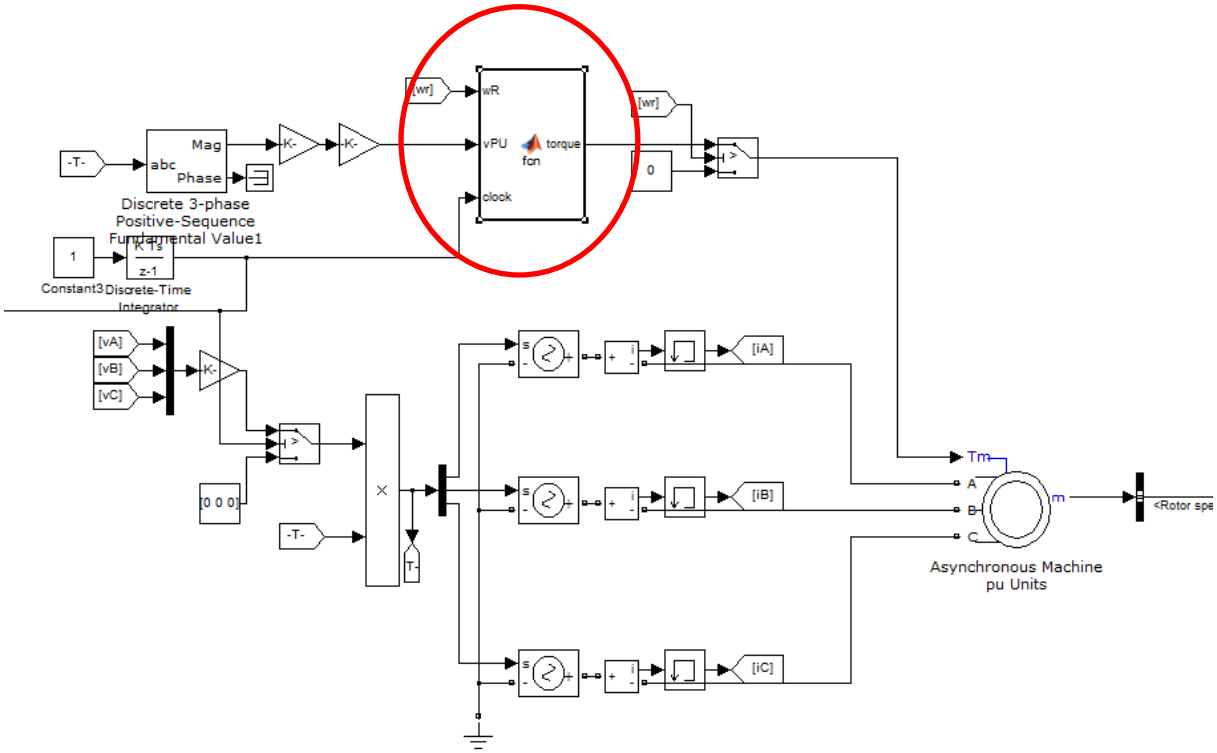
1. Correction on the stalling mechanism

In all motor loads (both single- and three-phase) => in the block containing the stalling logic, that is:



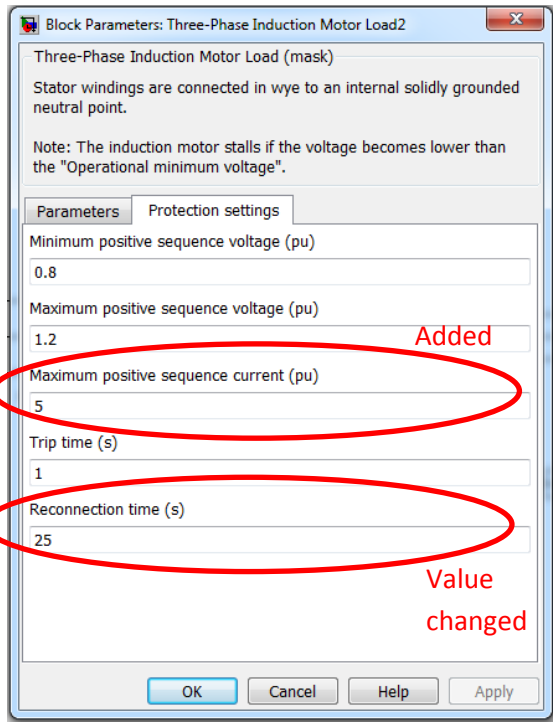
=> the last part of the code has changed as shown below:

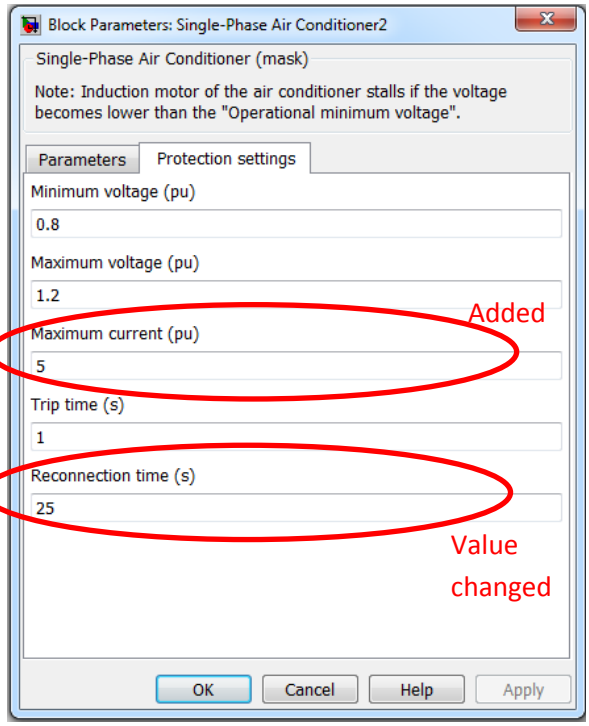
```
32 -        if wR >= 0.75
33 -            ifStalled = 0;
34          else
35 -            if (clock < (timerS
36 -                ifStalled = 1;
37 -            elseif (clock >= (t
38 -                isTimerOn = 0;
39 -                ifStalled = 1;
40              else
41 -                ifStalled = 1;
42              end
43          end
44      end
45
46      end
```

```
32 -        if wR >= 0.75
33 -            ifStalled = 0;
34          else
35 -            if (clock < (timerS
36 -                ifStalled = 1;
37 -            elseif (clock >= (t
38 -                isTimerOn = 0;
39 -                ifStalled = 1;
40              end
41          end
42      end
```

2. Addition of time-definite overcurrent protection to motor loads – Change of the reconnection time

In all motor loads, the dialog box has changed to:



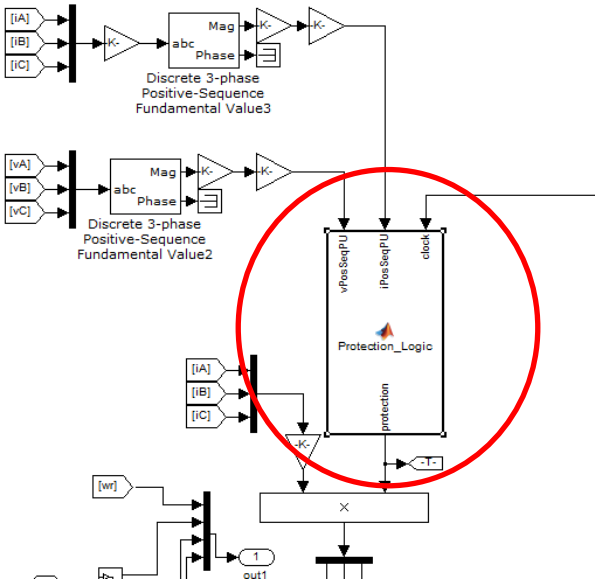


Three-phase motor loads

Single-phase motor loads

In all motor loads (single- and three-phase), time-definite overcurrent protection has been added. This means that if the output current goes above the limit (shown above) and stays there for at least the “Trip time” (shown above), the load disconnects.

In all motor loads (both single- and three-phase) => in the block containing the protection logic, that is:



=> the code has changed. Since almost all lines of the code are affected, I haven't shown the changes here. Please note that, in the three-phase model, the positive sequence current is fed to the protection block while, in the single-phase model, the phase current is fed to the protection block.

3. Correction on the dq connection to the excitation system

I don't think you need to change anything in your model because you are using your own blocks and connections (i.e. this mistake has not been copied in the emtp-rv model). But just to make sure, in the HV section => in the "Electric Power Grid" model => in the "M1TurbineRegulators" block => the stator voltage (vd and vq) are now correctly connected to the "EXCITATION" block. Previously they were mixed up.