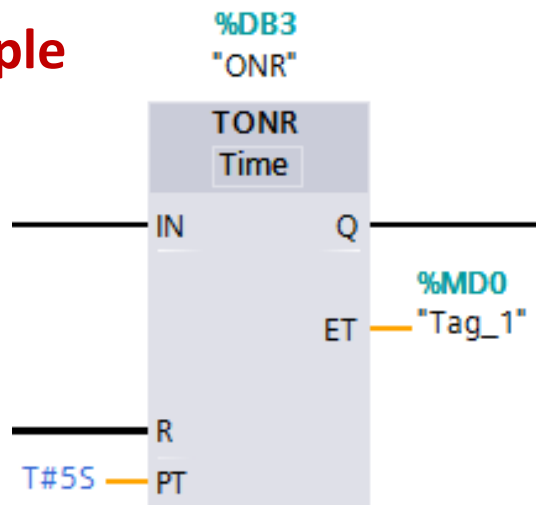


Siemens S7-1200

CPU 1212C AC/DC/Relay

Timer Operations

- How to change PT of TONR dynamically
- **Exercise Example**



Code and Compile
Learning Made Easy

www.codeandcompile.com



Timer Operations in LAD – Changing PT of TONR



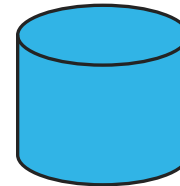
Retentive ON Delay

The **TONR timer** sets the **output (Q) to ON** after a **preset time delay**. The elapsed time is **accumulated** over multiple timing periods until the **reset (R) input reset the elapsed time**.

Basic instructions
Name
Timer operations
TP
TON
TOF
TONR

Every Timer is associated with a Data block which stores the status of the timer

Data Block (DB)



Values can be read/write by using the specific address of the timer

Data Block Address

%DB3
"ONR"

Data block Name

Input Signal

IN

Q

Output Signal

Reset Signal

%I0.1
"Stop"

R

ET

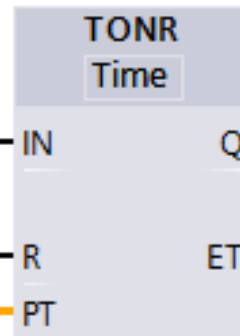
Preset Time

"ONR".PT

PT

%MD0
"Tag_1"

Current Time



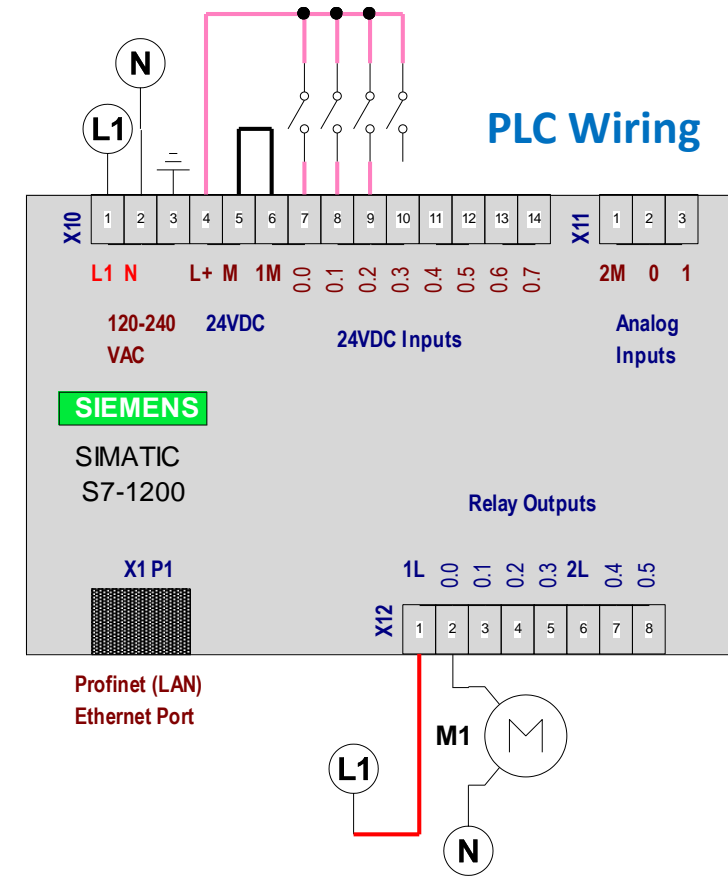
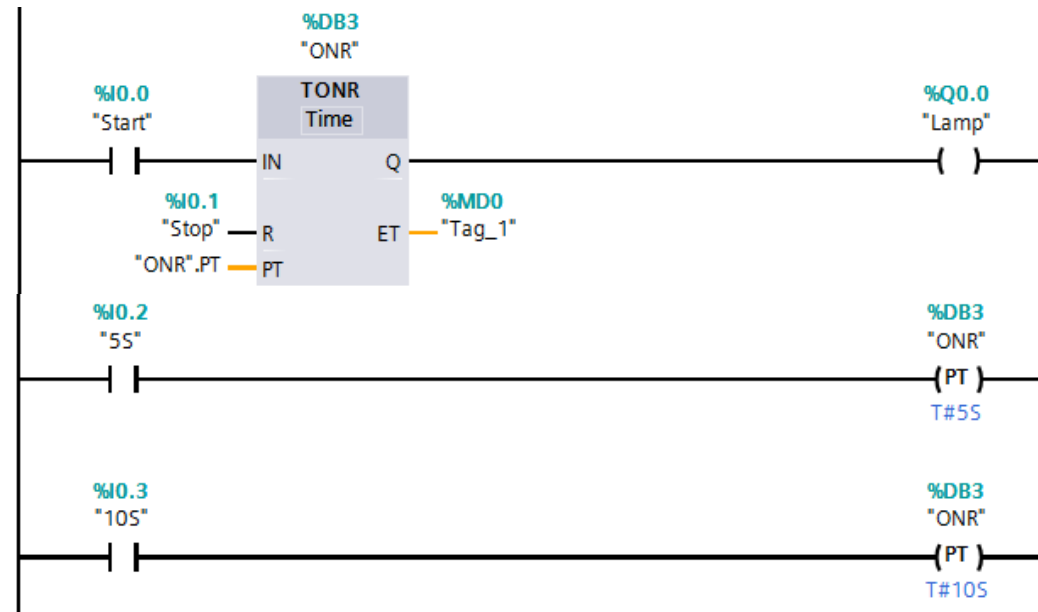
Exercise Example



Write a Logic to energize an output via retentive timer. Use the following elements:

- I0.0 to energize the output
- I0.1 to reset the ET
- I0.3 to change the PT to 5S
- I0.4 to change the PT to 10S

Ladder Solution



What did we learn in this lesson?

- By default timers are associated with a **data block** which has **all the addresses of the timer**
- We can **read/write** the **values of timers** by accessing the **associated data block addresses**

Thank you

*Get copy of this presentation
in the course!*



Code and Compile
Learning Made Easy

www.codeandcompile.com

