# **Project Documentation**

File: Cena05.project

Date: 22/12/2024

Profile: CODESYS V3.5 SP8 Patch 1

## Table of Contents

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## 1 Device: Device

#### **Users and Groups**

Users:

Groups:

#### **Information**

Name: CODESYS Control Win V3

Vendor: 3S - Smart Software Solutions GmbH

Groups: PLCs
Type: 4096
ID: 0000 0001
Version: 3.5.8.10
Order number: 305021

Description: CODESYS V3 Soft-PLC for Windows with non realtime capabilities (CODESYS Control Win V3)

## 1.1 Plc Logic: Plc Logic

## 1.1.1 Application: Application

#### 1.1.1.1 Library Manager: Library Manager

```
#loStandard
  Base Interfaces, * (System)
  SysTypes2 Interfaces, * (System)
  CmpErrors2 Interfaces, * (System)
#3SLicense
  #CmpLog
     SysTypes2 Interfaces, * (System)
  #CAA Types
     #SysCpuHandling
        #SysMem
          SysTypes2 Interfaces, * (System)
        SysTypes2 Interfaces, * (System)
        CmpErrors2 Interfaces, * (System)
  #Standard
  #Component Manager
     #CmpEventMgr
        SysTypes2 Interfaces, * (System)
        CmpErrors2 Interfaces, * (System)
     #CmpApp
        SysTypes2 Interfaces, * (System)
        #CmpEventMgr
```

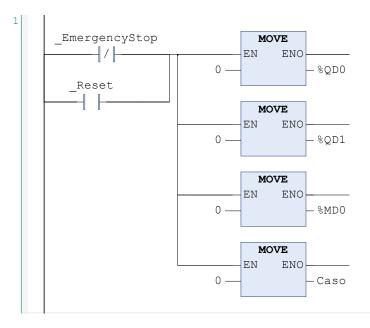
```
CmpErrors2 Interfaces, * (System)
     SysTypes2 Interfaces, * (System)
  #CmpApp
     SysTypes2 Interfaces, * (System)
     #CmpEventMgr
        SysTypes2 Interfaces, * (System)
        CmpErrors2 Interfaces, * (System)
  #CmpCodeMeter
     SysTypes2 Interfaces, * (System)
     CmpErrors2 Interfaces, * (System)
  CmpErrors2 Interfaces, * (System)
  SysTypes2 Interfaces, * (System)
#Standard
#BreakpointLogging
  #CmpLog
     SysTypes2 Interfaces, * (System)
  SysTypes2 Interfaces, * (System)
#lecVarAccess
  #CmplecVarAccess
     #Collections
        #SysMem
           SysTypes2 Interfaces, * (System)
        #Standard
        Collections Interfaces, * (System)
        Base Interfaces, * (System)
        CmpErrors2 Interfaces, * (System)
     Base Interfaces, * (System)
     Collections Interfaces, * (System)
     SysTypes2 Interfaces, * (System)
     lecVarAccess3 Interfaces, * (System)
  #Component Manager
     #CmpEventMgr
        SysTypes2 Interfaces, * (System)
        CmpErrors2 Interfaces, * (System)
     #CmpApp
        SysTypes2 Interfaces, * (System)
        #CmpEventMgr
           SysTypes2 Interfaces, * (System)
           CmpErrors2 Interfaces, * (System)
     SysTypes2 Interfaces, * (System)
  #Collections
     #SysMem
        SysTypes2 Interfaces, * (System)
     #Standard
     Collections Interfaces, * (System)
     Base Interfaces, * (System)
     CmpErrors2 Interfaces, * (System)
  #Standard
  #SymbolicVarsBase
     #CmpApp
        SysTypes2 Interfaces, * (System)
        #CmpEventMgr
           SysTypes2 Interfaces, * (System)
           CmpErrors2 Interfaces, * (System)
     #Collections
        #SysMem
          SysTypes2 Interfaces, * (System)
```

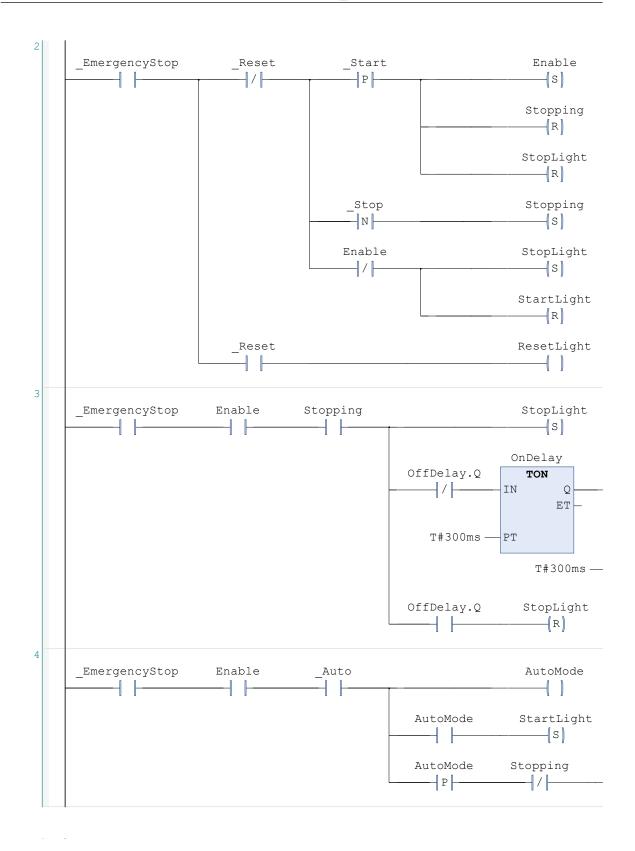
```
Collections Interfaces, * (System)
      Base Interfaces, * (System)
      CmpErrors2 Interfaces, * (System)
   #Standard
  #SysMem
     SysTypes2 Interfaces, * (System)
   #SysCpuHandling
     #SysMem
        SysTypes2 Interfaces, * (System)
     SysTypes2 Interfaces, * (System)
CmpErrors2 Interfaces, * (System)
  Base Interfaces, * (System)
  Collections Interfaces, * (System)
  SysTypes2 Interfaces, * (System)
  CmpErrors2 Interfaces, * (System)
  lecVarAccess3 Interfaces, * (System)
Base Interfaces, * (System)
Collections Interfaces, * (System)
Data Server Interfaces, * (System)
SysTypes2 Interfaces, * (System)
CmpErrors2 Interfaces, * (System)
#SysMem
   SysTypes2 Interfaces, * (System)
lecVarAccess3 Interfaces, * (System)
```

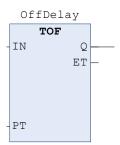
#### 1.1.1.2 POU: PLC\_PRG

```
1
         PROGRAM PLC PRG
 2
 3
               //Entradas
 4
               _AtExit : BOOL ;
             _Auto: BOOL;
              _EmergencyStop : BOOL ;
              _Manual : BOOL ;
 8
              _Reset : BOOL ;
              _Start : BOOL ;
 9
              _Stop: BOOL;
10
11
              _VisionSensor: WORD;
12
        //Saidas
Counter1: WORD;
Counter2: WORD;
Counter3: WORD;
EntryConveyor: BOOL;
ExitConveyor: BOOL;
ResetLight: BOOL;
StartLight: BOOL;
StopLight: BOOL;
13
             //Saídas
14
15
16
17
18
19
20
21
22
            Sorter1Belt : BOOL ;
23
             Sorter1Turn : BOOL ;
24
              Sorter2Belt : BOOL ;
25
              Sorter2Turn : BOOL ;
             Sorter3Belt: BOOL;
26
27
             Sorter3Turn : BOOL ;
28
             StopBlade : BOOL ;
29
```

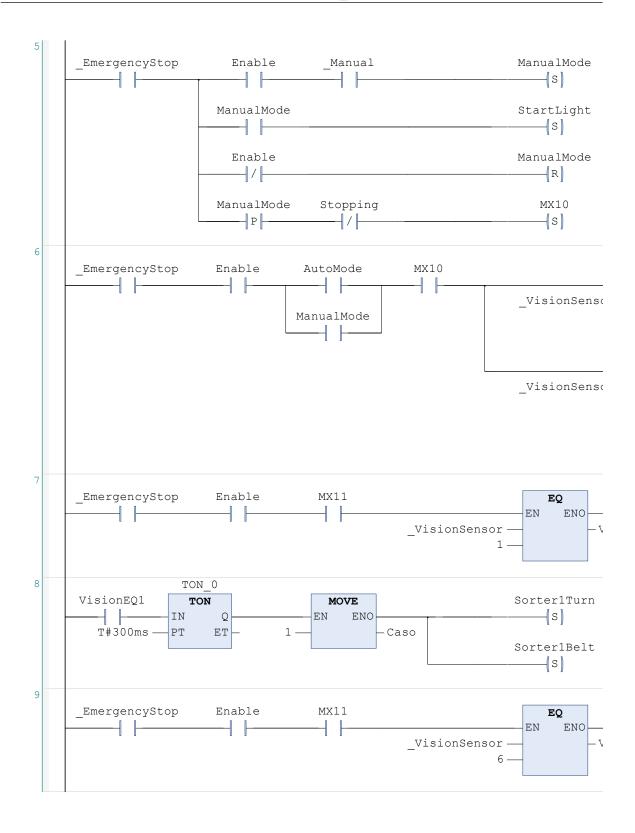
```
//Sinais
           Enable : BOOL ;
31
32
           Stopping : BOOL ;
           AutoMode : BOOL ;
33
34
           ManualMode: BOOL;
35
           OnDelay: TON;
           OffDelay: TOF;
36
37
           TON: ARRAY [1..4] OF TON;
           Caso: INT;
38
           F_TRIG : ARRAY [ 1 .. 3 ] OF F_TRIG ;
39
          MX10 : BOOL ;
40
41
          MX11: BOOL;
42
          MX12: BOOL;
43
          VisionEQ1 : BOOL ;
44
          TON_0 : TON ;
45
           VisionEQ6 : BOOL ;
          TON_1 : TON ;
46
47
          VisionEQ4 : BOOL ;
          TON_2 : TON;
48
49
          VisionEQ5 : BOOL ;
50
           TON 3: TON;
51
           VisionEQ2 : BOOL ;
52
           TON 4: TON;
53
           VisionEQ3 : BOOL ;
54
           TON_5 : TON;
55
       END_VAR
56
```

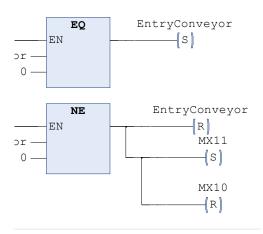






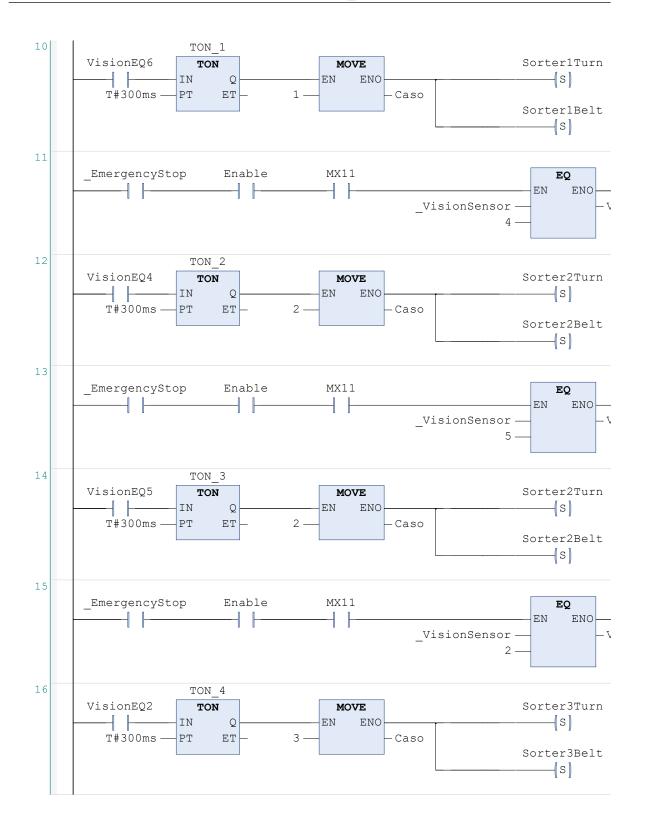




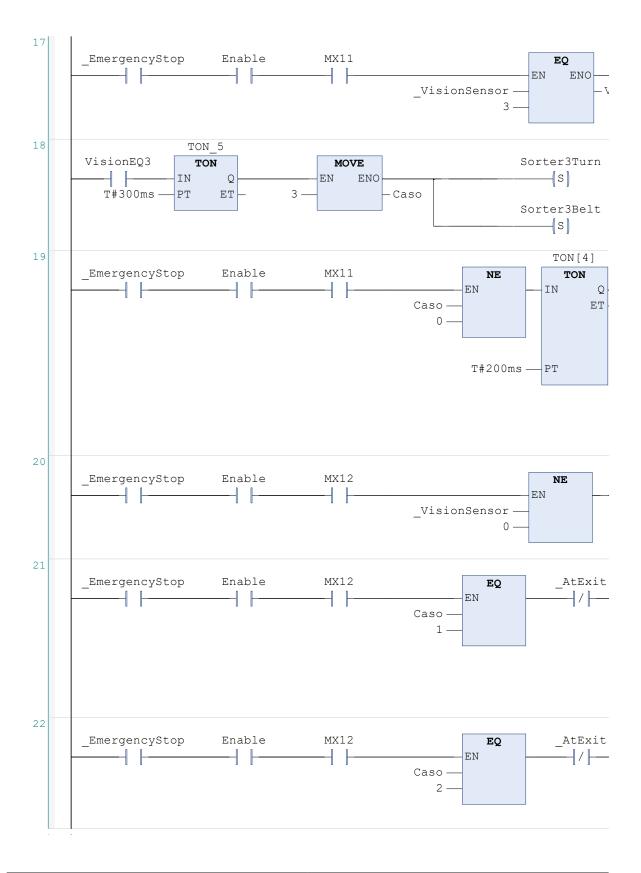


/isionEQ1

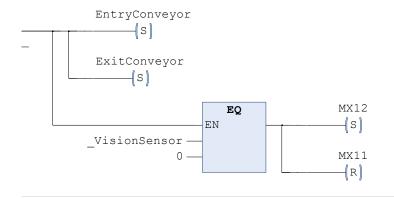
/isionEQ6

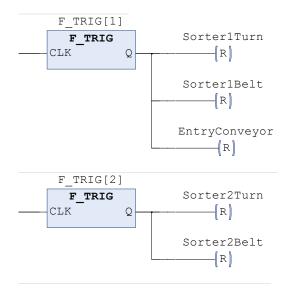


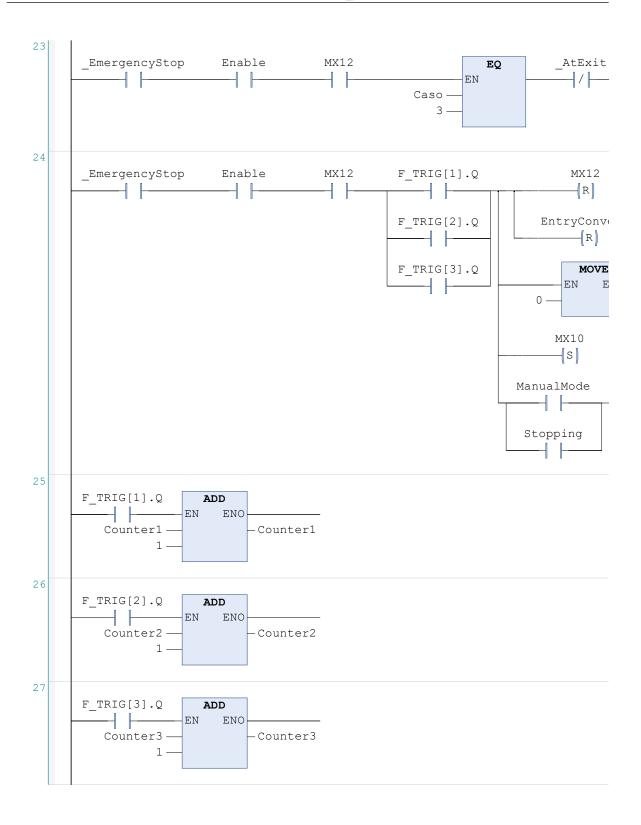
isionEQ4	
isionEQ5	
isionEQ2	

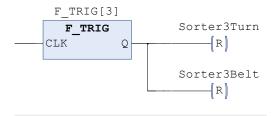


/isionEQ3









eyor



### 1.1.1.3 Symbol configuration: Symbols

## 1.1.1.4 Task Configuration: Task Configuration

Max. number of tasks: 100
Max. number of cyclic tasks: 100
Max. number of freewheeling tasks: 100
Max. number of event tasks: 100
Max. number of status tasks: 100

System Events:

#### 1.1.1.4.1 Task: MainTask

Priority: 1 Type: Cyclic Interval: t#20ms Unit: ms Watchdog: Inactive POUs: PLC\_PRG

## 1.1.1.4.1.1 Program call: PLC\_PRG

## 2 : Project Settings

Static Analysis Light:

Unused variables (#33): 0 Overlapping memory areas (#28): 0 Concurrent access (#6): 0 Multiple write access on output (#4): 0 Multiple usage of name (#27): 0