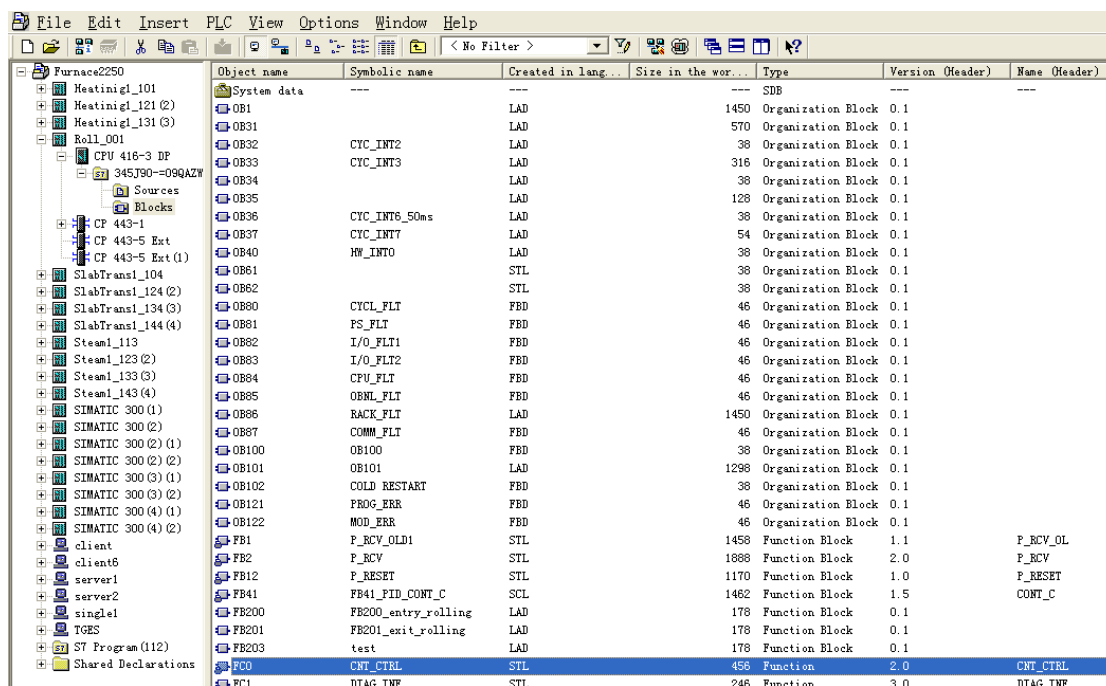


# STEP7 程序修改注意事项-赵根海

1、程序块在 CPU 下面，选中 OB1 直接输入 FC、OB、DB、FB 号可直接定位；



Object name	Symbolic name	Created in lang...	Size in the wor...	Type	Version (Header)	Name (Header)
System data	---	---	---	SDB	---	---
OB1		LAD	1450	Organization Block	0.1	
OB31		LAD	570	Organization Block	0.1	
OB32	CYC_INT2	LAD	38	Organization Block	0.1	
OB33	CYC_INT3	LAD	316	Organization Block	0.1	
OB34		LAD	38	Organization Block	0.1	
OB35		LAD	128	Organization Block	0.1	
OB36	CYC_INT6_50ms	LAD	38	Organization Block	0.1	
OB37	CYC_INT7	LAD	54	Organization Block	0.1	
OB40	HW_INT0	LAD	38	Organization Block	0.1	
OB61		STL	38	Organization Block	0.1	
OB62		STL	38	Organization Block	0.1	
OB80	CYCL_FLT	FBD	46	Organization Block	0.1	
OB81	PS_FLT	FBD	46	Organization Block	0.1	
OB82	I/O_FLT1	FBD	46	Organization Block	0.1	
OB83	I/O_FLT2	FBD	46	Organization Block	0.1	
OB84	CPU_FLT	FBD	46	Organization Block	0.1	
OB85	OBNL_FLT	FBD	46	Organization Block	0.1	
OB86	RACK_FLT	LAD	1450	Organization Block	0.1	
OB87	COMM_FLT	FBD	46	Organization Block	0.1	
OB100	OB100	FBD	38	Organization Block	0.1	
OB101	OB101	LAD	1298	Organization Block	0.1	
OB102	COLD_RESTART	FBD	38	Organization Block	0.1	
OB121	PROG_ERR	FBD	46	Organization Block	0.1	
OB122	MOD_ERR	FBD	46	Organization Block	0.1	
FB1	P_RCV_OLD1	STL	1458	Function Block	1.1	P_RCV_OLD
FB2	P_RCV	STL	1888	Function Block	2.0	P_RCV
FB12	P_RESET	STL	1170	Function Block	1.0	P_RESET
FB41	FB41_FID_CONT_C	SCL	1462	Function Block	1.5	CONT_C
FB200	FB200_entry_rolling	LAD	178	Function Block	0.1	
FB201	FB201_exit_rolling	LAD	178	Function Block	0.1	
FB203	test	LAD	178	Function Block	0.1	
FC0	CNT_CTRL	STL	456	Function	2.0	CNT_CTRL
FC1	DIAG_INF	STL	246	Function	3.0	DIAG_INF

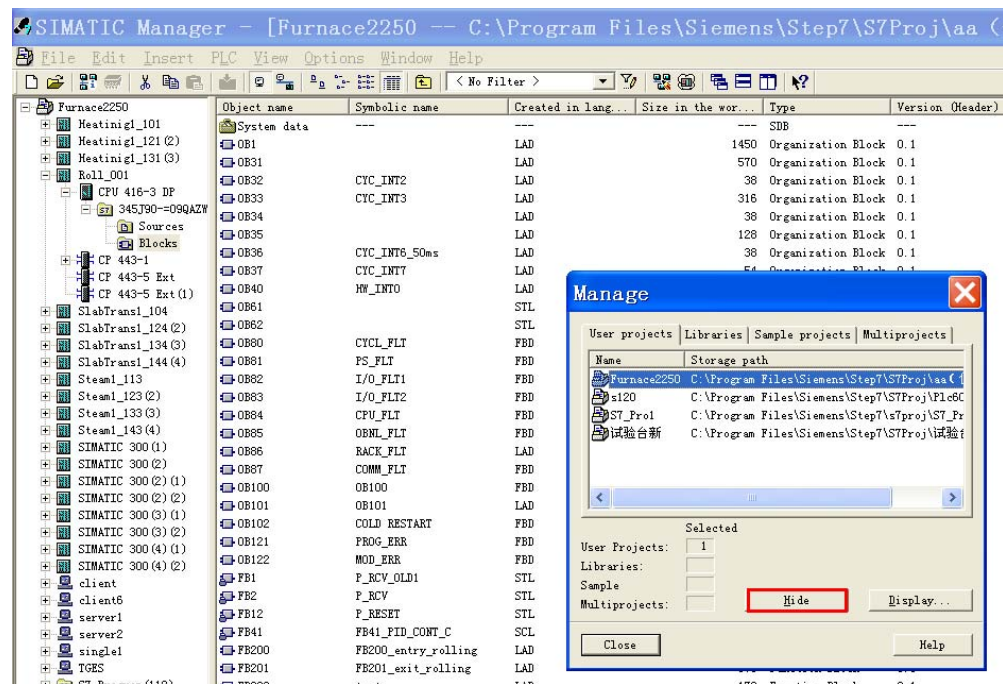
原则：下载程序前，一定保存并编译；

2、程序修改后一定要记着保存，否则在线按钮是灰色的；

修改前：



## 1) 法一: File-->manage

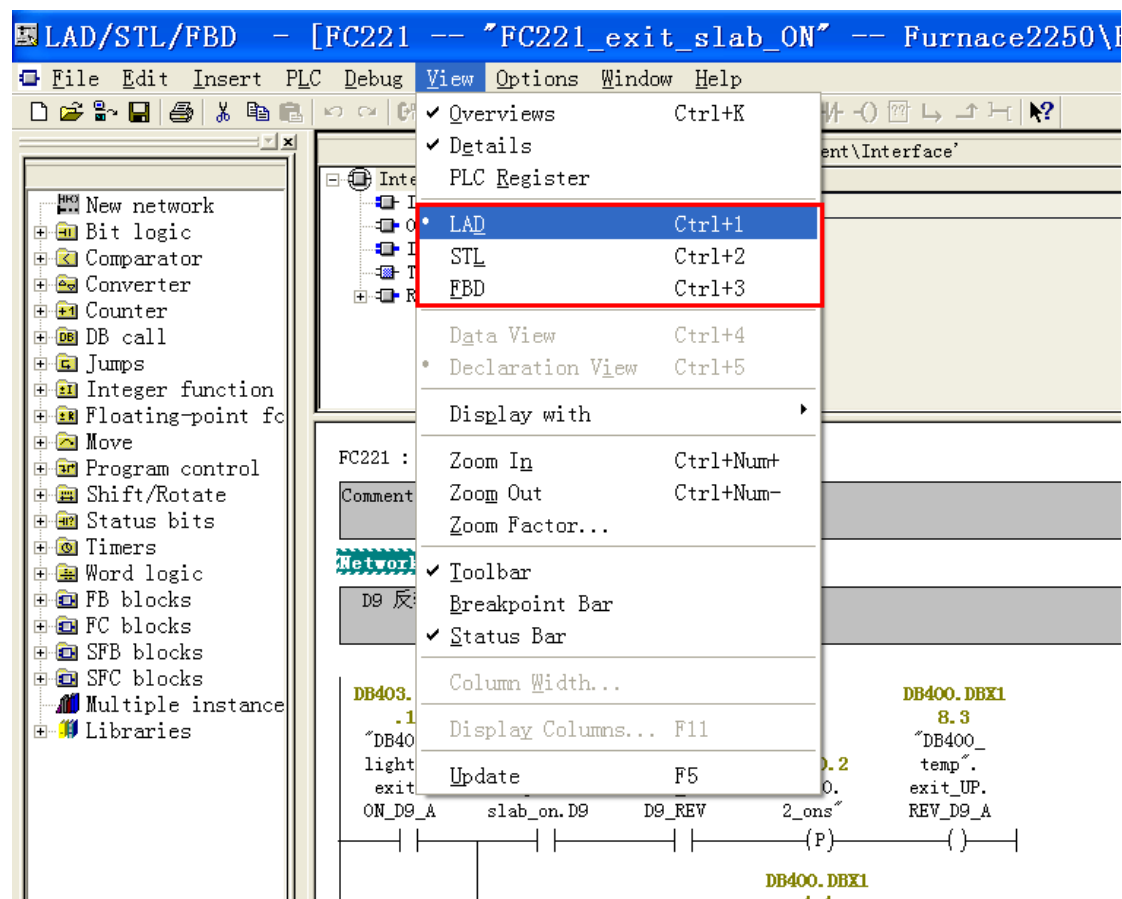


点击 Hide 将项目隐藏;

## 2) 法二: 找到项目根目录将项目删除;

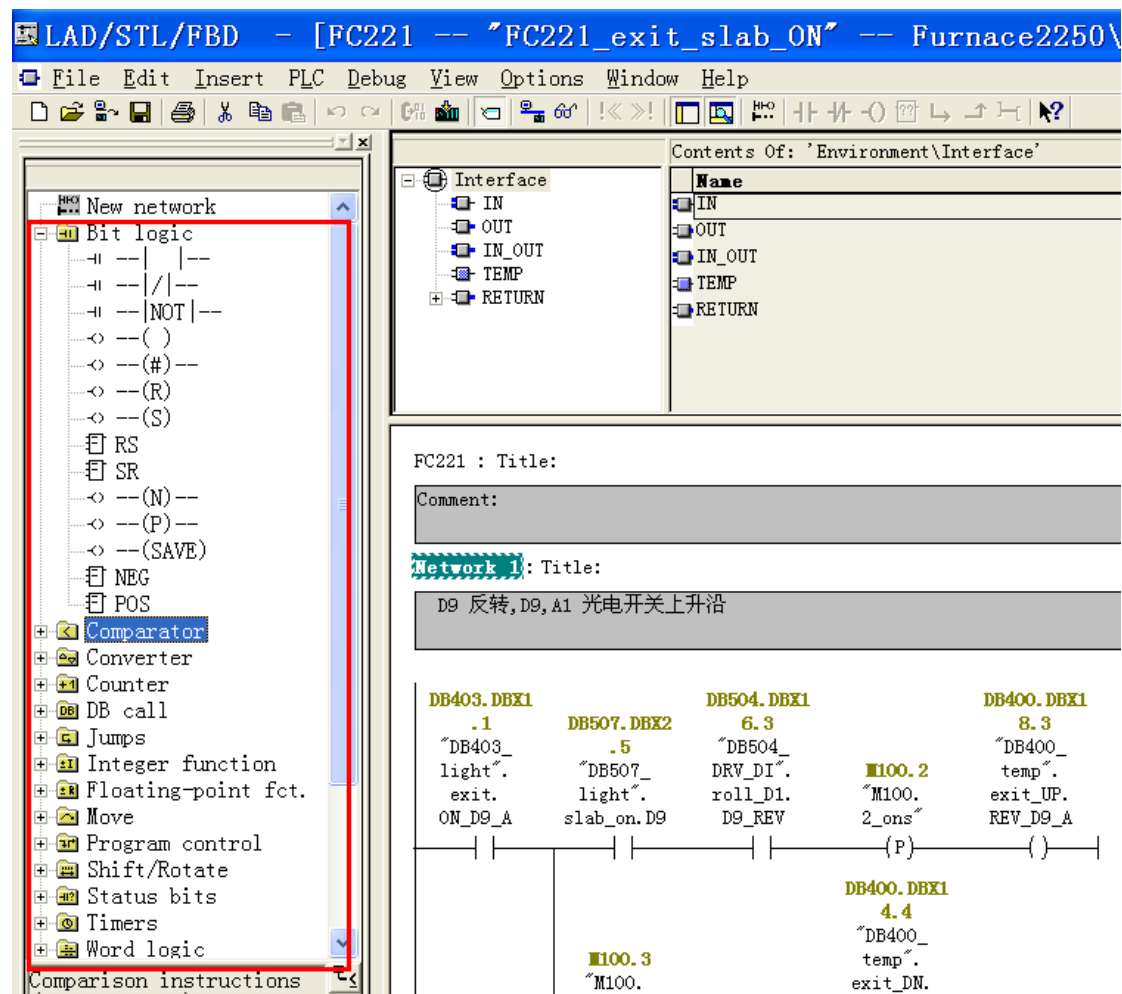
5、一般修改程序点不能重复使用(像 LD20 临时变量除外,可以重复使用),尤其逻辑控制时容易出问题。

## 6、程序语言的切换



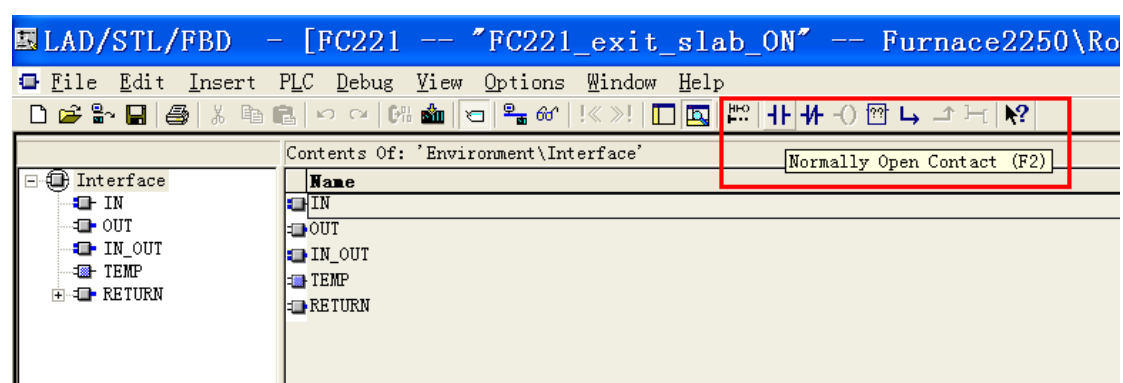
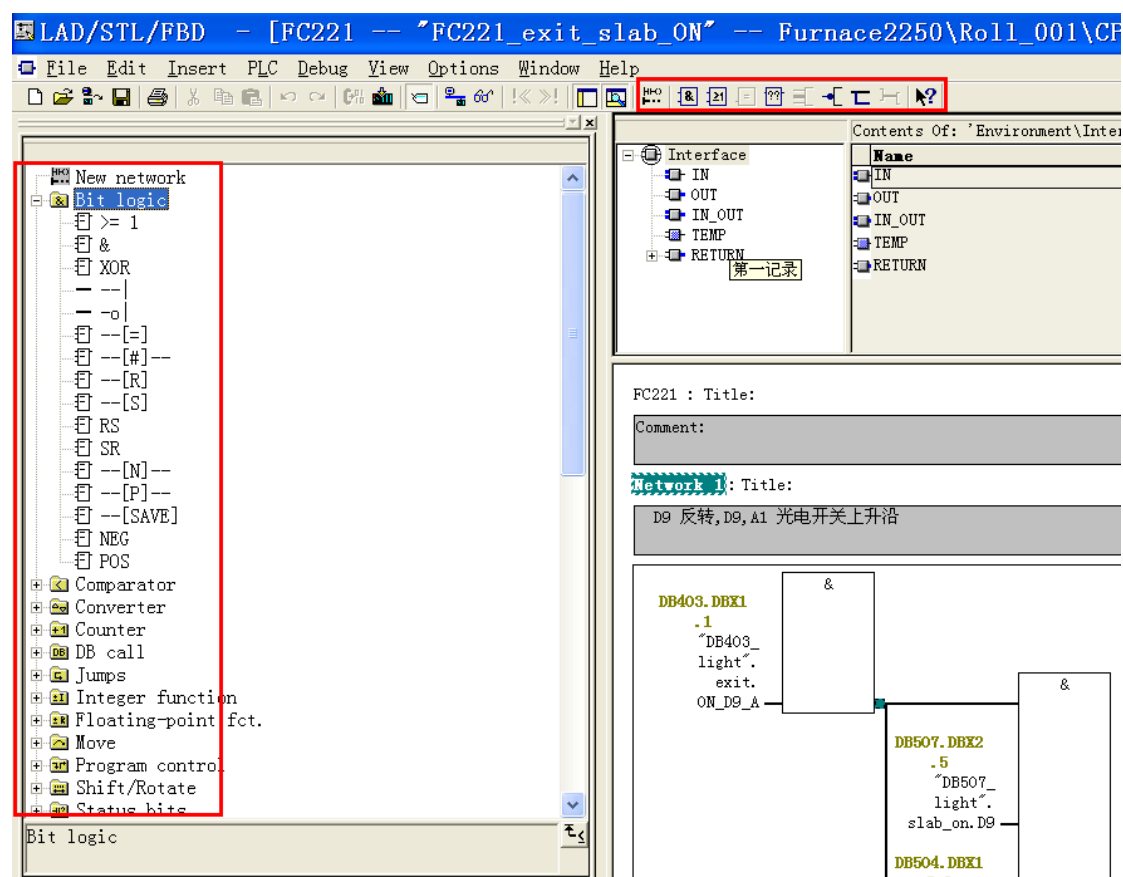
梯形图一定能转换为语句表；但语句表不一定能转换为梯形图；

Ctrl+1 组合键可以将语言转换为梯形图；类似的好多操作都有快捷键；可以慢慢熟悉；



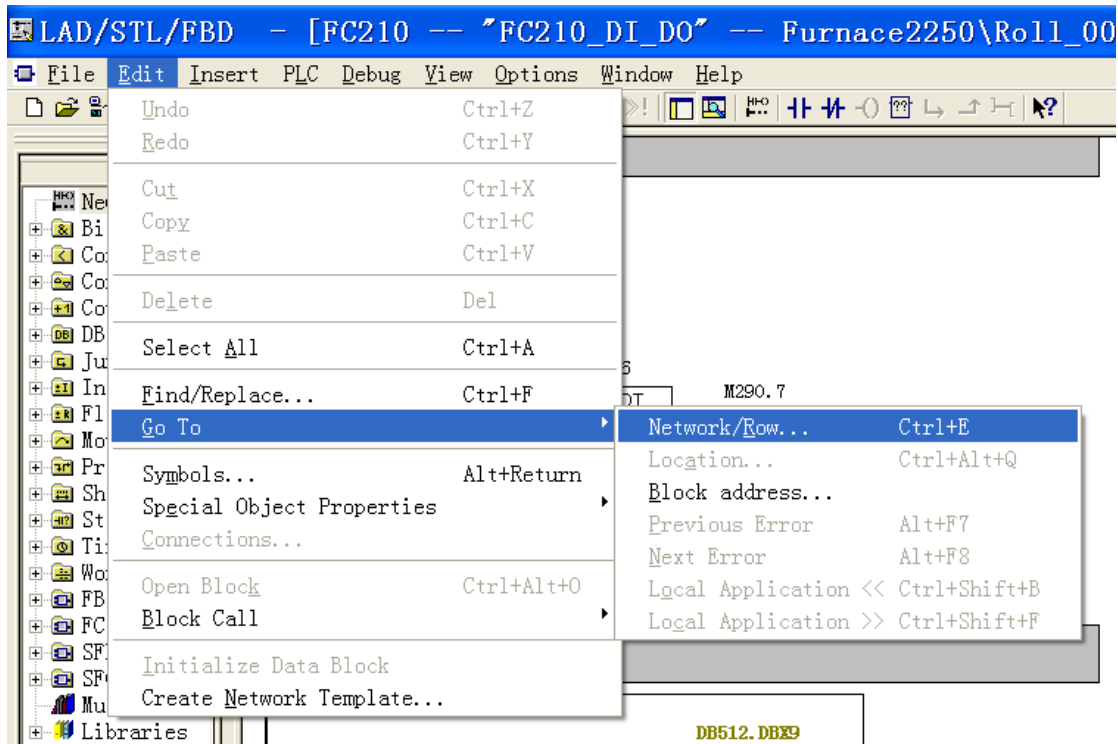
上图右侧是 LAD 所有的指令表，主要包括位指令，比较指令，转换指令，计数指令等等（注意切换成 FBD、STL 语言时，右侧显示的指令不同）；选中某一指令按下 F1 键可打开帮助；

语言切换成 FBD 时显示的指令如下图：



上图红框（新建网络、插入常开常闭点、线圈、指令盒、分支等等）修改程序时用的比较多；

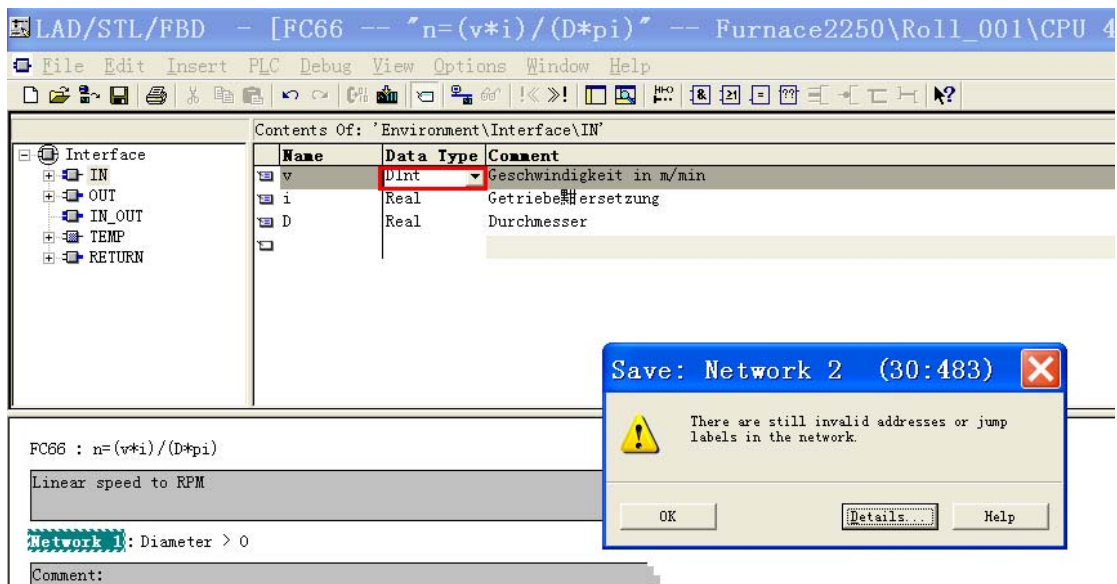
快速定位网络（快捷键 Ctrl+E）



7、LAD 语言对数据类型要求严格,数据类型一定要匹配,否则出错; 修改程序时一定要注意:

如下图:

将 V 数据类型由 Real 改为 Dint 保存时出错;



相应的参数变为红色;

LAD/STL/FBD - [FC66 -- "n=(v\*i)/(D\*pi)" -- Furr

File Edit Insert PLC Debug View Options Window Help

Contents Of: 'Environment\Interface\IN'

Name	Data Type	Comment
v	DInt	Geschwindigkeit in m/min
i	Real	Getriebeübersetzung
D	Real	Durchmesser

Interface

- IN
- OUT
- IN\_OUT
- TEMP
- RETURN

FC66 : n=(v\*i)/(D\*pi)

Linear speed to RPM

**Network 1:** Diameter > 0

Comment:

```

graph LR
    D[D] --> IN1[IN1]
    IN2[IN2] --> CMP[>R]
    CMP --> OK[#ok]
    OK --> JMPN[JMPN]
    IN2 --> OUT[0.000000e+000]
  
```

**Network 2:** (v \* i) / (D \* pi) = n

Comment:

```

graph LR
    OK[#ok] --> EN[EN]
    EN --> IN1[IN1]
    IN1 --> OUT[OUT]
    OUT --> MUL1[MUL_R]
    MUL1 --> ENO[ENO]
    ENO --> IN2[IN2]
    IN2 --> ENO
    ENO --> MUL2[MUL_R]
    MUL2 --> EN[EN]
    EN --> TM1[TM1]
  
```

可以将下图的地址数据类型检查红色框前对勾去掉,来消除错误  
(不推荐);



LAD/STL/FBD - [FC66 -- "n=(v\*i)/(D\*pi)" -- Furnace2250\Roll\_001\CPU 416-3 DP]

File Edit Insert PLC Debug View Options Window Help

Contents Of: 'Environment\Interface\IN'

Name	Data Type	Comment
v	DInt	Geschwindigkeit in m/min
i	Real	Getriebeübersetzung
D	Real	Durchmesser

Interface

- IN
- OUT
- IN\_OUT
- TEMP
- RETURN

FC66 : n=(v\*i)/(D\*pi)

Linear speed to RPM

Network 1: Diameter > 0

Comment:

```

#D -- IN1 --> [CMP >R]
0.000000e+000 -- IN2 --> [CMP >R]
[CMP >R] --> [#]
[#] --> [#ok]
[#] --> [fehl]
[#ok] --> [JMPN]
[fehl] --> [JMPN]

```

Network 2: (v \* i) / (D \* pi) = n

Comment:

```

#ok -- EN --> [MUL_R]
#v -- IN1 --> [MUL_R]
#i -- IN2 --> [MUL_R]
[MUL_R] --> [#mul_1]
[MUL_R] -- EN --> [MUL_R]

```

Customize

General View STL LAD/FBD Block Sources Source Text

Layout: DIN A4 Portrait Address Field Width: 10 (10 - 26)

Element Representation: 2-dimensional

Line/Color Reference: Status fulfilled

Line: ☐ Narrow ☒ Medium ☐ Wide

Color:   Select...

☒ Type Check of Addresses

☒ Display symbol information at address

确定 取消 帮助

8、对 FC、FB 块接口参数修改时，一定要对 FC、FB 块执行块更新；