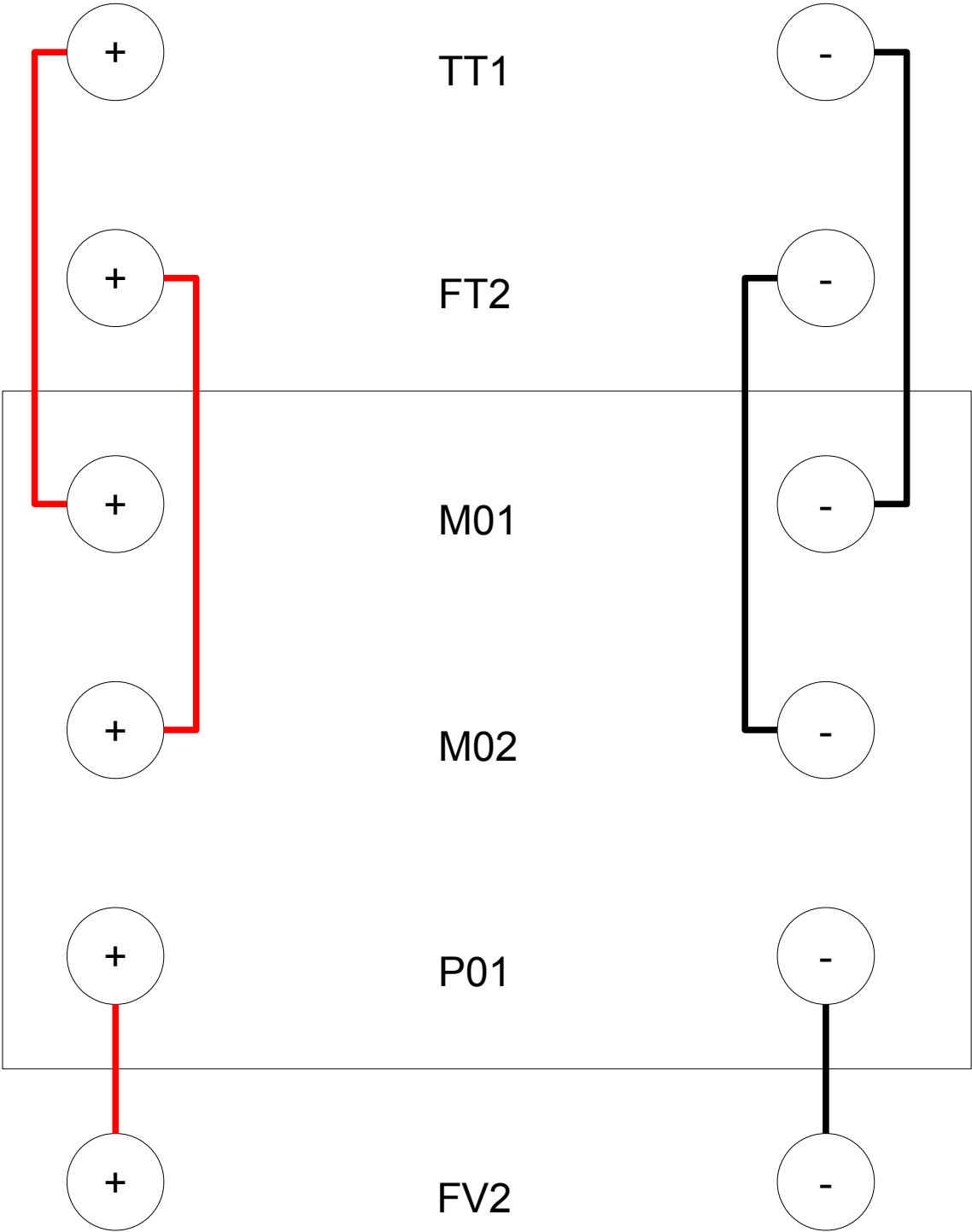
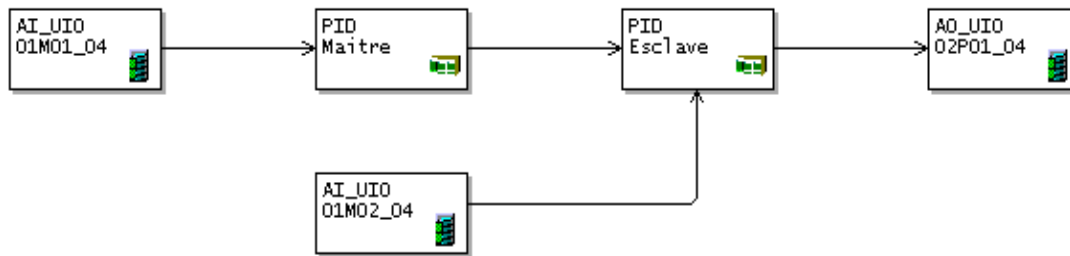


TP3 Multi - Ayza			Pt	A	B	C	D	Note	
	INSTRUMENTATION								
	Cablage électrique	2	A					2	
	REGULATION								
	Mise en place de la régulation cascade	3	A					3	
	Réglage de la boucle de régulation	6	C					2,1	
	Validation du fonctionnement du démarrage	3	C					1,05	
	AUTOMATISMES								
	GRAFCET	6	C					2,1	
Note : 10,25/20									

Câblage



On fait une régulation cascade



Et on paramètre les entrées

Block: 01M01_04					
		Comment		Connections	
Tagname	01M01_04			LIU Name	01M01_04
Type	AI_UIO			DBase	<local>
Task	3 (110ms)			Rate	0
MODE	AUTO			Alarms	
Fallback	AUTO			Node	>00
PV	0.0	%		SiteNo	1
				Channel	1
HR	100.0	%		InType	mA
LR	0.0	%		HR_in	20.00 mA
				LR_in	4.00 mA
HiHi	100.0	%		AI	0.00 mA
Hi	100.0	%		Res	0.000 Ohms
Lo	0.0	%			
LoLo	0.0	%		CJ_type	Auto
Hyst	0.5000	%		CJ_temp	0.000
				LeadRes	0.000 Ohms
Filter	0.000	Secs		Emissiv	1.000
Char	Linear			Delay	0.000 Secs
UserChar					
PVoffset	0.000	%		SBreak	Up
				PVErrAct	Up
AlmOnTim	0.000	Secs		Options	>0000
AlmOfTim	0.000	Secs		Status	>0000

Block: 01M02_04					
		Comment		Connections	
Tagname	01M02_04			LIU Name	01M02_04
Type	AI_UIO			DBase	<local>
Task	3 (110ms)			Rate	0
MODE	AUTO			Alarms	
Fallback	AUTO			Node	>00
PV	0.0	%		SiteNo	1
				Channel	2
HR	100.0	%		InType	mA
LR	0.0	%		HR_in	20.00 mA
				LR_in	4.00 mA
HiHi	100.0	%		AI	0.00 mA
Hi	100.0	%		Res	0.000 Ohms
Lo	0.0	%			
LoLo	0.0	%		CJ_type	Auto
Hyst	0.5000	%		CJ_temp	0.000
				LeadRes	0.000 Ohms
Filter	0.000	Secs		Emissiv	1.000
Char	Linear			Delay	0.000 Secs
UserChar					
PVoffset	0.000	%		SBreak	Up
				PVErrAct	Up
AlmOnTim	0.000	Secs		Options	>0000
AlmOfTim	0.000	Secs		Status	>0000

Puis la sortie

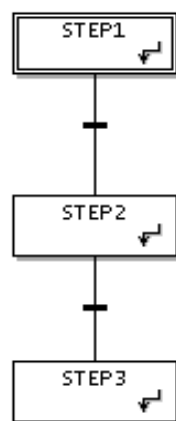
Block: 02P01_04					
Comment		Connections			
TagName	02P01_04		LIH Name	02P01_04	
Type	AO_UIO		DBase	<local>	
Task	3 (110ms)		Rate	0	
MODE	AUTO		Alarms		
Fallback	AUTO		Node	>00	
→ OP	0.0	%	Sitello	2	
			Channel	1	
HR	100.0	%	OutType	mA	
LR	0.0	%	HR_out	20.00	mA
			LR_out	4.00	mA
Out	0.0	%	AO	0.00	mA
Track	0.0	%			
Trim	0.000	mA	Options	>0000	
			Status	>0000	

Puis les PID

Block: Maître					
Comment		Connections			
TagName	Maître		LIH Name	Maître	
Type	PID		DBase	<local>	
Task	3 (110ms)		Rate	0	
Mode	AUTO		Alarms		
FallBack	AUTO				
→ PV	0.0	%	HAA	100.0	%
SP	0.0	%	LAA	0.0	%
OP	0.0	%	HDA	100.0	%
SL	0.0	%	LDA	100.0	%
TrimSP	0.0	%	TimeBase	Secs	
RemoteSP	0.0	%	XP	100.0	%
Track	0.0	%	TI	0.00	
			TD	0.00	
HR_SP	100.0	%	Options	01101100	
LR_SP	0.0	%	SelMode	00000000	
HL_SP	100.0	%			
LL_SP	0.0	%	ModeSel	00000000	
HR_OP	100.0	%	ModeAct	00000000	
LR_OP	0.0	%			
HL_OP	100.0	%	FF_PID	50.0	%
LL_OP	0.0	%	FB_OP	0.0	%

Block: Esclave					
Comment		Connections			
TagName	Esclave		LIH Name	Esclave	
Type	PID		DBase	<local>	
Task	3 (110ms)		Rate	0	
Mode	AUTO		Alarms		
FallBack	AUTO				
→ PV	0.0	%	HAA	100.0	%
SP	0.0	%	LAA	0.0	%
OP	0.0	%	HDA	100.0	%
SL	0.0	%	LDA	100.0	%
TrimSP	0.0	%	TimeBase	Secs	
→ RemoteSP	0.0	%	XP	100.0	%
Track	0.0	%	TI	0.00	
			TD	0.00	
HR_SP	100.0	%	Options	01101100	
LR_SP	0.0	%	SelMode	00000000	
HL_SP	100.0	%			
LL_SP	0.0	%	ModeSel	00000000	
HR_OP	100.0	%	ModeAct	00000000	
LR_OP	0.0	%			
HL_OP	100.0	%	FF_PID	50.0	%
LL_OP	0.0	%	FB_OP	0.0	%

Le grafcet



Step 1

```
Esclave.SelMode.SelMan:=1;  
Maitre.SelMode.SelMan:=1;
```

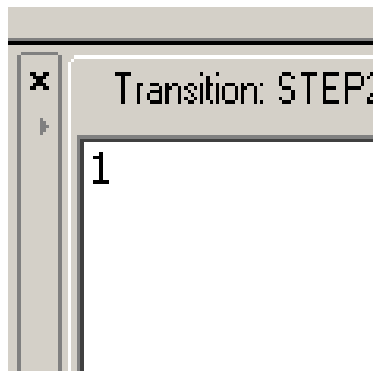
Transition 1

```
Maitre.PV>Maitre.SP
```

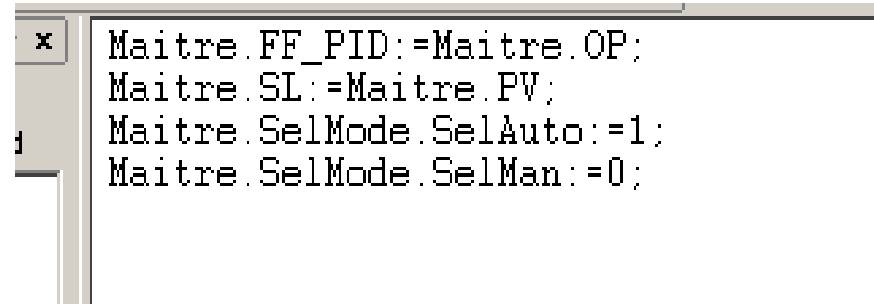
Step 2

```
Esclave.FF_PID:=Esclave.OP;  
Esclave.SL:=Esclave.PV;  
Esclave.SelMode.SelRem:=1;  
Esclave.SelMode.SelMan:=0;
```

Transition 2



Step 3



Après on rajoute le block control



Et on le paramètre

TagName	G1_CON	LIU Name	G1_CON
Type	SFC_CON	DBase	<local>
Task	3 (110ms)	Rate	0
Run	TRUE	Alarms	
Hold	FALSE		
Init	FALSE	Filename	G1
Load	TRUE	Filepath	
		DispBlk	

On voit que quand M01.PV passe au dessus de 50, les pid change de mode

Elément	Valeur
01M01_04.PV	49.90777206
Maitre.SL	50
01M02_04.PV	83.91079712
02P01_04.OP	99.97558594
02P02_04.OP	0
Esclave.SL	50
Esclave.Mode	MANUAL
Maitre.Mode	MANUAL

Elément	Valeur
01M01_04.PV	51.32674408
Maitre.SL	51.3280983
01M02_04.PV	44.06960678
02P01_04.OP	55.90685654
02P02_04.OP	0
Esclave.SL	0
Esclave.Mode	F_AUTO
Maitre.Mode	AUTO