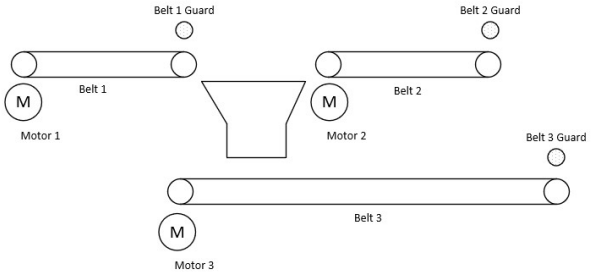
Three belt conveyors control



Belts 1 & 2 can be started and stopped by pushbuttons. Belt status is displayed by means of respectiv lamp.

Belts 1 & 2 are not allowed to run at the same time.

Belt guards monitor belt motion.

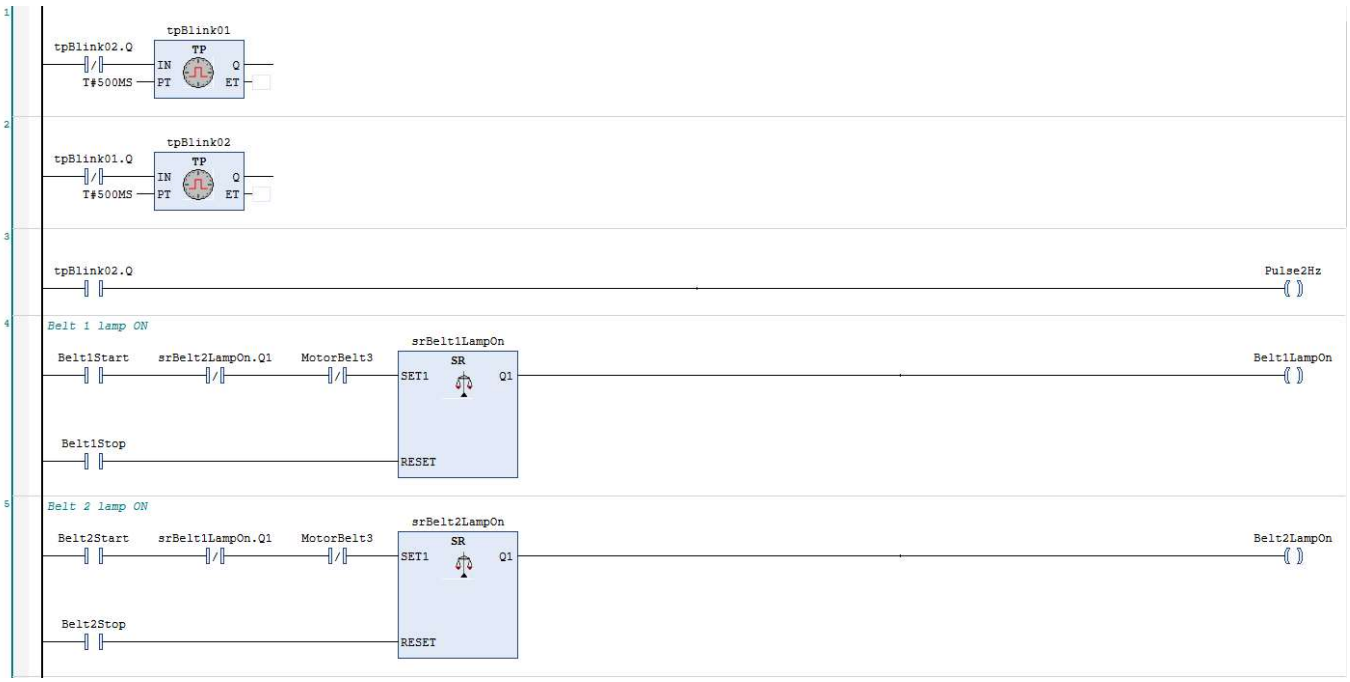
After power on, there should be 3 sec delay in guard monitoring of all belts.

When stop button is pressed, the belts 1 and 2 should switch off with delay of 3 sec. and belt three with delay of 6 sec.

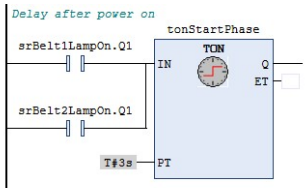
If during the running any belt guard from belt 1 or 2 is broken (signal=False), the respective belt motor should be deenergized immediately, but belt three should dwitch off with delay of 6 sec.

The lamps of belt 1 & 2 show failure as flashing.

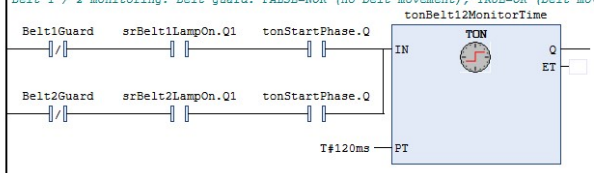
```
PROGRAM MAIN
VAR
    Belt1Start              :   BOOL;
    Belt2Start              :   BOOL;
    Belt1Stop               :   BOOL;
    Belt2Stop               :   BOOL;
    Belt1Guard              :   BOOL;
    Belt2Guard              :   BOOL;
    Belt3Guard              :   BOOL;

    srBelt1LampOn           :   SR;
    srBelt2LampOn           :   SR;
    Belt1LampOn             :   BOOL;
    Belt2LampOn             :   BOOL;
    Belt1LampOff            :   BOOL;
    Belt2LampOff            :   BOOL;

    MotorBelt1              :   BOOL;
    MotorBelt2              :   BOOL;
    MotorBelt3              :   BOOL;

    Pulse2Hz                :   BOOL;

    tonStartPhase           :   TON;
    tonBelt12MonitorTime    :   TON;
    tonBelt3MonitorTime     :   TON;
    tofDelayOffBelt1        :   TOF;
    tofDelayOffBelt2        :   TOF;
    tofDelayOffBelt3        :   TOF;

    tpBlink01               : TP;
    tpBlink02               : TP;
END_VAR
```



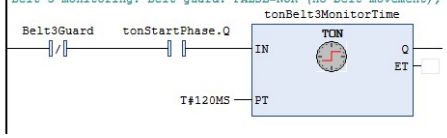
6 *Delay after power on*



7 *Belt 1 / 2 monitoring. Belt guard: FALSE=NOK (no belt movement), TRUE=OK (belt moving)*



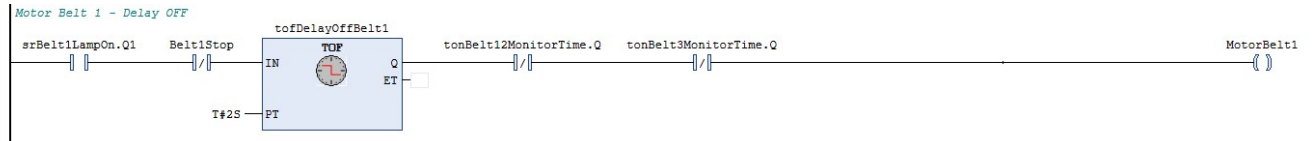
8 *Belt 3 monitoring. Belt guard: FALSE=NOK (no belt movement), TRUE=OK (belt moving)*



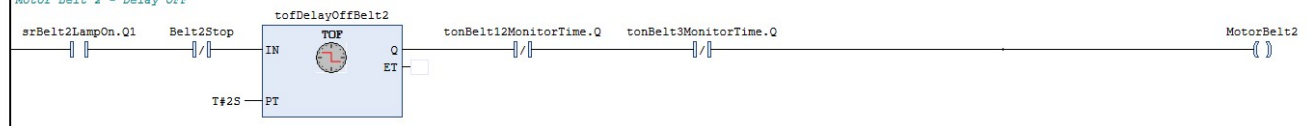
9 *Lamp OFF Belt 1*

10 *Lamp OFF Belt 2*

11 *Motor Belt 1 - Delay OFF*



12 *Motor Belt 2 - Delay OFF*



13 *Motor Belt 3 - Delay OFF*