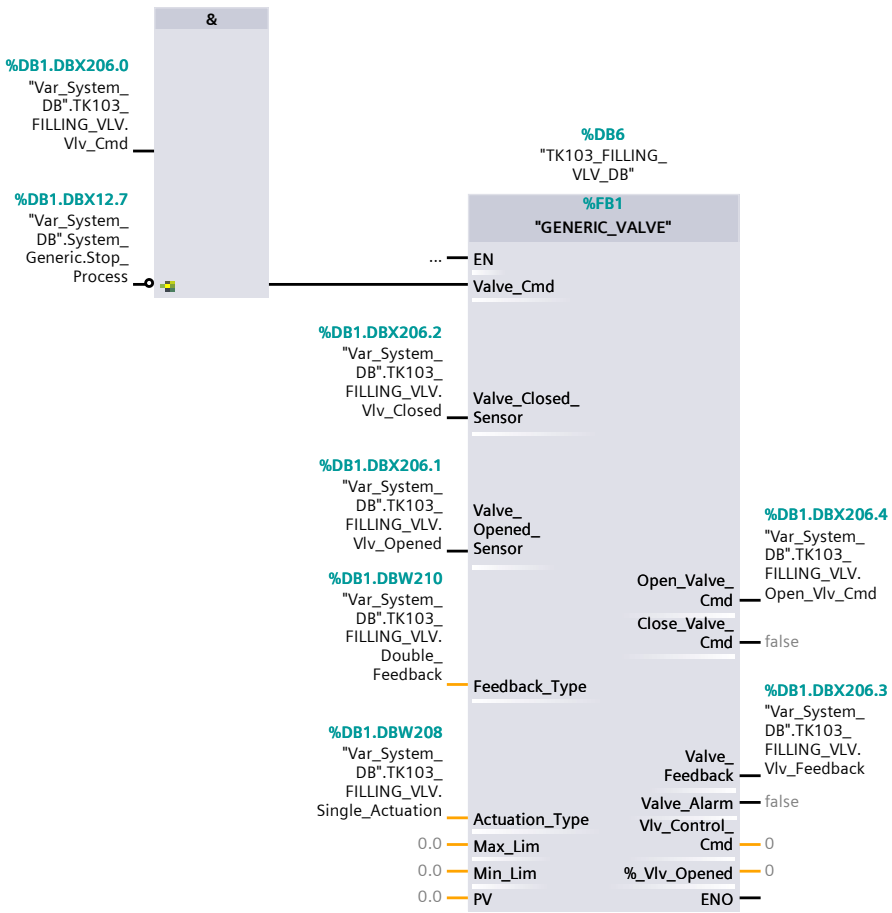
Network 9: /********TANK 102 AND DISCHARGE VALVE**********/**



Network 10: /********TANK103 LEVEL **********/**



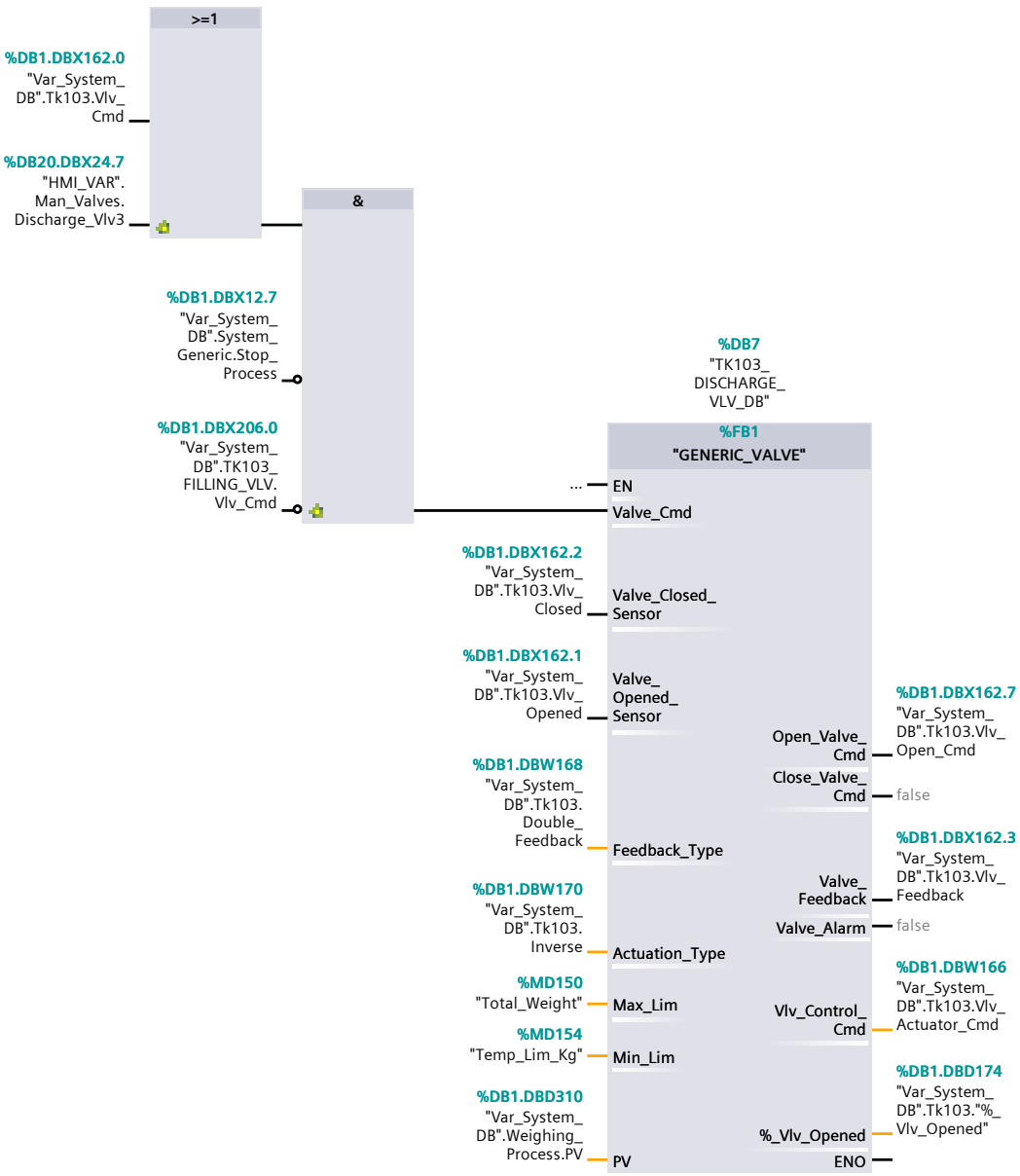
Network 11: /********TANK 103 FILLING VALVE**********/**



Network 12: **********************CONDITIONS TO FILL TANK 103**/**

```
0001 // IF SYSTEM IS ACTIVE => CHECK CONDITIONS
0002       U     "Var_System_DB".System_Generic.System_Act
0003 // IF LEVEL IS < 20% => SET FILLING TANK
0004       U(
0005       L     "Var_System_DB".Tk103."Level_%"
0006       L     20
0007       <=I
0008       )
0009       S     "Var_System_DB".TK103_FILLING_VLV.Vlv_Cmd// SET VLV_CMD
0010
0011 // IF LEVEL IS >= 90% => RESET FILLING TANK
0012       U(
0013       L     "Var_System_DB".Tk103."Level_%"
0014       L     90
0015       >=I
0016       )
0017       R     "Var_System_DB".TK103_FILLING_VLV.Vlv_Cmd// RESET VLV_CMD
0018
```

Network 13: /**********************TANK 103 AND DISCHARGE VALVE**/**


>=1
%DB1.DBX162.0
"Var_System_
DB".Tk103.Vlv_
Cmd
%DB20.DBX24.7
"HMI_VAR".
Man_Valves.
Discharge_Vlv3
&
%DB1.DBX12.7
"Var_System_
DB".System_
Generic.Stop_
Process
%DB1.DBX206.0
"Var_System_
DB".TK103_
FILLING_VLV.
Vlv_Cmd
%DB7
"TK103_
DISCHARGE_
VLV_DB"
%FB1
"GENERIC_VALVE"
...
EN
Valve_Cmd
%DB1.DBX162.2
"Var_System_
DB".Tk103.Vlv_
Closed
Valve_Closed_
Sensor
%DB1.DBX162.1
"Var_System_
DB".Tk103.Vlv_
Opened
Valve_
Opened_
Sensor
%DB1.DBW168
"Var_System_
DB".Tk103.
Double_
Feedback
Feedback_Type
%DB1.DBW170
"Var_System_
DB".Tk103.
Inverse
Actuation_Type
%MD150
"Total_Weight"
Max_Lim
%MD154
"Temp_Lim_Kg"
Min_Lim
%DB1.DBD310
"Var_System_
DB".Weighing_
Process.PV
PV
Open_Valve_
Cmd
%DB1.DBX162.7
"Var_System_
DB".Tk103.Vlv_
Open_Cmd
Close_Valve_
Cmd
false
Valve_
Feedback
%DB1.DBX162.3
"Var_System_
DB".Tk103.Vlv_
Feedback
Valve_Alarm
false
Vlv_Control_
Cmd
%DB1.DBW166
"Var_System_
DB".Tk103.Vlv_
Actuator_Cmd
%_Vlv_Opened
%DB1.DBD174
"Var_System_
DB".Tk103."%_
Vlv_Opened"
ENO