Example 6: Operation with curve segments and standstill area

- Via a master cycle, a slave feed with following standstill is to take place from a master position of 30° on; from a master position of 230° on, the slave is to return. This sequence is to be repeated cyclically.

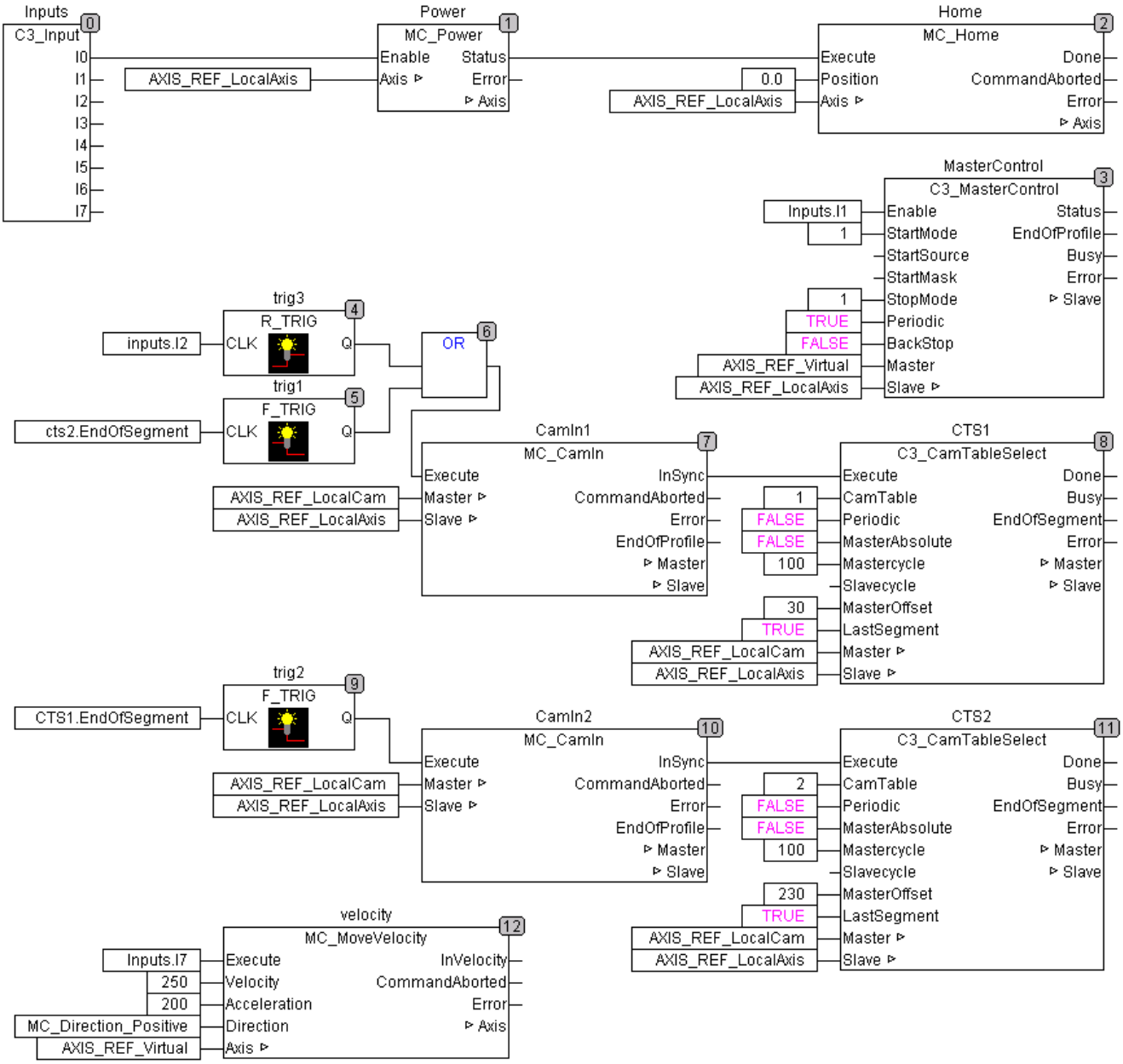
Corresponding files:

CamExample06.C3P (Compax3 project on the Compax3 CD:\Examples\Example6)
CamExample06.pro (CoDeSys project on the Compax3 CD:\Examples\Example6)

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:



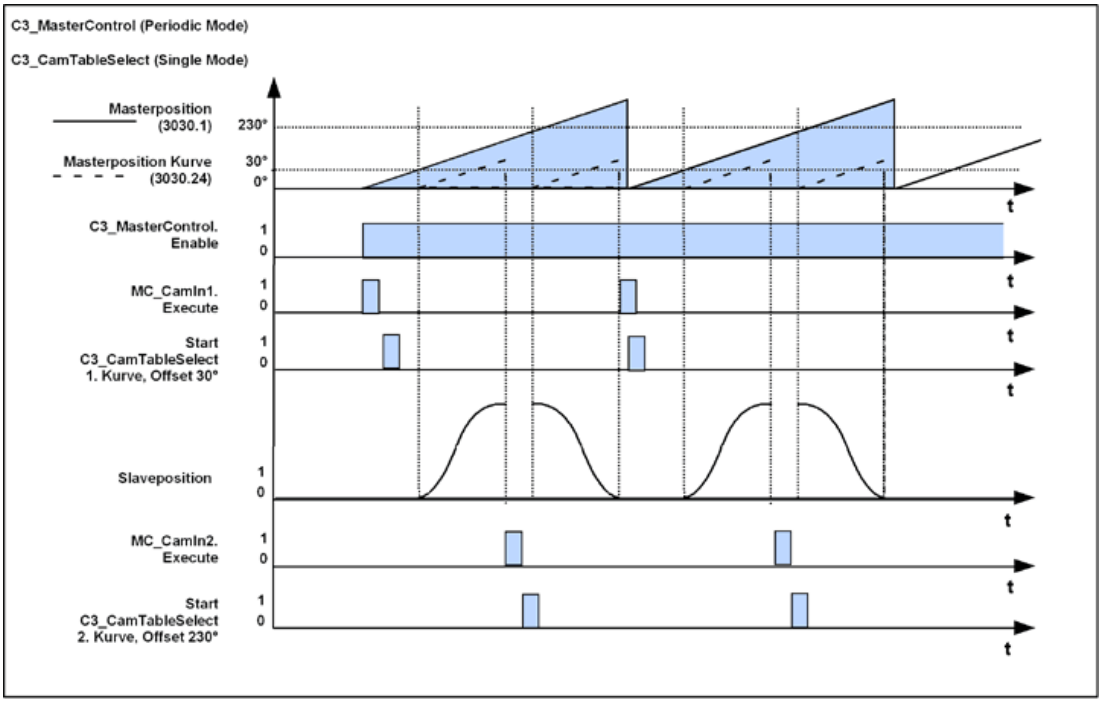
Boundary conditions:

- After the coupling of the axis, the curve generator (CST1) is started in relative mode with an offset of 30°.
  The start of the curve takes only place, if a master position of 30° is reached.
- The feed takes place via 100 master degrees (C3_CamTableSelect module): Mastercycle = 100).
- With the falling edge of EndofSegment of the CamTableSelect module (CTS1), the next movement will be triggered via CamIn2.
- CamIn2 will start via "InSynch" the 2nd C3_CamTableSelect (CTS2), whose curve will reset the slave to its previous position via the master position range between 100° and 230°.
- The sequence can be repeated with "EndofSegment" of this module.

Special feature:

- In this example, the curve shall be run through entirely, therefore MC_CamIn is started before C3_CamTableSelect. This is only possible with MC_CamIn.

Signal image:


C3_MasterControl (Periodic Mode)
C3_CamTableSelect (Single Mode)
Masterposition (3030.1)
Masterposition Kurve (3030.24)
230°
30°
0°
C3_MasterControl. Enable
MC_CamIn1. Execute
Start C3_CamTableSelect 1. Kurve, Offset 30°
Slaveposition
MC_CamIn2. Execute
Start C3_CamTableSelect 2. Kurve, Offset 230°
1
0
t