

Project Documentation

File:	Parcial2.project
Date:	12/04/2023
Profile:	CODESYS V3.5 SP19

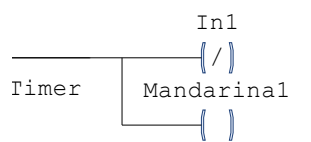
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1 POU: PLC_PRG

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1  PROGRAM PLC_PRG
2  VAR
3      In1 : BOOL ; //incomeMandarina
4      MandarinaTimer : TIME ; //elapsed time for mandarina incoming
5      BandaMandarinaTimer : TIME ; //elapsed time for mandarina moving from 2nd
        position to ready position
6      Mandarina1 : BOOL ; //first position of mandarina
7      Ton0 : TON ; //timer for incominng mandarinas
8      ReinicioTimer : BOOL ; //reset ton 1 when time elapsed
9      TON_1 : TON ; // timer for mandarina in the second position
10     ResetMandarinaCount : BOOL ; // contact for manual reset of mandarina
        count
11     MandarinaWait : INT ; //quantity of mandarinas in the wait line
12     Mandarina2 : BOOL ; //second position of mandarina
13     Overflow : BOOL ; //overflow when the quantity of mandarinas in the wait
        line surpass the limit
14     MandarinaInBox : BOOL ; //position of mandarina inside the box
15     CTUD0 : CTUD ; //Counter for the quantity of mandarinas in the wait line
16     CTU_0 : CTU ; //counter for mandarinas in the box;
17     MandarinaCounter : INT ; //quantity of mandarinas inside a box
18     FullBox : BOOL ; //coil when the box is full
19     CTU_2 : CTU ; //counter for the quantity of full boxes
20     ResetBoxFull : BOOL ; //Reset manual the quantity of full boxes
21     BoxCounter : WORD ; //quantity of full boxes
22     Full : BOOL ; //coil when the quantity of boxes reach the goal
23     TON_2 : TON ; //timer for the time when the mandarina trigger the
        movement of the box
24     BandaBoxTimer : TIME ; //elapsed time for box moving to be ready to be
        fulfilled
25     BoxReady : BOOL ; //coil-sensor when the box is in the place to be fulfilled
26     MandarinaReady : BOOL ; //coil-sensor when the mandarina is ready to be
        stored
27     TON_3 : TON ; //timer for the time that the mandarina falls into the box
28     MandarinaFallTimer : TIME ; //elapsed time of mandarina falling inside
        the box
29     addMandarina : BOOL ; //Recursive variable to count down the mandarina
        from the counter of MandarinaWait
30     TON_4 : TON ; //Timer for the addMandarina to be trigger
31     auxTime : TIME ; //elapsed time for add mandarina
32     TON_5 : TON ; //timer for the box that is packed to reset FullBox and
        BoxPacked
33     timeGone : TIME ; //elapsed time for timer TON_5
34     BoxPacked : BOOL ; //last position of a full box before being stored
35     BoxIncome : BOOL ; // coil-sensor for a box to be fulfilled
36     TON_6 : TON ; //timer for the full box to reset the count of CTU_0
37     timeoff : TIME ; //elapsed timed to reset CTU_0
38     ResetCount : BOOL ; //coil to reset CTU_0
39 END_VAR
40 VAR_INPUT
41     Stop : BOOL ; //Stop Button
42     Start : BOOL ; //Start Button
43 END_VAR
```





1 POU: PLC_PRG

