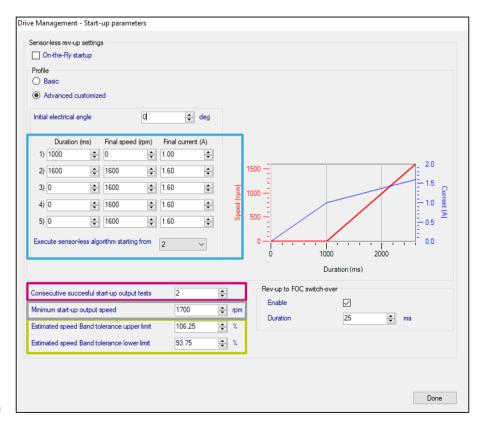
Start-Up failure

→ A Start-Up Failure occurred during the START of the state machine

Convergence: the STO PLL speed has to be N times in the range of the speed expected by the virtual speed sensor. When the minimum speed is reached the convergence is checked to go out of the Start state in the Time dedicated for the Start-Up.



Reasons for Start-Up failure:

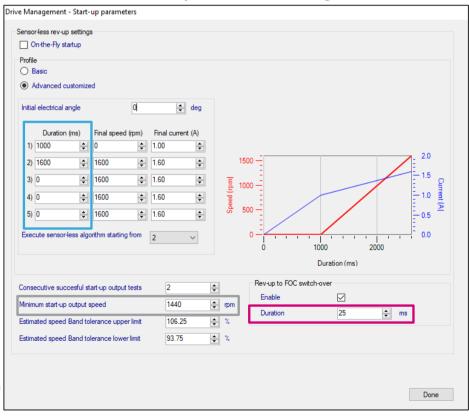
- →The minimum start-up speed is too high
- →The range of the comparison speed is too narrow
- →The time for start-up is too short
- →The final ramp of the start-up phase is too low
- →The speed measured is not reliable (PLL)
- →Too much load

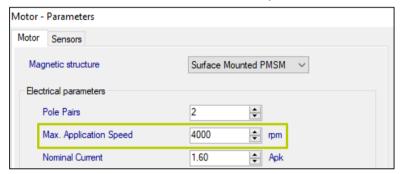


Start-Up failure

→ A Start-Up Failure occurred during the SWITCH OVER of the state machine

Closed loop: At the end of the pre defined time for the Switch Over state, the virtual speed sensor (VSS) has to be in the reliability range. The Switch Over state has to take place during the rev-up phases. When the loop is closed we go out of the Switch Over state and the rev-up is over.





- Reasons for Start-Up failure:
- →Switch Over duration is too high
- →Rev-up phases time is too short
- →VSS speed is not in the range of the authorized speed (0 to Max)
- →The minimum start-up speed is too high