Energy_Drink_V15.1 / ENERGY_DRINK_PROC [CPU 314C-2 PN/DP] / Program blocks / 05-CONVEYOR MANAGEMENT

CONVEYOR_BELT [FC10]

CONVEYOR_BELT Properties

General

Name	CONVEYOR_BELT	Number	10	Type	FC	Language	FBD
Numbering	Automatic						

Information

Title		Author		Comment		Family	
Version	0.1	User-defined ID					

CONVEYOR_BELT

Name	Data type	Offset	Default value	Comment
▼ Input				
Conveyor_Cmd	Bool			
Time_Act	Time			
Output				
InOut				
Temp				
Constant				
▼ Return				
CONVEYOR_BELT	Void			

Network 1: *******************COMMANDS AND CONDITIONS TO MANAGE CONVEYOR BELT**/

```
0001   // WHEN SCALE IS FINISHED WEIGHING ALL THE PRODUCTS => BACH IN PROGRESS =1
0002   // SEND COMMAND TO ACTIVATE THE CONVEYOR BELT
0003       U     #Conveyor_Cmd
0004       FP    "FP_Conveyor_Act"
0005       S     "Var_System_DB".System_Generic.Mixer_Station
0006
0007       U     "Var_System_DB".System_Generic.Mixer_Station
0008       FP    "Tag_14"
0009       =     "Var_System_DB".Conveyor_Belt.Motor_Cmd
0010
0011
0012   // TIMER ACTIVATION: IF FN PULSE OF CONVEYOR_CMD => SET TIMER_ACT
0013       U     #Conveyor_Cmd
0014       FN    "FN_Bach_in_Prog"
0015       =     "Var_System_DB".Conveyor_Belt.Timer_Act
0016
0017   // IF TIMER_ACT = 1 => ACTIVATE TIMER
0018       CALL  TP , "T_CONVEYOR"
0019         Time
0020         IN :="Var_System_DB".Conveyor_Belt.Timer_Act
0021         PT :=#Time_Act
0022         Q  :=
0023         ET :=
0024
0025
0026   // IF TIMER.Q => SEND PULSE TO RESET MOTOR_CMD
0027       U     "T_CONVEYOR".Q
0028       FN    "FN_TIMER.Q"
0029       R     "Var_System_DB".Conveyor_Belt.M_Stop
0030
0031
0032   // SEND PULSE TO SET STOP COMMAND TO ITS NORMAL POSITON "NC" WHEN FN OF FEEDBACK
0033       U     "Var_System_DB".Conveyor_Belt.M_Feedback
0034       FN    "FN_STOP_CMD"
0035       S     "Var_System_DB".Conveyor_Belt.M_Stop
0036       S     "Var_System_DB".System_Generic.Conveyor_Station
0037
0038
0039   // RESET CONVEYOR STATION
0040       U     "AGITATOR_TIMER_DB".Q
0041       R     "Var_System_DB".System_Generic.Conveyor_Station
0042
0043   // MOTOR MEMORY STATE: IN CASE STOP BUTTON IS PRESSED AND THE MOTOR WAS ACTIVE,
0044   // WE WANT TO KEEP THE MOTOR "ON" AFTER THE STOP BUTTON IS REALESED AGAIN
0045       U     "Var_System_DB".Conveyor_Belt.M_Feedback
0046       S     "Var_System_DB".Conveyor_Belt.State
0047
0048   // RESET BELT STATE BIT
0049       UN    "Var_System_DB".System_Generic.Stop_Process
0050       UN    "Var_System_DB".System_Generic.System_Failure
0051       O(
0052       U     "Var_System_DB".System_Generic.Start
0053       FN    "Tag_27"
0054       )
0055       R     "Var_System_DB".Conveyor_Belt.State
0056
```

Network 2: ****************** CONVEYOR BELT MOTOR ACTIVATION**/

```
                              &
%DB1.DBX12.2
"Var_System_
DB".System_
Generic.Start

%DB1.DBX21.6
"Var_System_                        >=1
DB".Conveyor_
Belt.State              %DB1.DBX20.0
                        "Var_System_
%DB1.DBX12.7            DB".Conveyor_
"Var_System_            Belt.Motor_
DB".System_             Cmd
Generic.Stop_
Process

                              &
%DB1.DBX12.2
"Var_System_
DB".System_
Generic.Start

%DB1.DBX13.1
"Var_System_                                        %DB14
DB".System_                                       "CONVEYOR_DB"
Generic.System_                                       %FB2
Failure                 %DB1.DBX20.1              "STAR/DELTA_STARTER"
                        "Var_System_
%DB1.DBX21.6            DB".Conveyor_
"Var_System_            Belt.Man_Start                                    %DB1.DBX20.4
DB".Conveyor_                                  ... — EN          KM_MAIN — "Var_System_
Belt.State                                         — START                  DB".Conveyor_
                                                                            Belt.M_Main

                              &                                            %DB1.DBX20.5
%DB1.DBX20.3                                                     KM_STAR — "Var_System_
"Var_System_                                                              DB".Conveyor_
DB".Conveyor_                                                             Belt.M_Star
Belt.M_Stop
                                                                          %DB1.DBX20.6
%DB1.DBX12.3                                                    KM_DELTA — "Var_System_
"Var_System_                                                              DB".Conveyor_
DB".System_                                                               Belt.M_Delta
Generic.Stop
                                                                          %DB1.DBX20.6
%DB1.DBX12.5                                                     H_MAIN — "Var_System_
"Var_System_                                                              DB".Conveyor_
DB".System_                                                               Belt.M_Delta
Generic.
Emergency_Stop                                                            %DB1.DBX21.0
                                                                          "Var_System_
%DB1.DBX20.2                                                     H_STAR — DB".Conveyor_
"Var_System_                                                              Belt.M_Led_
DB".Conveyor_                                                             Main
Belt.Man_Stop
                                                                         %DB1.DBX21.1
%DB1.DBX0.5                                                               "Var_System_
"Var_System_                                                    H_DELTA — DB".Conveyor_
DB".Mixer_                                                                Belt.M_Led_
Motor.Overload                                                            Delta

%DB20.DBX26.1                                                            %DB1.DBX21.2
"HMI_VAR".                                                               "Var_System_
Man_Motors.                                                   H_STOPPED — DB".Conveyor_
Stop_Conveyor                                                             Belt.M_Led_
                                                  — STOP                  Stop

                                                                         %DB1.DBX21.3
                        %DB1.DBX20.7                                     "Var_System_
                        "Var_System_                           H_OVL — DB".Conveyor_
                        DB".Conveyor_                                    Belt.M_Led_
                        Belt.M_                                          Ovl
                        Overload
                                                  — OVL                 %DB1.DBX21.4
                        %DB1.DBD24                                      "Var_System_
                        "Var_System_                          CMD_Feedback — DB".Conveyor_
                        DB".Conveyor_                                   Belt.M_
                        Belt.T_Star                                     Feedback
                                                  — PT          ENO —
```