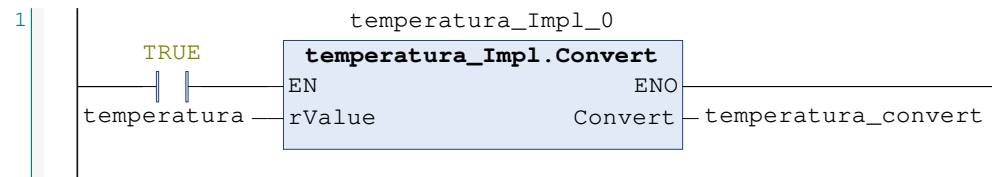
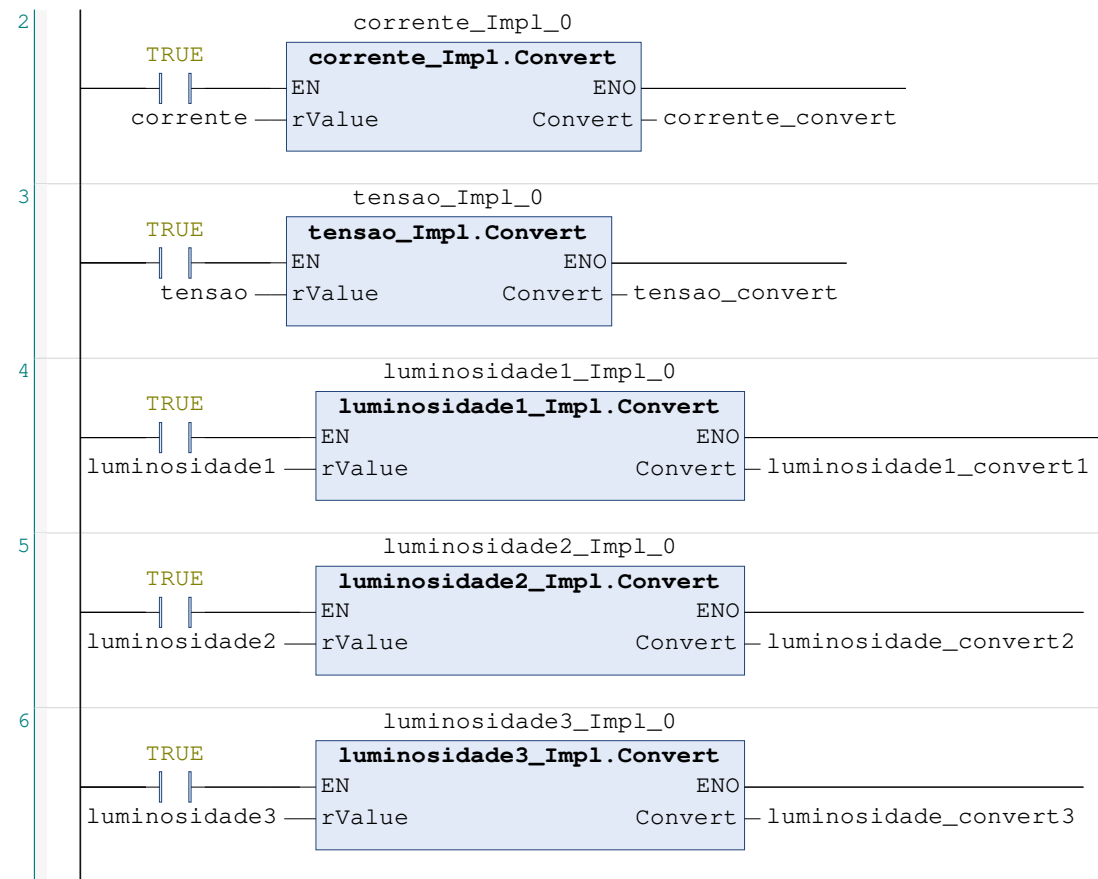


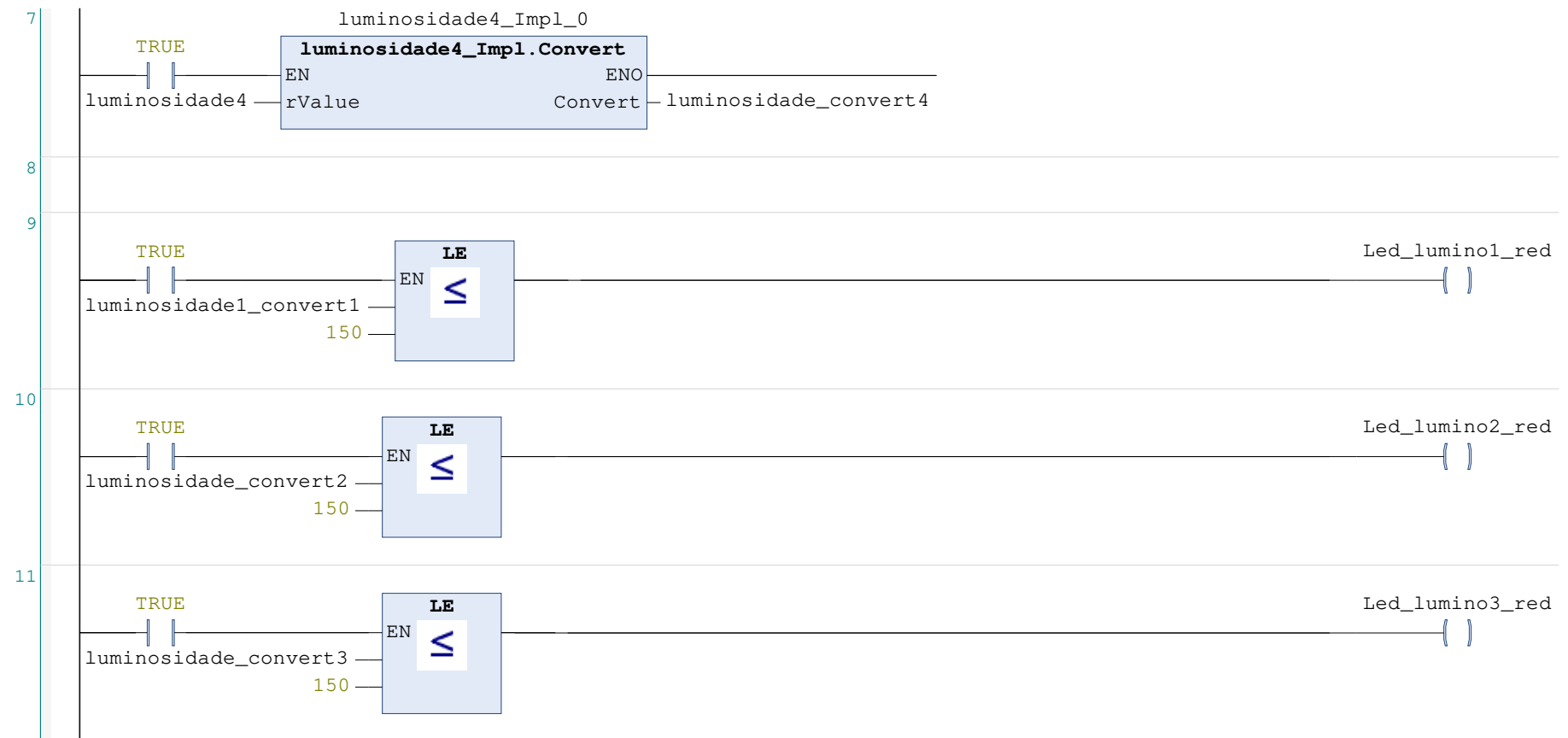
```
1  PROGRAM PLC
2  VAR
3      //corrente: DWORD;
4      corrente : DWORD := 0 ;
5
6      //luminosidade: INT := 0;
7      luminosidade1 : DWORD := 0 ;
8      luminosidade2 : DWORD := 0 ;
9      luminosidade3 : DWORD := 0 ;
10     luminosidade4 : DWORD := 0 ;
11
12     // media aritmética do sensor de luminosidade
13     SomaLuminoG : REAL ;
14     MediaLumino : REAL ;
15
16     //media ponderadas do sensor de luminosidade
17     PondeLumino1 : REAL ;
18     PondeLumino2 : REAL ;
19     PondeLumino3 : REAL ;
20     PondeLumino4 : REAL ;
21     PondeLuminoG : REAL ;
22     MediaPondeLumino : REAL ;
23     tensao : DWORD := 0 ;
24     temperatura : DWORD ;
25
26     //conversão das variáveis de luminosidade CONVERSÃO
27     luminosidade1_Impl_1 : luminosidade1_Impl ;
28     luminosidade1_convert1 : REAL ;
29     luminosidade2_Impl_0 : luminosidade2_Impl ;
30     luminosidade_convert2 : REAL ;
31     luminosidade3_Impl_0 : luminosidade3_Impl ;
32     luminosidade_convert3 : REAL ;
33     luminosidade4_Impl_0 : luminosidade4_Impl ;
```

```
34      luminosidade_convert4 : REAL ;
35      luminosidade_media_Impl_0 : luminosidade_media_Impl ;
36      Medialumino_convert : REAL ;
37      luminosidade_pond_Impl_0 : luminosidade_pond_Impl ;
38      MediaPondeLumio_convert : REAL ;
39      luminosidade1_Impl_0 : luminosidade1_Impl ;
40      temperatura_Impl_0 : temperatura_Impl ;
41      temperatura_convert : REAL ;
42      corrente_Impl_0 : corrente_Impl ;
43      corrente_convert : REAL ;
44      tensao_Impl_0 : tensao_Impl ;
45      tensao_convert : REAL ;
46
47      //variáveis virtuais com representação de LED
48      Led_temp : BOOL ;
49      temperatura_Impl_1 : temperatura_Impl ;
50      corrente_Impl_1 : corrente_Impl ;
51      Led_corrente : BOOL ;
52      tensao_Impl_1 : tensao_Impl ;
53      Led_tensao : BOOL ;
54      temperatura_Impl_2 : temperatura_Impl ;
55      temperatura_Impl_3 : temperatura_Impl ;
56      temperatura_Impl_4 : temperatura_Impl ;
57
58      //variáveis virtuais para Leds vermelhos de alerta
59      Led_temp_red : BOOL ;
60      Led_corrente_red : BOOL ;
61      Led_tensao_red : BOOL ;
62      Led_lumino1_red : BOOL ;
63      Led_lumino2_red : BOOL ;
64      Led_lumino3_red : BOOL ;
65      Led_lumino4_red : BOOL ;
```

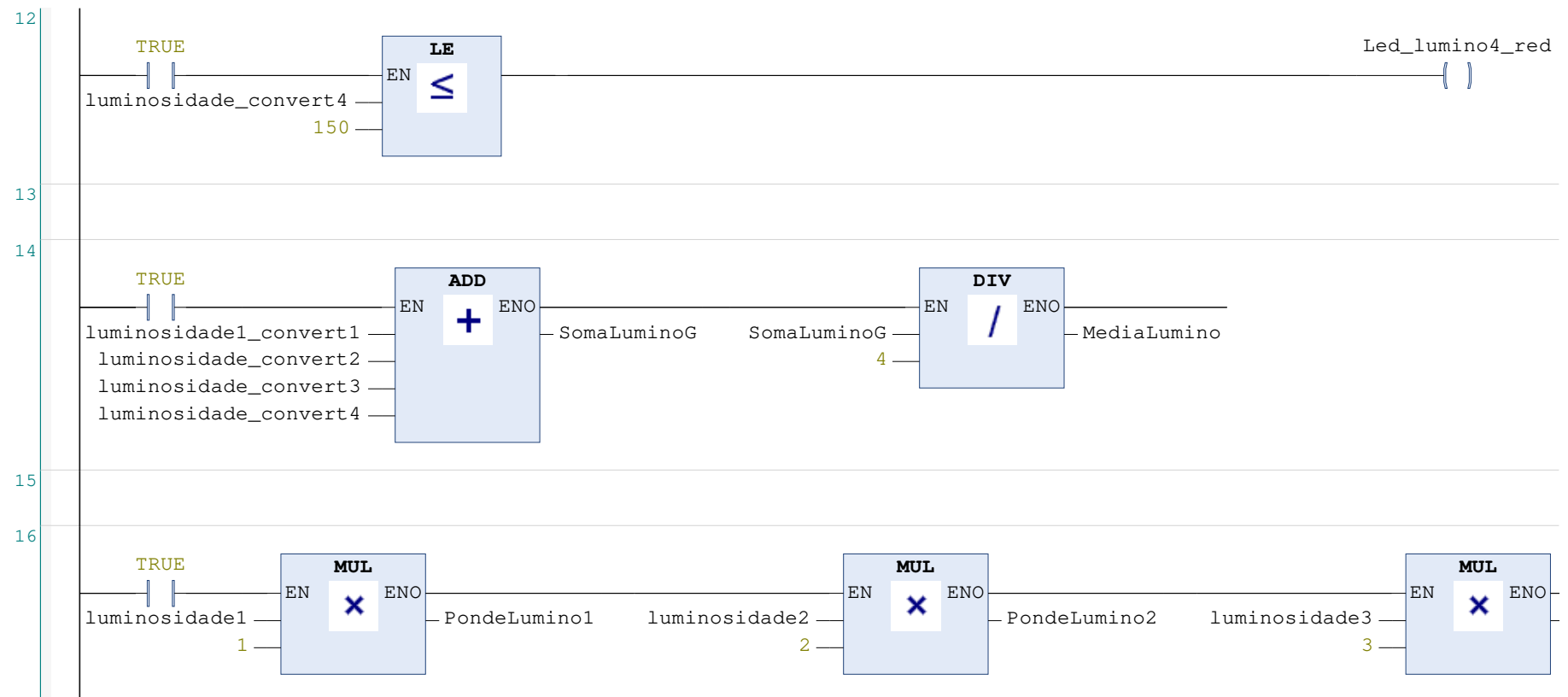
```
66      Led_Geral_red : BOOL ;
67
68      //Média geral luminosidade
69      MediaGeral_convert : REAL ;
70      MediaGeral : REAL ;
71      Led_Geral : BOOL ;
72
73      //contador lumnosidade
74      Conta_lux : CTU ;
75      Conta_lux_Reset : BOOL ;
76      Conta_lux_saida : WORD ;
77      Contador_luminosidade_Impl_0 : Contador_luminosidade_Impl ;
78      Conta_lux_saida_convert : REAL ;
79
80      //alarmes
81      emergencia_limpeza : BOOL ;
82
83
84      END_VAR
85
```

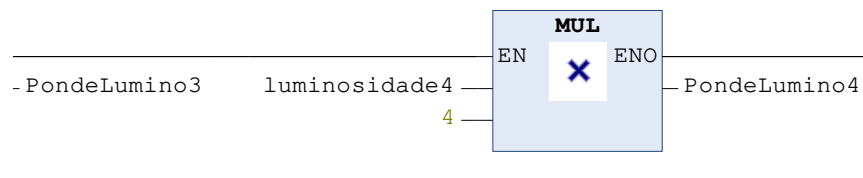


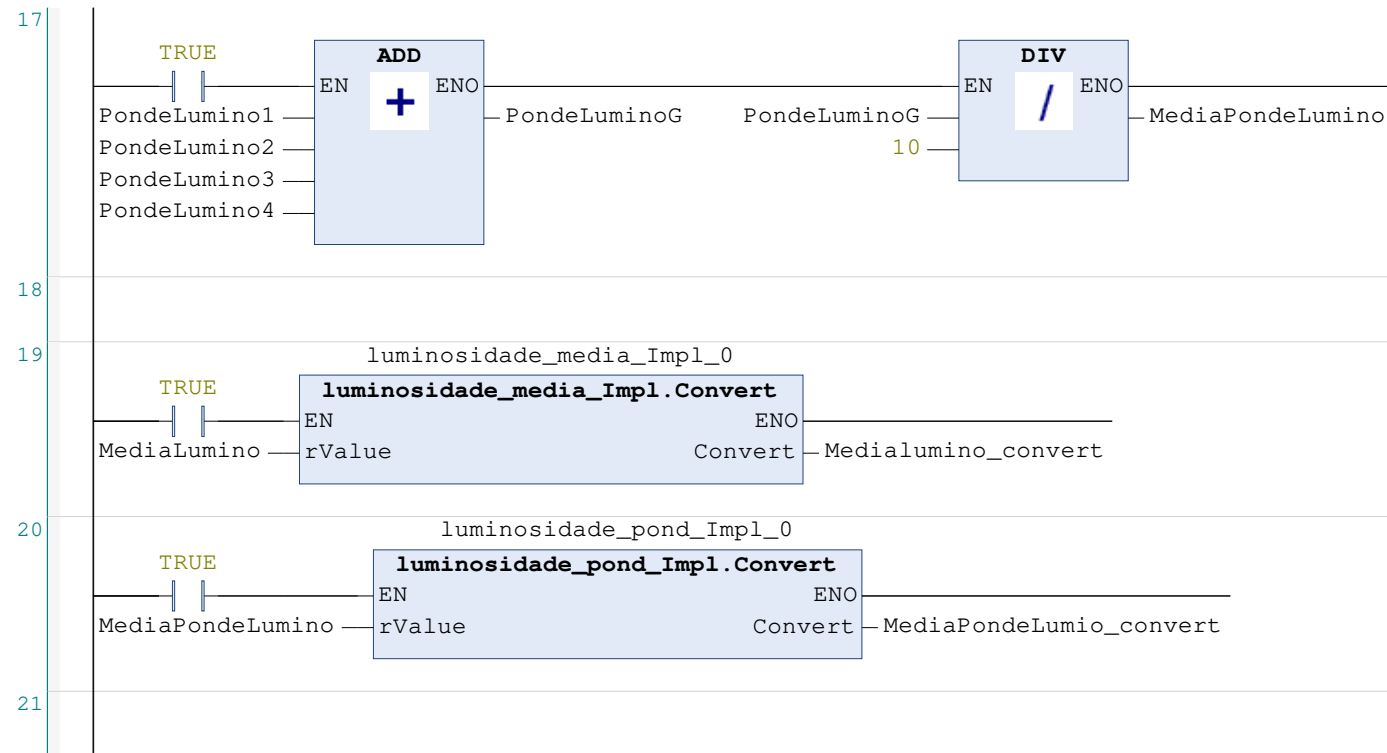


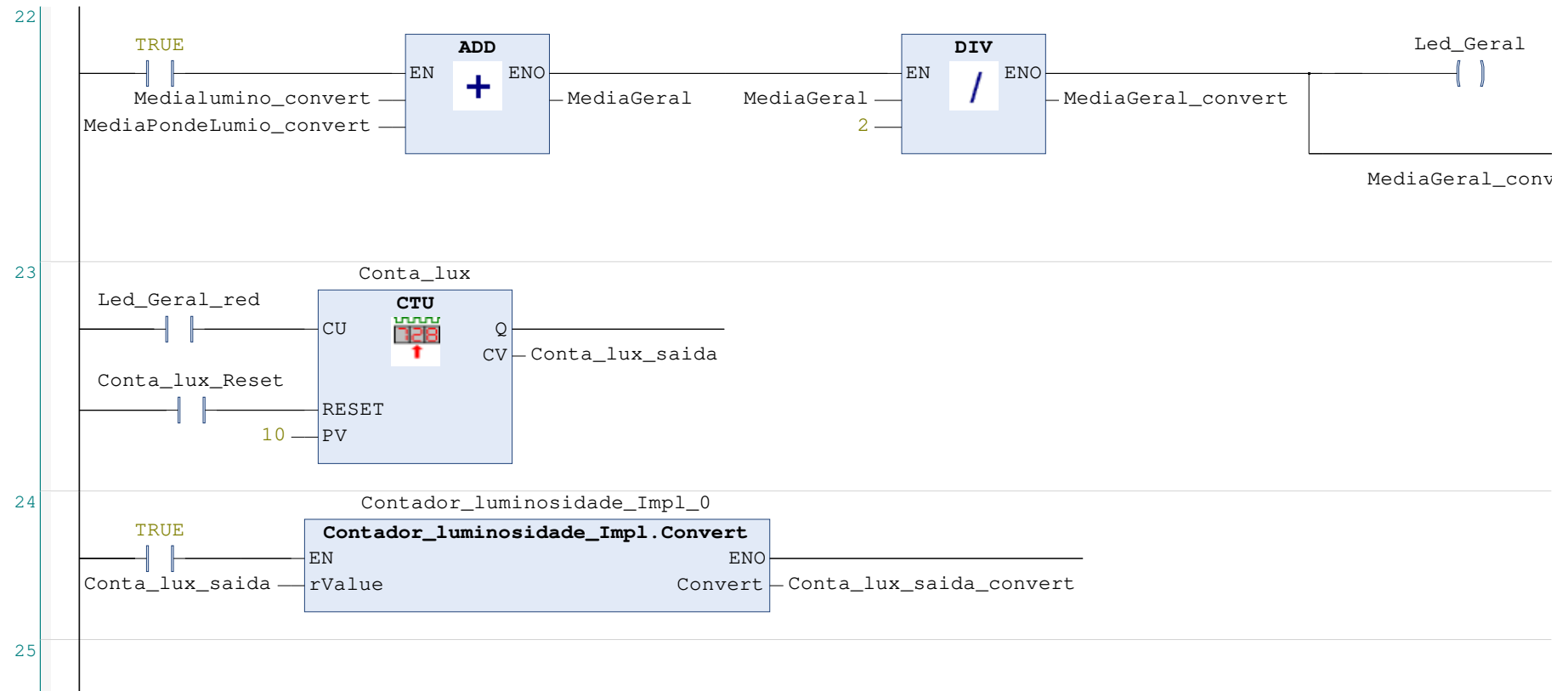


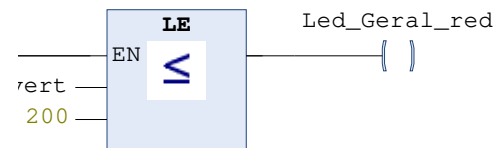
POU: PLC

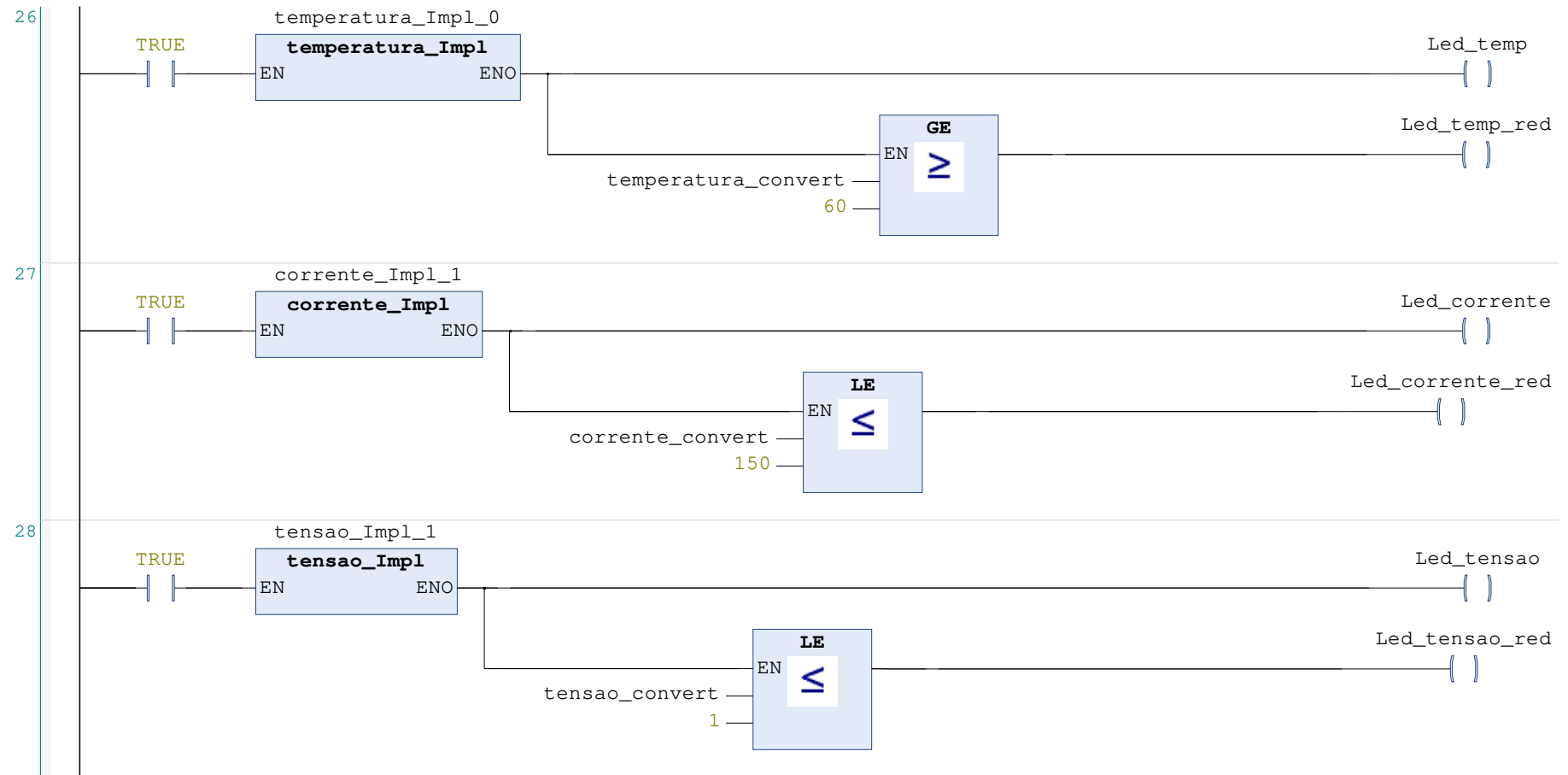












POU: PLC

29

POU: PLC
