

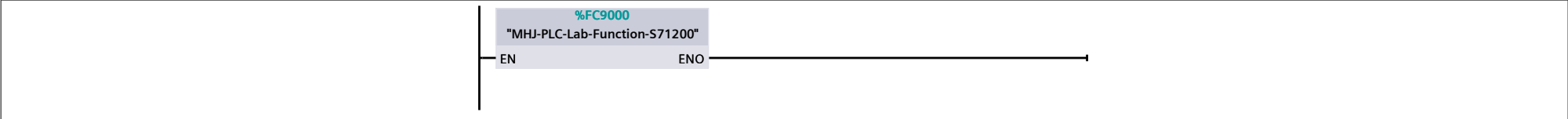
Assignment\_Project / PLC\_1 [CPU 1214C DC/DC/DC] / Program blocks

Main [OB1]

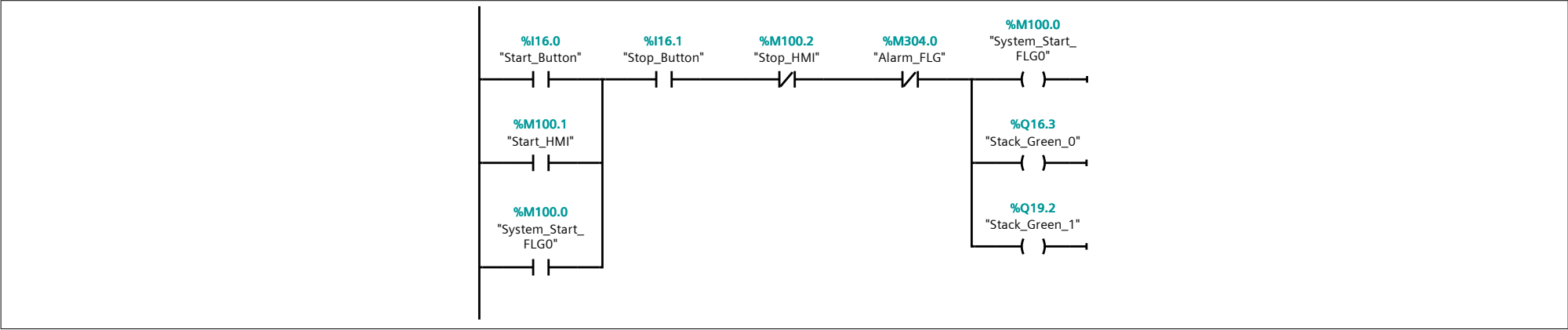
| Main Properties |                              |                 |   |         |    |          |     |
|-----------------|------------------------------|-----------------|---|---------|----|----------|-----|
| General         |                              |                 |   |         |    |          |     |
| Name            | Main                         | Number          | 1 | Type    | OB | Language | LAD |
| Numbering       | Automatic                    |                 |   |         |    |          |     |
| Information     |                              |                 |   |         |    |          |     |
| Title           | "Main Program Sweep (Cycle)" | Author          |   | Comment |    | Family   |     |
| Version         | 0.1                          | User-defined ID |   |         |    |          |     |

| Main         |           |               |                                       |
|--------------|-----------|---------------|---------------------------------------|
| Name         | Data type | Default value | Comment                               |
| ▼ Input      |           |               |                                       |
| Initial_Call | Bool      |               | Initial call of this OB               |
| Remanence    | Bool      |               | =True, if remanent data are available |
| Temp         |           |               |                                       |
| Constant     |           |               |                                       |

Network 1:

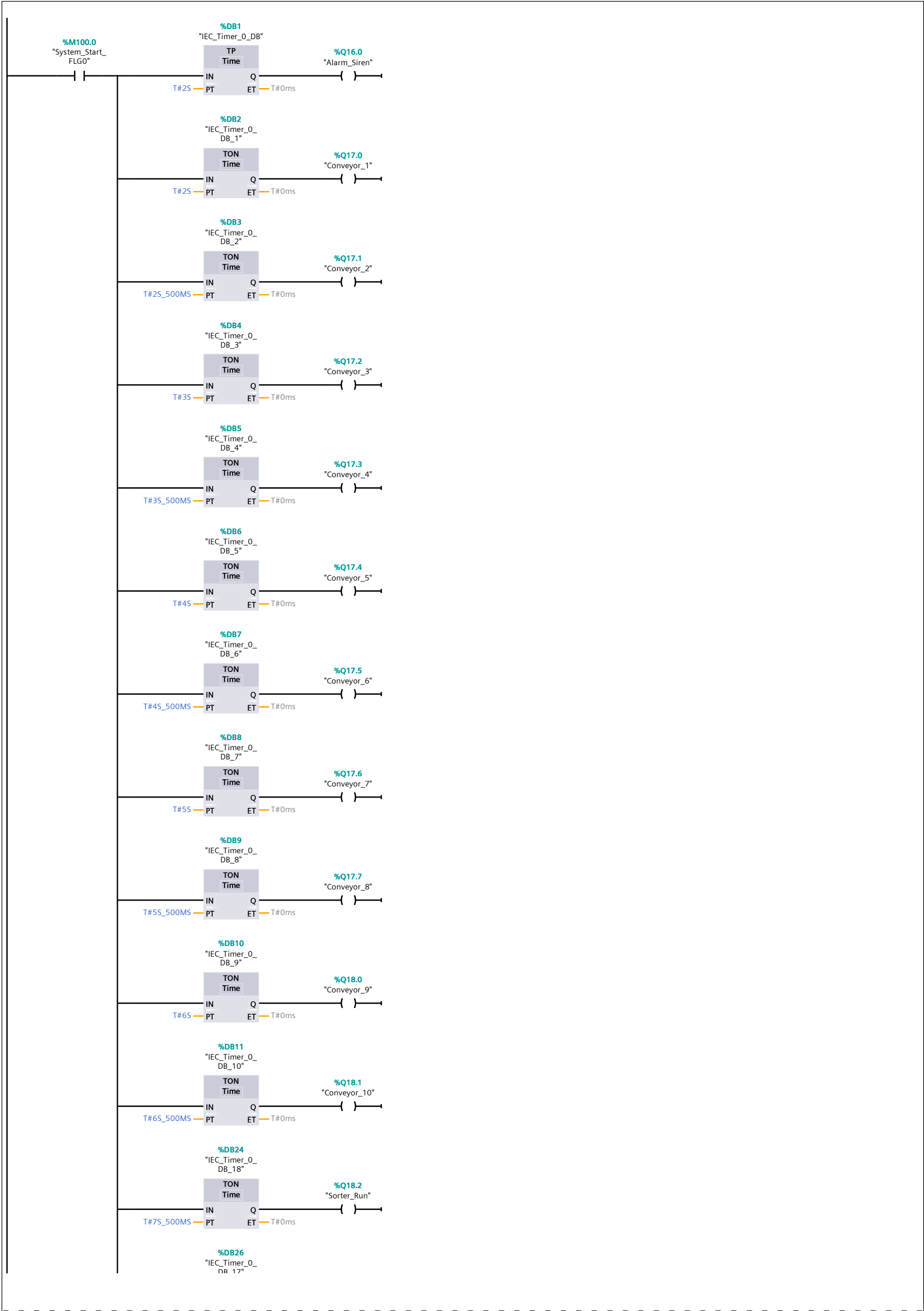


Network 2: System is ready to operate



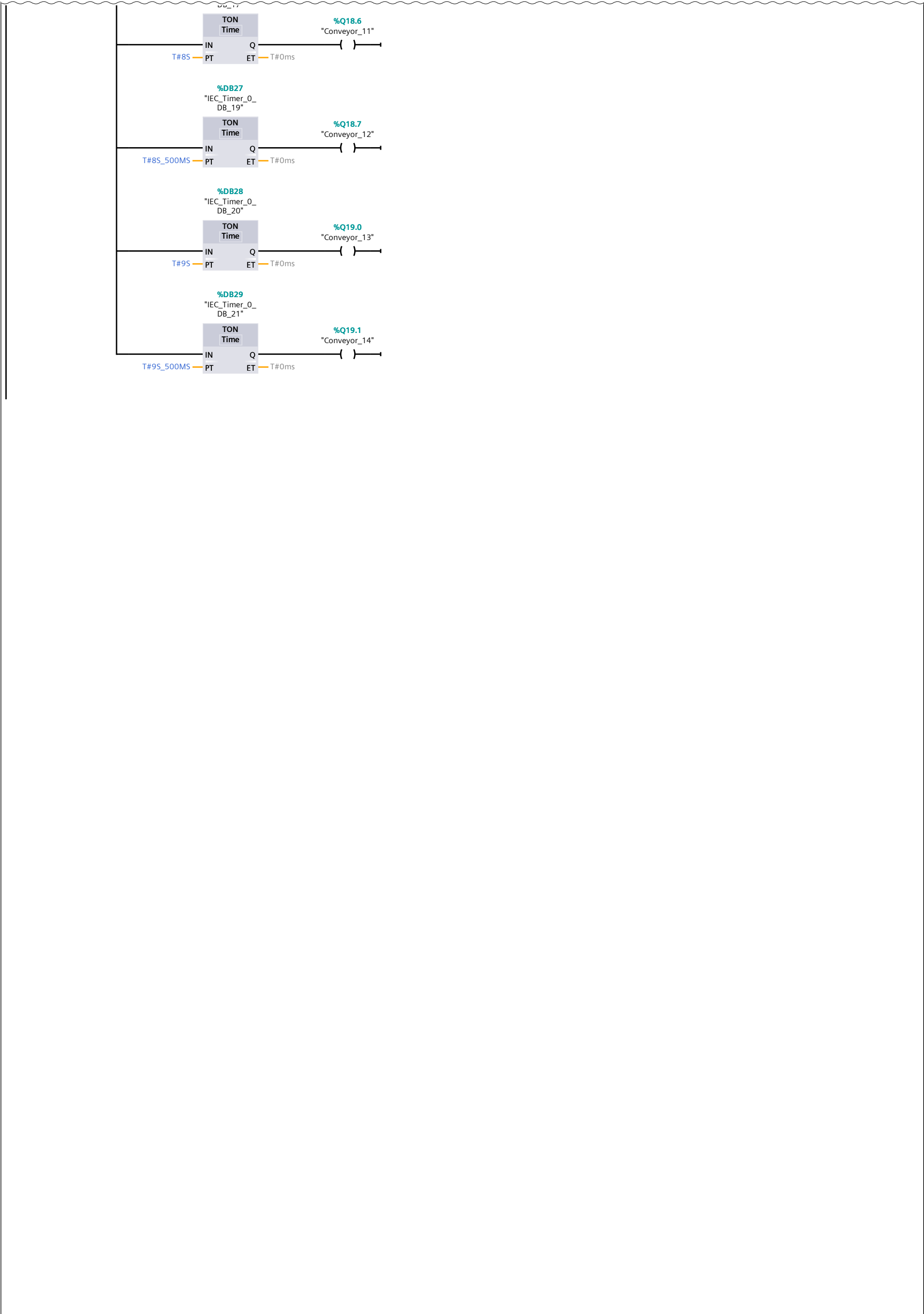
Network 3: Start all conveyors sequentially to limit startup current

Network 3: Start all conveyors sequentially to limit startup current (1.1 / 2.1)

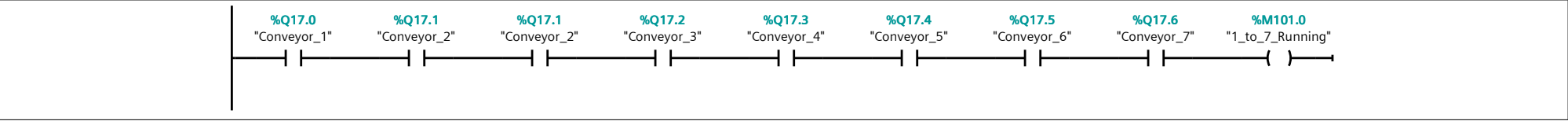


Network 3: Start all conveyors sequentially to limit startup current (2.1 / 2.1)

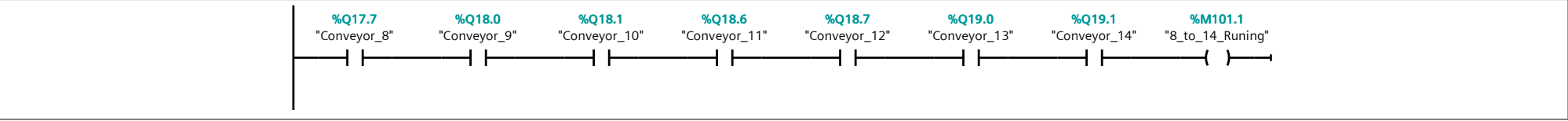
1.1 ( Page1 - 2)



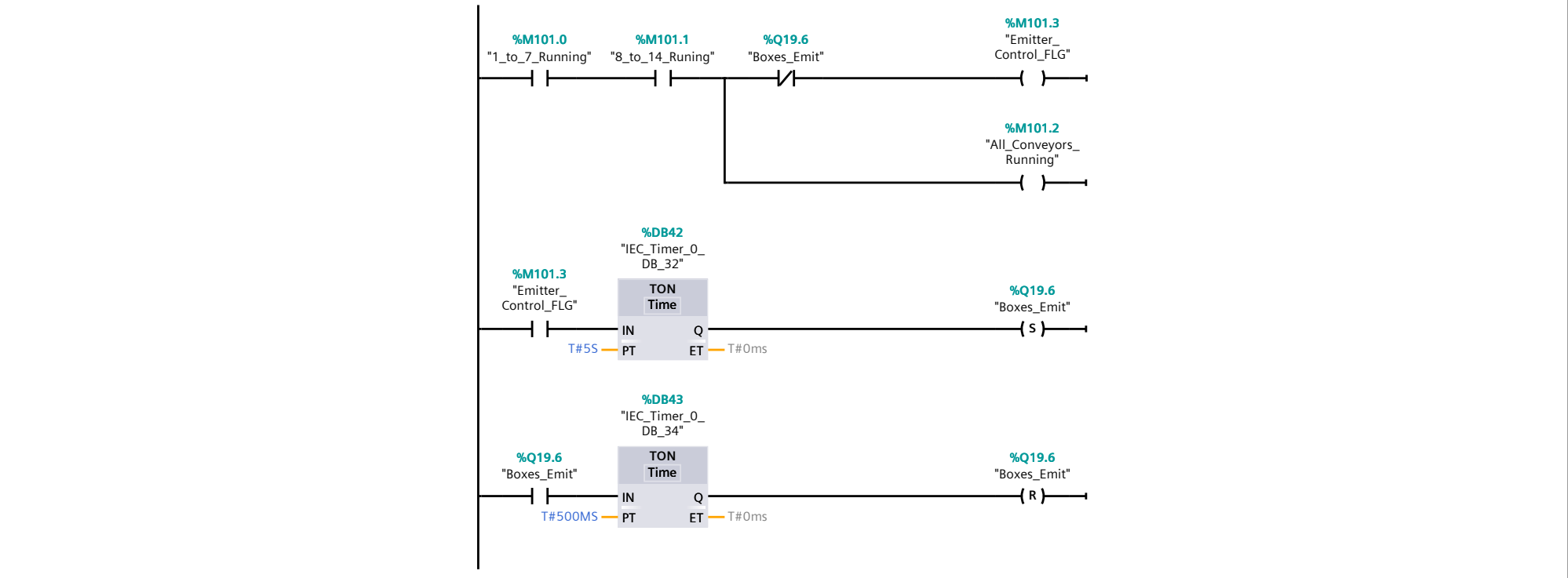
Network 4: Check Conveyors 1 to 7 are running



Network 5: Check Conveyors 8 to 14 are running

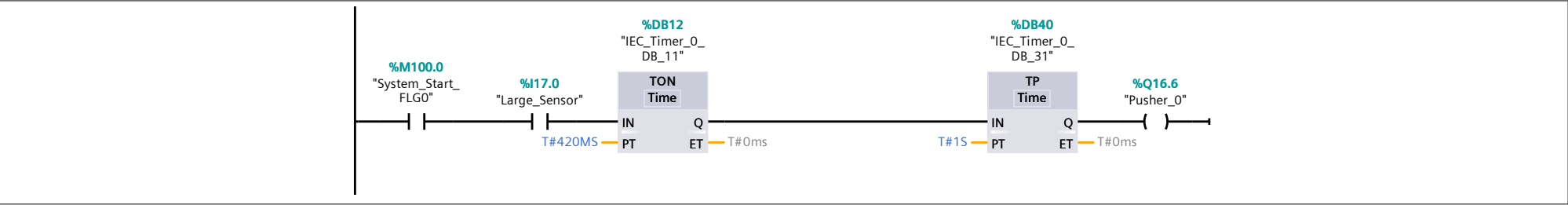


Network 6: Box Emitter Control



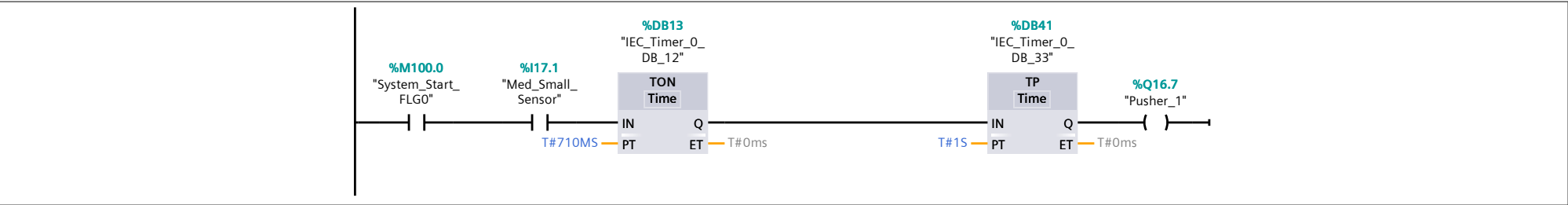
Network 7: Seperate Large Boxes by using pusher 0

Sensor break, delay time to get to pusher

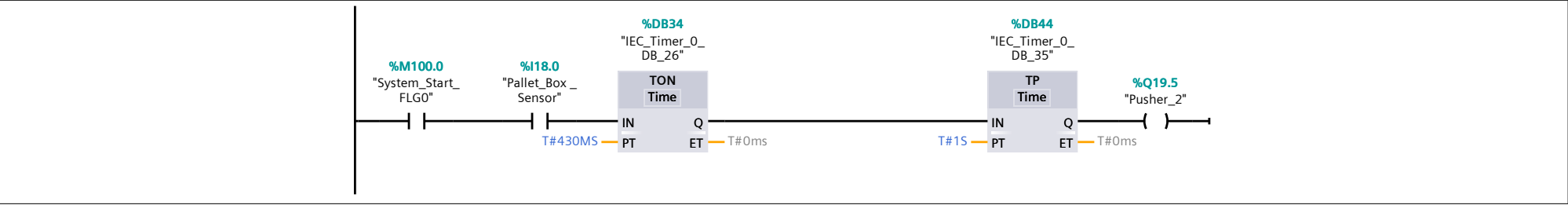


Network 8: Seperate Medium Boxes onto sorting conveyor using Pusher 1

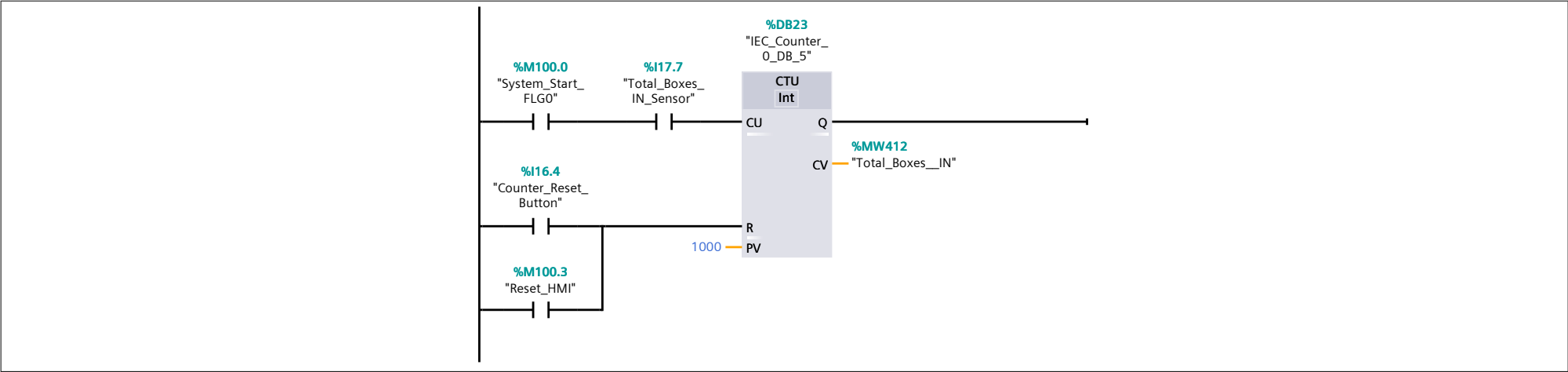
Sensor break, delay time to get to pusher 1



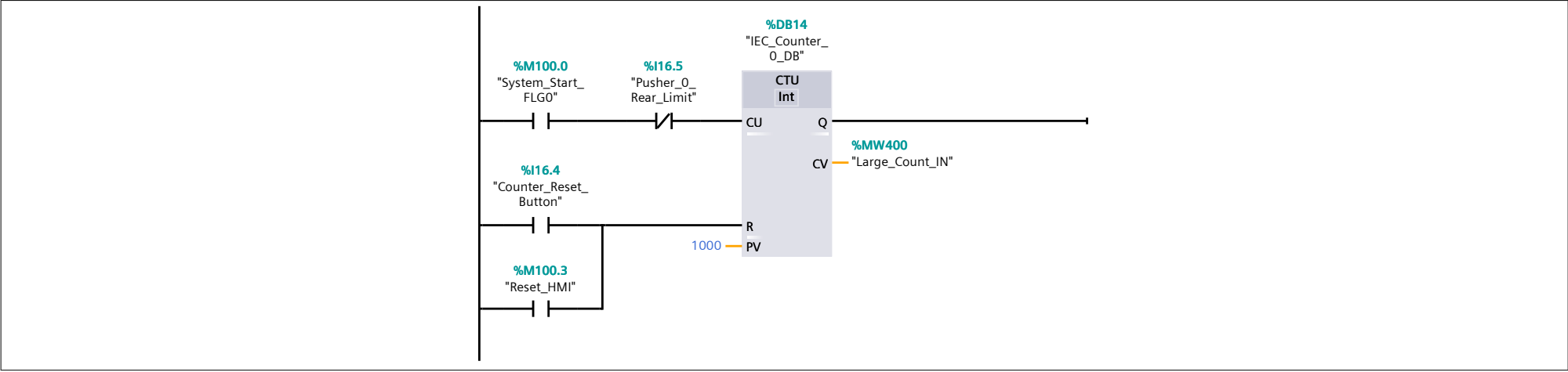
Network 9: Palletiser Boxes Sorted By Pusher 2



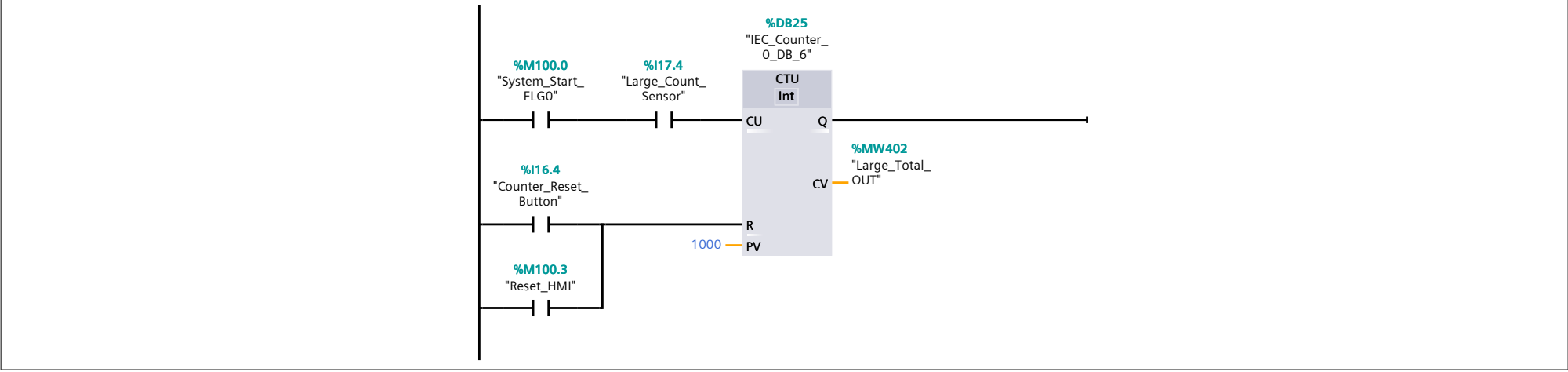
Network 10: Count Total Amount of boxes entering the system



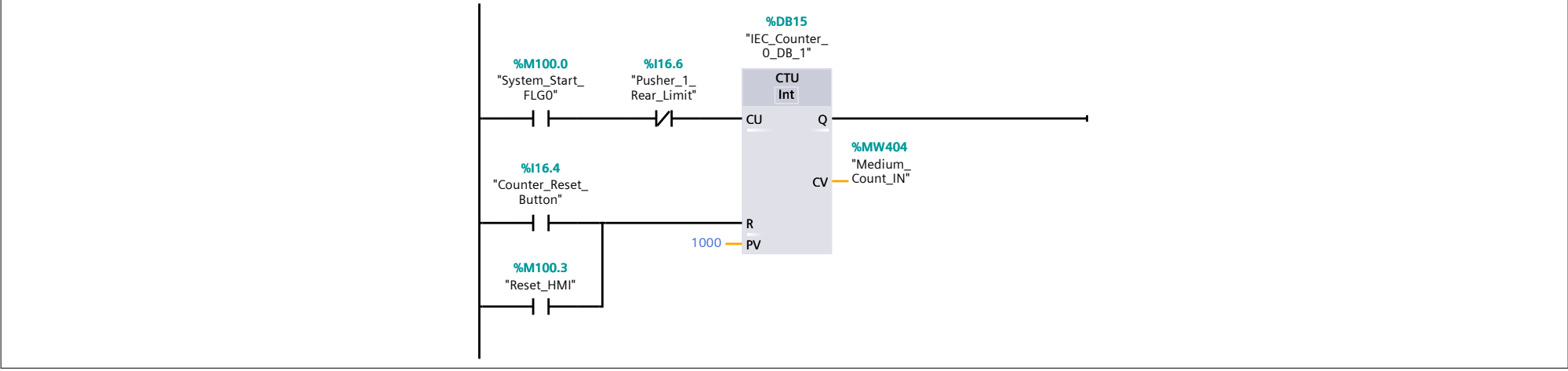
Network 11: Count Large Boxes



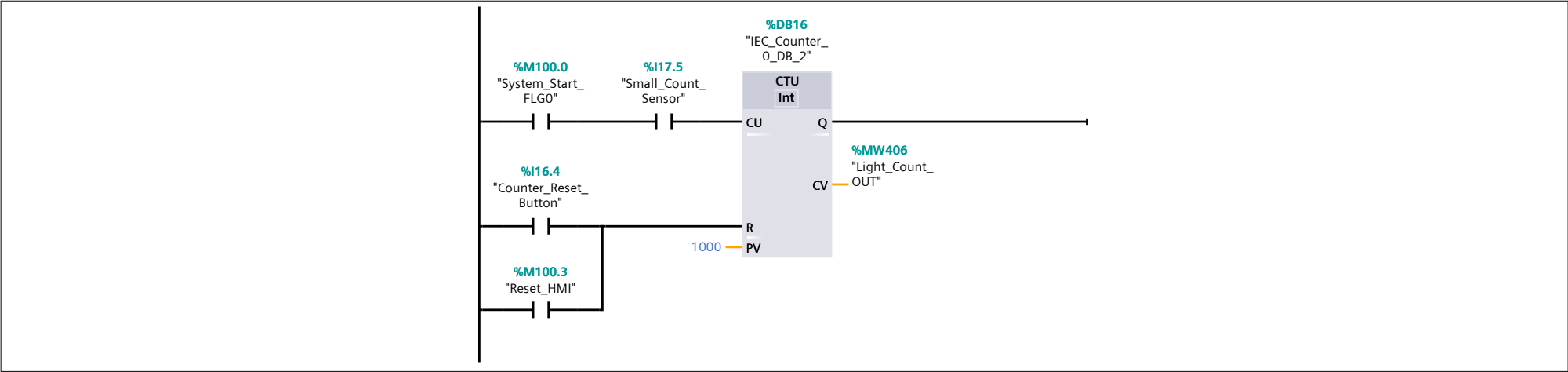
Network 13: Count Large Boxes Leaving System



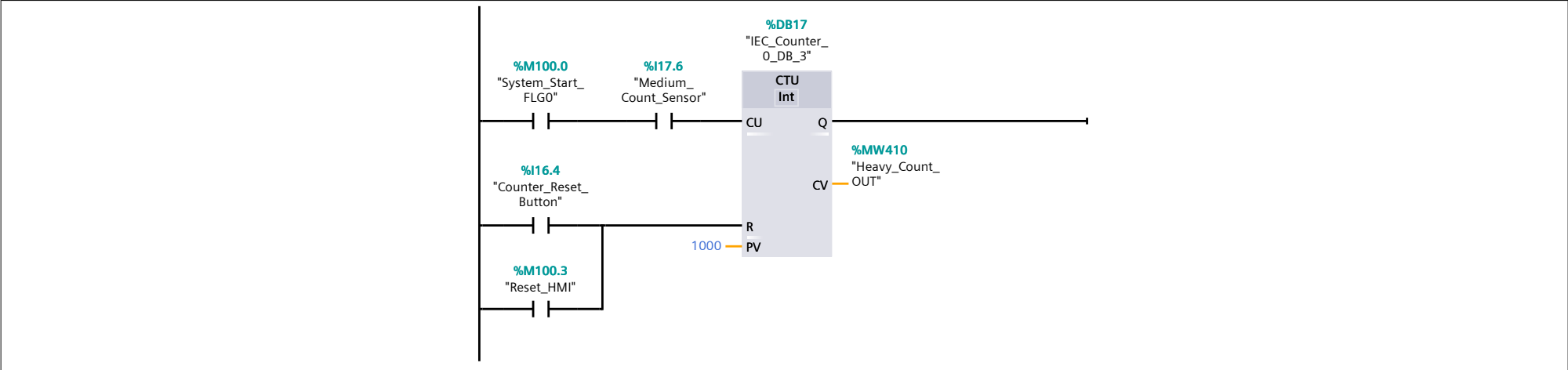
Network 15: Count Medium Size boxes into sorting system



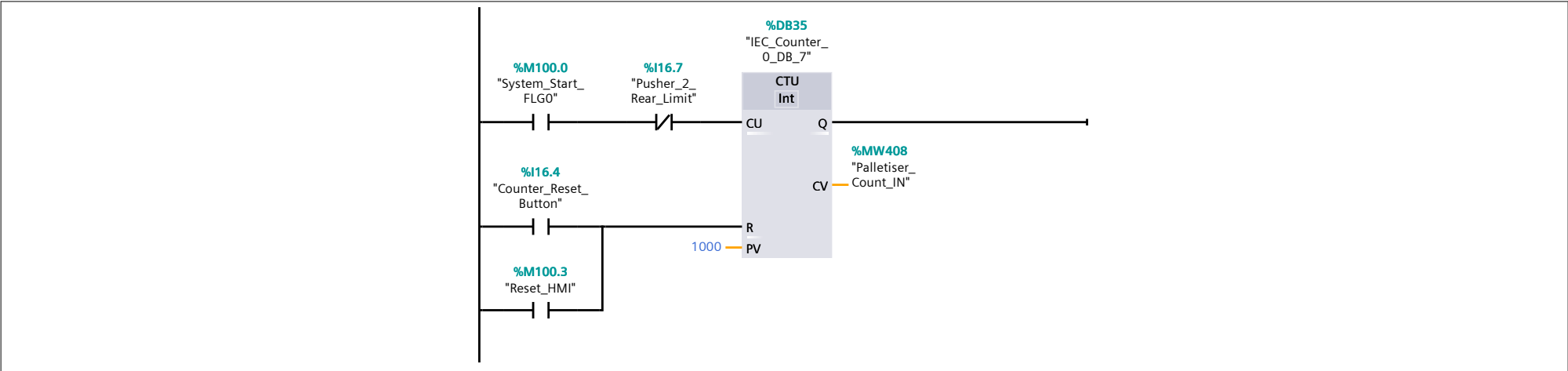
Network 17: Count Light boxes from sorter exiting the system



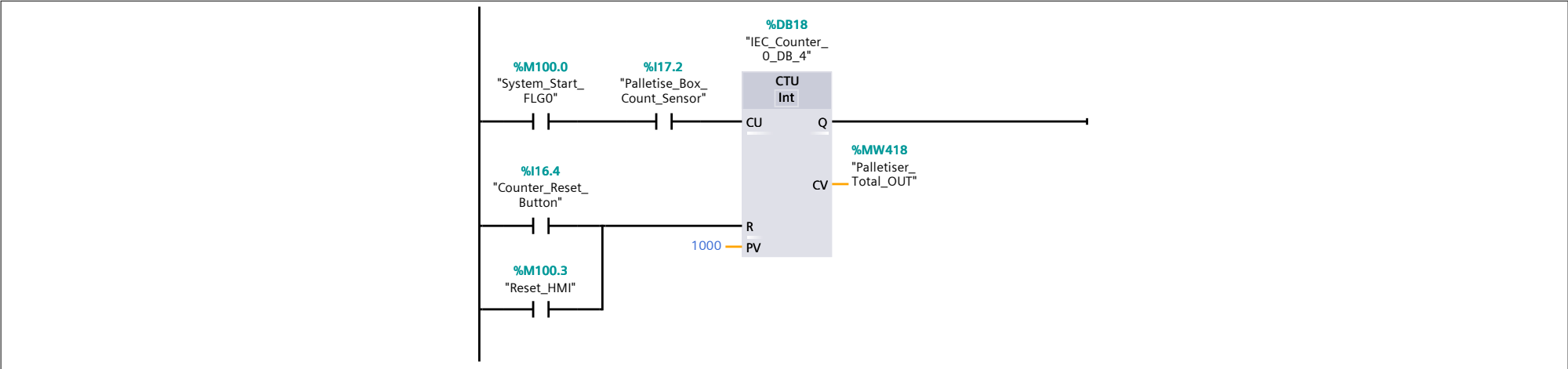
Network 15: Count Heavy Boxes from sorter exiting the system



Network 16: Count Palletiser boxes off of main conveyor



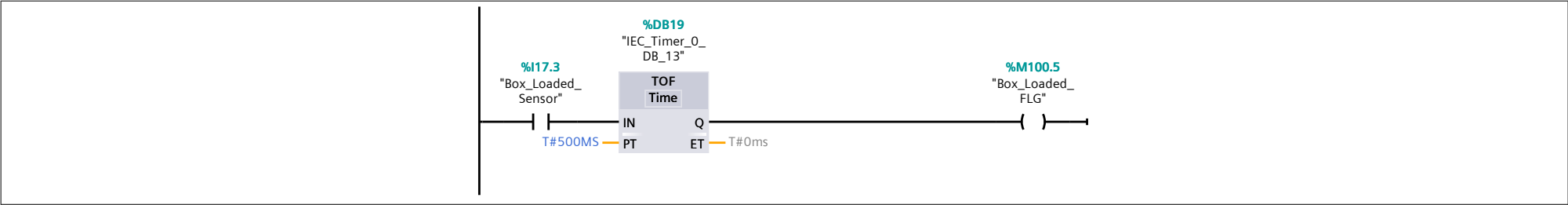
Network 17: Count Palletiser size boxes through system



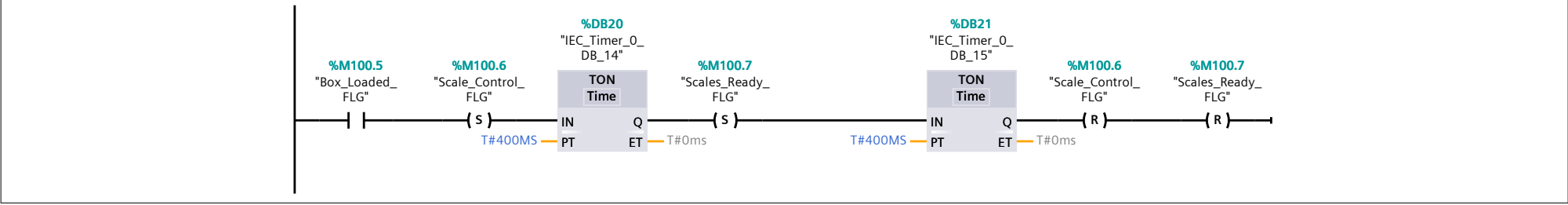
Network 18:



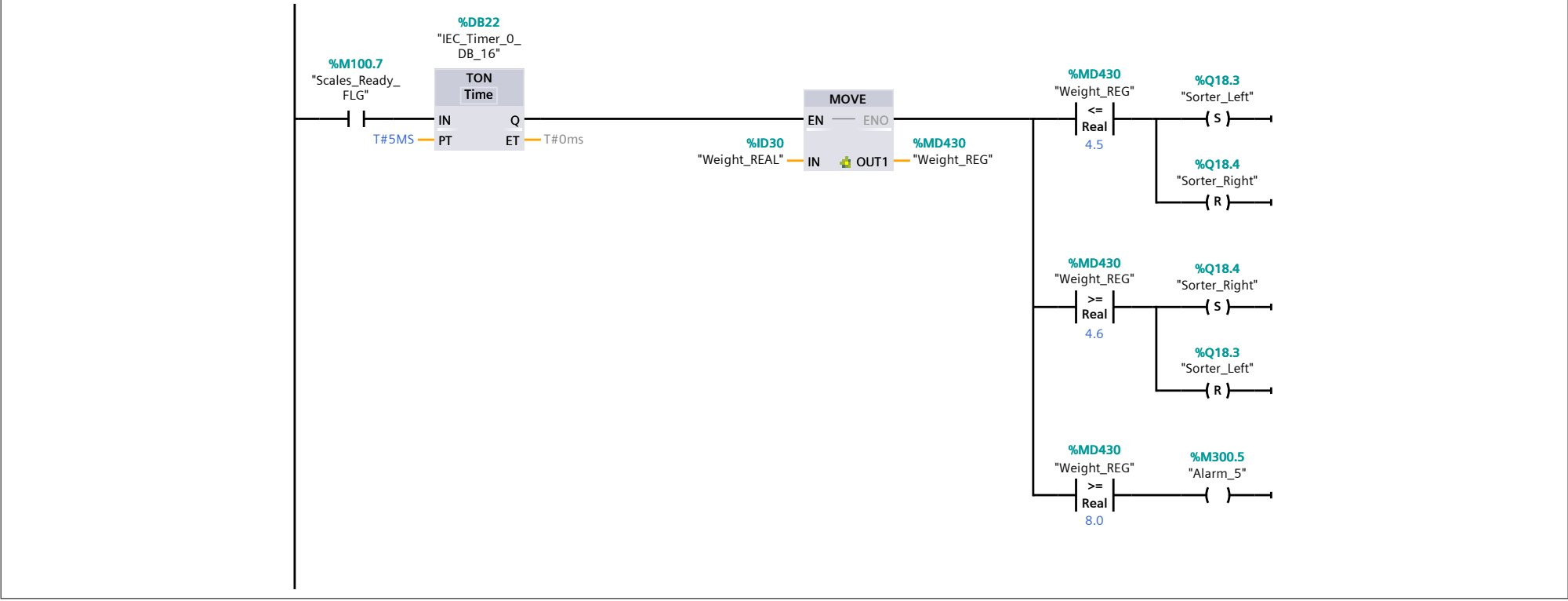
Network 19: Recognition of box landing on scales



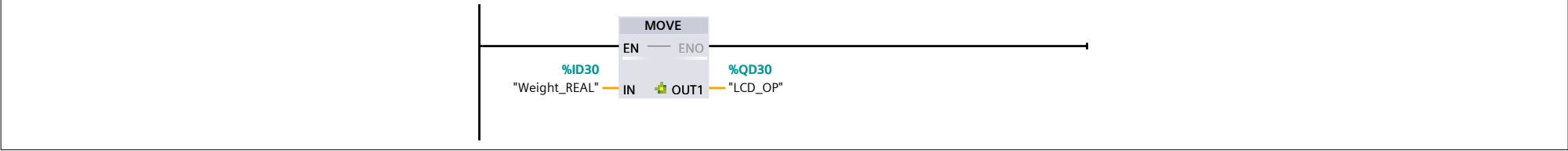
Network 20: Scales Control



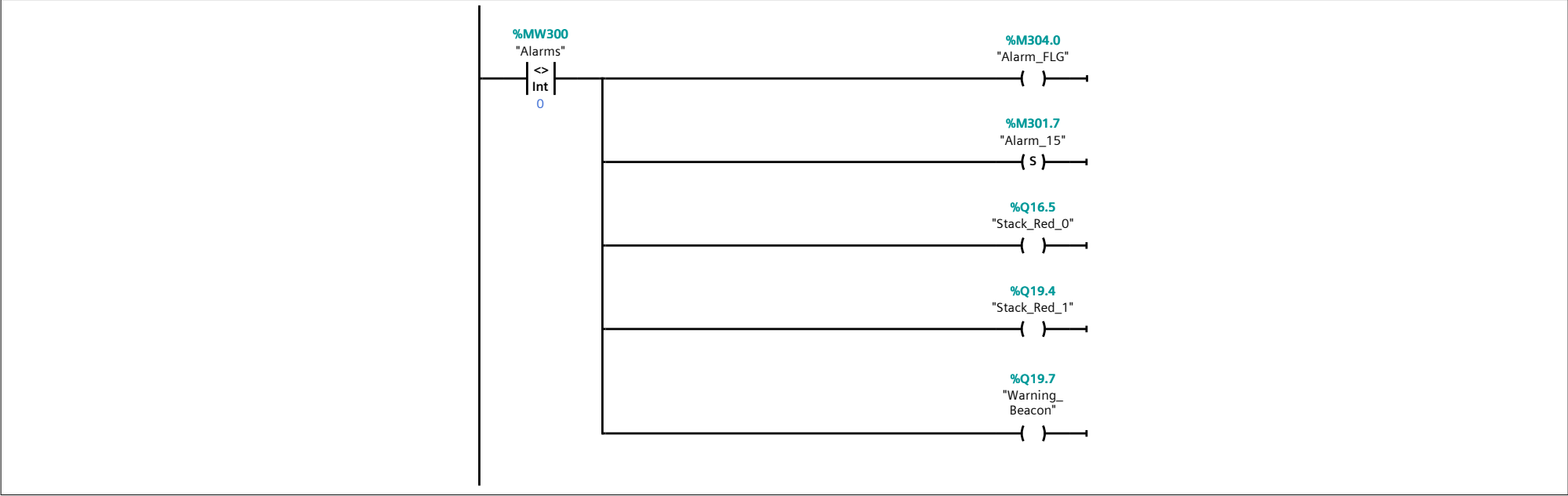
Network 21: Capture and compare scales reading



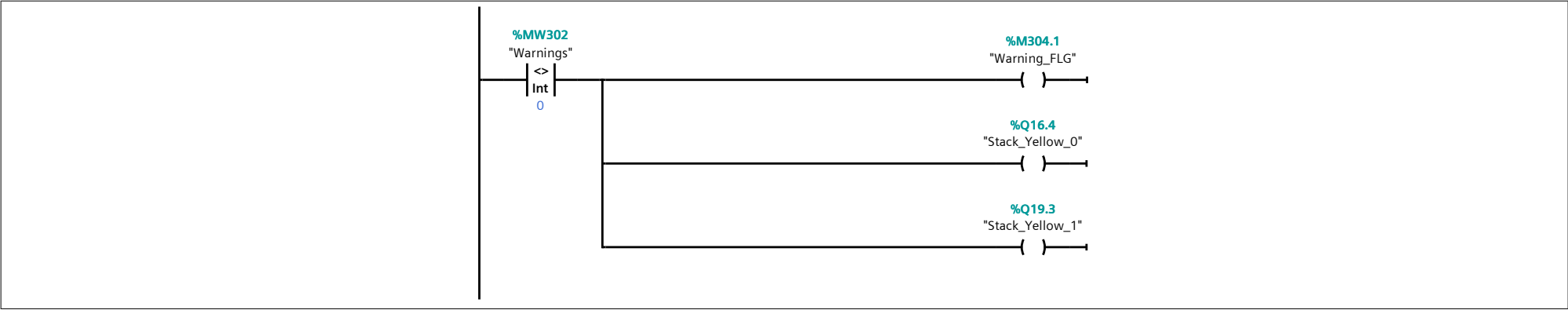
Network 22: Echo weight to LCD Screen on Control Panel



Network 23: Alarm Word Comparison



Network 24: Warning Word

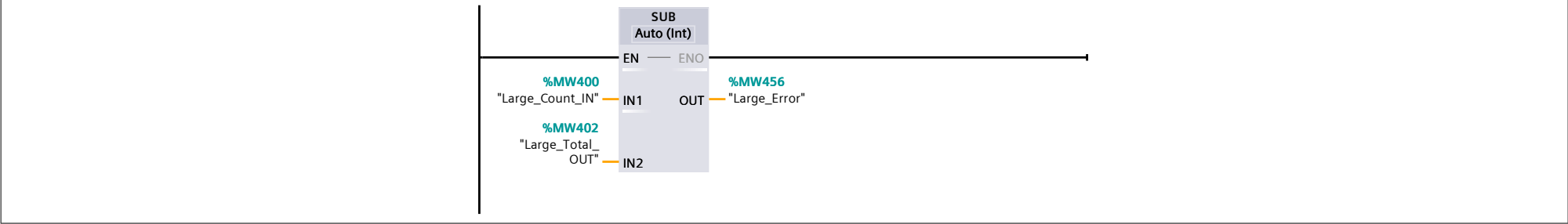


Network 25: E-Stop circuit monitoring



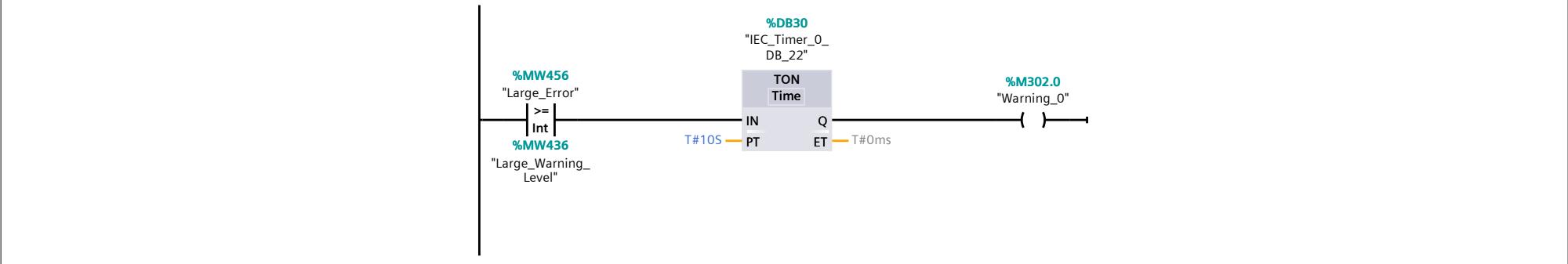
Network 26: Error Level for Large Boxes

Compares pulser limit count for large boxes into the system and subtracts number of boxes detected outgoing



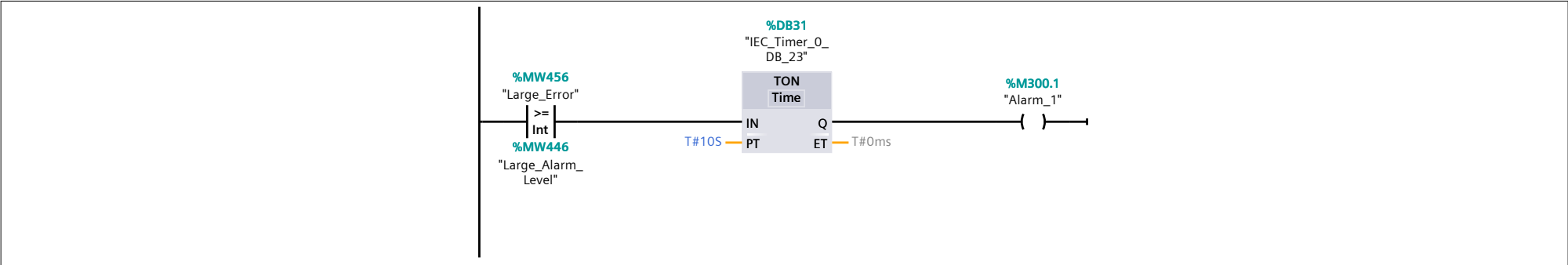
Network 27: Large Box Warning Level

Compares error to value set for waring limit of boxes

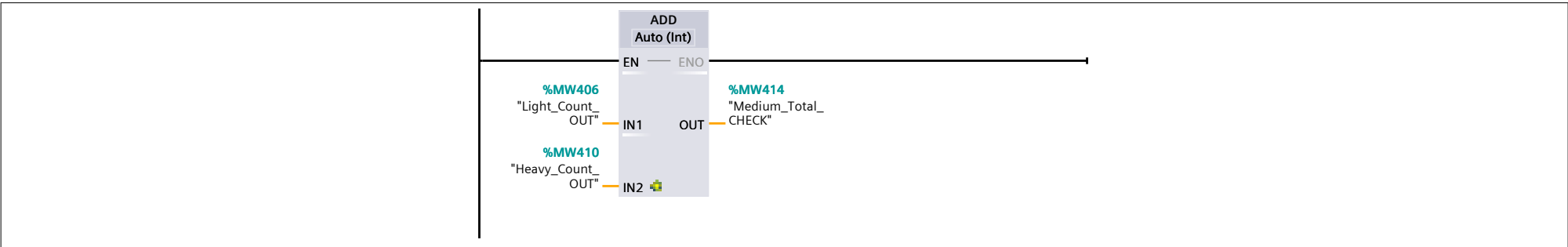


Network 28: Large Box Alarm Level

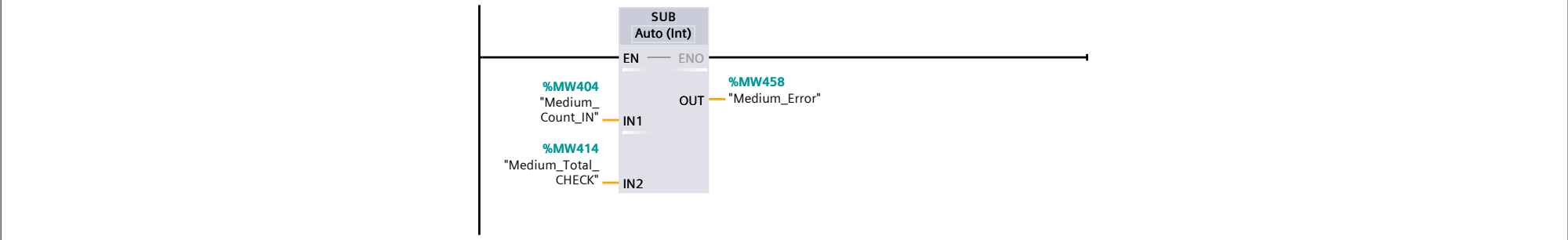
Compares error to value set for waring limit of boxes



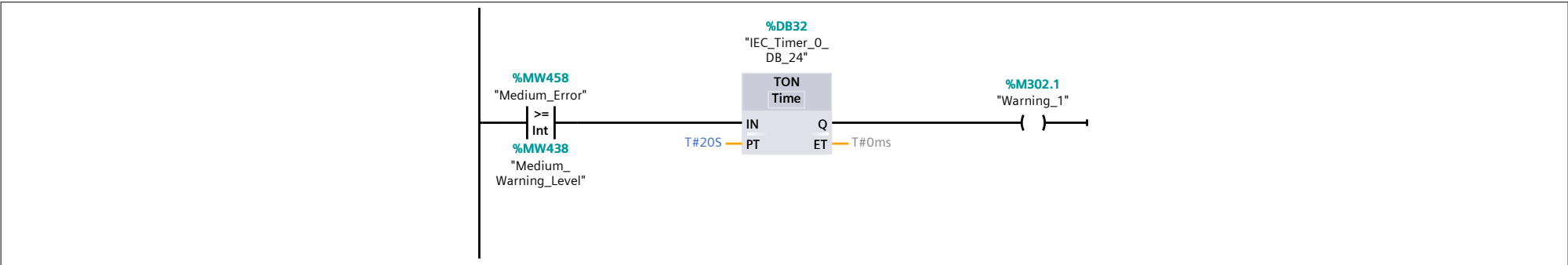
Network 29:



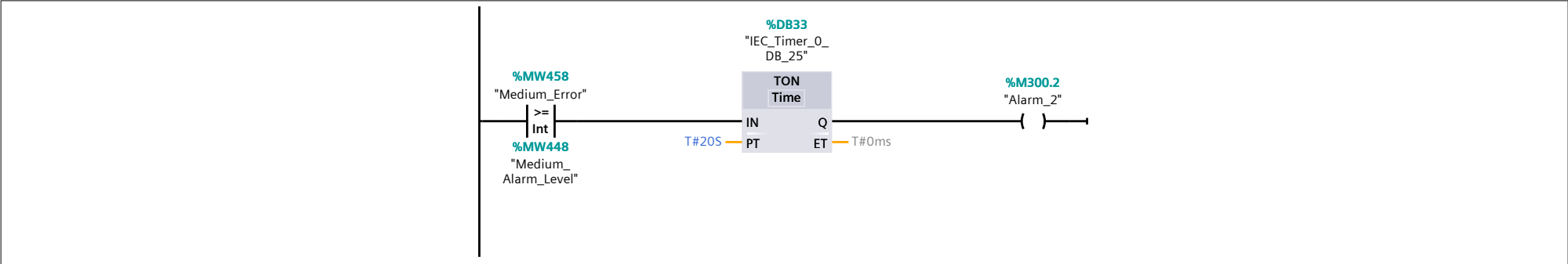
Network 30:



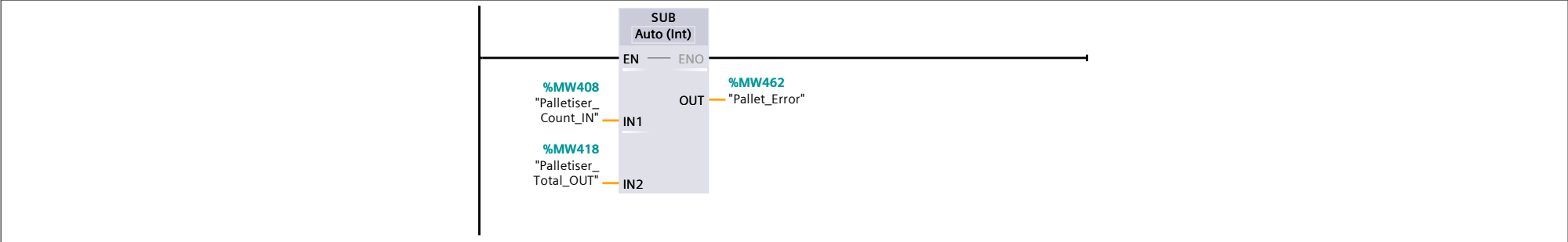
Network 31:



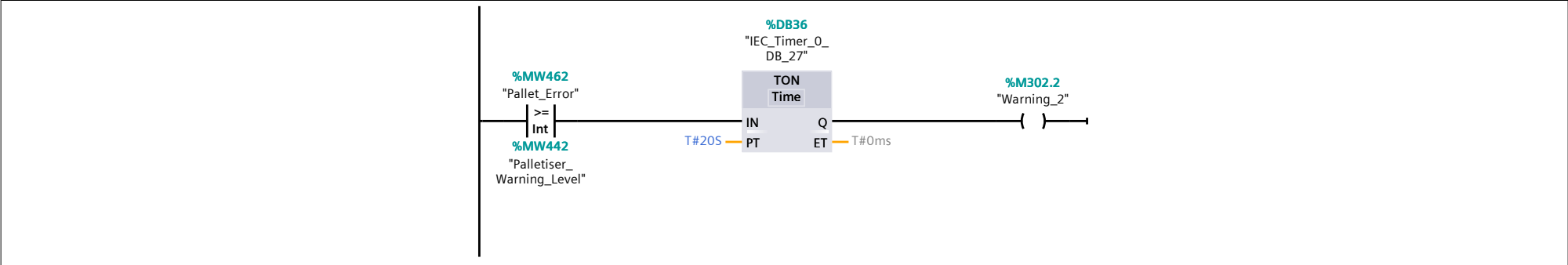
Network 32:



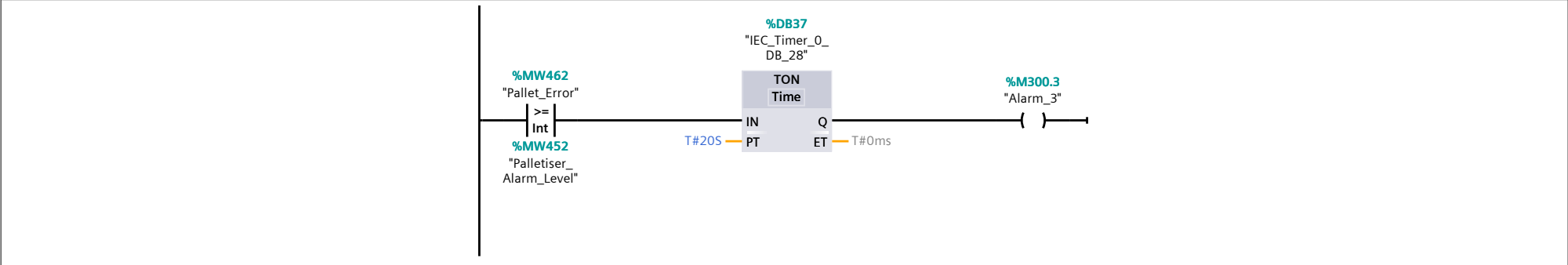
Network 33:



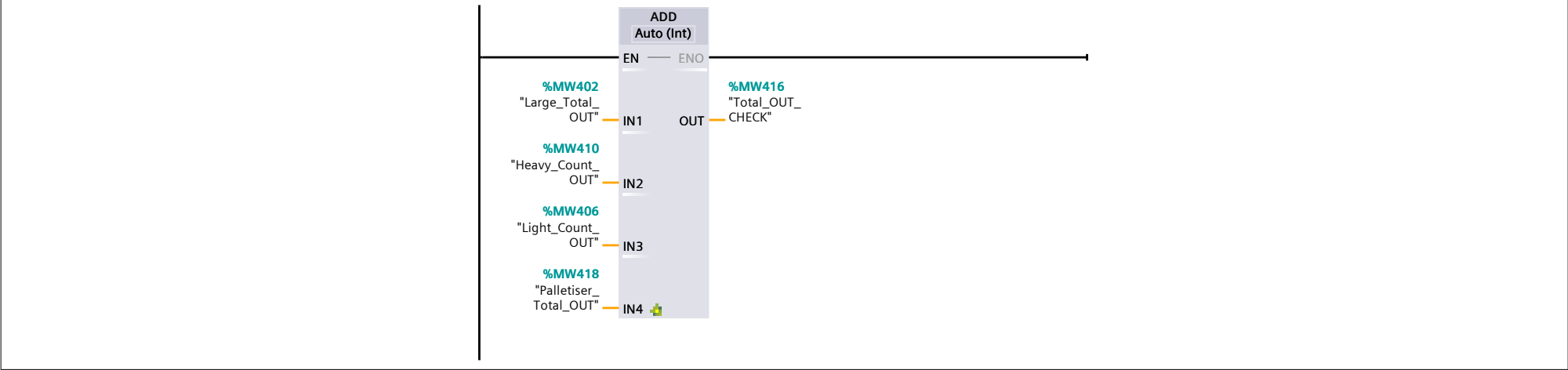
Network 34:



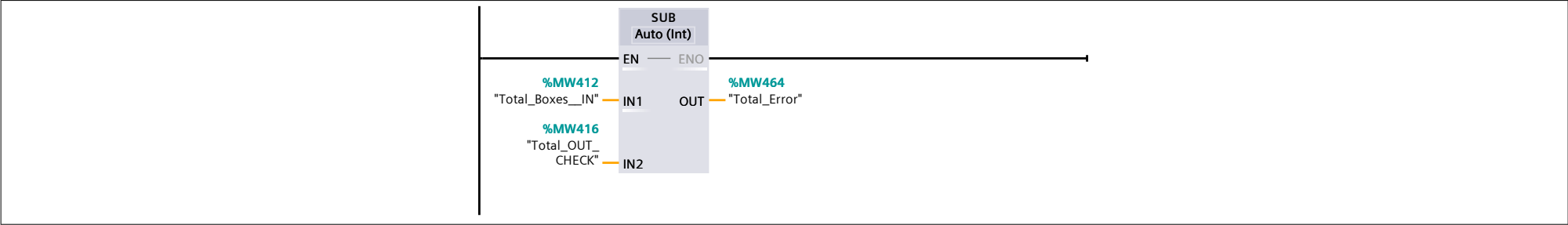
Network 35:



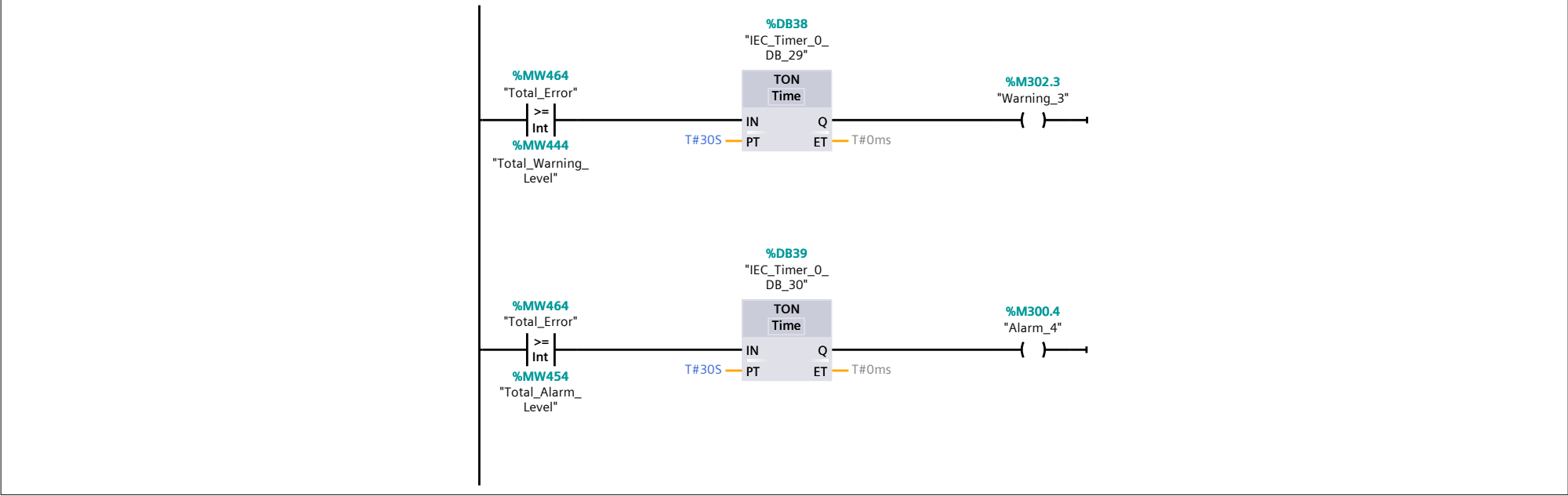
Network 36: Check the total boxes out of the system by adding individual count levels



Network 37: Subtract boxes in to the system from the number exiting the system for error



Network 38:



Network 39: Error Detection for box pushers. If output is on, but no movement detected in set time, fault condition Failed to activate

