Receives command from HMI to turn on the axis so that the motor can be powered down when not in use.

0

EnableAxisBit — Enable Axis CMMT_Test.EnableAxis

Transferrs velocity tag (controller scope) from HMI to the CMMT velocity tag (program scope)

1

Velocity in User Units While using MDI Mode (Manual Data Input)

MOV
Move
Source Velocity 45
Dest CMMT_Test.Velocity 45

When the previouis motion is completed and the HMI has sent the RUN bit, decide whether the motor is currrently at the lower or upper target limit, and latch a bit to begin configuring the new positons - only when the move is completed.

2

Motion Completed CMMT_Test.AxisPosOk — OnOffBit

ADD
Add
Source A LowerTarget 50000
Source B 50
Dest LowerTargetHight 50050

SUB
Subtract
Source A LowerTarget 50000
Source B 50
Dest LowerTargetLow 49950

Actual Position
LIM
Limit Test (CIRC)
Low Limit LowerTargetLow 49950
Test CMMT_Test.ActPosition 350000
High Limit LowerTargetHight 50050

AtLowTarget (L)

ADD
Add
Source A UpperTarget 350000
Source B 50
Dest UpperTargetHigh 350050

SUB
Subtract
Source A UpperTarget 350000
Source B 50
Dest UpperTargetLow 349950

Actual Position
LIM
Limit Test (CIRC)
Low Limit UpperTargetLow 349950
Test CMMT_Test.ActPosition 350000
High Limit UpperTargetHigh 350050

AtUpperTarget (L)

The next two rungs transfer the new target position (if it's at the lower limit, re-send the upper target, etc)

3

AtLowTarget

MDI Mode=Pos.Target
or
Record Mode=Record#

MOV
Move
Source UpperTarget 350000
Dest CMMT_Test.Position 350000

ReadyForUpper

4

AtUpperTarget

MDI Mode=Pos.Target
or
Record Mode=Record#

MOV
Move
Source LowerTarget
50000
Dest CMMT_Test.Position
350000

ReadyForLower

When the new position has been sent, tell the drive to start.

5

ReadyForUpper

ReadyForLower

Motion
Completed
CMMT_Test.AxisPosOk

Task Start
CMMT_Test.ExecuteMode

As soon as the drive begins moving, unlatch the configuration bits.

6

Motion
Completed
CMMT_Test.AxisPosOk

AtLowTarget (U)

AtUpperTarget (U)

7

PTP_Drives_Festo_EIP

PTP_Drives_Festo_EIP	CMMT_Test ...	AxisEnabled
I_O_I_n_t_e_r_f_a_c_e	0	
DRV_Status	Festo_Motion:I1.Data	AxisPosOk
DRV_Control	Festo_Motion:O1.Data	
C_o_n_t_r_o_l_A_r_e_a	0	AxisSpFixed
ModePos	2	
EnableAxis	1	AxisAckSetpoint
CancelTraversing	1	
IntermediateStop	1	ClampTorqueReached
Positive	0	
Negative	0	AxisRef
Jog1	0	
Jog2	0	AxisWarn
AckError	0	
ReleaseBrake	0	AxisError
TravelToFixStop	0	
ExecuteMode	0	Lockout
Position	350000	
Velocity	45	Error
OverV	100	
OverAcc	100	
OverDec	100	
ConfigEPos	15	
BaseSpeedValue	3000.0	
ConnectionFaulted	Festo_Motion:I1.ConnectionFaulted	
	0	
M_o_n_i_t_o_r_A_r_e_a	0	
ActVelocity	1.2763208	
ActPosition	350000	
ActMode	2	
EposZSW1	-32768	
EposZSW2	4	
ActWarn	0	
ActFault	0	
Status	16#7002	

(End)