



Project

Project number ---
Project manager Bublebree, bublebree
PLC type ---
Comment ---



Global variables

	Class	Identifier	FP address	IEC address	Type	Initial	Autoextern	Comment
0	VAR_GLOBAL	inX0	X0	%IX0.0	BOOL	FALSE		START
1	VAR_GLOBAL	inX1	X1	%IX0.1	BOOL	FALSE		3f
2	VAR_GLOBAL	inX2	X2	%IX0.2	BOOL	FALSE		zdroj 24V
3	VAR_GLOBAL	inX3	X3	%IX0.3	BOOL	FALSE		motor on
4	VAR_GLOBAL	inX4	X4	%IX0.4	BOOL	FALSE		door closed
5	VAR_GLOBAL	inX5	X5	%IX0.5	BOOL	FALSE		malo mat
6	VAR_GLOBAL	inX6	X6	%IX0.6	BOOL	FALSE		
7	VAR_GLOBAL	inX7	X7	%IX0.7	BOOL	FALSE		
8	VAR_GLOBAL	inX8	X8	%IX0.8	BOOL	FALSE		
9	VAR_GLOBAL	outY0	Y0	%QX0.0	BOOL	FALSE		
10	VAR_GLOBAL	outY1	Y1	%QX0.1	BOOL	FALSE		
11	VAR_GLOBAL	outY2	Y2	%QX0.2	BOOL	FALSE		
12	VAR_GLOBAL	outY3	Y3	%QX0.3	BOOL	FALSE		
13	VAR_GLOBAL	outY4	Y4	%QX0.4	BOOL	FALSE		
14	VAR_GLOBAL	outY5	Y5	%QX0.5	BOOL	FALSE		
15	VAR_GLOBAL	outY6	Y6	%QX0.6	BOOL	FALSE		
16	VAR_GLOBAL	vComBitArea	WR0	%MW0.0	GT_CommunicationBitArea_DUT		X	GT Bit Communication Area DUT
17	VAR_GLOBAL	GTB00	R40	%MX0.4.0	BOOL	false		lang init is done
18	VAR_GLOBAL	GTB01	R41	%MX0.4.1	BOOL	FALSE		Technolog
19	VAR_GLOBAL	GTB02	R42	%MX0.4.2	BOOL	FALSE		Admin
20	VAR_GLOBAL	GTB03	R43	%MX0.4.3	BOOL	FALSE		indikator dostatku mat / on if ok
21	VAR_GLOBAL	GTB04	R44	%MX0.4.4	BOOL	FALSE		enable tlac na panelu
22	VAR_GLOBAL	GTB05	R45	%MX0.4.5	BOOL	FALSE		all is good
23	VAR_GLOBAL	GTB06	R46	%MX0.4.6	BOOL	FALSE		potvrd login
24	VAR_GLOBAL	GTB07	R47	%MX0.4.7	BOOL	FALSE		loggin OK (muzu pokracovat)
25	VAR_GLOBAL	GTB08	R48	%MX0.4.8	BOOL	FALSE		Logged in (jsem v main)
26	VAR_GLOBAL	GTClearPW	R49	%MX0.4.9	BOOL	FALSE		clear PW
27	VAR_GLOBAL	GTB0A	R4A	%MX0.4.10	BOOL	FALSE		open PW keyscreen
28	VAR_GLOBAL	GTB0B	R4B	%MX0.4.11	BOOL	FALSE		Vetrak ON
29	VAR_GLOBAL	GTB0C	R4C	%MX0.4.12	BOOL	FALSE		tick 1
30	VAR_GLOBAL	GTB0D	R4D	%MX0.4.13	BOOL	FALSE		tick 2
31	VAR_GLOBAL	GTB0E	R4E	%MX0.4.14	BOOL	FALSE		tick 3
32	VAR_GLOBAL	GTB0F	R4F	%MX0.4.15	BOOL	FALSE		tick 4
33	VAR_GLOBAL	EnableManual	R50	%MX0.5.0	BOOL	FALSE		Povoleni manualniho rizeni pres GT
34	VAR_GLOBAL	GTB11	R51	%MX0.5.1	BOOL	FALSE		
35	VAR_GLOBAL	GTB12	R52	%MX0.5.2	BOOL	FALSE		
36	VAR_GLOBAL	GTB13	R53	%MX0.5.3	BOOL	FALSE		
37	VAR_GLOBAL							
38	VAR_GLOBAL	test	WR6	%MW0.6	word	0		
39	VAR_GLOBAL	vAlarmHistoryControl	WR7	%MW0.7	GT_AlarmHistoryControl_DUT			control alarm (size 2 word)
40	VAR_GLOBAL							
41	VAR_GLOBAL	GTB90	R90	%MX0.9.0	bool	FALSE		alarm 0 STOP
42	VAR_GLOBAL	GTB91	R91	%MX0.9.1	bool	FALSE		alarm 1 malo materialu
43	VAR_GLOBAL	GTB92	R92	%MX0.9.2	bool	FALSE		alarm 2 teplota oleje
44	VAR_GLOBAL	GTB93	R93	%MX0.9.3	bool	FALSE		alarm 3 vypadek faze
45	VAR_GLOBAL	GTB94	R94	%MX0.9.4	bool	FALSE		alarm 4 dlohodoby nedostatek materialu
46	VAR_GLOBAL	GTB95	R95	%MX0.9.5	bool	FALSE		alarm 5
47	VAR_GLOBAL	GTB96	R96	%MX0.9.6	bool	FALSE		alarm 6
48	VAR_GLOBAL	GTB97	R97	%MX0.9.7	bool	FALSE		alarm 7 - motor overheat
49	VAR_GLOBAL	GTB98	R98	%MX0.9.8	bool	FALSE		alarm 8 - lock overheat
50	VAR_GLOBAL	vComWordArea	DT0	%MW5.0	GT_CommunicationWordArea_DUT		X	GT Word Communication Area DUT
51	VAR_GLOBAL	GTW00	DT10	%MW5.10	WORD	2#0100_0000_0000_1110		user privilege settings
52	VAR_GLOBAL	GT_user	DT11	%MW5.11	WORD	0		aktualni uzivatel
53	VAR_GLOBAL	GTW02	DT12	%MW5.12	WORD	0		ukazatel aktualni obrazovky
54	VAR_GLOBAL	GTW03	DT13	%MW5.13	WORD	6		rychlost prace v kus/min (?int?)
55	VAR_GLOBAL	GTW04	DT14	%MW5.14	WORD	0		teplota zamku(vystupu)
56	VAR_GLOBAL	GTW05	DT15	%MW5.15	WORD	0		teplota oleje
57	VAR_GLOBAL	GTW06	DT16	%MW5.16	WORD	0		teptota motoru
58	VAR_GLOBAL	GTW07	DT17	%MW5.17	WORD	0		
59	VAR_GLOBAL	GTW08	DT18	%MW5.18	WORD	0		
60	VAR_GLOBAL	GTW09	DT19	%MW5.19	WORD	0		
61	VAR_GLOBAL	GTCCurrPW	DT20	%MW5.20	WORD	0		Aktualni heslo
						Print date: 23.5.2016 12:26:57		...bleBree\Programy\PLC panasonic\BP_HydraLis_out.pro
Rev	Change	Date	Name					Page: 2



Global variables

	Class	Identifier	FP address	IEC address	Type	Initial	Autoextern	Comment
62	VAR_GLOBAL	GTW11	DT21	%MW5.21	WORD	0		
63	VAR_GLOBAL	GTW12	DT22	%MW5.22	WORD	0		msg on 13 - login good/bad
64	VAR_GLOBAL	GTW13	DT23	%MW5.23	WORD	0		graf
65	VAR_GLOBAL	GTW14	DT24	%MW5.24	WORD	0		graf
66	VAR_GLOBAL	GTW15	DT25	%MW5.25	WORD	0		graf
67	VAR_GLOBAL	GTW16	DT26	%MW5.26	WORD	0		graf
68	VAR_GLOBAL	GTW17	DT27	%MW5.27	WORD	0		Com A
69	VAR_GLOBAL	GTW18	DT28	%MW5.28	WORD	0		Com B
70	VAR_GLOBAL	GTW19	DT29	%MW5.29	WORD	0		Com C
71	VAR_GLOBAL	GTW20	DT30	%MW5.30	WORD	0		Com D
72	VAR_GLOBAL	GTW21	DT31	%MW5.31	WORD	0		cislo materialu / smesi
73	VAR_GLOBAL	GTW22	DT32	%MW5.32	WORD	0		doba provozu
74	VAR_GLOBAL	GTW23	DT33	%MW5.33	WORD	0		
75	VAR_GLOBAL	GTW24	DT34	%MW5.34	WORD	0		
76	VAR_GLOBAL	GTCurrNameA	DT50	%MW5.50	WORD	0		
77	VAR_GLOBAL	GTCurrNameB	DT51	%MW5.51	WORD	0		
78	VAR_GLOBAL	GTCurrNameC	DT52	%MW5.52	WORD	0		
79	VAR_GLOBAL	GTCurrNameD	DT53	%MW5.53	WORD	0		
80	VAR_GLOBAL	nPistA			int	0		vedlejsi (plnici) valec
81	VAR_GLOBAL	nPistB			int	0		Hlavni pist
82	VAR_GLOBAL	nPistC			int	0		Zamek / pist
83	VAR_GLOBAL	nPistD			int	0		pist pro Uvolneni
84	VAR_GLOBAL	N1			int	0		Pocitadlo naplneni
85	VAR_GLOBAL	nSA0			bool	FALSE		senzor: A je zatazeno
86	VAR_GLOBAL	nSA1			bool	FALSE		senzor: A je vytazen
87	VAR_GLOBAL	nSB0			bool	FALSE		senzor: B je zatazeno
88	VAR_GLOBAL	nSB1			bool	FALSE		senzor: B je vytazen
89	VAR_GLOBAL	nSB2			bool	FALSE		90 % Pistu B
90	VAR_GLOBAL	wait1			bool	FALSE		
91	VAR_GLOBAL	nSTOP			bool	false		
92	VAR_GLOBAL	OFF			BOOL	FALSE		
93	VAR_GLOBAL	GlobalT1			bool	FALSE		
94	VAR_GLOBAL	GlobalT2			bool	FALSE		
95	VAR_GLOBAL	GlobalT3			bool	FALSE		
96	VAR_GLOBAL	nMaterialN			real	0.0		
97	VAR_GLOBAL	nMatContstant1			real	1.1		
98	VAR_GLOBAL	nMatContstant2			real	1.2		
99	VAR_GLOBAL	nMatContstant3			real	1.3		
100	VAR_GLOBAL	nMatContstant4			real	1.4		
101	VAR_GLOBAL	nMatContstant5			real	1.5		
102	VAR_GLOBAL	nMatContstant6			real	1.6		
103	VAR_GLOBAL	nMatContstant7			real	1.7		
104	VAR_GLOBAL	nMatContstant8			real	1.8		
105	VAR_GLOBAL_RETAIN	nDoLanginit			bool	true		new lang init
106	VAR_GLOBAL_RETAIN	PW1			Word	1		
107	VAR_GLOBAL_RETAIN	PW2			Word	2		
108	VAR_GLOBAL_RETAIN	PW3			Word	3		
109	VAR_GLOBAL_RETAIN	PW4			Word	4		
110	VAR_GLOBAL_RETAIN	PW5			Word	5		
111	VAR_GLOBAL_RETAIN	PW6			Word	6		
112	VAR_GLOBAL_RETAIN	PW7			Word	7		
113	VAR_GLOBAL_RETAIN	PW8			Word	8		Technolog default
114	VAR_GLOBAL_RETAIN	PW9			Word	0333		Admin PW
115	VAR_GLOBAL_RETAIN	Cyklus			int	0		case hlavniho cyklu
116	VAR_GLOBAL_RETAIN	N1Max			int	3		
117	VAR_GLOBAL_RETAIN	GlobalCounter1			int	0	X	
118	VAR_GLOBAL_RETAIN	GlobalCounter2			int	0		
119	VAR_GLOBAL_RETAIN	GlobalCounter3			int	0		
120	VAR_GLOBAL_RETAIN	GTName00			Name_DUT	pA := 16#2020, pB := 16#2020, pC := 16#2020, pD := 16#2020		

						Print date: 23.5.2016 12:26:57	...bleBree\Programy\PLC panasonic\BP_HydraLis_out.pro	
							Global variables	
								Page: 3
Rev	Change	Date	Name					



Global variables

	Class	Identifier	FP address	IEC address	Type	Initial	Autoextern	Comment
121	VAR_GLOBAL_RETAIN	GTName01			Name_DUT	pA := 16#2020, pB := 16#5355, pC := 16#5245, pD := 16#3120		
122	VAR_GLOBAL_RETAIN	GTName02			Name_DUT	pA := 16#2020, pB := 16#5355, pC := 16#5245, pD := 16#3220		
123	VAR_GLOBAL_RETAIN	GTName03			Name_DUT	pA := 16#2020, pB := 16#5355, pC := 16#5245, pD := 16#3320		
124	VAR_GLOBAL_RETAIN	GTName04			Name_DUT	pA := 16#2020, pB := 16#5355, pC := 16#5245, pD := 16#3420		
125	VAR_GLOBAL_RETAIN	GTName05			Name_DUT	pA := 16#2020, pB := 16#5355, pC := 16#5245, pD := 16#3520		
126	VAR_GLOBAL_RETAIN	GTName06			Name_DUT	pA := 16#2020, pB := 16#5355, pC := 16#5245, pD := 16#3620		
127	VAR_GLOBAL_RETAIN	GTName07			Name_DUT	pA := 16#2020, pB := 16#5355, pC := 16#5245, pD := 16#3720		
128	VAR_GLOBAL_RETAIN	GTName08			Name_DUT	pA := 16#4554, pB := 16#4843, pC := 16#4C4e, pD := 16#474f		technolog
129	VAR_GLOBAL_RETAIN	GTName09			Name_DUT	pA := 16#2020, pB := 16#4120, pC := 16#4d44, pD := 16#4e49		admin
130	VAR_GLOBAL_RETAIN	sTimeContant0			PressTimingConstant_DUT			rychlost 0
131	VAR_GLOBAL_RETAIN	sTimeContant1			PressTimingConstant_DUT			rychlost 1
132	VAR_GLOBAL_RETAIN	sTimeContant2			PressTimingConstant_DUT			rychlost 2
133	VAR_GLOBAL_RETAIN	sTimeContant3			PressTimingConstant_DUT			rychlost 3
134	VAR_GLOBAL_RETAIN	sTimeContant4			PressTimingConstant_DUT			rychlost 4
135	VAR_GLOBAL_RETAIN	sTimeContant5			PressTimingConstant_DUT			rychlost 4
136	VAR_GLOBAL_RETAIN	sTimeContant6			PressTimingConstant_DUT			rychlost 4
137	VAR_GLOBAL_RETAIN	sTimeContant7			PressTimingConstant_DUT			rychlost 4
138	VAR_GLOBAL_RETAIN	sTimeContant8			PressTimingConstant_DUT			rychlost 4
139	VAR_GLOBAL_RETAIN	sTimeContant9			PressTimingConstant_DUT			rychlost 4

						Print date: 23.5.2016 12:26:57	...bleBree\Programy\PLC panasonic\BP_HydraLis_out.pro	
							Global variables	
								Page: 4
Rev	Change	Date	Name					



Global variables

	Class	Identifier	FP address	IEC address	Type	Initial	Autoextern	Comment
140	VAR_GLOBAL_RETAIN	sTimeContant10			PressTimingConstant_DUT			rychlost 4
141	VAR_GLOBAL_RETAIN	sTimeContant11			PressTimingConstant_DUT			rychlost 4
142	VAR_GLOBAL_RETAIN	sTimeContant12			PressTimingConstant_DUT			rychlost 4
143	VAR_GLOBAL_RETAIN	sTimeContant13			PressTimingConstant_DUT			rychlost 4
144	VAR_GLOBAL_RETAIN	sTimeContant14			PressTimingConstant_DUT			rychlost 4
145	VAR_GLOBAL_RETAIN	sTimeContant15			PressTimingConstant_DUT			rychlost 4
146	VAR_GLOBAL_RETAIN	sTimeContant16			PressTimingConstant_DUT			rychlost 4
147	VAR_GLOBAL_RETAIN	sTimeContant17			PressTimingConstant_DUT			rychlost 4
148	VAR_GLOBAL_RETAIN	sTimeContant18			PressTimingConstant_DUT			rychlost 4
149	VAR_GLOBAL	nSpeedLimitHigh			int	10		
150	VAR_GLOBAL	nSpeedLimitLow			int	03		
151	VAR_GLOBAL	sett0	WY2	%QW2	WORD	0		
152	VAR_GLOBAL	sett1	WY3	%QW3	WORD	0		
153	VAR_GLOBAL	analog0	WX2	%IW2	WORD	0		
154	VAR_GLOBAL	analog1	WX3	%IW3	WORD	0		
155	VAR_GLOBAL	nDobaAktualnihoProvozu			int	0		
156	VAR_GLOBAL_RETAIN	nDobaCelkovehoProvozu			int	0		nejnizsi digit je desena hodiny - 0.1h
157	VAR_GLOBAL	nEnginelsGoing			bool	FALSE		
158	VAR_GLOBAL_RETAIN							
159	VAR_GLOBAL	nCelkovaProdukce			int	0		
160	VAR_GLOBAL	nStart			bool	true		
161	VAR_GLOBAL	nMotorStart			bool	FALSE		
162	VAR_GLOBAL	nAllClear			bool	true		if ok, lisovani muze probehnout
163	VAR_GLOBAL	nError			bool	FALSE		
164	VAR_GLOBAL	nTemp1			int	0		olej
165	VAR_GLOBAL	nTemp2			int	0		zamek
166	VAR_GLOBAL	nTemp3			int	0		motor
167	VAR_GLOBAL	nErrorClear			bool	FALSE		
168	VAR_GLOBAL	nTemp1_limit			int	1900		olej
169	VAR_GLOBAL	nTemp2_limit			int	3000		zamek
170	VAR_GLOBAL	nTemp3_limit			int	2400		motor
171	VAR_GLOBAL	nTime_lack_material			int	500		za jak dlouho dojde k odpojeni kvuli nedostatku materialu
172	VAR_GLOBAL							



FB_ifCurrScrn

	Class	Identifier	Type	Initial	Comment
0	VAR_IN_OUT	dutGTWordArea	GT_CommunicationWordArea_DU T		
1	VAR_INPUT	bWantedScreen	word	0	
2	VAR_OUTPUT	bOut	BOOL	FALSE	
3	VAR				

FB_ifCurrScrn

```
if (dutGTWordArea.w2_CurrentScreenNumber = bwantedscreen) then
    bOut := TRUE;
else
    bOut := False;
end_if;
```



FB_SetUserPriv

	Class	Identifier	Type	Initial	Comment
0	VAR_INPUT	GTW02int	int	0	ukazatel aktualni obrazovky
1	VAR_EXTERNAL	GTB01	BOOL	FALSE	Technolog
2	VAR_EXTERNAL	GTB02	BOOL	FALSE	Admin
3	VAR_EXTERNAL	GTW00	WORD	2#0100_0000_0000_1110	user privilage settings
4	VAR	b0	BOOL	FALSE	
5	VAR	b1	BOOL	FALSE	
6	VAR	b2	BOOL	FALSE	
7	VAR	b3	BOOL	FALSE	
8	VAR	b4	BOOL	FALSE	
9	VAR	b5	BOOL	FALSE	
10	VAR	b6	BOOL	FALSE	
11	VAR	b7	BOOL	FALSE	
12	VAR	b8	BOOL	FALSE	
13	VAR	b9	BOOL	FALSE	
14	VAR	b10	BOOL	FALSE	
15	VAR	b11	BOOL	FALSE	
16	VAR	b12	BOOL	FALSE	
17	VAR	b13	BOOL	FALSE	
18	VAR	b14	BOOL	FALSE	
19	VAR	b15	BOOL	FALSE	
20	VAR_EXTERNAL	GTCurrNameA	WORD	0	
21	VAR_EXTERNAL_RETAIN	GTName01	Name_DUT	pA := 16#2020, pB := 16#5355, pC := 16#5245, pD := 16#3120	
22	VAR_EXTERNAL	GTCurrNameB	WORD	0	
23	VAR_EXTERNAL	GTCurrNameC	WORD	0	
24	VAR_EXTERNAL	GTCurrNameD	WORD	0	
25	VAR_EXTERNAL	GTB0A	BOOL	FALSE	open PW keyscreen
26	VAR_EXTERNAL_RETAIN	GTName00	Name_DUT	pA := 16#2020, pB := 16#2020, pC := 16#2020, pD := 16#2020	
27	VAR_EXTERNAL_RETAIN	GTName02	Name_DUT	pA := 16#2020, pB := 16#5355, pC := 16#5245, pD := 16#3220	
28	VAR_EXTERNAL_RETAIN	GTName03	Name_DUT	pA := 16#2020, pB := 16#5355, pC := 16#5245, pD := 16#3320	
29	VAR_EXTERNAL_RETAIN	GTName04	Name_DUT	pA := 16#2020, pB := 16#5355, pC := 16#5245, pD := 16#3420	
30	VAR_EXTERNAL_RETAIN	GTName05	Name_DUT	pA := 16#2020, pB := 16#5355, pC := 16#5245, pD := 16#3520	
31	VAR_EXTERNAL_RETAIN	GTName06	Name_DUT	pA := 16#2020, pB := 16#5355, pC := 16#5245, pD := 16#3620	
32	VAR_EXTERNAL_RETAIN	GTName07	Name_DUT	pA := 16#2020, pB := 16#5355, pC := 16#5245, pD := 16#3720	
33	VAR_EXTERNAL_RETAIN	GTName08	Name_DUT	pA := 16#4554, pB := 16#4843, pC := 16#4C4e, pD := 16#474f	technolog
34	VAR_EXTERNAL_RETAIN	GTName09	Name_DUT	pA := 16#2020, pB := 16#4120, pC := 16#4d44, pD := 16#4e49	admin
35	VAR				

FB_SetUserPriv

```
;
WORD_TO_BOOLS (In := GTW00,
                Boo10 => b0,
                Boo11 => b1,
                Boo12 => b2,
```

						Print date: 23.5.2016 12:26:57	...bleBree\Programy\PLC panasonic\BP_HydraLis_out.pro
							FB_SetUserPriv
							Page: 7
Rev	Change	Date	Name				



FB_SetUserPriv

```

Bool3 => b3,
Bool4 => b4,
Bool5 => b5,
Bool6 => b6,
Bool7 => b7,
Bool8 => b8,
Bool9 => b9,
Bool10 => b10,
Bool11 => b11,
Bool12 => b12,
Bool13 => b13,
Bool14 => b14);

```

Case GTW02int Of

```

0 :      GTB01 := 0;
         GTB02 := 0;
         GTCurrNameA := GTName00.pA;
         GTCurrNameB := GTName00.pB;
         GTCurrNameC := GTName00.pC;
         GTCurrNameD := GTName00.pD;

1 :      GTB01 := 0;
         GTB02 := 0;
         GTCurrNameA := GTName01.pA;
         GTCurrNameB := GTName01.pB;
         GTCurrNameC := GTName01.pC;
         GTCurrNameD := GTName01.pD;

2 :      GTB01 := 0;
         GTB02 := 0;
         GTCurrNameA := GTName02.pA;
         GTCurrNameB := GTName02.pB;
         GTCurrNameC := GTName02.pC;
         GTCurrNameD := GTName02.pD;

3 :      GTB01 := 0;
         GTB02 := 0;
         GTCurrNameA := GTName03.pA;
         GTCurrNameB := GTName03.pB;
         GTCurrNameC := GTName03.pC;
         GTCurrNameD := GTName03.pD;

4 :      GTB01 := 0;
         GTB02 := 0;
         GTCurrNameA := GTName04.pA;
         GTCurrNameB := GTName04.pB;
         GTCurrNameC := GTName04.pC;
         GTCurrNameD := GTName04.pD;

5 :      GTB01 := 0;
         GTB02 := 0;
         GTCurrNameA := GTName05.pA;
         GTCurrNameB := GTName05.pB;
         GTCurrNameC := GTName05.pC;
         GTCurrNameD := GTName05.pD;

6 :      GTB01 := 0;
         GTB02 := 0;
         GTCurrNameA := GTName06.pA;
         GTCurrNameB := GTName06.pB;
         GTCurrNameC := GTName06.pC;
         GTCurrNameD := GTName06.pD;

7 :      GTB01 := 0;
         GTB02 := 0;
         GTCurrNameA := GTName07.pA;
         GTCurrNameB := GTName07.pB;
         GTCurrNameC := GTName07.pC;
         GTCurrNameD := GTName07.pD;

8 :      (* technolog *)
         GTB01 := 1;
         GTB02 := 0;
         GTCurrNameA := GTName08.pA;
         GTCurrNameB := GTName08.pB;
         GTCurrNameC := GTName08.pC;
         GTCurrNameD := GTName08.pD;

9 :      (* admin *)
         GTB01 := 1;
         GTB02 := 1;
         GTCurrNameA := GTName09.pA;
         GTCurrNameB := GTName09.pB;
         GTCurrNameC := GTName09.pC;

```

						Print date: 23.5.2016 12:26:57	...bleBree\Programy\PLC panasonic\BP_HydraLis_out.pro	
							FB_SetUserPriv	
								Page: 8
Rev	Change	Date	Name					



FB_SetUserPriv

```

    GTCurrNameD := GTName09.pD;

(*)
  10:
    GTB01 := b10;
    GTB02 := 0;

  11:
    GTB01 := b11;
    GTB02 := 0;

  12:
    GTB01 := b12;
    GTB02 := 0;

  13:
    GTB01 := b13;
    GTB02 := 0;

  14..15:
    GTB01 := 1;
    GTB02 := 1;

*) Else
    GTB01 := 0;
    GTB02 := 0;
End_case;

if (GTB0A) then
  GTCurrNameA := GTName01.pA;
  GTCurrNameB := GTName01.pB;
  GTCurrNameC := GTName01.pC;
  GTCurrNameD := GTName01.pD;

end_if;
```



Porovnaní_PW

	Class	Identifier	Type	Initial	Comment
0	VAR_EXTERNAL_RETAIN	PW1	Word	1	
1	VAR_EXTERNAL_RETAIN	PW2	Word	2	
2	VAR_EXTERNAL_RETAIN	PW3	Word	3	
3	VAR_EXTERNAL_RETAIN	PW4	Word	4	
4	VAR_EXTERNAL_RETAIN	PW5	Word	5	
5	VAR_EXTERNAL_RETAIN	PW6	Word	6	
6	VAR_EXTERNAL_RETAIN	PW7	Word	7	
7	VAR_EXTERNAL_RETAIN	PW8	Word	8	Technolog default
8	VAR_EXTERNAL_RETAIN	PW9	Word	0333	Admin PW
9	VAR_EXTERNAL	GT_CurrPW	WORD	0	Aktualní heslo
10	VAR_EXTERNAL	GTB06	BOOL	FALSE	potvrd login
11	VAR_EXTERNAL	GT_user	WORD	0	aktualní uživatel
12	VAR_EXTERNAL	GTB07	BOOL	FALSE	login OK (muzu pokračovat)
13	VAR_EXTERNAL	GT_ClearPW	BOOL	FALSE	clear PW
14	VAR_EXTERNAL	GTW12	WORD	0	msg on 13 - login good/bad
15	VAR_EXTERNAL	vComWordArea	GT_CommunicationWordArea_DUT		GT Word Communication Area DUT
16	VAR_EXTERNAL	GTB0A	BOOL	FALSE	open PW keyscreen
17	VAR				

Porovnaní_PW

```
;
if (GTB06) then
  if (GT_CurrPW = PW1) then (* Porovnaní hesla *)
    GT_user := 01;
    GTB07 := 1;
    GTW12 := 1;
  elseif (GT_CurrPW = PW2) then
    GT_user := 02;
    GTB07 := 1;
    GTW12 := 1;
  elseif (GT_CurrPW = PW3) then
    GT_user := 03;
    GTB07 := 1;
    GTW12 := 1;
  elseif (GT_CurrPW = PW4) then
    GT_user := 04;
    GTB07 := 1;
    GTW12 := 1;
  elseif (GT_CurrPW = PW5) then
    GT_user := 05;
    GTB07 := 1;
    GTW12 := 1;
  elseif (GT_CurrPW = PW6) then
    GT_user := 06;
    GTB07 := 1;
    GTW12 := 1;
  elseif (GT_CurrPW = PW7) then
    GT_user := 07;
    GTB07 := 1;
    GTW12 := 1;
  elseif (GT_CurrPW = PW8) then (* Technolog - nízi administrator *)
    GT_user := 08;
    GTB07 := 1;
    GTW12 := 1;
  elseif (GT_CurrPW = PW9) then (* Admin *)
    GT_user := 09;
    GTB07 := 1;
    GTW12 := 1;
  elseif (GT_CurrPW = 0) then
    GT_user := 00;
    GTB07 := 0;
    GTB0A := 1;

  else
    (* Pokud ani jedno heslo nesedne *)
    GT_user := 00;
    GTB07 := 0;
    GTW12 := 2;
  end_if;

end_if;

if (GT_ClearPW = true) then (* Reset hesla *)
  GT_CurrPW := 00;
  GT_ClearPW := 0;
  GTW12 := 0;

end_if;
```



Porovnaní_PW

```
if ( vComWordArea.w2_CurrentScreenNumber = 16#0 ) then
  GTCurrPW := 00;
  GTW12 := 0;
  GT_user := 00;
end_if;

if ( vComWordArea.w2_CurrentScreenNumber = 16#13 AND GTCurrPW = 0 ) then (* obr lang and no PW / *)
  GT_user := 0;
end_if;
```

							Print date: 23.5.2016 12:26:57	...bleBree\Programy\PLC panasonic\BP_HydraLis_out.pro
								Porovnaní_PW
								Page: 11
Rev	Change	Date	Name					



TimerCounter

	Class	Identifier	Type	Initial	Comment
0	VAR_EXTERNAL_RETAIN	GlobalCounter1	int	0	
1	VAR_EXTERNAL	GlobalT1	bool	FALSE	
2	VAR_EXTERNAL_RETAIN	GlobalCounter2	int	0	
3	VAR_EXTERNAL_RETAIN	GlobalCounter3	int	0	
4	VAR_EXTERNAL	GlobalT2	bool	FALSE	
5	VAR_EXTERNAL	GlobalT3	bool	FALSE	
6	VAR_EXTERNAL	GTB11	BOOL	FALSE	
7	VAR	penable	bool	true	
8	VAR_EXTERNAL	GTB12	BOOL	FALSE	
9	VAR_EXTERNAL	GTB13	BOOL	FALSE	
10	VAR_EXTERNAL	vComBitArea	GT_CommunicationBitArea_DUT		GT Bit Communication Area DUT
11	VAR_EXTERNAL	vComWordArea	GT_CommunicationWordArea_DUT		GT Word Communication Area DUT
12	VAR_EXTERNAL	vAlarmHistoryControl	GT_AlarmHistoryControl_DUT		control alarm (size 2 word)
13	VAR_EXTERNAL	GTB08	BOOL	FALSE	Logged in (jsem v main)
14	VAR_EXTERNAL	nEngineIsGoing	bool	FALSE	
15	VAR_EXTERNAL	GTB91	bool	FALSE	alarm 1 malo materialu
16	VAR_EXTERNAL	nTime_lack_material	int	500	za jak dlouho dojde k odpojení kvuli nedostatku materialu
17	VAR				

TimerCounter

```
; (* interval 100ms *)  
  
if (GTB91 = 1) then  
    GlobalCounter1 := GlobalCounter1 + 1;  
else  
    GlobalCounter1 := 0;  
end_if;  
  
if (nEngineIsGoing ) then  
    GlobalCounter2 := GlobalCounter2 + 1;  
end_if;  
  
if (GTB08 ) then  
    GlobalCounter3 := GlobalCounter3 + 1;  
end_if;  
  
if (GlobalCounter1 >= nTime_lack_material) then (* 100ms*)  
    GlobalCounter1 := 0;  
    GlobalT1:= 1;  
end_if;  
  
if (GlobalCounter2 >= 3600) then (* 360s = 6 min = 0.1 hod *)  
    GlobalCounter2 := 0;  
    GlobalT2:= 1;  
  
end_if;  
  
if (GlobalCounter3 >= 3600) then (* 360 s*)  
    GlobalCounter3 := 0;  
    GlobalT3:= 1;  
    GTB13 := NOT(GTB13);  
  
end_if;
```



FB_startup

	Class	Identifier	Type	Initial	Comment
0	VAR_EXTERNAL	vComWordArea	GT_CommunicationWordArea_DUT		GT Word Communication Area DUT
1	VAR_EXTERNAL	vComBitArea	GT_CommunicationBitArea_DUT		GT Bit Communication Area DUT
2	VAR_EXTERNAL_RETAIN	GlobalCounter1	int	0	
3	VAR_EXTERNAL_RETAIN	nDoLangInit	bool	true	new lang init
4	VAR_EXTERNAL	GTCurrPW	WORD	0	Aktualni heslo
5	VAR_EXTERNAL	GTClearPW	BOOL	FALSE	clear PW
6	VAR_EXTERNAL	GTW12	WORD	0	msg on 13 - login good/bad
7	VAR_EXTERNAL	GTW13	WORD	0	graf
8	VAR_EXTERNAL	GTW03	WORD	6	rychlost prace v kus/min (?int?)
9	VAR_EXTERNAL	GTB07	BOOL	FALSE	loggin OK (muzu pokracovat)
10	VAR_EXTERNAL	GT_user	WORD	0	aktualni uzivatel

FB_startup

```
;
if ( nDoLangInit = 0 AND ( vComWordArea.w2_CurrentScreenNumber = 1) OR ( vComWordArea.w2_CurrentScreenNumber = 0) ) )
then
    vComWordArea.w0_NewScreenNumber := 16#0013;

    elsif ( nDoLangInit = 1 AND (vComWordArea.w2_CurrentScreenNumber = 1)) then
        vComWordArea.w0_NewScreenNumber := 16#0000;

        end_if;
;

if ( vComWordArea.w2_CurrentScreenNumber = 1) then (* pri startu *)

    GTCurrPW := 00;
    GTClearPW := 0;
    GTW12 := 0;
    GT_user := 0;

    GTW03 := 16#006;
    GTB07 := 0;
    end_if;
```



PRG_GT_Control

	Class	Identifier	Type	Initial	Comment
0	VAR_EXTERNAL	vComBitArea	GT_CommunicationBitArea_DUT		GT Bit Communication Area DUT
1	VAR_EXTERNAL	vComWordArea	GT_CommunicationWordArea_DUT		GT Word Communication Area DUT
2	VAR_EXTERNAL_RETAIN	GlobalCounter1	int	0	
3	VAR	nSetUserPriv	FB_SetUserPriv		
4	VAR_EXTERNAL	GT_user	WORD	0	aktualni uzivatel
5	VAR_EXTERNAL	GTB00	BOOL	false	lang init is done
6	VAR	pom1	BOOL	FALSE	
7	VAR	GT_gotologin	GT_ActivateScreen		
8	VAR	pom2	BOOL	FALSE	
9	VAR	nFB_porovnani_PW	Porovnani_PW		
10	VAR_EXTERNAL_RETAIN	nDoLangInit	bool	true	new lang init
11	VAR	pom3	BOOL	FALSE	
12	VAR_EXTERNAL	GTB0A	BOOL	FALSE	open PW keyscreen
13	VAR	ConstA	word	16#0013	
14	VAR_EXTERNAL_RETAIN	GlobalCounter2	int	0	
15	VAR_EXTERNAL	GTW21	WORD	0	dislo materialu / smesi
16	VAR_EXTERNAL	nMaterialN	real	0.0	
17	VAR_EXTERNAL	GlobalT3	bool	FALSE	
18	VAR_EXTERNAL	GTW22	WORD	0	doba provozu
19	VAR_EXTERNAL	GTB08	BOOL	FALSE	Logged in (jsem v main)
20	VAR	pomDobaProvozu2	word	0	
21	VAR_EXTERNAL	nDobaAktualnihoProvozu	int	0	
22	VAR_EXTERNAL	GlobalT2	bool	FALSE	
23	VAR_EXTERNAL_RETAIN	nDobaCelkovehoProvozu	int	0	nejnizsi digit je desena hodiny - 0.1h
24	VAR_EXTERNAL	GTW17	WORD	0	Com A
25	VAR_EXTERNAL	nMatContstant1	real	1.1	
26	VAR_EXTERNAL	nMatContstant2	real	1.2	
27	VAR_EXTERNAL	nMatContstant3	real	1.3	
28	VAR_EXTERNAL	nMatContstant4	real	1.4	
29	VAR_EXTERNAL	nMatContstant5	real	1.5	
30	VAR_EXTERNAL	nMatContstant6	real	1.6	
31	VAR_EXTERNAL	nMatContstant7	real	1.7	
32	VAR_EXTERNAL	nMatContstant8	real	1.8	
33	VAR_EXTERNAL	nMotorStart	bool	FALSE	
34	VAR	nTemp_fan	int	130	nejnizsi digit je 1 C
35	VAR_EXTERNAL	GTW18	WORD	0	Com B
36	VAR	nFanHystere	int	05	
37	VAR				

PRG_GT_Control

```

;

GTB0A := nDoLangInit;

if DF(GTB00) then
    nDoLangInit:= 0;
end_if;

if DFN(GTB00) AND vComWordArea.w2_CurrentScreenNumber = 16#030 then
    nDoLangInit:= 1;
end_if;

nSetUserPriv(GTW02int := WORD_TO_INT(GT_user ));
nFB_porovnani_PW();

if (GT_user <> 0) then (* vypojit motor kdyz neni *)
    nMotorStart := 0;
end_if;

case WORD_TO_INT(GTW21) of

    0:
        ;

    1:
        nMaterialN := nMatContstant1 ;
        ;

    2:
        nMaterialN := nMatContstant2 ;

```

						Print date: 23.5.2016 12:26:57	...bleBree\Programy\PLC panasonic\BP_HydraLis_out.pro
							PRG_GT_Control
							Page: 14
Rev	Change	Date	Name				



PRG_GT_Control

```

4:      nMaterialN := nMatContstant3 ;

8:      nMaterialN := nMatContstant4 ;

16:     nMaterialN := nMatContstant5 ;

32:     nMaterialN := nMatContstant6 ;

64:     nMaterialN := nMatContstant7 ;

128:    nMaterialN := nMatContstant8 ;

else
;
end_case;

(* pocitani provozni doby *)
if (GlobalT3 = 1) then
  GlobalT3 := 0;
  ndobaaktualnihoprovozu := ndobaaktualnihoprovozu + 1 ;
  GTW22 := INT_TO_WORD(ndobaaktualnihoprovozu ) ;
(* pomDobaProvozu2 := *)
end_if;

if (NOT GTB08) then
  GTW22 := 0;
  ndobaaktualnihoprovozu := 0;
end_if;

(* pocitani provozni doby *)
if (GlobalT2 = 1) then
  GlobalT2 := 0;
  nDobaCelkovehoProvozu := nDobaCelkovehoProvozu + 1 ;
(* pomDobaProvozu2 := *)
end_if;

if (vComWordArea.w2_CurrentScreenNumber = 16#033) then (* OBR 33 - HISTORY *)
  GTW17 := INT_TO_WORD(nDobaCelkovehoProvozu );
;
end_if;

if (vComWordArea.w2_CurrentScreenNumber = 16#034) then (* OBR 34 - FAN *)
  GTW17 := INT_TO_WORD(nTemp_fan );
  GTW18 := INT_TO_WORD(nFanHystere);
;
end_if;

;

```

							Print date: 23.5.2016 12:26:57	...bleBree\Programy\PLC panasonic\BP_HydraLis_out.pro
								PRG_GT_Control
								Page: 15
Rev	Change	Date	Name					



PRG_Comm

	Class	Identifier	Type	Initial	Comment
0	VAR_EXTERNAL	GTW02	WORD	0	ukazatel aktualni obrazovky
1	VAR_EXTERNAL	inX1	BOOL	FALSE	3f
2	VAR_EXTERNAL	inX2	BOOL	FALSE	zdroj 24V
3	VAR_EXTERNAL	inX3	BOOL	FALSE	motor on
4	VAR	pom0	bool	FALSE	
5	VAR	pom1	bool	FALSE	
6	VAR	pom2	bool	FALSE	
7	VAR	pom3	bool	FALSE	
8	VAR	pom4	bool	FALSE	
9	VAR	pom5	bool	FALSE	
10	VAR_EXTERNAL	outY2	BOOL	FALSE	
11	VAR_EXTERNAL	outY3	BOOL	FALSE	
12	VAR_EXTERNAL	nSA1	bool	FALSE	senzor: A je vytazen
13	VAR_EXTERNAL	nSB0	bool	FALSE	senzor: B je zatazeno
14	VAR_EXTERNAL	nSA0	bool	FALSE	senzor: A je zatazeno
15	VAR_EXTERNAL	nSB1	bool	FALSE	senzor: B je vytazen
16	VAR_EXTERNAL	nSB2	bool	FALSE	90 % Pistu B
17	VAR_EXTERNAL	nPistA	int	0	vedlejsi (plnicí) valec
18	VAR_EXTERNAL	inX4	BOOL	FALSE	door closed
19	VAR_EXTERNAL	inX5	BOOL	FALSE	malo mat
20	VAR_EXTERNAL	nPistB	int	0	Hlavni pist
21	VAR_EXTERNAL	nPistC	int	0	Zamek / pist
22	VAR_EXTERNAL	GTW04	WORD	0	teplota zamku(vystupu)
23	VAR_EXTERNAL	GTW05	WORD	0	teplota oleje
24	VAR_EXTERNAL	GTW06	WORD	0	teptota motoru
25	VAR_EXTERNAL	GTB90	bool	FALSE	alarm 0 STOP
26	VAR_EXTERNAL	GTB91	bool	FALSE	alarm 1 malo materialu
27	VAR_EXTERNAL	GTB92	bool	FALSE	alarm 2 teplota oleje
28	VAR_EXTERNAL	GTB93	bool	FALSE	alarm 3 vypadek faze
29	VAR_EXTERNAL	GTB94	bool	FALSE	alarm 4 dlohodoby nedostatek materialu
30	VAR_EXTERNAL	GTB95	bool	FALSE	alarm 5
31	VAR_EXTERNAL	GTW09	WORD	0	
32	VAR_EXTERNAL	GTW11	WORD	0	
33	VAR_EXTERNAL	GTW13	WORD	0	graf
34	VAR_EXTERNAL	GTW14	WORD	0	graf
35	VAR_EXTERNAL	GlobalT3	bool	FALSE	
36	VAR	count1	int	0	
37	VAR_EXTERNAL	GTB0B	BOOL	FALSE	Vetrak ON
38	VAR	gtb0b_fill	bool	FALSE	
39	VAR				
40	VAR_EXTERNAL	vComBitArea	GT_CommunicationBitArea_DUT		GT Bit Communication Area DUT
41	VAR_EXTERNAL	vComWordArea	GT_CommunicationWordArea_DUT		GT Word Communication Area DUT
42	VAR_EXTERNAL_RETAIN	GlobalCounter1	int	0	
43	VAR	nStartUp	FB_startup		
44	VAR				
45	VAR	temp0	int	0	
46	VAR	temp1	int	0	
47	VAR	temp2	int	0	
48	VAR	temp3	int	0	
49	VAR	temp4	int	0	
50	VAR	temp5	int	0	
51	VAR_EXTERNAL	sett0	WORD	0	
52	VAR_EXTERNAL	sett1	WORD	0	
53	VAR	nAnalogIn	Unit_AnalogInput_FP0_RTD_INT		
54	VAR	pa	word	16#FFFF	
55	VAR	pb	word	0	
56	VAR_EXTERNAL	analog0	WORD	0	
57	VAR_EXTERNAL	analog1	WORD	0	
58	VAR	nAnalogIN1	Unit_AnalogInput_FP0_A80		
59	VAR_EXTERNAL	nTemp1	int	0	olej
60	VAR_EXTERNAL	nTemp2	int	0	zamek
61	VAR_EXTERNAL	nTemp3	int	0	motor
62	VAR_EXTERNAL	inX0	BOOL	FALSE	START
63	VAR_EXTERNAL	inX8	BOOL	FALSE	

						Print date: 23.5.2016 12:26:57	...bleBree\Programy\PLC panasonic\BP_HydraLis_out.pro
							PRG_Comm
							Page: 16
Rev	Change	Date	Name				



PRG_Comm

	Class	Identifier	Type	Initial	Comment
64	VAR_EXTERNAL	nTemp1_limit	int	1900	olej
65	VAR_EXTERNAL	nError	bool	FALSE	
66	VAR_EXTERNAL	GTB96	bool	FALSE	alarm 6
67	VAR_EXTERNAL	GTB97	bool	FALSE	alarm 7 - motor overheat
68	VAR_EXTERNAL	GlobalT1	bool	FALSE	
69	VAR_EXTERNAL	nTemp2_limit	int	3000	zamek
70	VAR_EXTERNAL	GTB98	bool	FALSE	alarm 8 - lock overheat
71	VAR_EXTERNAL	nTemp3_limit	int	2400	motor
72	VAR				

PRG_Comm

```
(* Prepis hodnot mezi tagem pouzitym v FPWIN a jeho odpovidaji fyzickou adresou nA externi zarizeni *)

nStartUp();

(* Nacteni dat z analogove jednotky RTD *)
nAnalogIn(iIOWordOffset := 2,
  bChannel0HighResolution := false,
  bChannel1HighResolution := false,
  bChannel2HighResolution := False,
  bChannel3HighResolution := False,
  bChannel4HighResolution := False,
  bChannel5HighResolution := False,
  bTemperatureInFahrenheit := False,
  bChannel012DIPSwitchSetToResistor := False,
  bChannel345DIPSwitchSetToResistor := False,
  iChannel0 => nTemp1,
  iChannel1 => nTemp2,
  iChannel2 => nTemp3
);

sett0 := pa;
sett1 := pb;

(*
temp0 := WORD_TO_INT(analog0);
temp1 := WORD_TO_INT(analog1);
*) (*
nAnalogIN1(iIOWordOffset := 2,
  iInChannel0 => temp0,
  iInChannel1 => temp1,
  iInChannel2 => temp2,
  iInChannel3 => temp3,
  iInChannel4 => temp4)
; *)

if (False) then
  nSA0 := inX1 ;
  nSA1 := inX2 ;
  nSB0 := inX3 ;
  nSB1 := inX4 ;
  nSB2 := inX5 ;

  else
    ;
  end_if;

(* Bit com*)

  GTB0B:= gtb0b_fill;

(* Word com *)

  GTW02 := vComWordArea.w2_CurrentScreenNumber ;

  if (0) then
    (* teplota zamku / oleje / motoru *)
    GTW04 := INT_TO_WORD(sys_iPotiInputV0);
    GTW05 := INT_TO_WORD(sys_iPotiInputV0);
    GTW06 := INT_TO_WORD(sys_iPotiInputV0);

    (* vykon v kg / hod / elektricky prikon *)
    GTW09 := INT_TO_WORD(sys_iPotiInputV1);
    GTW11 := INT_TO_WORD(sys_iPotiInputV1);
  end_if;

  (* teplota zamku / oleje / motoru *)
```

						Print date: 23.5.2016 12:26:57	...bleBree\Programy\PLC panasonic\BP_HydraLis_out.pro	
							PRG_Comm	
								Page: 17
Rev	Change	Date	Name					



PRG_Comm

```

GTW04 := INT_TO_WORD(nTemp2);
GTW05 := INT_TO_WORD(nTemp1);
GTW06 := INT_TO_WORD(nTemp3);

(* vykon v kg / hod / elektricky prikon *)
GTW09 := INT_TO_WORD(sys_iPotiInputV0);
GTW11 := INT_TO_WORD(sys_iPotiInputV1);

(* Alarmy *)
GTB90 := inX8 ;
GTB91 := NOT inX5 ;

GTB93 := NOT inX1 ;

GTB95 := pom2;
GTB96 := pom3;
GTB97 := pom5;

(* *)
GTW13 := INT_TO_WORD(sys_iPotiInputV0);
GTW14 := INT_TO_WORD(count1);

if (GlobalT3= 1) then
    GlobalT3:= 0;
    count1 := count1 + 100;

end_if;

if (count1 > 900) then
    count1 := 100;
end_if;

if (GlobalT1 = 1) then
    GlobalT1 := 0;
    GTB94 := 1;

elseif (GTB91 = 0) then
    GTB94 := 0;
end_if;

if (nTemp1 > nTemp1_limit ) then
    GTB92 := 1;
    nError := 1;
else
    GTB92:= 0;
end_if;

if (nTemp2 > nTemp2_limit ) then
    GTB98 := 1;
    nError := 1;
else
    GTB98:= 0;
end_if;

if (nTemp3 > nTemp3_limit ) then
    GTB97 := 1;
    nError := 1;
else
    GTB97:= 0;
end_if;

if (inX5 = 0) then
    nError := 1;

end_if;

```

;

						Print date: 23.5.2016 12:26:57	...bleBree\Programy\PLC panasonic\BP_HydraLis_out.pro	
							PRG_Comm	
								Page: 18
Rev	Change	Date	Name					



PRG_Rizeni_lisu

	Class	Identifier	Type	Initial	Comment
0	VAR_EXTERNAL	Cyklus	int	0	case hlavniho cyklu
1	VAR_EXTERNAL	nPistA	int	0	vedlejsi (plnicí) valec
2	VAR_EXTERNAL	nPistB	int	0	Hlavni pist
3	VAR_EXTERNAL	nPistC	int	0	Zamek / pist
4	VAR_EXTERNAL	nSA0	bool	FALSE	senzor: A je zatazeno
5	VAR_EXTERNAL	nSA1	bool	FALSE	senzor: A je vytazen
6	VAR_EXTERNAL	nSB0	bool	FALSE	senzor: B je zatazeno
7	VAR_EXTERNAL	nSB1	bool	FALSE	senzor: B je vytazen
8	VAR_EXTERNAL	nSB2	bool	FALSE	90 % Pistu B
9	VAR_EXTERNAL	N1	int	0	Pocitadlo naplneni
10	VAR_EXTERNAL_RETAIN	N1Max	int	3	
11	VAR_EXTERNAL	wait1	bool	FALSE	
12	VAR	nTimerZpozdeni_sezr	TON		pro senzor
13	VAR	cas2	time	T#0s	
14	VAR	in	bool	FALSE	
15	VAR	out	bool	FALSE	
16	VAR_CONSTANT	cas1	time	T#01s	
17	VAR_RETAIN	speed	int	6	
18	VAR	nTimerA	TON		ladovani do komory
19	VAR	nTimerB	TON		padani
20	VAR	nTimerC	Ton		
21	VAR	nTimerD	Ton		
22	VAR	nTimerE	TON		ustaleni
23	VAR	nTimerF	TON		cekani do dalsiho cyklu
24	VAR	nTa	time	T#400ms	
25	VAR	nTb	time	T#200ms	
26	VAR	nTc	time	T#1s	
27	VAR	nTd	time	T#500ms	
28	VAR	nTe	time	T#1s	
29	VAR	nTf	time	T#500ms	cekani na konci
30	VAR	nTimeBufferA	time	T#0s	
31	VAR	nTimeBufferA1	time	T#0s	
32	VAR	nTimeBufferA2	time	T#0s	
33	VAR	nTimeBufferA3	time	T#0s	
34	VAR	nTimeBufferA4	time	T#0s	
35	VAR	nTimeBufferA5	time	T#0s	
36	VAR	nCyklusStore	int	0	
37	VAR	nCurrTimeConst	PressTimingConstant_DUT		
38	VAR_EXTERNAL	vComBitArea	GT_CommunicationBitArea_DUT		GT Bit Communication Area DUT
39	VAR_EXTERNAL	vComWordArea	GT_CommunicationWordArea_DUT		GT Word Communication Area DUT
40	VAR_EXTERNAL_RETAIN	GlobalCounter1	int	0	
41	VAR	nTimerDValve	TON		
42	VAR_EXTERNAL	nPistD	int	0	pist pro Uvolneni
43	VAR_EXTERNAL	nEnginelsGoing	bool	FALSE	
44	VAR_EXTERNAL	nMotorStart	bool	FALSE	
45	VAR_EXTERNAL_RETAIN	sTimeContant0	PressTimingConstant_DUT		rychlost 0
46	VAR_EXTERNAL_RETAIN	sTimeContant4	PressTimingConstant_DUT		rychlost 4
47	VAR_EXTERNAL_RETAIN	sTimeContant3	PressTimingConstant_DUT		rychlost 3
48	VAR_EXTERNAL_RETAIN	sTimeContant1	PressTimingConstant_DUT		rychlost 1
49	VAR_EXTERNAL_RETAIN	sTimeContant2	PressTimingConstant_DUT		rychlost 2
50	VAR_EXTERNAL_RETAIN	sTimeContant5	PressTimingConstant_DUT		rychlost 4
51	VAR_EXTERNAL_RETAIN	sTimeContant6	PressTimingConstant_DUT		rychlost 4
52	VAR_EXTERNAL_RETAIN	sTimeContant7	PressTimingConstant_DUT		rychlost 4
53	VAR_EXTERNAL_RETAIN	sTimeContant8	PressTimingConstant_DUT		rychlost 4
54	VAR_EXTERNAL_RETAIN	sTimeContant9	PressTimingConstant_DUT		rychlost 4
55	VAR_EXTERNAL_RETAIN	sTimeContant11	PressTimingConstant_DUT		rychlost 4
56	VAR_EXTERNAL_RETAIN	sTimeContant10	PressTimingConstant_DUT		rychlost 4
57	VAR_EXTERNAL_RETAIN	sTimeContant12	PressTimingConstant_DUT		rychlost 4
58	VAR_EXTERNAL_RETAIN	sTimeContant13	PressTimingConstant_DUT		rychlost 4
59	VAR_EXTERNAL_RETAIN	sTimeContant14	PressTimingConstant_DUT		rychlost 4
60	VAR_EXTERNAL_RETAIN	sTimeContant15	PressTimingConstant_DUT		rychlost 4
61	VAR_EXTERNAL_RETAIN	sTimeContant16	PressTimingConstant_DUT		rychlost 4
62	VAR_EXTERNAL_RETAIN	sTimeContant17	PressTimingConstant_DUT		rychlost 4
63	VAR_EXTERNAL	nSTOP	bool	false	

						Print date: 23.5.2016 12:26:57	...bleBree\Programy\PLC_panasonic\BP_HydraLis_out.pro
							PRG_Rizeni_lisu
							Page: 19
Rev	Change	Date	Name				



PRG_Rizeni_lisu

	Class	Identifier	Type	Initial	Comment
64	VAR_EXTERNAL	nAllClear	bool	true	if ok, lisovani muze probehnout
65	VAR_EXTERNAL	nErrorClear	bool	FALSE	
66	VAR_EXTERNAL	nError	bool	FALSE	
67	VAR				

PRG_Rizeni_lisu

```

;

if (nError ) then
    Cyklus := 20;
end_if;

if (Cyklus = 2) then
    (* BASE - INIT
    Pouze pri prvni spusteni programu
    *)
    case speed of (* rucni nastaveni casovacu *)
        0:
            nCurrTimeConst := sTimeContant0 ;
        1:
            nCurrTimeConst := sTimeContant1 ;
        2:
            nCurrTimeConst := sTimeContant2 ;
        3:
            nCurrTimeConst := sTimeContant3 ;
        4:
            nCurrTimeConst := sTimeContant4 ;
        5:
            nCurrTimeConst := sTimeContant5 ;
        6:
            nCurrTimeConst := sTimeContant6 ;
        7:
            nCurrTimeConst := sTimeContant7 ;
        8:
            nCurrTimeConst := sTimeContant8 ;
        9:
            nCurrTimeConst := sTimeContant9 ;
        10:
            nCurrTimeConst := sTimeContant10 ;
        11:
            nCurrTimeConst := sTimeContant11 ;
        12:
            nCurrTimeConst := sTimeContant12 ;
        13:
            nCurrTimeConst := sTimeContant13 ;
        14:
            nCurrTimeConst := sTimeContant14 ;
        15:
            nCurrTimeConst := sTimeContant15 ;
        16:
            nCurrTimeConst := sTimeContant16 ;
        17:
            nCurrTimeConst := sTimeContant17 ;

        else
            ;
    end_case;
end_if;

nTimerA(Pt := nTa);
nTimerB(Pt := nTb);
nTimerC(Pt := nTc);
nTimerD(Pt := nTd);
nTimerE(Pt := nTe);
nTimerF(Pt := nTf);
nTimerDValve(Pt := T#100ms);

if (nTimerDValve.Q = 1) then
    nTimerDValve.in := 0;
    nPistD := 0;
end_if;

if (nPistD = 1) then
    nTimerDValve.in := 1;
end_if;

if (nStop) then
    Cyklus := 20;
    nMotorStart:= 0;

end_if;

case 2 of

```

						Print date: 23.5.2016 12:26:57	...bleBree\Programy\PLC panasonic\BP_HydraLis_out.pro
							PRG_Rizeni_lisu
							Page: 20
Rev	Change	Date	Name				



PRG_Rizeni_lisu

```

1:      (* Senzorické řízení *)
      case Cyklus of
        0:  (*  BASE - INIT
                Pouze při prvním spuštění programu
                *)

                if (wait1=0) then
                  Cyklus:=1;
                end_if;

        1:  (* Inicializace, + uřízení *)

                nPistA:=0;
                nPistB:=0;
                nPistC:=1;

                if (nSA0=1 AND nSB0=1) then
                  Cyklus := 2;
                end_if;

        2:  (* První krok cyklu *)
                if (nSA1=1) then
                  Cyklus:=3;
                end_if;

                nPistA:=1;

        3:  if (N1<N1max) then
                N1:= N1+1;
                Cyklus:=4;
                end_if;

                if (N1=N1max) then
                  N1:=0;
                  Cyklus:=5;
                end_if;

        4:  nPistA:=0;

                if (nSA0=1) then
                  Cyklus:=2;
                end_if;

        5:  nPistB := 1;

                if (nSB2=1) then
                  Cyklus:=6;
                end_if;

        6:  nPistC:=0;

                if (nSB1=1) then
                  Cyklus:=7;
                end_if;

        7:

                nPistC:=1;
                nPistB:=0;
                nPistA:=0;

                if (nSA0= 1 AND nSB0=1) then
                  Cyklus:=8;
                end_if;

        8:

                in := 1;
                nTimerZpozdeni_sezr(IN := in, PT := cas1, Q => out, ET => cas2);

                if (out=1) then
                  Cyklus:=1;
                  in := 0;
                end_if;

      else
        Cyklus := 0;
        wait1:= 1;

      end_case;

;

2:  (* Casovane *)
      case Cyklus of

        0:  (*  BASE - INIT
                Pouze při prvním spuštění programu
                *)

                if (wait1=0) then
                  Cyklus:=1;
                end_if;

```

						Print date: 23.5.2016 12:26:57	...bleBree\Programy\PLC panasonic\BP_HydraLis_out.pro		
							PRG_Rizeni_lisu		
								Page: 21	
Rev	Change	Date	Name						



PRG_Rizeni_lisu

```

nTa := nCurrTimeConst.Ta;
nTb := nCurrTimeConst.Tb;
nTc := nCurrTimeConst.Tc;
nTd := nCurrTimeConst.Td;
nTe := nCurrTimeConst.Te;
nTf := nCurrTimeConst.Tf;

1:  (* Inicializace, + ujisteni *)

    nPistA:=0;
    nPistB:=0;
    nPistC:=1;

    nTimerE.in := 1;

    if (ntimerE.Q = 1) then
        nTimerE.in := 0;
        Cyklus := 2;
    end_if;

2:  (* Prni krok cyklu *)

    nTimerA.in := 1;
    if (nTimerA.Q = 1) then
        nTimerA.in := 0;
        Cyklus := 3;
    end_if;

    nPistA:=1;

3:

    if (N1<N1max) then
        N1:= N1+1;
        Cyklus:=4;
    end_if;

    if (N1>=N1max) then
        N1:=0;
        Cyklus:=5;
    end_if;

4:

    nPistA:=0;
    nTimerA.in := 1;
    if (nTimerA.Q = 1) then
        nTimerA.in := 0;
        Cyklus:=2;
    end_if;

5:  (* Zahajeni lisovani *)
    nPistB := 1;

    nTimerB.in := 1;
    if (nTimerB.Q=1) then
        nTimerB.in :=0;
        Cyklus:=6;
    end_if;

6:

    nPistC:=0;

    nTimerD.in := 1;
    if (nTimerD.Q =1) then
        nTimerD.in := 0;
        Cyklus:=7;
    end_if;

7:  (* ustaleni *)
    nPistC:=1;
    nPistB:=0;
    nPistA:=0;

    nTimerE.in := 1;
    if (nTimerE.q = 1) then
        nTimerE.in:=0;
        Cyklus:=8;
    end_if;

8:

    nTimerF.in:= 1;
    if (nTimerF.q =1) then
        nTimerF.in:=0;
        Cyklus:=9;
    end_if;

9:  (* aktualizace casovycho konstant*)
    if (nAllClear ) then
        Cyklus := 2;
        nTa := nCurrTimeConst.Ta;
        nTb := nCurrTimeConst.Tb;

```

						Print date: 23.5.2016 12:26:57	...bleBree\Programy\PLC panasonic\BP_HydraLis_out.pro	
							PRG_Rizeni_lisu	
								Page: 22
Rev	Change	Date	Name					



PRG_Rizeni_lisu

```

        nTc := nCurrTimeConst.Tc;
        nTd := nCurrTimeConst.Td;
        nTe := nCurrTimeConst.Te;
        nTf := nCurrTimeConst.Tf;

    end_if;

10:
    nPistA := 2;
    nPistB := 2;
    nPistA := 2;
    ;

11:
    nPistC:=1;
    nPistB:=0;
    nPistA:=0;

    nTimerE.in := 1;
    if (nTimerE.q = 1) then
        nTimerE.in:=0;
        Cyklus:=9;
    end_if;

    ;

20:
    nPistA := 2;
    nPistB := 2;
    nPistA := 2;

    if (nErrorClear) then
        Cyklus:= 21;
    end_if;

    ;

21:
    nPistC:=1;
    nPistB:=0;
    nPistA:=0;

    nTimerE.in := 1;
    if (nTimerE.q = 1) then
        nTimerE.in:=0;
        Cyklus:=9;
    end_if;

else
    Cyklus := 0;
    wait1:= 1;

end_case;

;
else
;
end_case;
```