



### Example 3: Single Start for run through curve 5 times

#### Task:

- Open curve without standstill area
- Coupling / decoupling with change-over function
- Digital input for the start of 5 curve cycles (incl coupling and decoupling cycle)

#### Corresponding files:

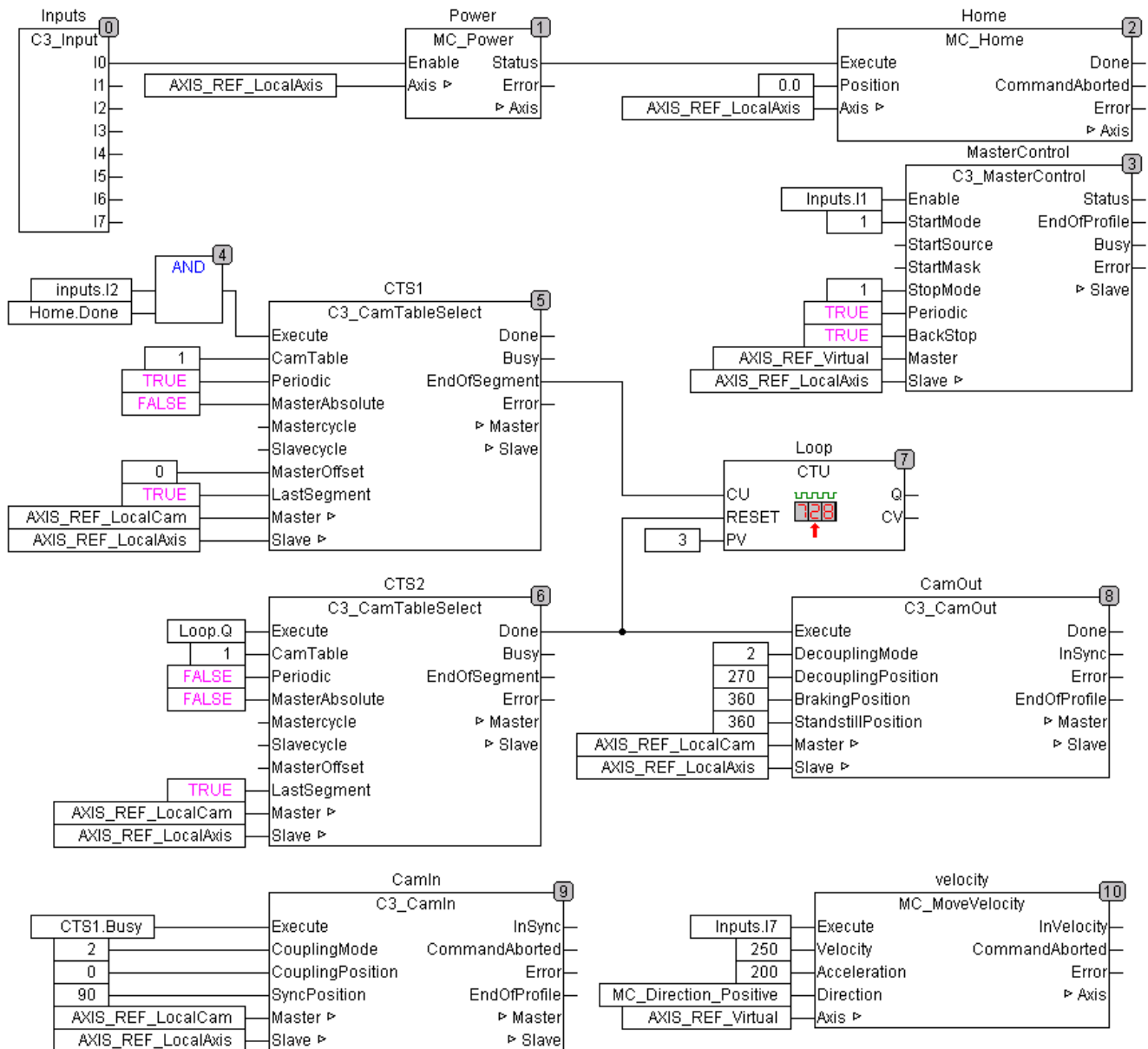
CamExample03.C3P (Compax3 project on the Compax3 CD:\Examples\Example3)

CamExample03.pro (CoDeSys project on the Compax3 CD:\Examples\Example3)

#### Control interface:

Input	Function
I0	Energize axis, Homing
I1	Enable and start of the master position detection
I2	Start of the curve cycle
I3	Free
I4	Free
I5	Free
I6	Free
I7	Start of the virtual master

#### Solution:



**Explanation:**

- Coupling from 0 on (CamIn.CouplingPosition = 0), decoupling on 360° (CamOut.StandstillPosition = 360°).
- The curve generator (C3\_CamTableSelect) is started in relative Mode with the Input I2.
- with MasterOffset = 0, the next zero crossing is waited for if the master is already running.
- The busy output of CTS1 starts the coupling sequence before the selected curve is active. Only if the master position has exceeded the value 0 (CTS1.MasterOffset = 0, CTS1.MasterAbsolute = TRUE), the curve starts to run and CTS1.Done will become TRUE.
- After the 3rd impulse "EndOfSegment" of the C3\_CamTableSelect module, the 4th curve is already running. The change of cam to the single mode is then triggered with the counter module. This will become active at the end of the 4th curve, so that the curve is run through 5 times.
- If the change to the 5th curve cycle has been executed, the Done output will come to this module (CTS2), which will trigger the decoupling sequence.