

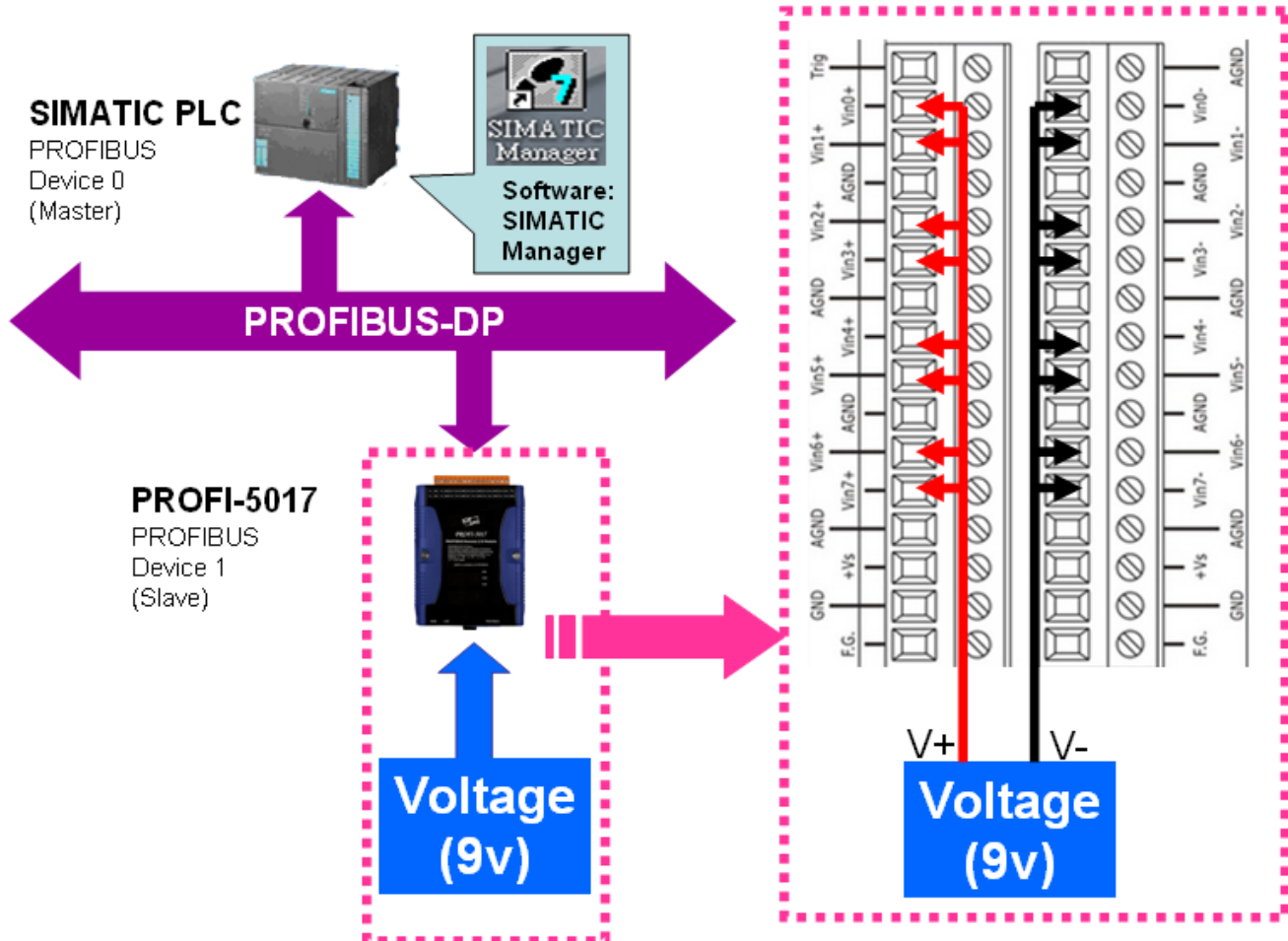
How to receive data at SIMATIC STEP 7 ?

PROFI-5017 : Example 1

PROFI-5017C : Example 2

Example 1 : PLC reads voltage(9v) from PROFI-5017

1. Architecture



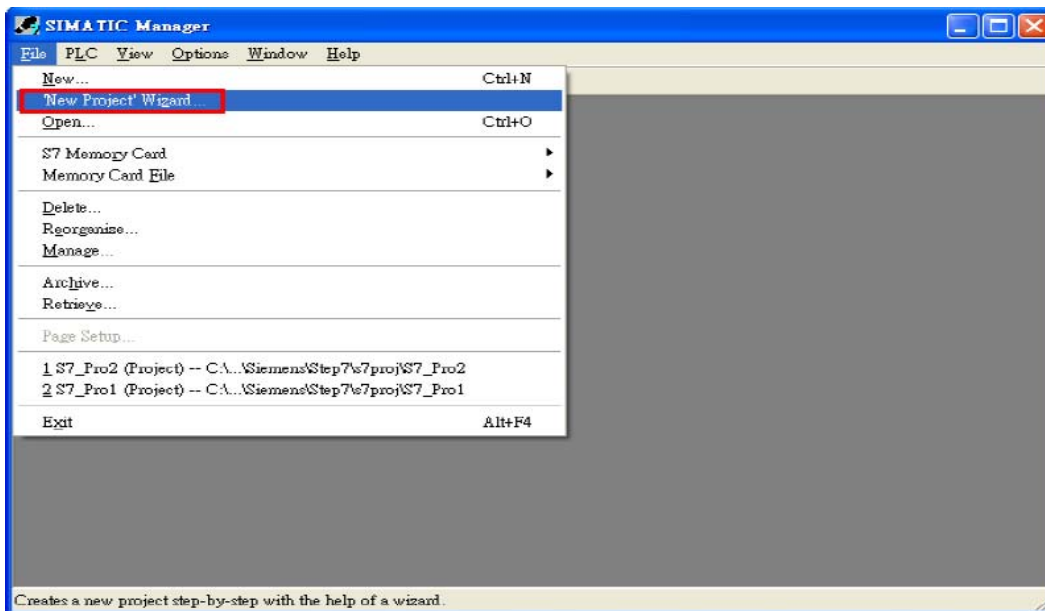
“Follow the below steps to establish the system!”

2.SIMATIC STEP7 Configuration:

Step 1: Double Click “SIMATIC Manager” icon to open “SIMATIC Manager”

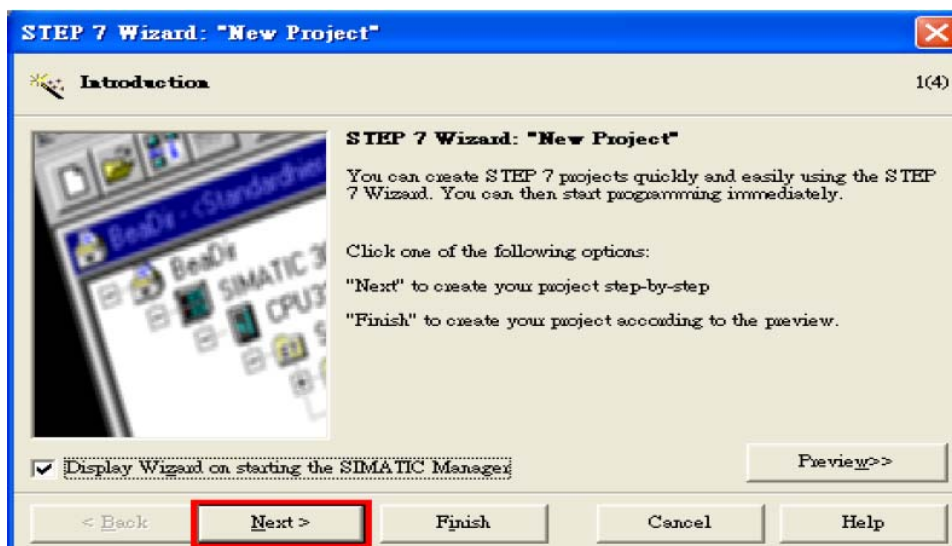


Step 2: Open “ New Project Wizard “

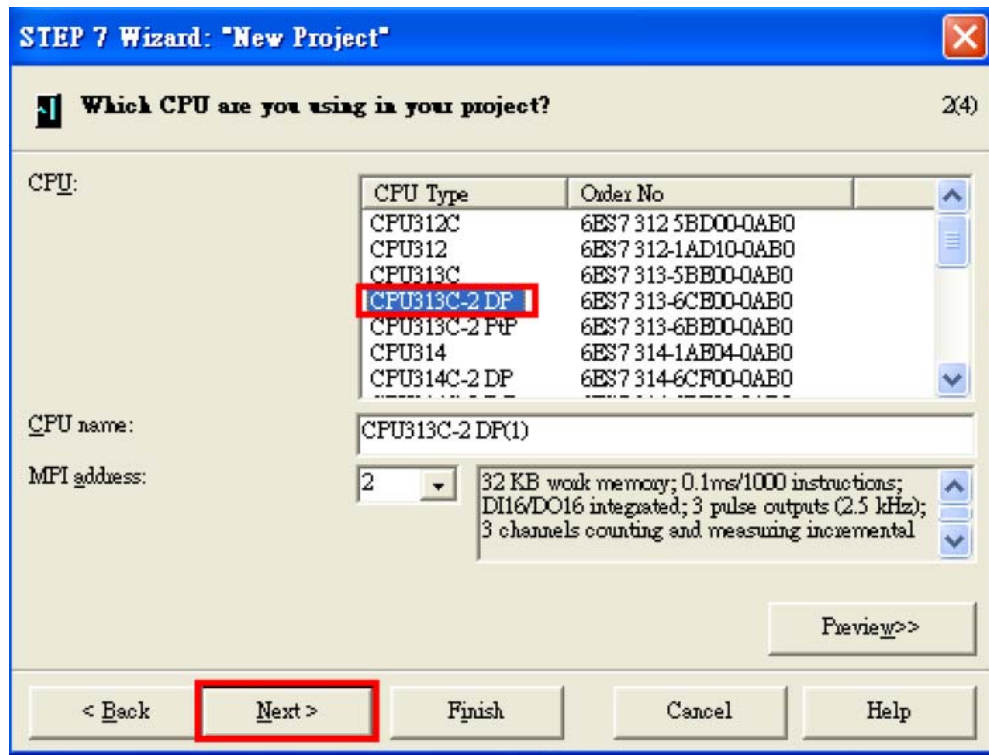


Step 3: Set up Project

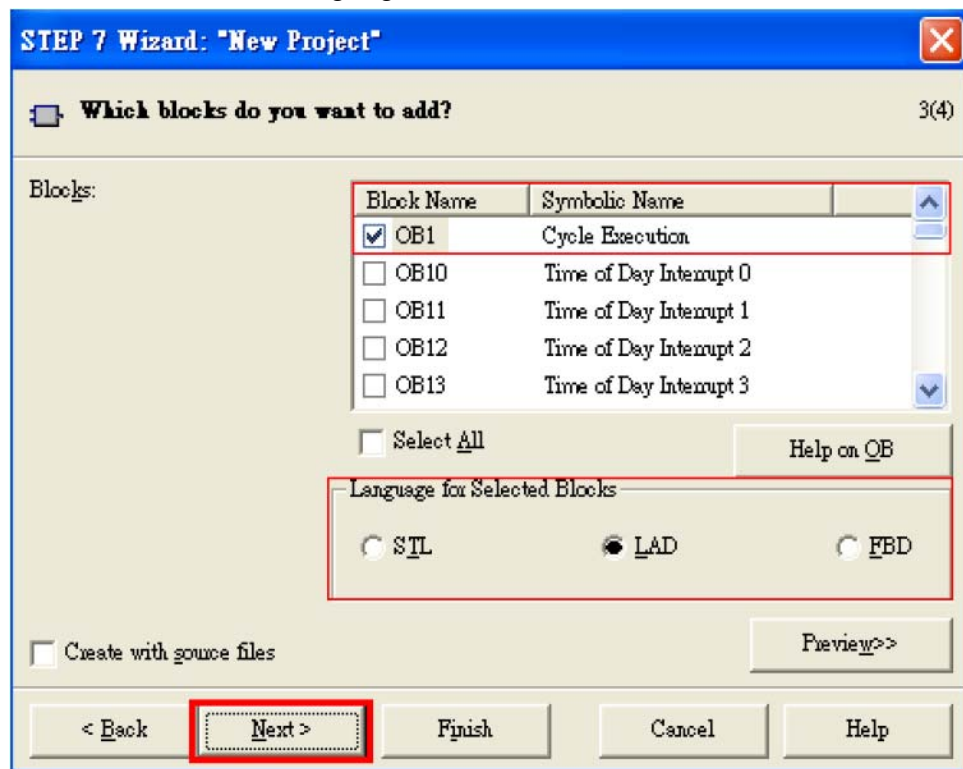
a. Click “Next”



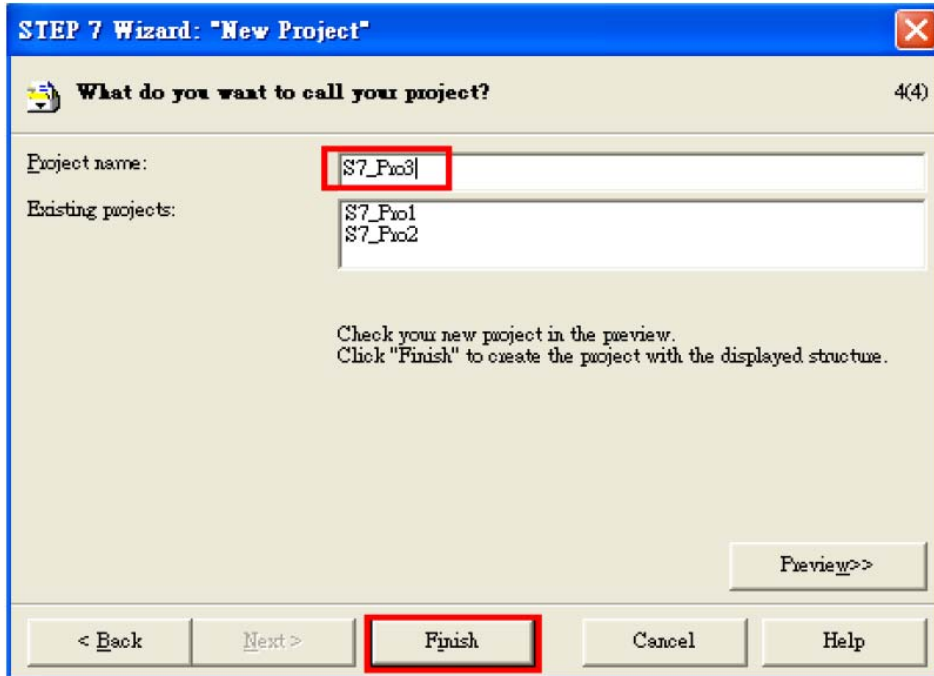
b. Select CPU type then click "Next"



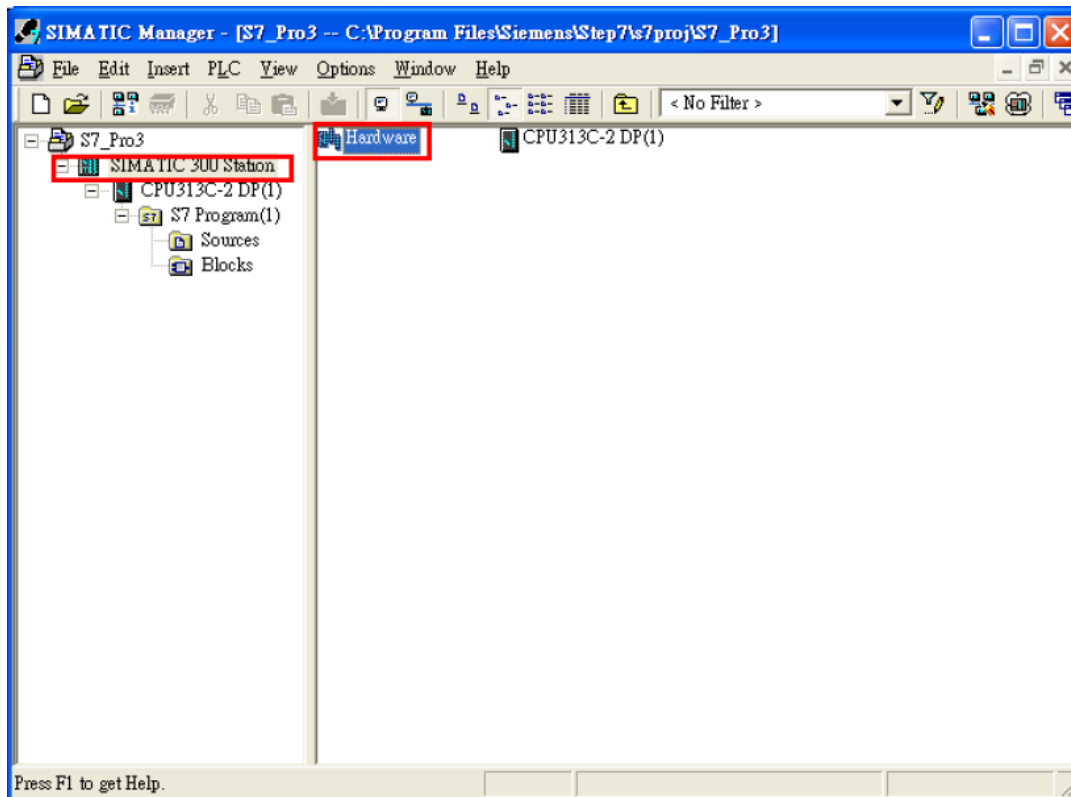
c. Select Blocks and Language for Selected Blocks then click "Next"



d. Set project name then click "Finish"



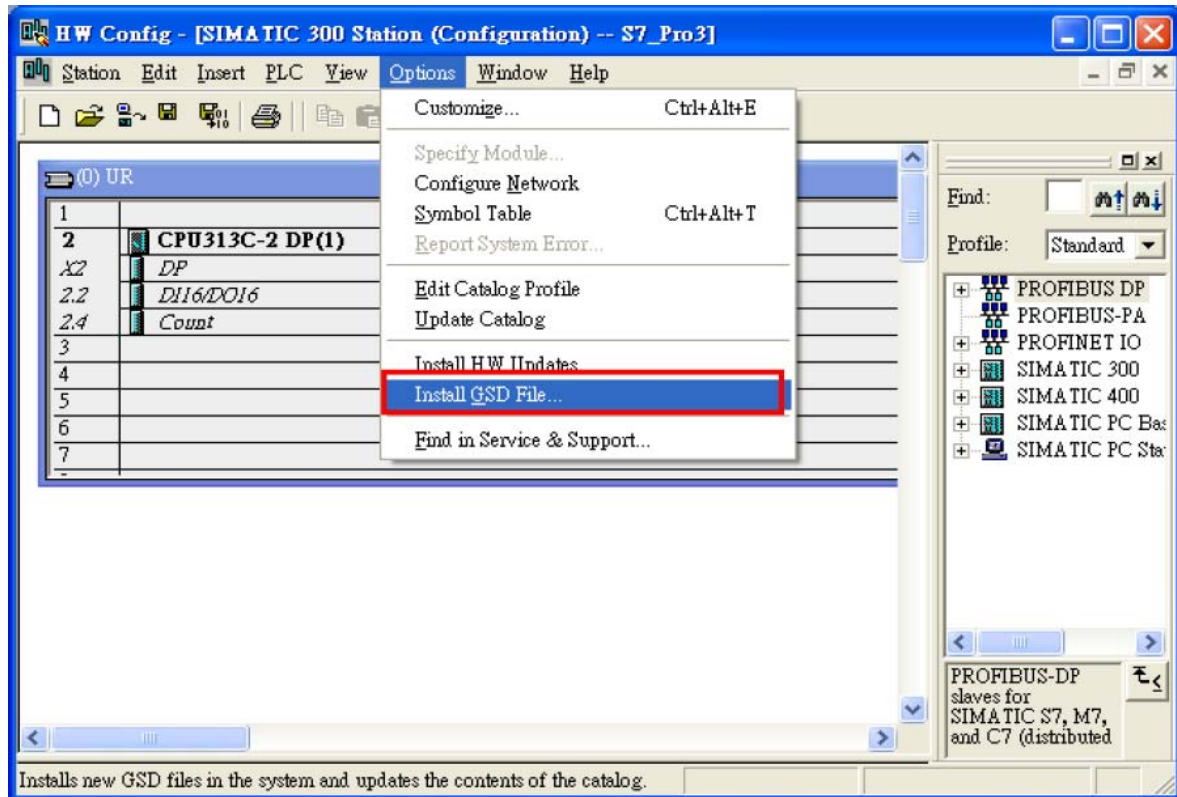
Step 4: Double click "Hardware" to open "HW Config"



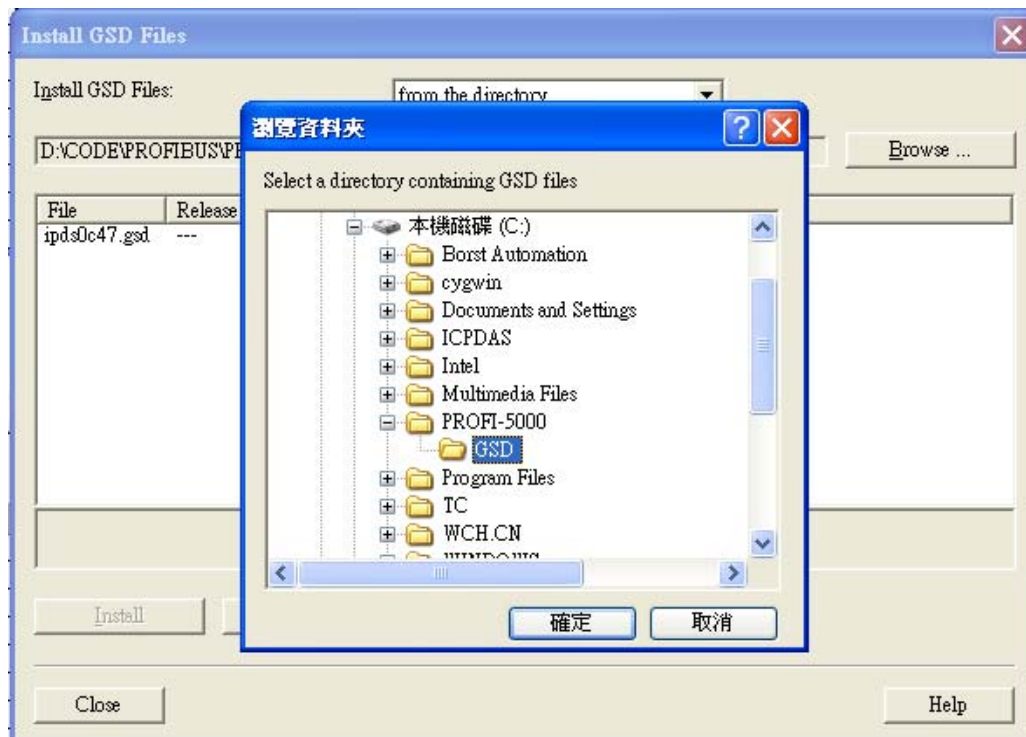
Step 5: Install PROFI-5000 GSD File

ftp://ftp.icpdas.com/pub/cd/fieldbus_cd/profibus/remote%20io/profi-5000/gsd/

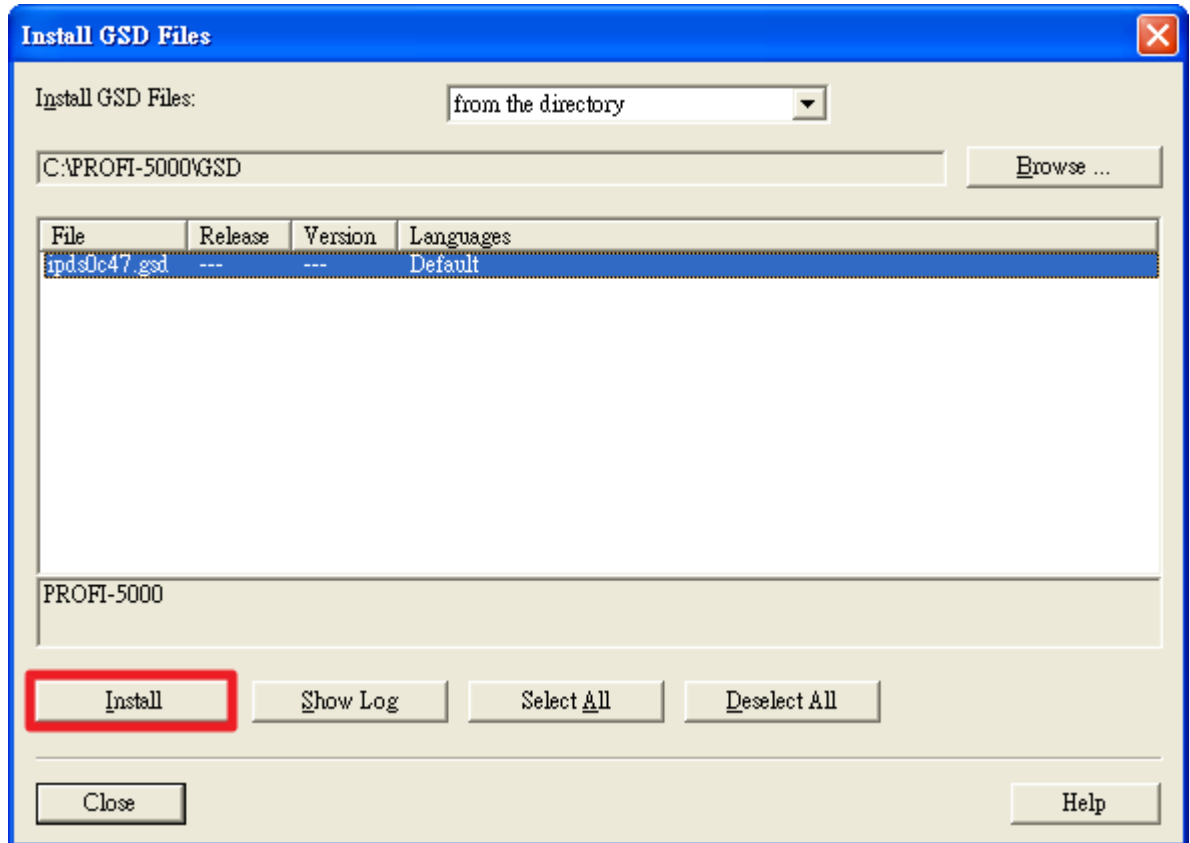
a. Click "Install GSD File"



b. Select the directory of PROFI-5017's GSD file(ipds0c47.gsd) and click "OK"



c. Click "Install"

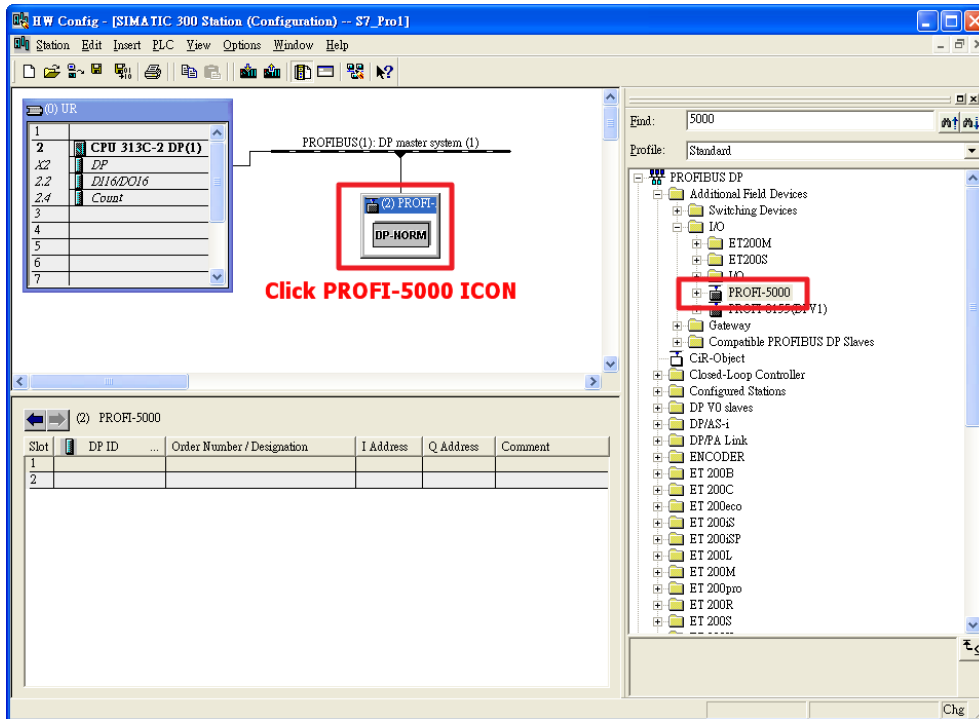


d. Click "OK"

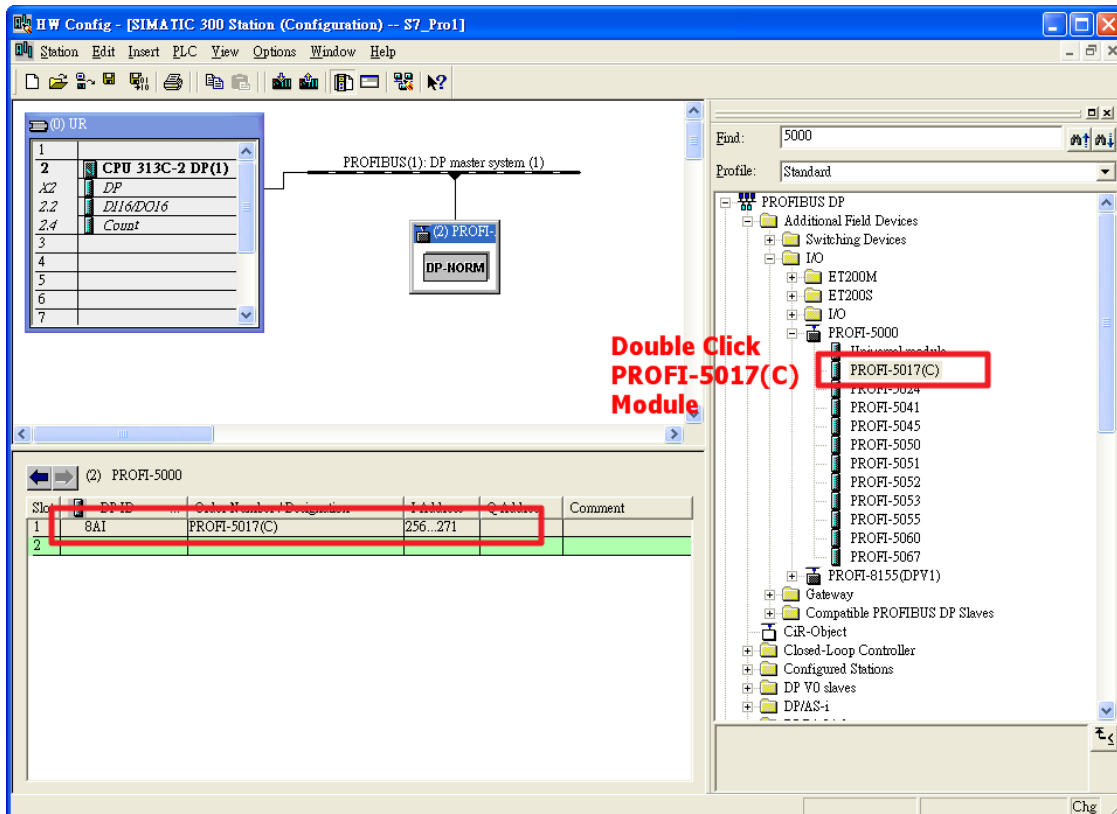


Step 6: Setup the PROFI-5017 module

a. Select PROFI-5000 module



b. Add a "PROFI-5017(C) module"

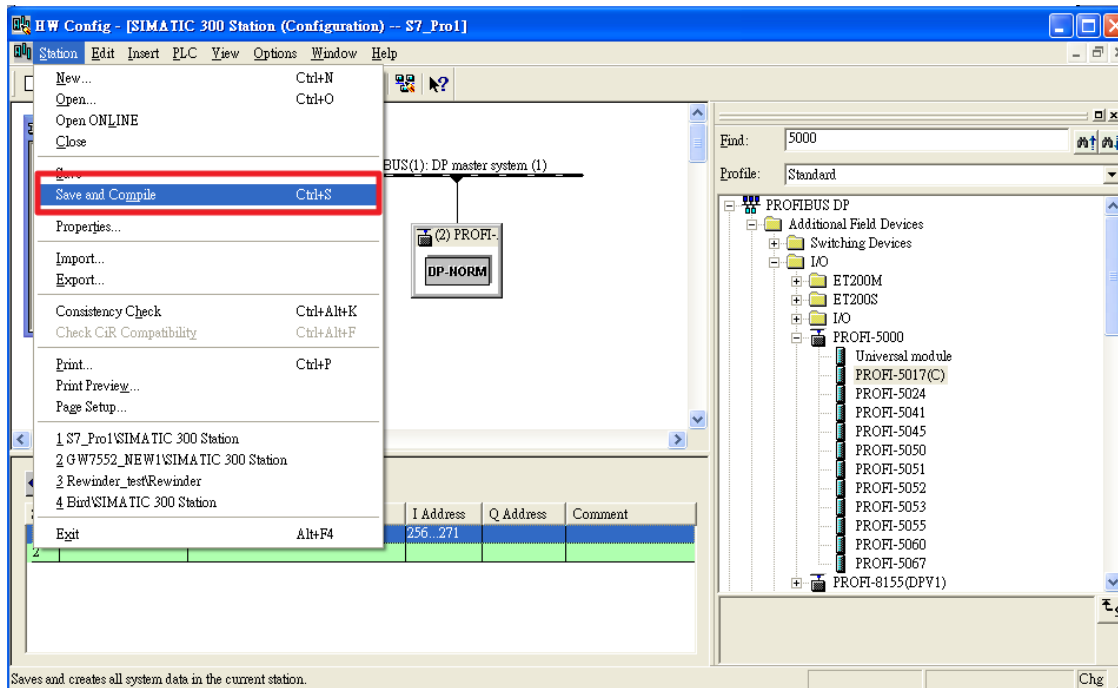


Step 7: Setup the parameters of the PROFI-5017

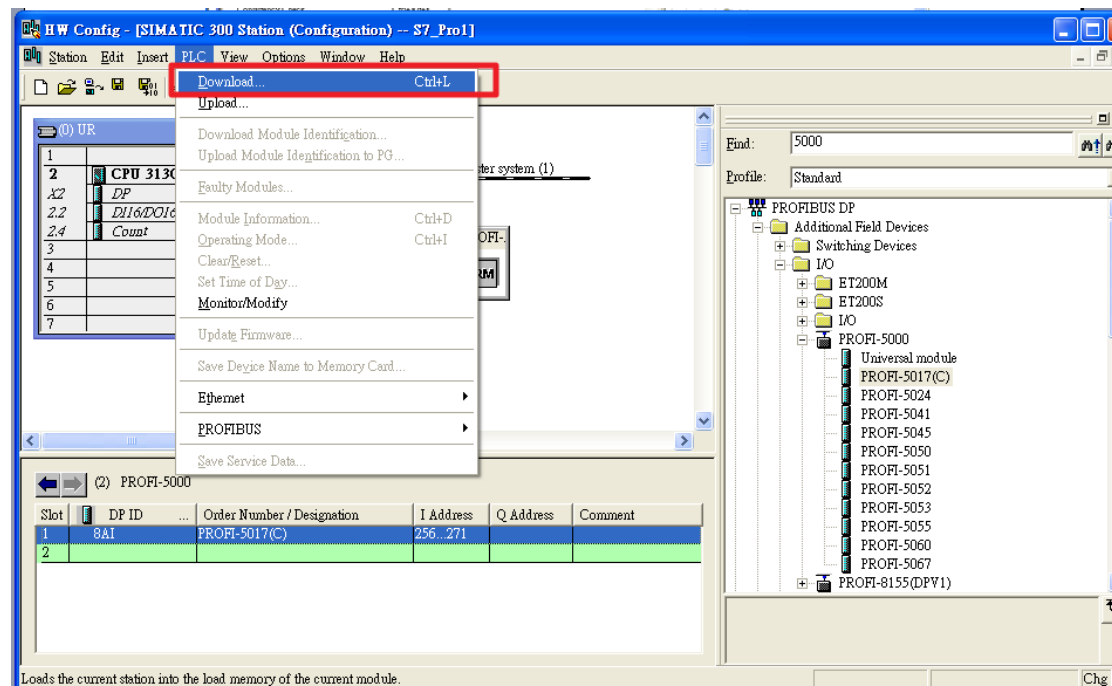
Use the default setting

Step 8: Download the HW settings into SIMATIC PLC

a. Save and Compile

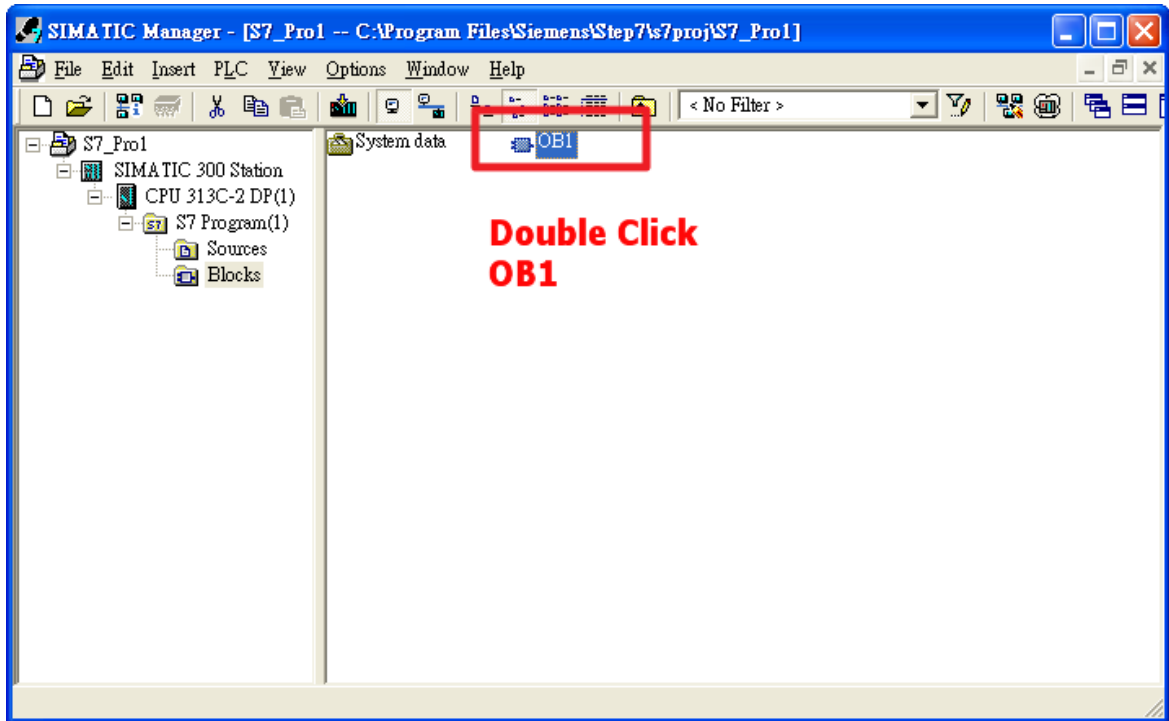


b. HW settings into SIMATIC PLC



Step 9: Edit OB1

- a. Double click "OB1"



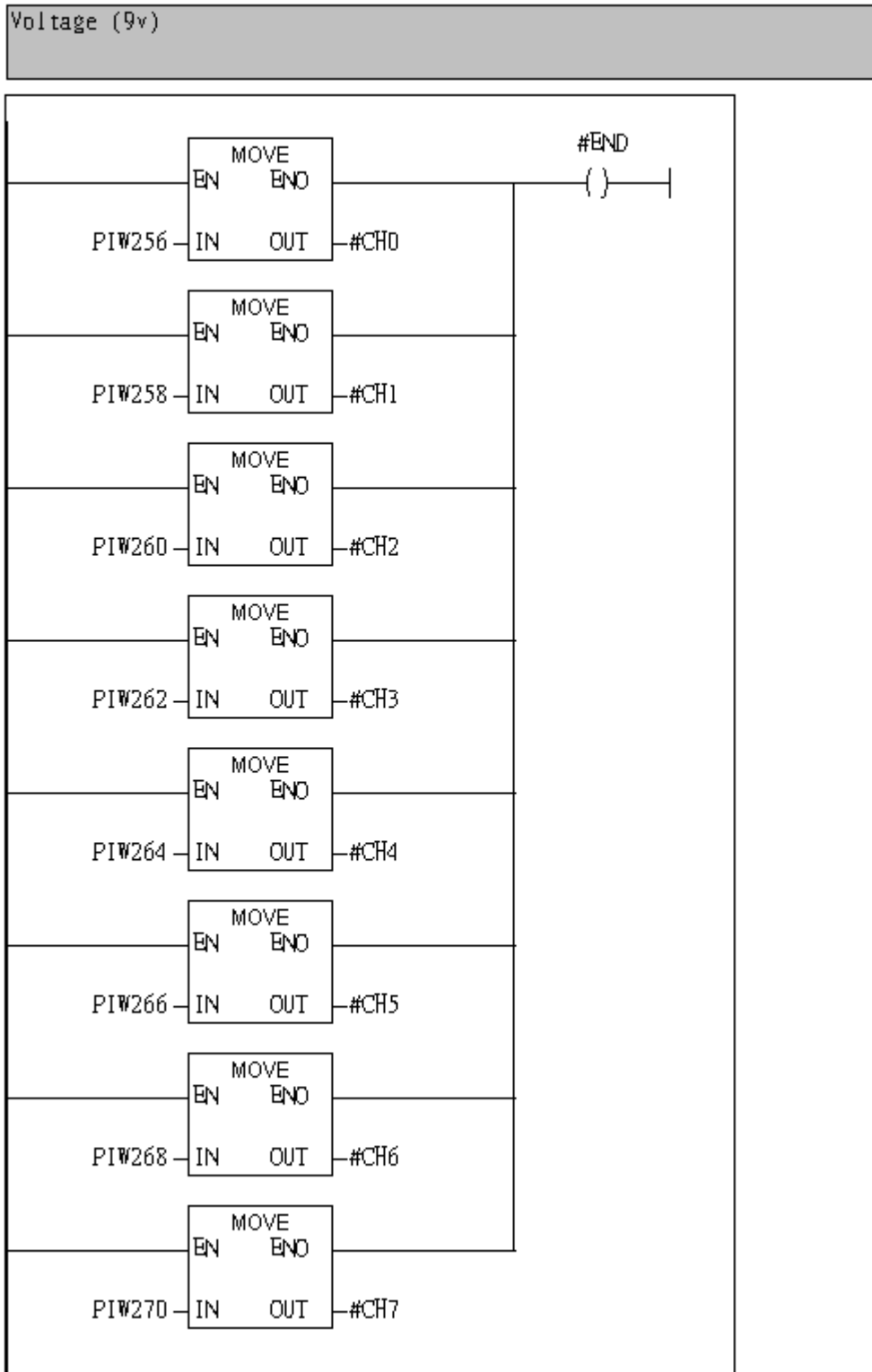
- b. Variables used in the example LD Program:

Contents Of: 'Environment\Interface\TEMP'

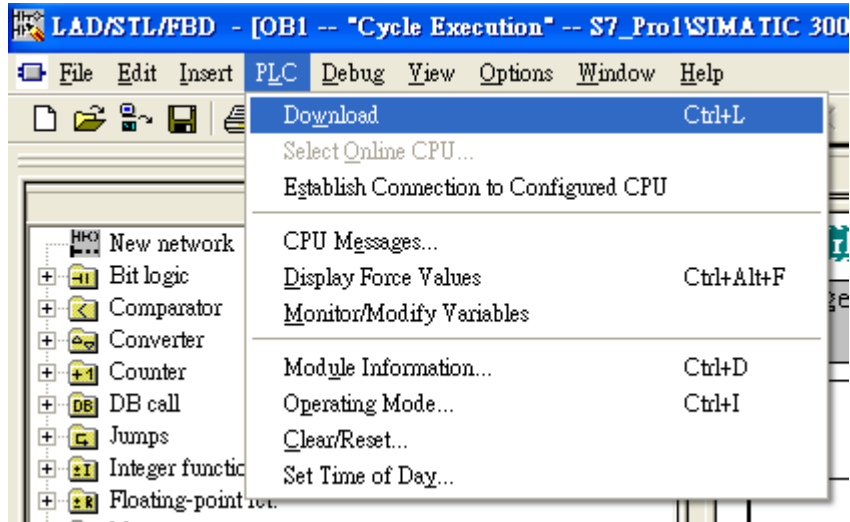
	Name	Data Type	Address	Comme
TEMP	OB1_EV_CLASS	Bool	20.0	
	OB1_SCAN_1	Word	22.0	
	OB1_PRIORITY	Word	24.0	
	OB1_OB_NUMBR	Word	26.0	
	OB1_RESERVED.	Word	28.0	
	OB1_RESERVED.	Word	28.0	
	OB1_PREV_CYC	Word	30.0	
	OB1_MIN_CYCL	Word	32.0	
	OB1_MAX_CYCL	Word	34.0	
	OB1 DATE TIM	Word	36.0	

c. Program

Network 1: Receive Voltage



Step 10: Download the settings into SIMATIC PLC



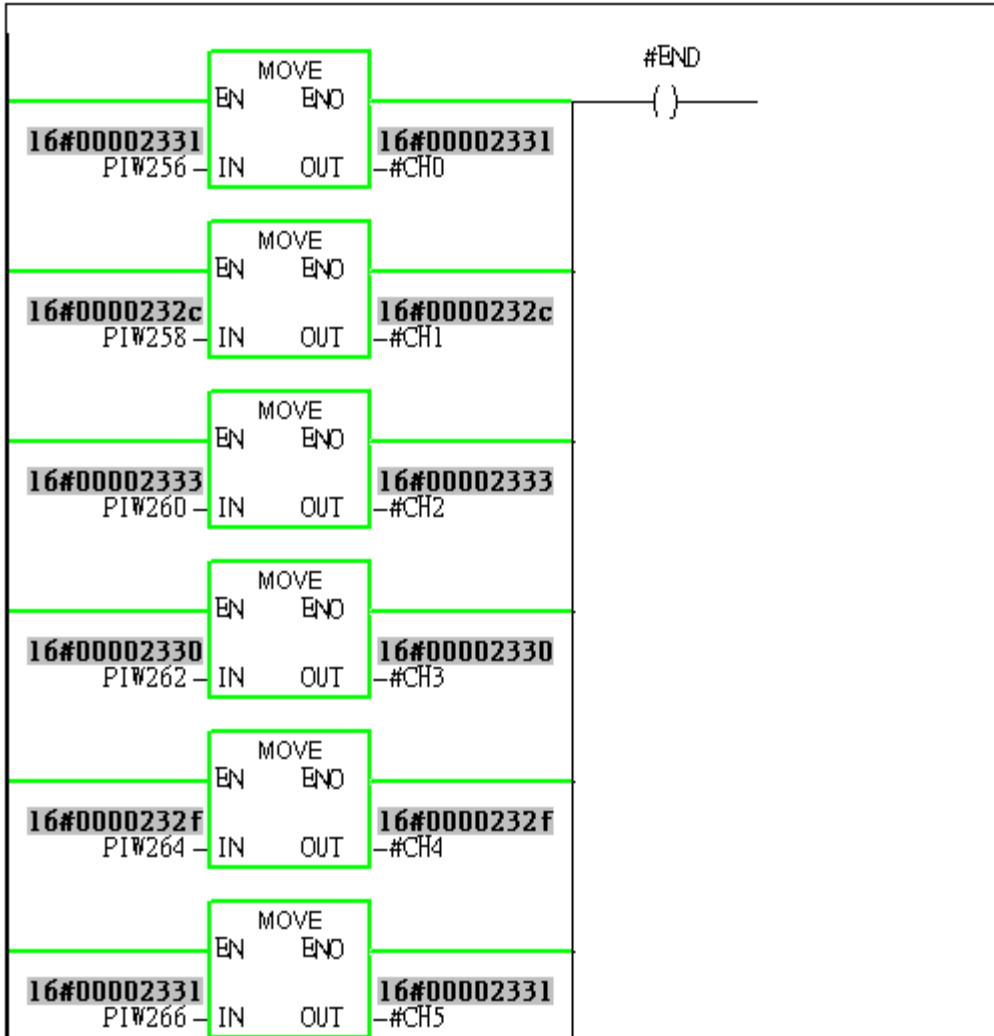
Step 11: Make sure the RUN LED of the PROFI-5017 is ON.



Now the setting procedure has been finished and the user can read voltage of channel 0 ~ channel 7 at address PIW256 ~ PIW 270

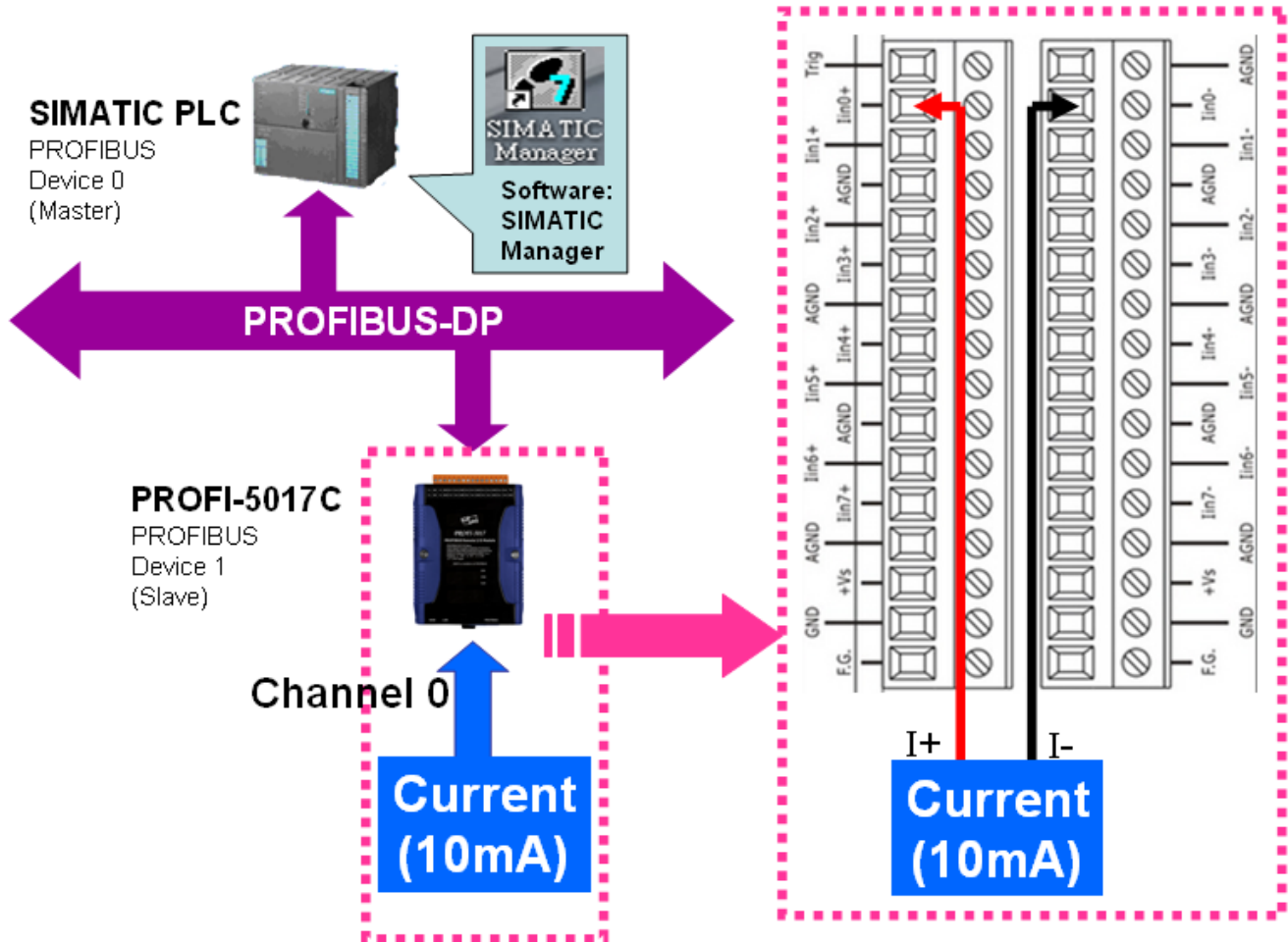
Network 1: Receive Voltage

Voltage (9v)



Example 2: PLC reads current(10mA) of channel 0 from PROFI-5017C

1. Architecture



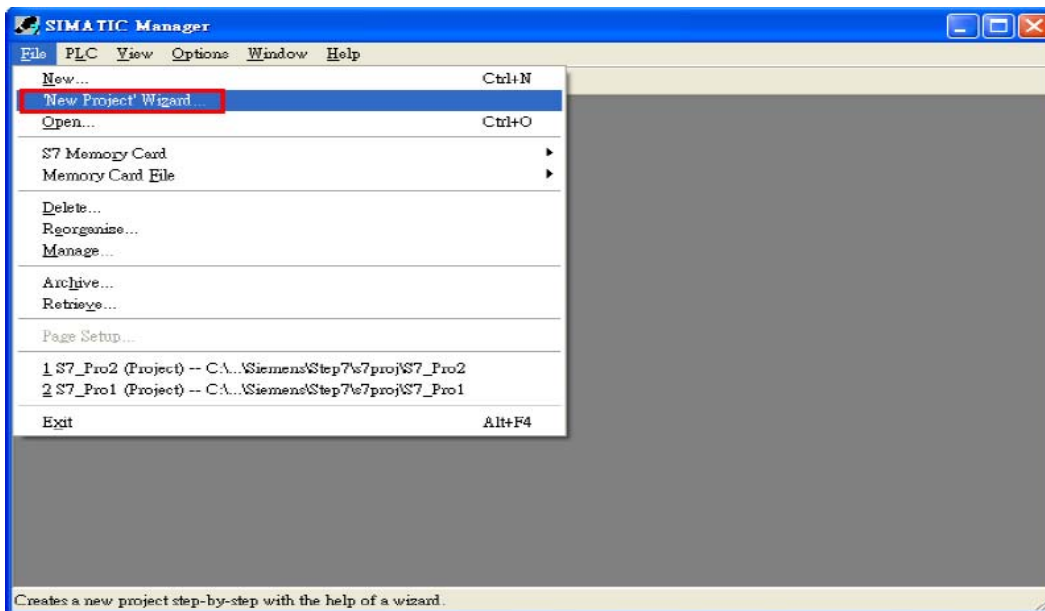
“Follow the below steps to establish the system!”

2.SIMATIC STEP7 Configuration:

Step 1: Double Click “SIMATIC Manager” icon to open “SIMATIC Manager”

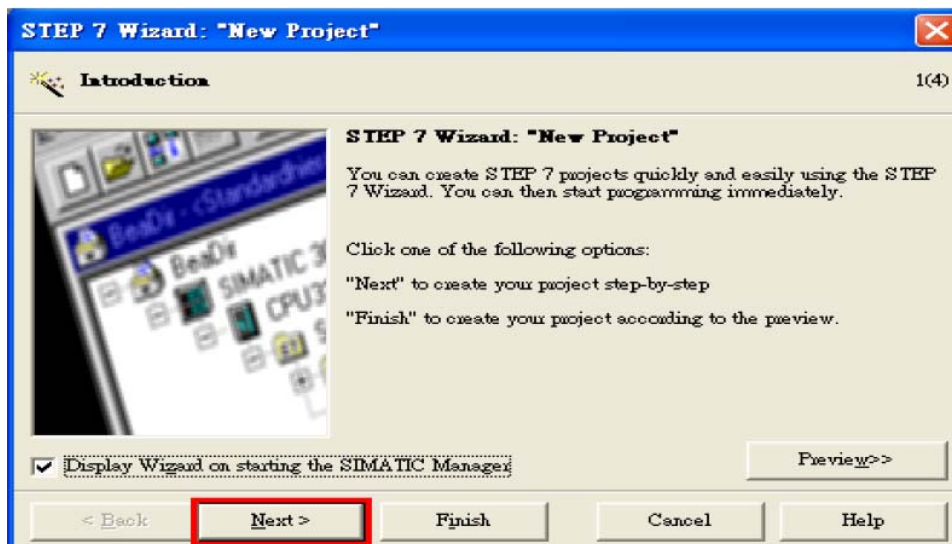


Step 2: Open “ New Project Wizard “

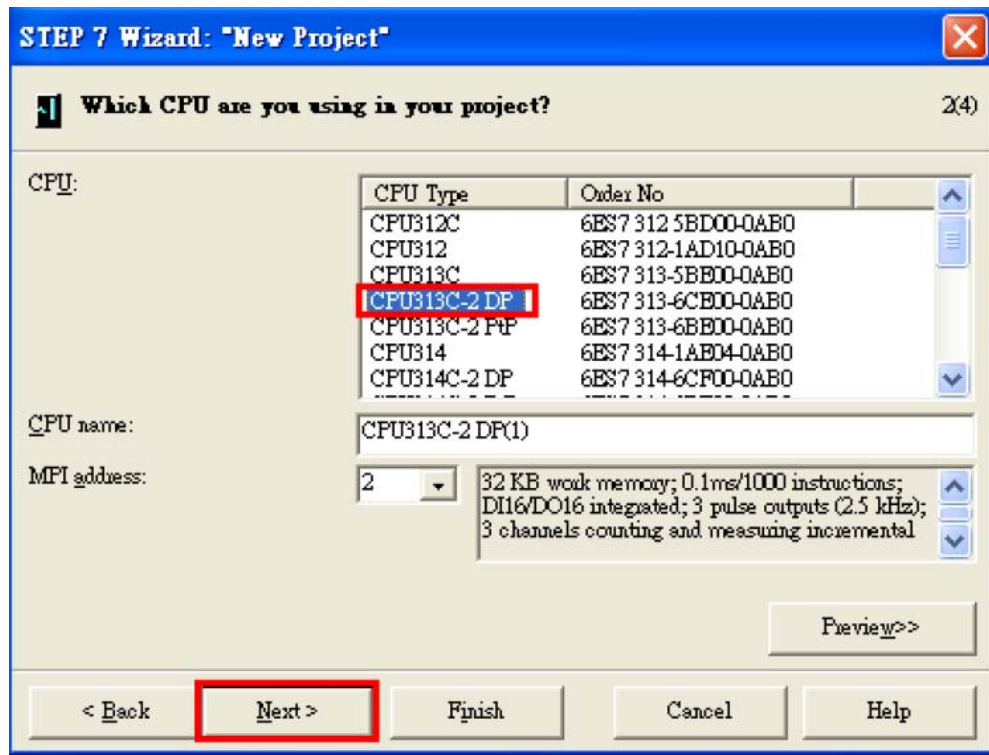


Step 3: Set up Project

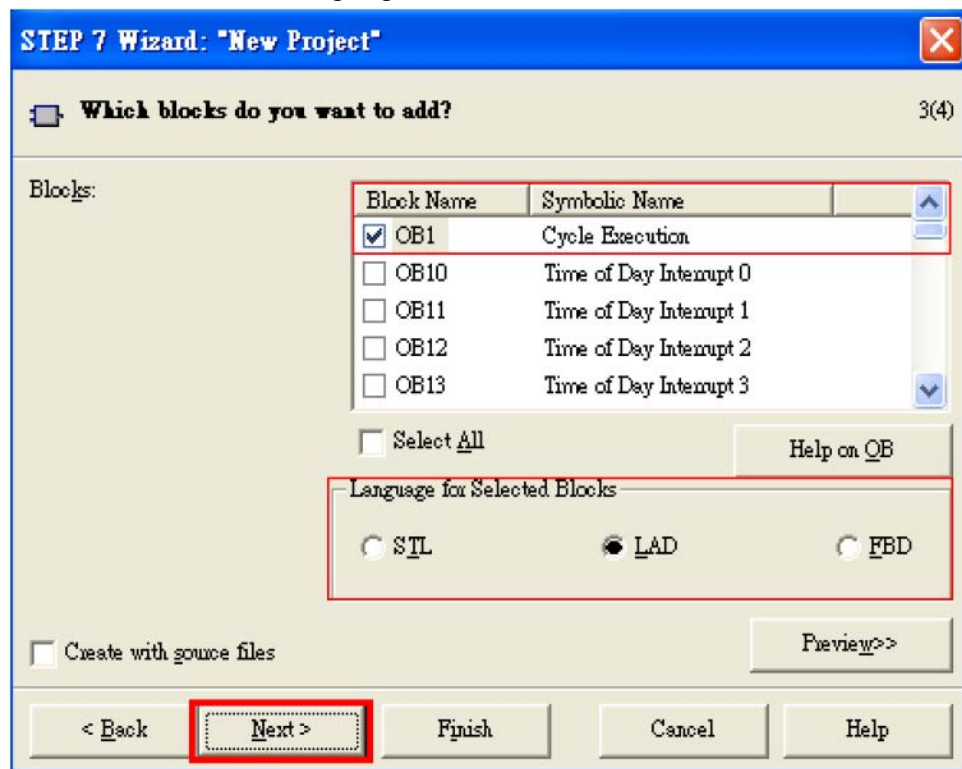
a. Click “Next”



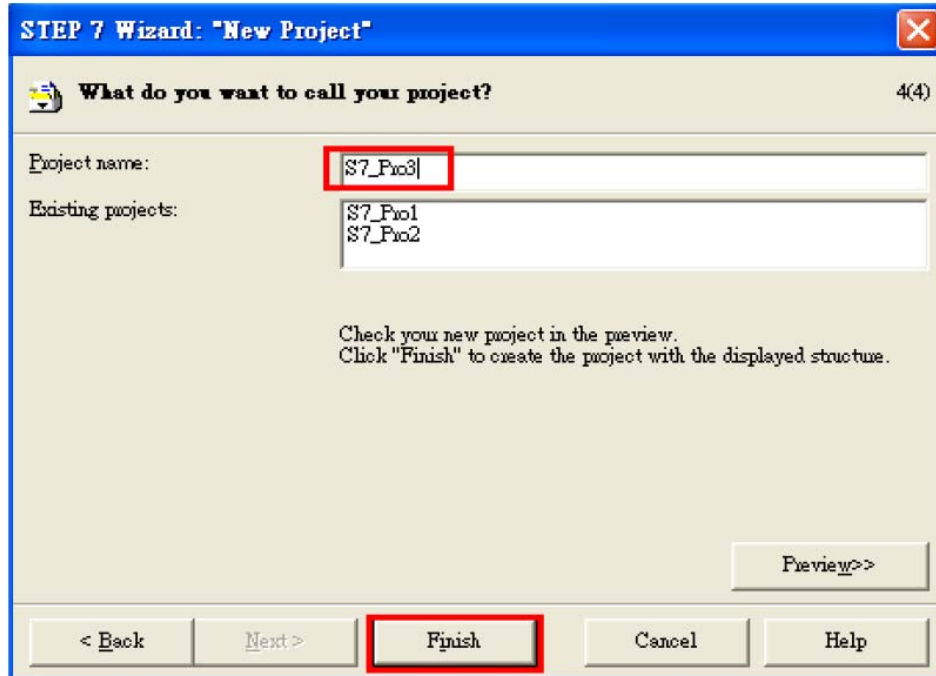
b. Select CPU type then click "Next"



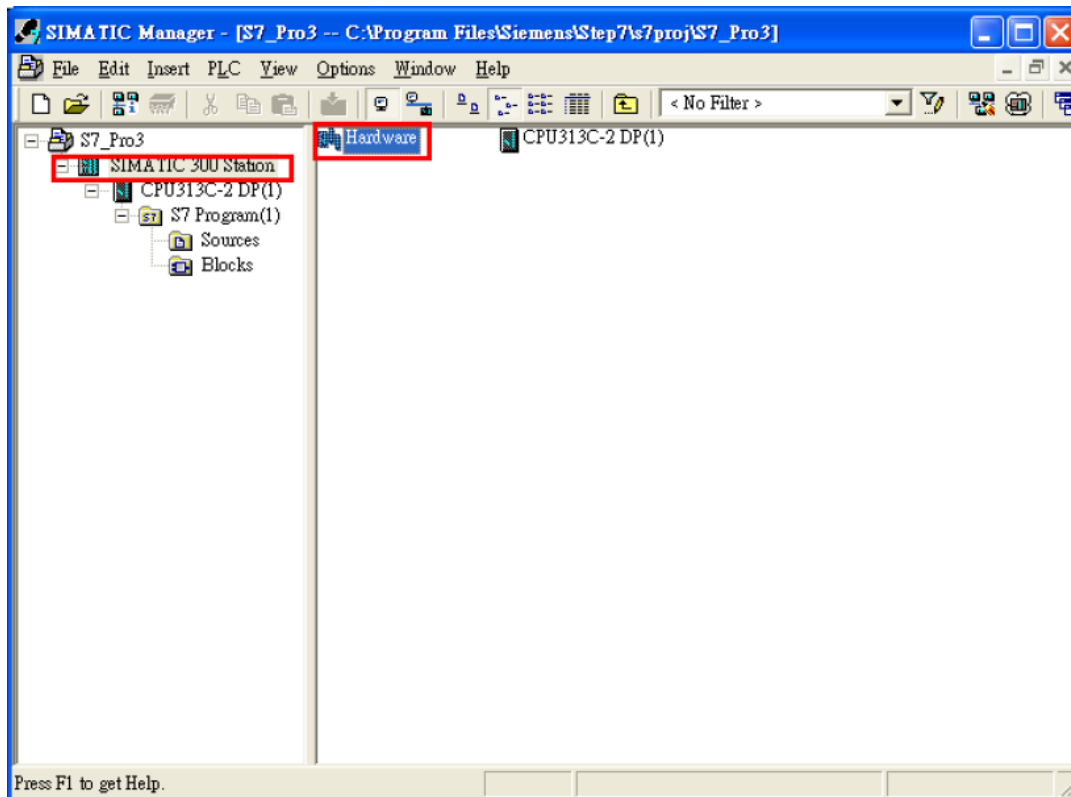
c. Select Blocks and Language for Selected Blocks then click "Next"



d. Set project name then click "Finish"



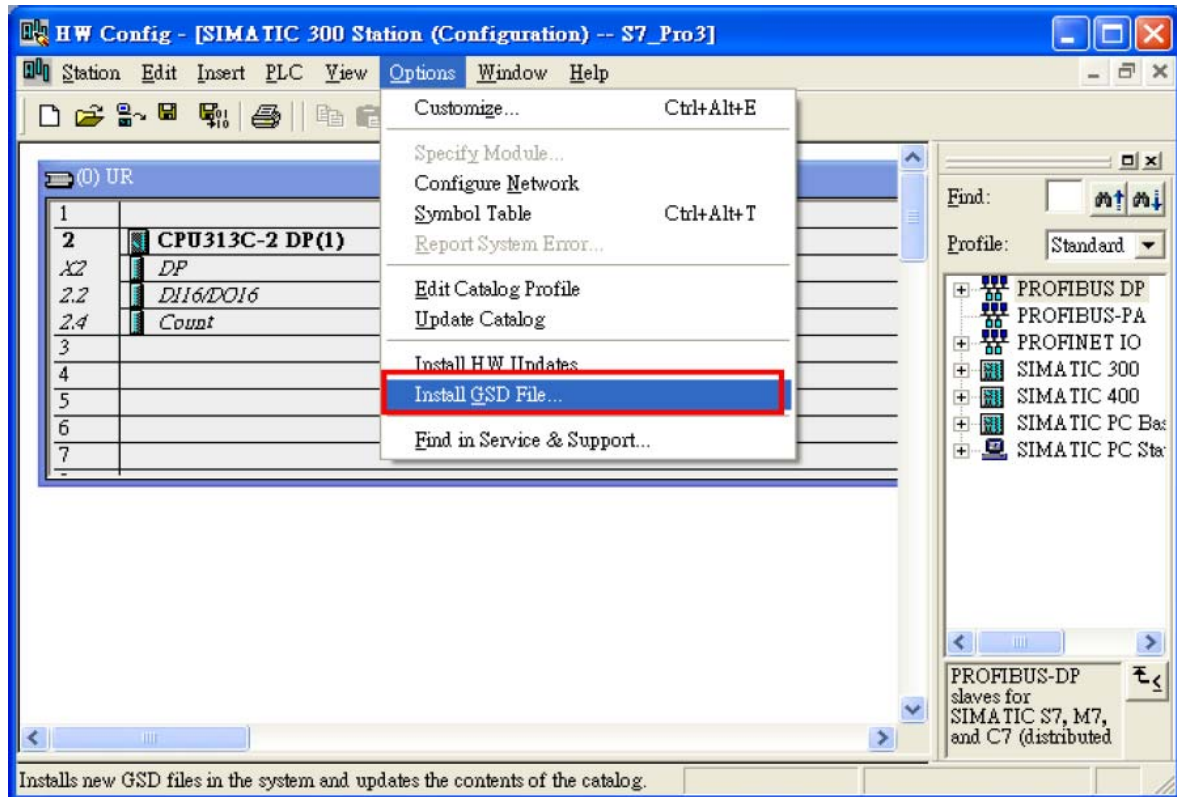
Step 4: Double click "Hardware" to open "HW Config"



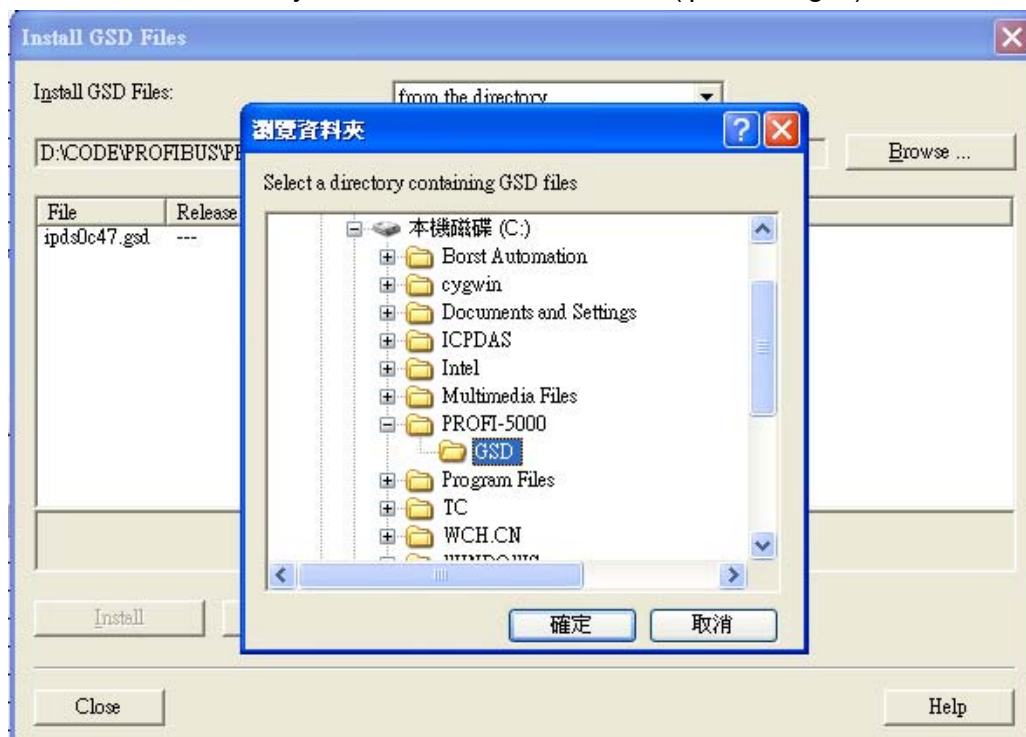
Step 5: Install PROFI-5000 GSD File

ftp://ftp.icpdas.com/pub/cd/fieldbus_cd/profibus/remote%20io/profi-5000/gsd/

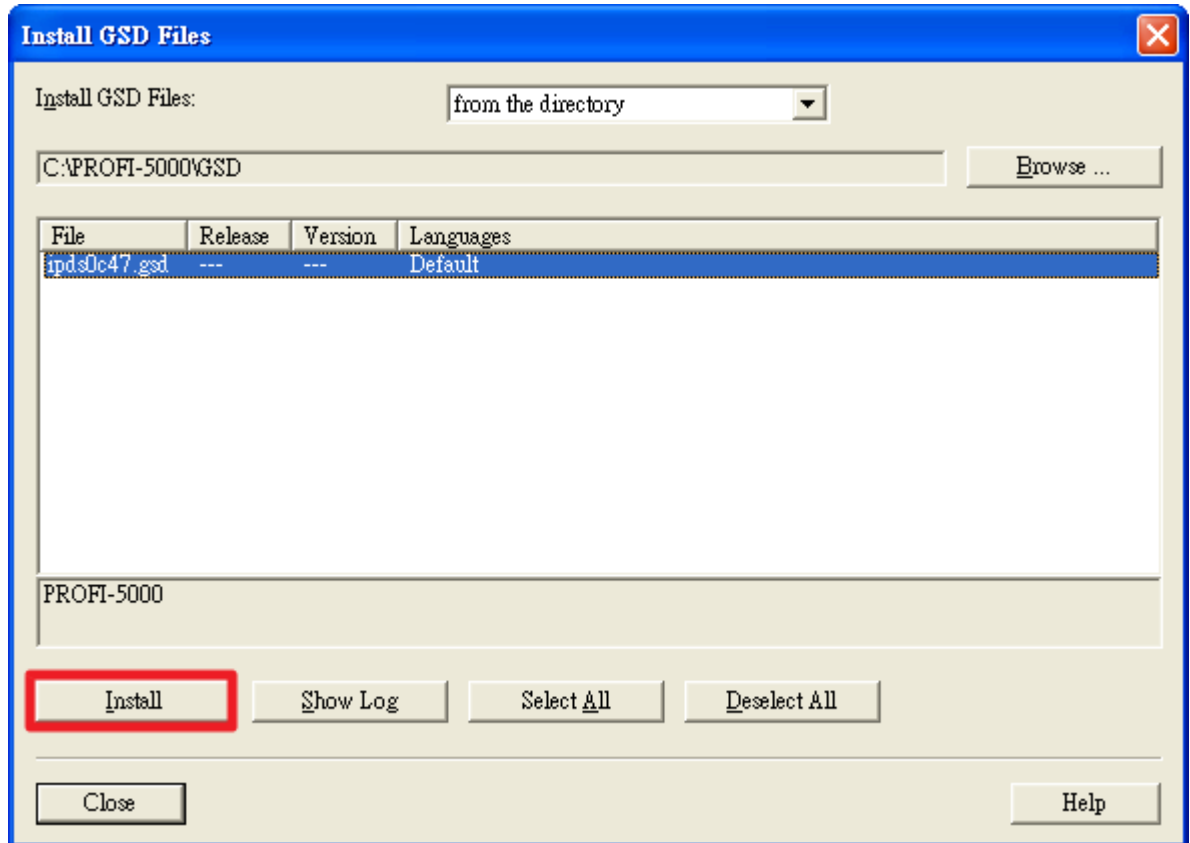
a. Click "Install GSD File"



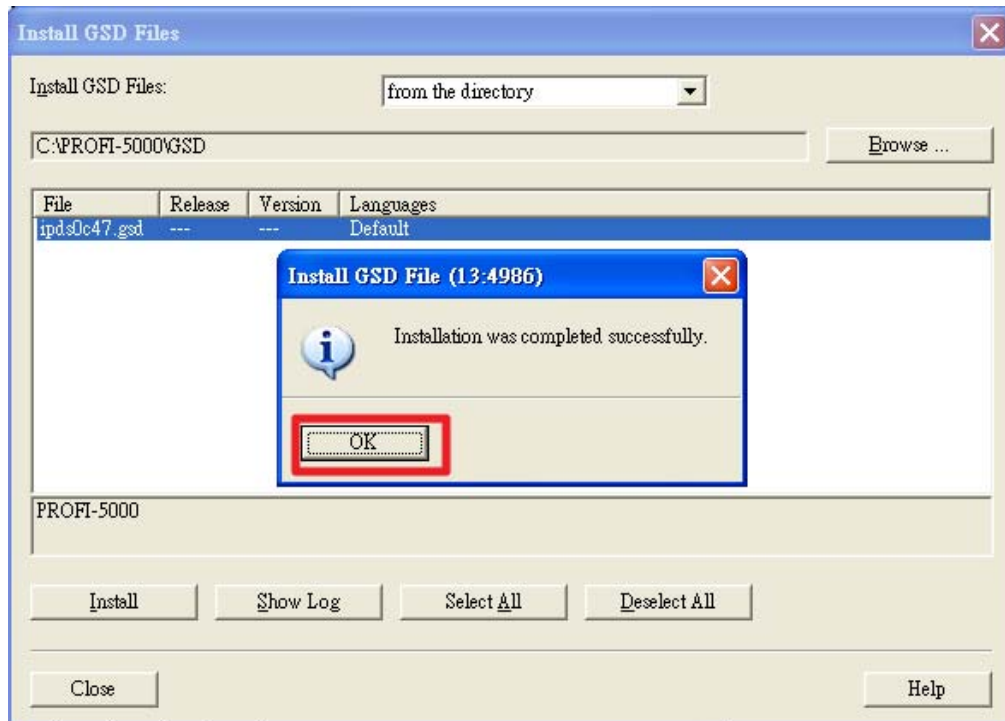
b. Select the directory of PROFI-5017C's GSD file(ipds0c47.gsd) and click "OK"



c. Click "Install"

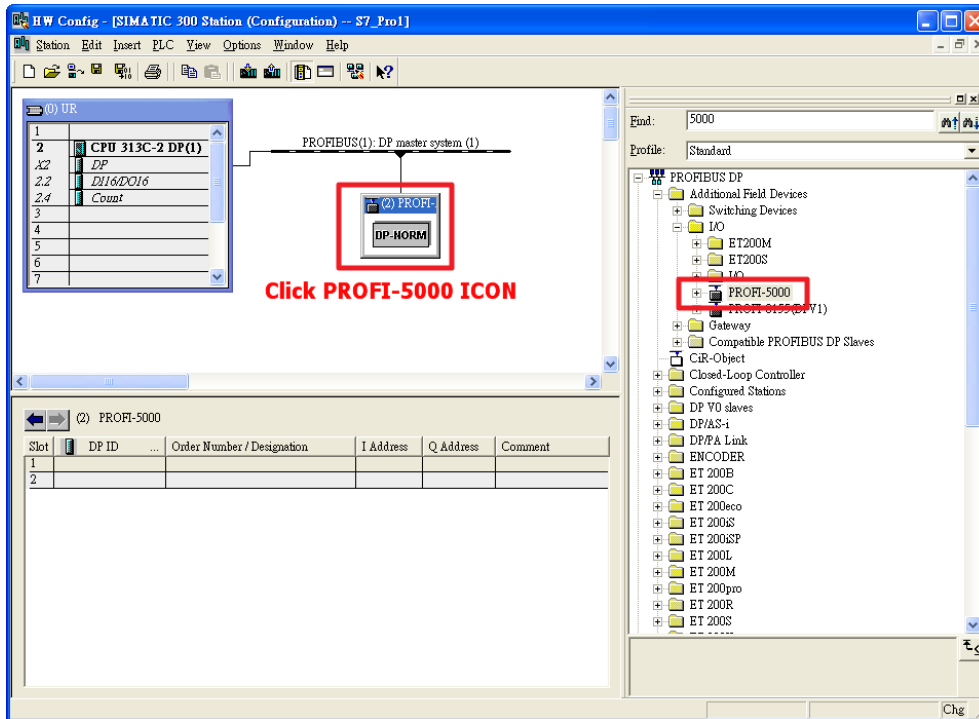


d. Click "OK"

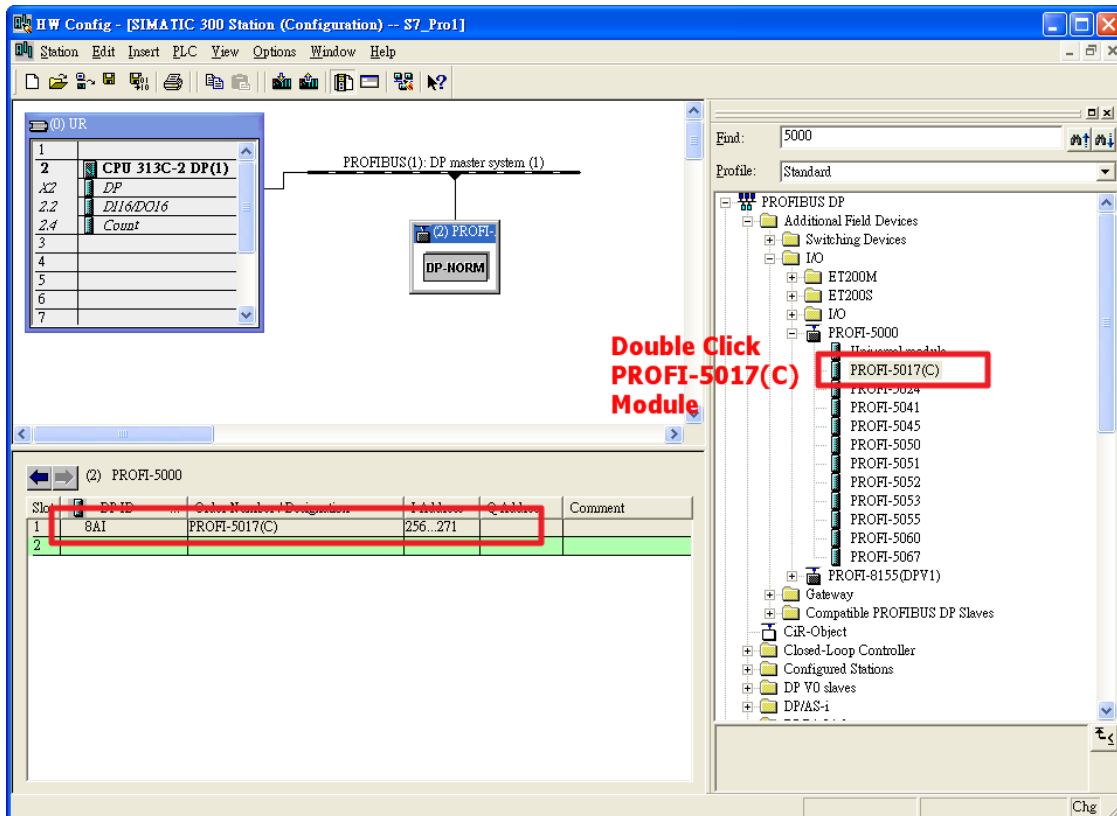


Step 6: Setup the PROFI-5017C module

a. Select PROFI-5000 module

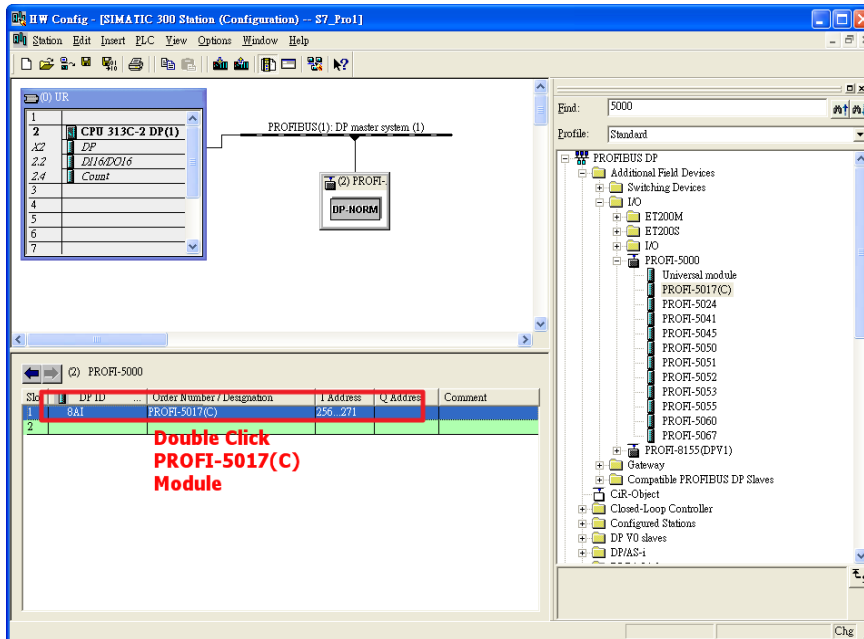


b. Add a "PROFI-5017(C) module"



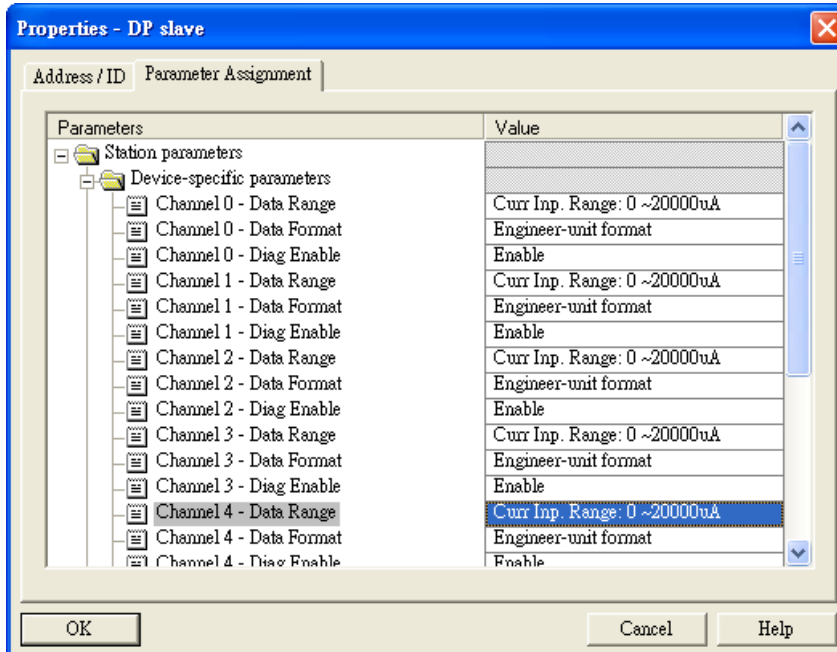
Step 7: Setup the parameters of the PROFI-5017C

a. Double Click “PROFI-5017(C) module”



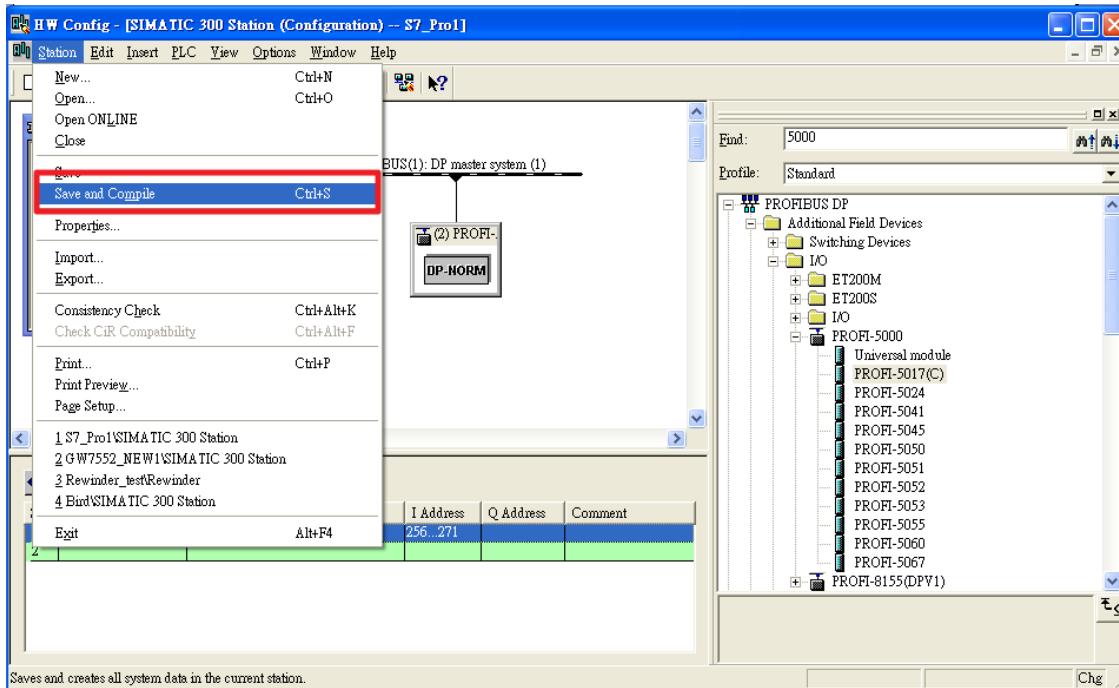
b. Select “Parameter Assignment”

Data Range of Channel 0~Channel 7 : Curr Inp. Range: 0~20000uA

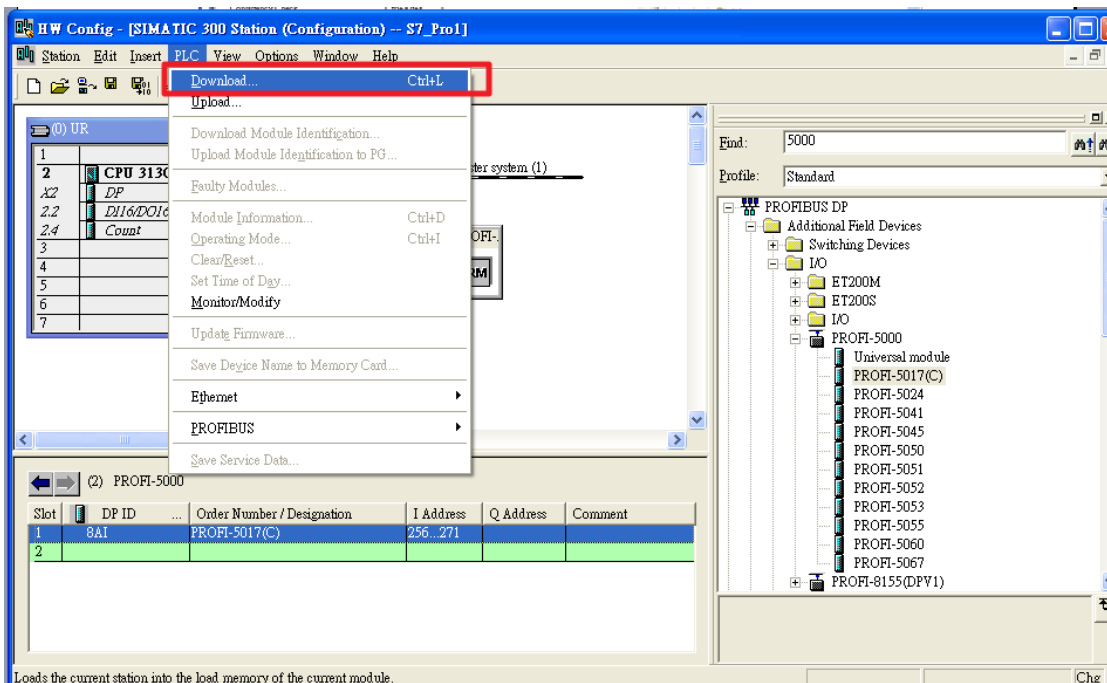


Step 8: Download the HW settings into SIMATIC PLC

a. Save and Compile

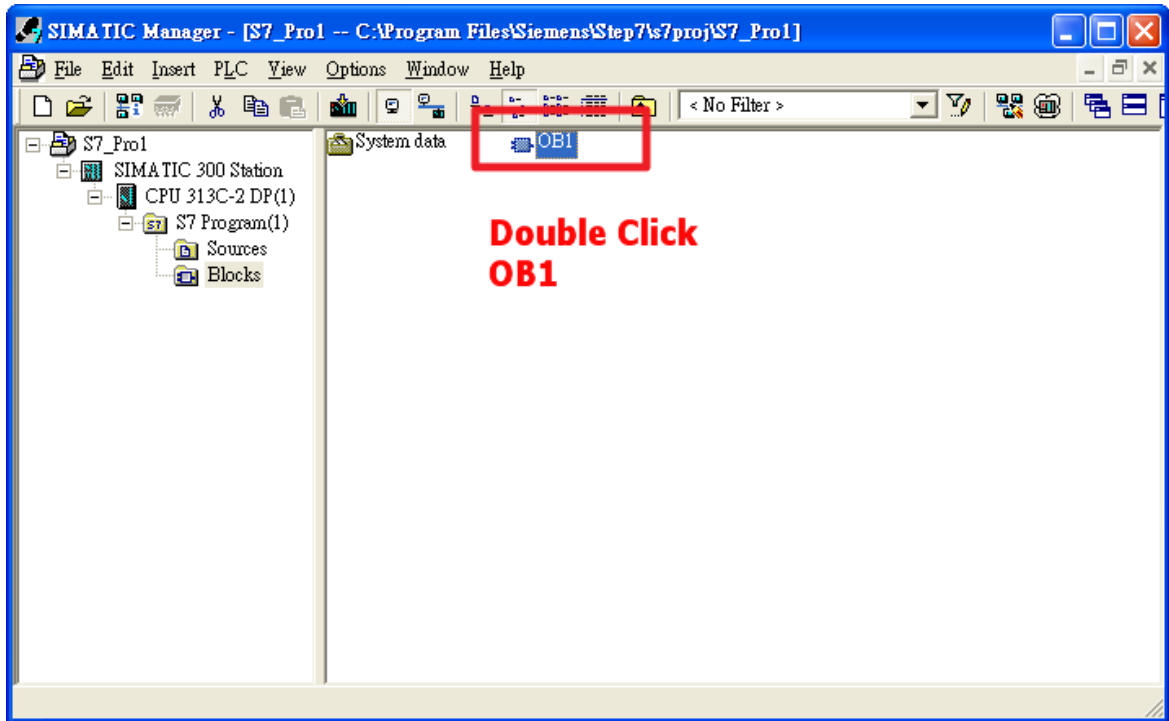


b. HW settings into SIMATIC PLC



Step 9: Edit OB1

- a. Double click "OB1"



- b. Variables used in the example LD Program:

Contents Of: 'Environment\Interface\TEMP'

	Name	Data Type	Address	Co
TEMP	OB1_EV_CLASS			
	OB1_SCAN_1			
	OB1_PRIORITY			
	OB1_OB_NUMBR			
	OB1_RESERVED.			
	OB1_RESERVED.			
	OB1_PREV_CYC:			
	OB1_MIN_CYC:			
	OB1_PREV_CYCLE	Int	6.0	Cyc
	OB1_MIN_CYCLE	Int	8.0	Mir
	OB1_MAX_CYCLE	Int	10.0	Ma:
	OB1_DATE_TIME	Date_And_Time	12.0	Da:
	END	Bool	20.0	
	CHU	Word	22.0	

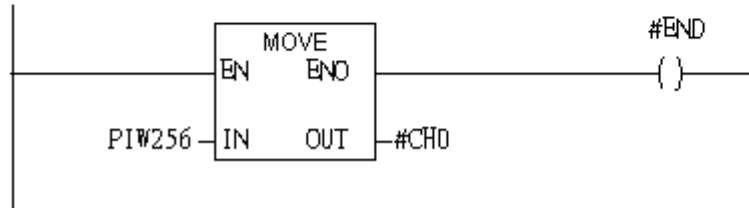
c. Program

OB1 : "Main Program Sweep (Cycle)"

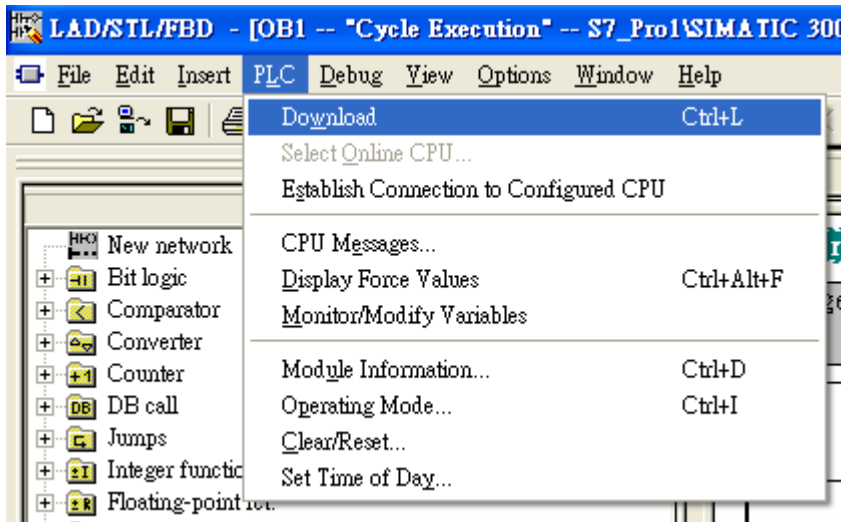
Comment:

Network 1: Receive Current

Current (10mA)



Step 10: Download the settings into SIMATIC PLC



Step 11: Make sure the RUN LED of the PROFI-5017C is ON.



Now the setting procedure has been finished and the user can read current of channel 0 at address PIW256

OB1 : "Main Program Sweep (Cycle)"

Comment:

Network 1: Receive Current

Current (10mA)

