

<https://drive.google.com/file/d/1uuAMmO5EJagcldifuli6ngv6AvwPIlda/view?usp=sharing>

The image shows the Siemens SIMATIC Manager software interface. The main window is the Ladder Logic (LAD) editor for a PLC program. The title bar indicates the project is 'Application [CODESYS_Control_Win_V3_x64; PLC Logic]'. The left sidebar shows the project tree with the 'Application' folder expanded, containing sub-folders like 'GLOBAL', 'PLC Logic', 'Task Configuration', and 'Visualization Manager'. The main editor area shows a ladder logic network with the following code:

```
1 [attribute 'qualified_only']
2 VAR GLOBAL
3
4 startxPS:INT;
5 startyPS:INT;
6
7 dirxPS:INT;
8 naPS:INT;
9 yaPS:INT;
10 S1PS:BOOL;
11 S2PS:BOOL;
12 S3PS:BOOL;
13 S4PS:BOOL;
14 TRYBOUTOMPS:BOOL;
15 STARTPS:BOOL;
16 STOPPS:BOOL;
17 POWWRODOOPS:BOOL;
18 WYBRANAPOZPS:INT;
19 RUCHDOZADOZPS:BOOL;
20 IMPULSPS:BOOL;
21 do3wykPS:BOOL;
22 do5wykPS:BOOL;
23 do4wykPS:BOOL;
24 pozwo1napowSPS:BOOL;
25 do5powPS:BOOL;
26 do1wykPS:BOOL;
27 chwytakPS:BOOL;
28 dozadpozPS:BOOL;
29 BT0PS, BY1PS, BX1PS, BX2PS, BX0PS:BOOL;
30 STAN1PS:INT;
31
32 END_VAR
```

The bottom status bar shows the build status: 'Build complete -- 0 errors, 0 warnings: Ready for download'. The status bar also displays the project user as '(nobody)' and the current network as 'Ln 30 Col 8 Ch 8'.

[illegible]

Instrukcje programu Main:

finalna.project - CODESYS

File Edit View Project Build Online Debug Tools Window Help

Application [CODESYS_Control_Win_V3_x64: PLC Logic]

Devices

PLC Logic

Application

GV1

Library Manager

dojazd (FB)

F0 (FUN)

F0 (FUN)

FB2TONPS (FB)

genimpulsw (FB)

Main (PRG)

stanPS (FUN)

Task Configuration

Task (EC-Tasks)

Main

VISU_TASK (DEC-T)

VisuElem.Vis

Visualization Manager

EkranGlowny

```
1 F0(S1_mono_PS,S_PS => GVL.S1PS);
2 F0(S2_mono_PS,S_PS => GVL.S2PS);
3 F0(S3_bi_PS,S_PS => GVL.TRYBAUTOMPS);
4 F0(S4_mono_PS,S_PS => GVL.dozadpozPS);
5 stanPS(GVL.BX0PS,GVL.BX1PS,GVL.BX2PS,GVL.BY0PS,GVL.BY1PS,STANPS => GVL.STANPS);
6 gvl.chwytaKF:=TRUE;
7 genimpPS(S1PS:=GVL.S1PS,H1FS => przebiegimpPS);
8 zboczeimpulswPS(CLK:=przebiegimpPS,Q=>GVL.IMFULSPS);
9
10 wtlaczeniePS(CLK :=GVL.S1PS);
11 IF wtlaczeniePS.Q THEN GVL.STARIFS:=TRUE; GVL.STOPPS:=FALSE; GVL.POWROTD00PS:=TRUE; gvl.chwytaKF:=TRUE; licznikwykonanPS:=0; GVL.RUCHDOZADPOZPS:=0;
12 END_IF
13
14 wylaczeniePS(CLK :=GVL.S2PS);
15 IF wylaczeniePS.Q THEN GVL.STOPPS:=TRUE; GVL.STARIFS:=FALSE;
16 END_IF
17
18 zboczenadpozPS(CLK :=GVL.dozadpozPS);
19 IF zboczenadpozPS.Q THEN GVL.STOPPS:=FALSE; GVL.STARIFS:=TRUE; GVL.RUCHDOZADPOZPS:=TRUE; GVL.POWROTD00PS:=FALSE; licznikwykonanPS:=0; gvl.chwytaKF:=TRUE;
20 END_IF
21
22 IF GVL.STARIFS AND NOT gvl.STOPPS THEN
23 IF GVL.TRYBAUTOMPS THEN GVL.POWROTD00PS:=FALSE;
24 IF NOT gvl.do3wykPS THEN dopoz3PS(npozycj1PS:=3,dirnPS => GVL.dirnPS,startxPS => GVL.startxPS,diryPS => GVL.diryPS,startyPS => GVL.startyPS); gvl.chwytaKF:=TRUE;
25 ELSEIF NOT gvl.do5wykPS THEN dopoz3PS(npozycj1PS:=5,dirnPS => GVL.dirnPS,startxPS => GVL.startxPS,diryPS => GVL.diryPS,startyPS => GVL.startyPS); gvl.chwytaKF:=FALSE;
26 ELSEIF NOT gvl.do4wykPS THEN dopoz3PS(npozycj1PS:=4,dirnPS => GVL.dirnPS,startxPS => GVL.startxPS,diryPS => GVL.diryPS,startyPS => GVL.startyPS); gvl.chwytaKF:=TRUE;
27 ELSEIF NOT gvl.do3powPS THEN dopoz3PS(npozycj1PS:=5,dirnPS => GVL.dirnPS,startxPS => GVL.startxPS,diryPS => GVL.diryPS,startyPS => GVL.startyPS);
28 ELSEIF NOT gvl.do1wykPS THEN dopoz3PS(npozycj1PS:=1,dirnPS => GVL.dirnPS,startxPS => GVL.startxPS,diryPS => GVL.diryPS,startyPS => GVL.startyPS); gvl.chwytaKF:=FALSE;
29 ELSEIF GVL.IMFULSPS THEN gvl.do3wykPS:=FALSE; gvl.do5wykPS:=FALSE; gvl.do4wykPS:=FALSE; gvl.do3powPS:=FALSE; gvl.do1wykPS:=FALSE; GVL.pozwolnapowPS:=FALSE; licznikwykonanPS:=licznikwykonanPS+1;
30 END_IF
31
32 ELSEIF GVL.POWROTD00PS AND gvl.yaPS<0 OR GVL.POWROTD00PS AND gvl.xaPS<0 THEN dopoz3PS(npozycj1PS:=0,dirnPS => GVL.dirnPS,startxPS => GVL.startxPS,diryPS => GVL.diryPS,startyPS => GVL.startyPS); gvl.chwytaKF:=TRUE;
33 ELSEIF GVL.RUCHDOZADPOZPS AND gvl.yaPS<ycPS OR GVL.RUCHDOZADPOZPS AND gvl.xaPS<xcPS THEN dopoz3PS(npozycj1PS:=GVL.WYBRANAPOZPS,dirnPS => GVL.dirnPS,startxPS => GVL.startxPS,diryPS => GVL.diryPS,startyPS => GVL.startyPS);
34 gvl.chwytaKF:=TRUE; gvl.do3wykPS:=FALSE; gvl.do5wykPS:=FALSE; gvl.do4wykPS:=FALSE; gvl.do3powPS:=FALSE; gvl.do1wykPS:=FALSE; GVL.pozwolnapowPS:=FALSE;
35 END_IF
36 END_IF
37
38 CASE GVL.WYBRANAPOZPS OF
39 0:
40 xcPS:=0;
41 ycPS:=0;
42 1:
43 xcPS:=0;
44 ycPS:=50;
45 2:
46 xcPS:=50;
47 ycPS:=0;
48 3:
49 xcPS:=50;
50 ycPS:=50;
51 4:
52 xcPS:=100;
53 ycPS:=0;
54 5:
55 xcPS:=100;
56 ycPS:=50;
57 ELSE
58 xcPS:=0;
59 ycPS:=0;
60 END_CASE
61
62 CASE GVL.xaPS OF
63 0:
64 GVL.BX0PS:=TRUE;
65 50:
66 GVL.BX1PS:=TRUE;
67 100:
68 GVL.BX2PS:=TRUE;
69 ELSE
70 GVL.BX0PS:=FALSE; GVL.BX1PS:=FALSE; GVL.BX2PS:=FALSE;
71 END_CASE
72
73 CASE GVL.yaPS OF
74 0:
75 GVL.BY0PS:=TRUE;
76 50:
77 GVL.BY1PS:=TRUE;
78 ELSE
79 GVL.BY0PS:=FALSE; GVL.BY1PS:=FALSE;
80 END_CASE
81
```

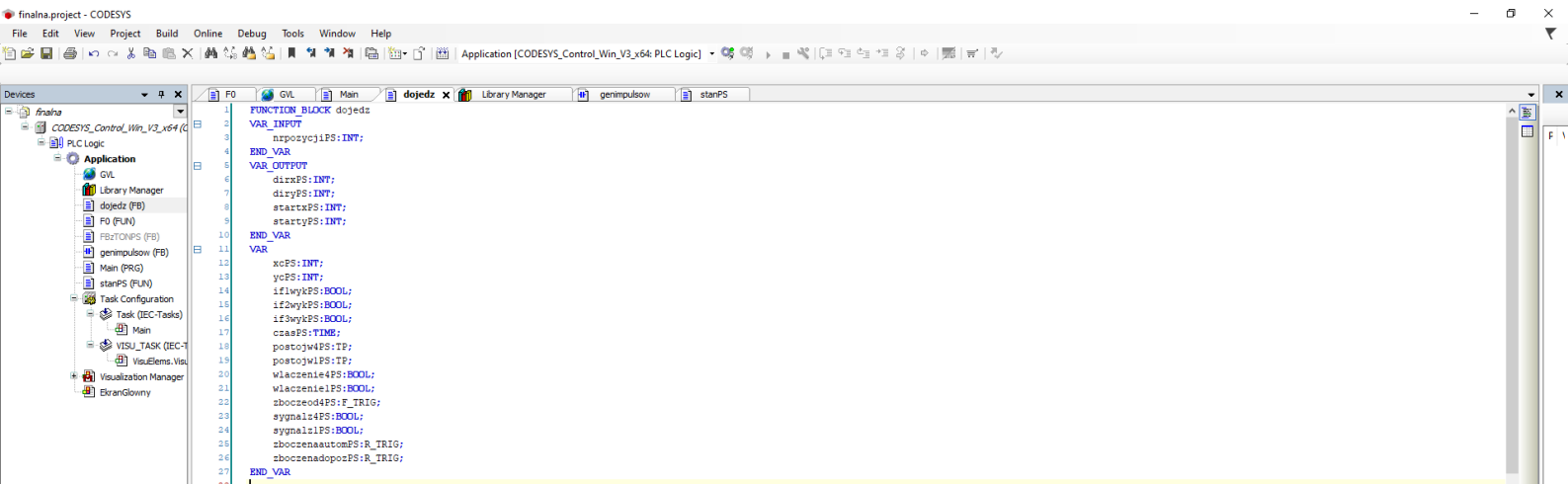
Messages - Total 0 error(s), 0 warning(s), 66 message(s)

Build 0 error(s) 0 warning(s) 62 message(s)

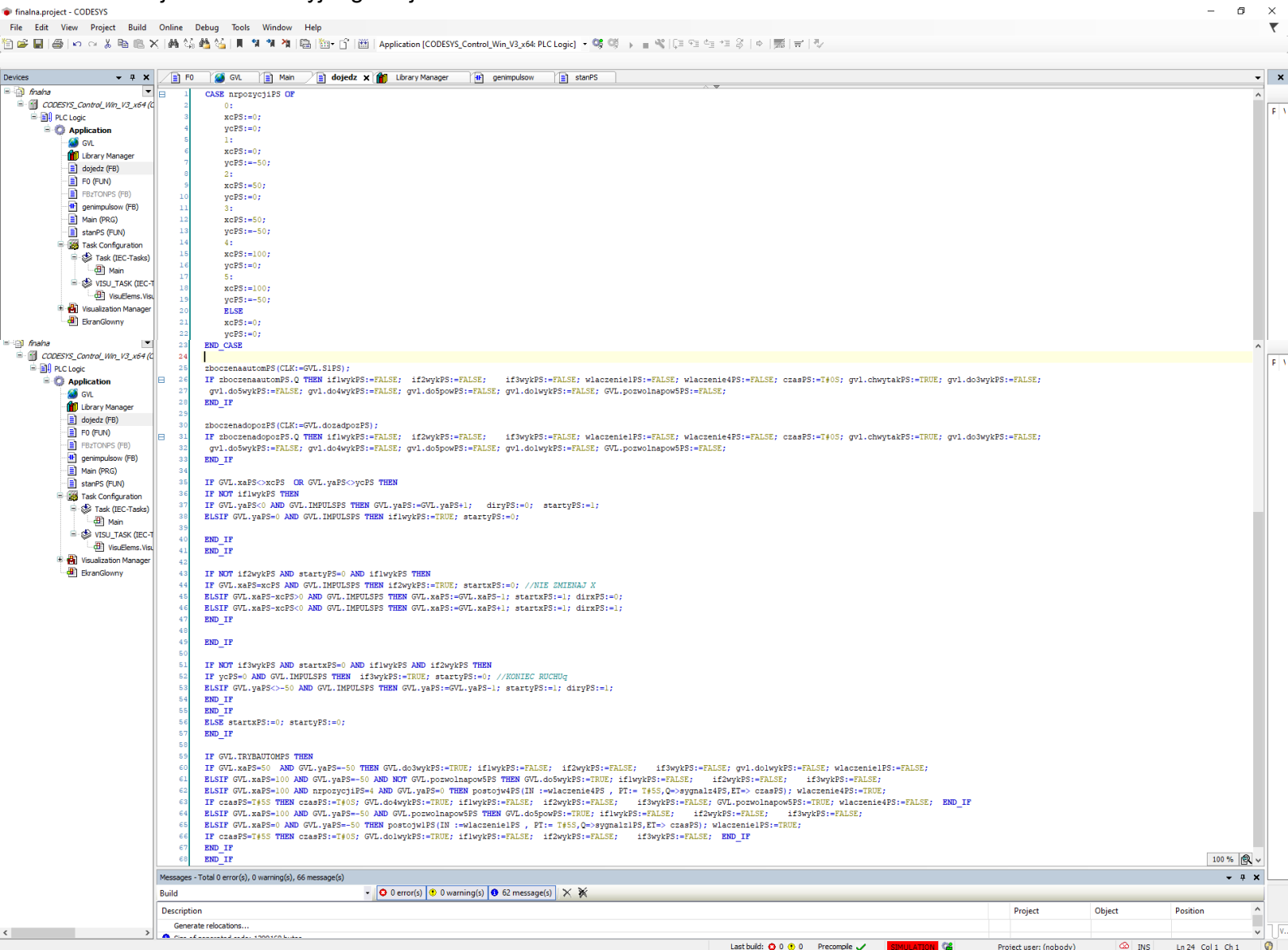
| Description | Project | Object | Position |
|-------------------------|---------|--------|----------|
| Generate relocations... | | | |

Project user: (nobody) INS Ln 37 Col 1 Ch 1

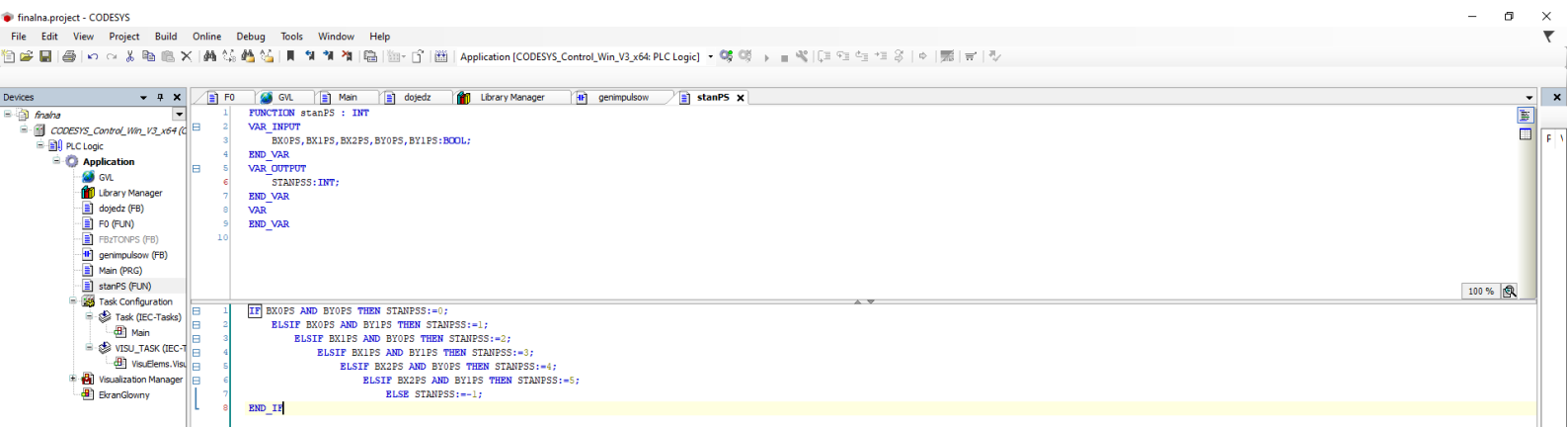
Zmienne bloku funkcyjnego dojedz:



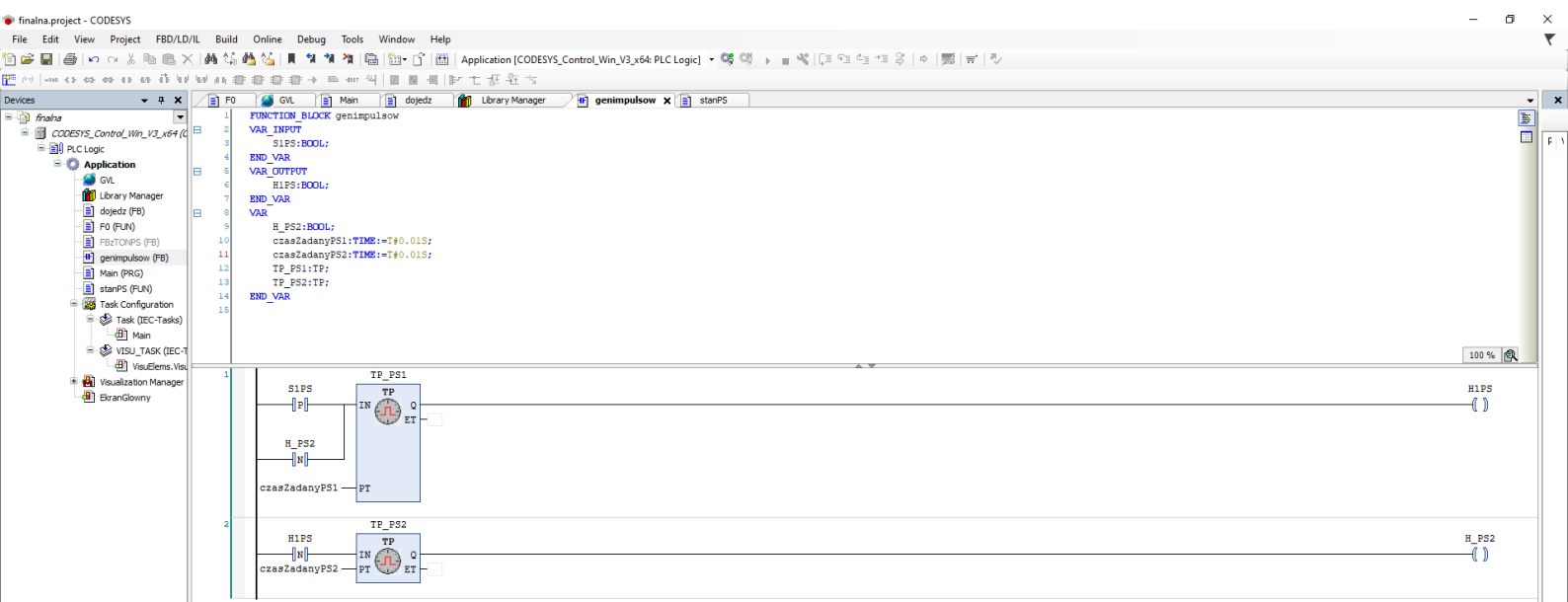
Instrukcje bloku funkcyjnego dojedz:



Funkcja stanPS:



Blok funkcyjny genimpulsow:



Panel HMI:

