

8.4 Three-Position Step Control Algorithm, Motor Travel Time Setting

Introduction

Three-Position Step Control lets you control a valve or other actuator with an electric motor driven by the output relays. These relays actuate two sets of coils, one to move clockwise and the other counter-clockwise without a feedback slidewire linked to the motor shaft.

- There is internal Feedback of the state of the relays.
- A TPSC controller provides an estimated position of the motor since the motor is not using any feedback from a slidewire. The "OUT" display will indicate this estimated motor position.
- The only calibration required is setting the Motor Travel Time (the time it takes for the motor to travel from 0% to 100%).









Set Up

Set "Lock" in *Subsection 3.6 – Tuning Set Up Group* to "None".

Procedure

The procedure for setting the motor travel time for the Three Position Step Control Algorithm is listed in Table 8-5.

Table 8-5 3 Position Step Control Algorithm, Motor Travel Time Setting

Step	Description	Press	Action
1	Enter Calibration Mode	 until you see	Upper Display  Lower Display 
2	Set Motor traverse Time ATTENTION This is the time it takes the motor to travel from 0 to 100%.		You will see: Upper Display  ← a value Lower Display 
		 or 	Until the proper motor stroke time is reached, see the motor specs or measure the time from 0 to 100%. • range of setting = 15 to 240 seconds.