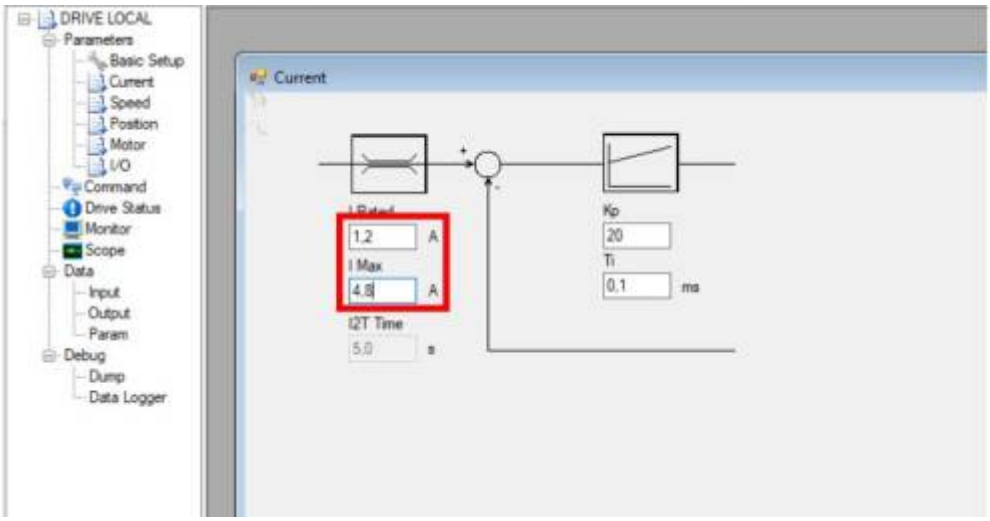
General Motor Configuration

Download TKSED Software here:
https://www.nilab.at/download/tksed-software-pc-tool/?wpdmdl=2126&refresh=637351b08fa4b1668501936

STEP 1

Please, considering the datasheet of the motor and set the correct value for I rated to Nominal current of the motor and the Peak values in the current window. For example 1,2 Amps rated and 4,8 Amps peak.

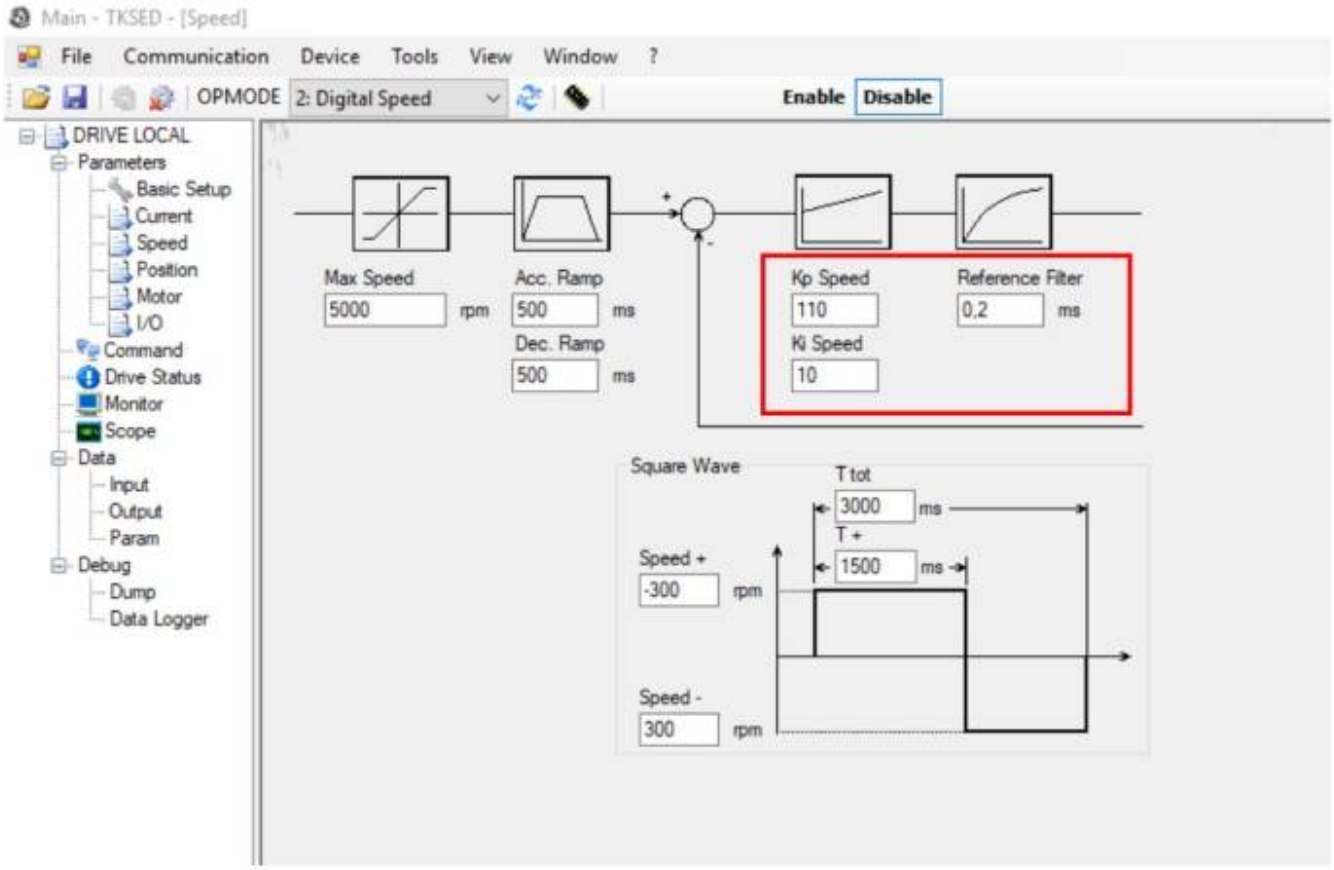


STEP 2

Specify the motor type, encoder resolution, number of poles, thermistor and feedback type in the motor window. For example 2000 counts per revolution, incremental + hall feedback type, 4 poles motor.

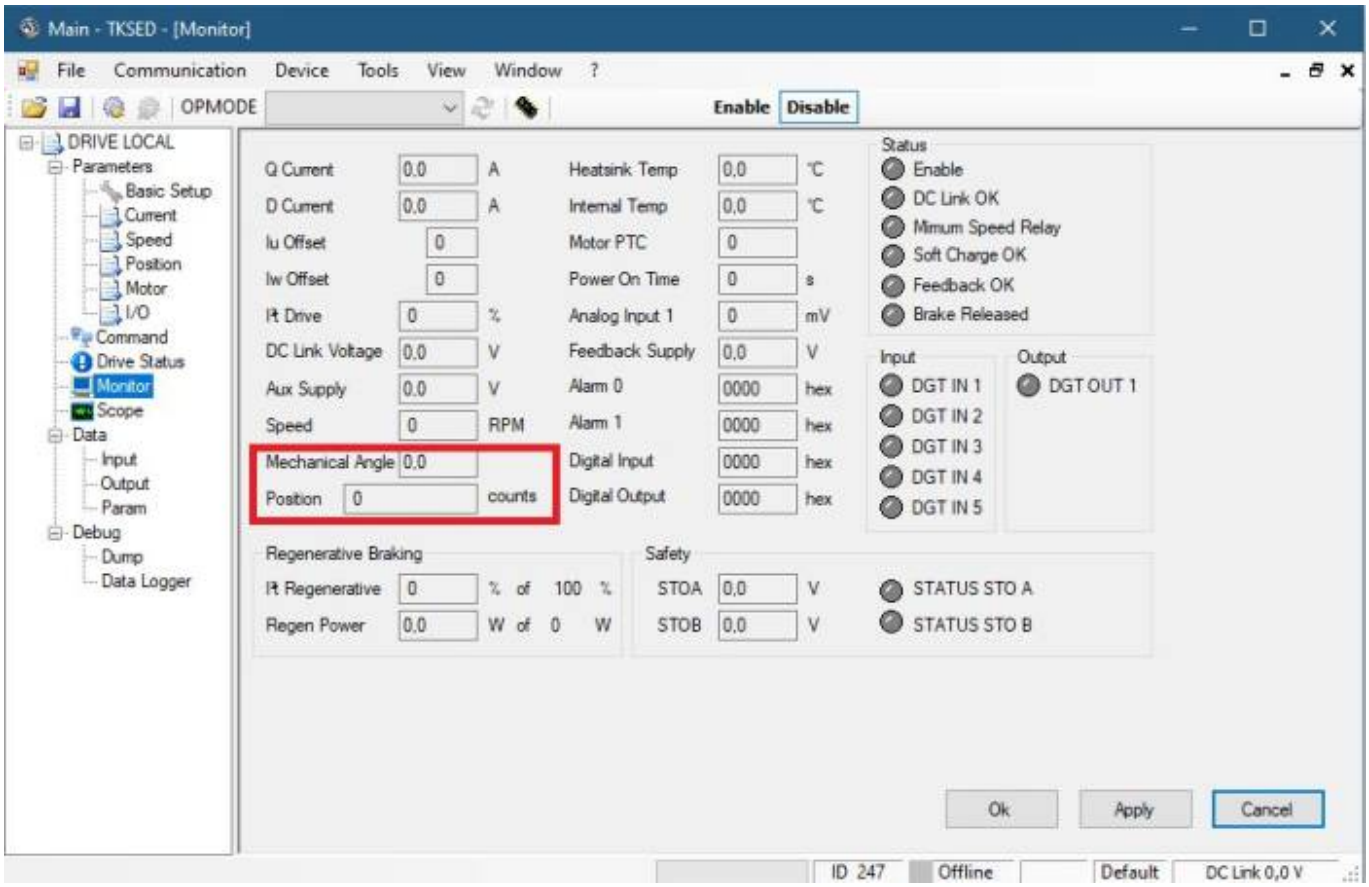
STEP 3

Set the gain, the integrative and the reference filter value inside the Speed window. For example, Kp=110, Ki=10 and 0.2 msec of speed loop filter. A general method to find the right values is incresing the Kp speed gain until vibration occurs then divide this value by 2.The Ki speed value is set typically 1/4 of the Kp gain. Then, fix the reference filter to reduce the noises.

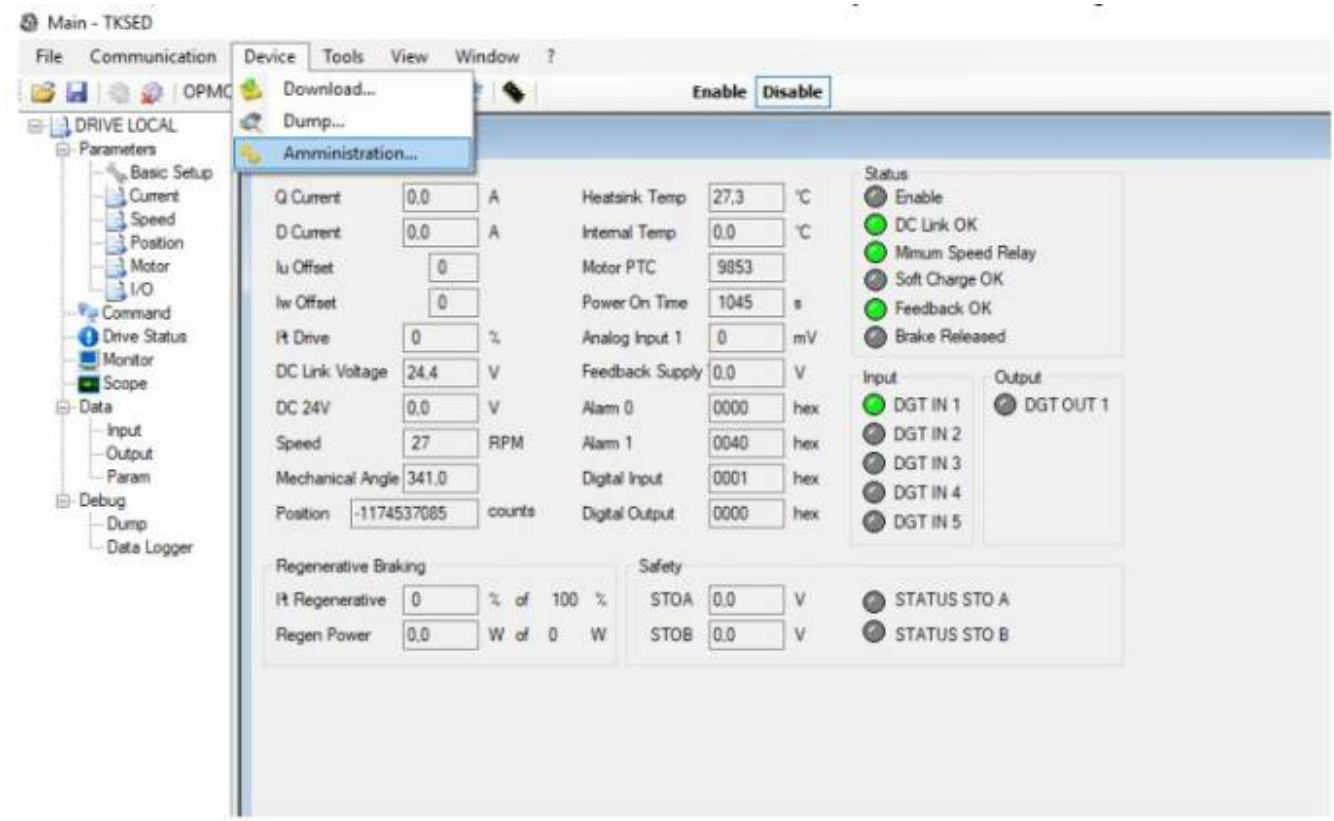


STEP 4

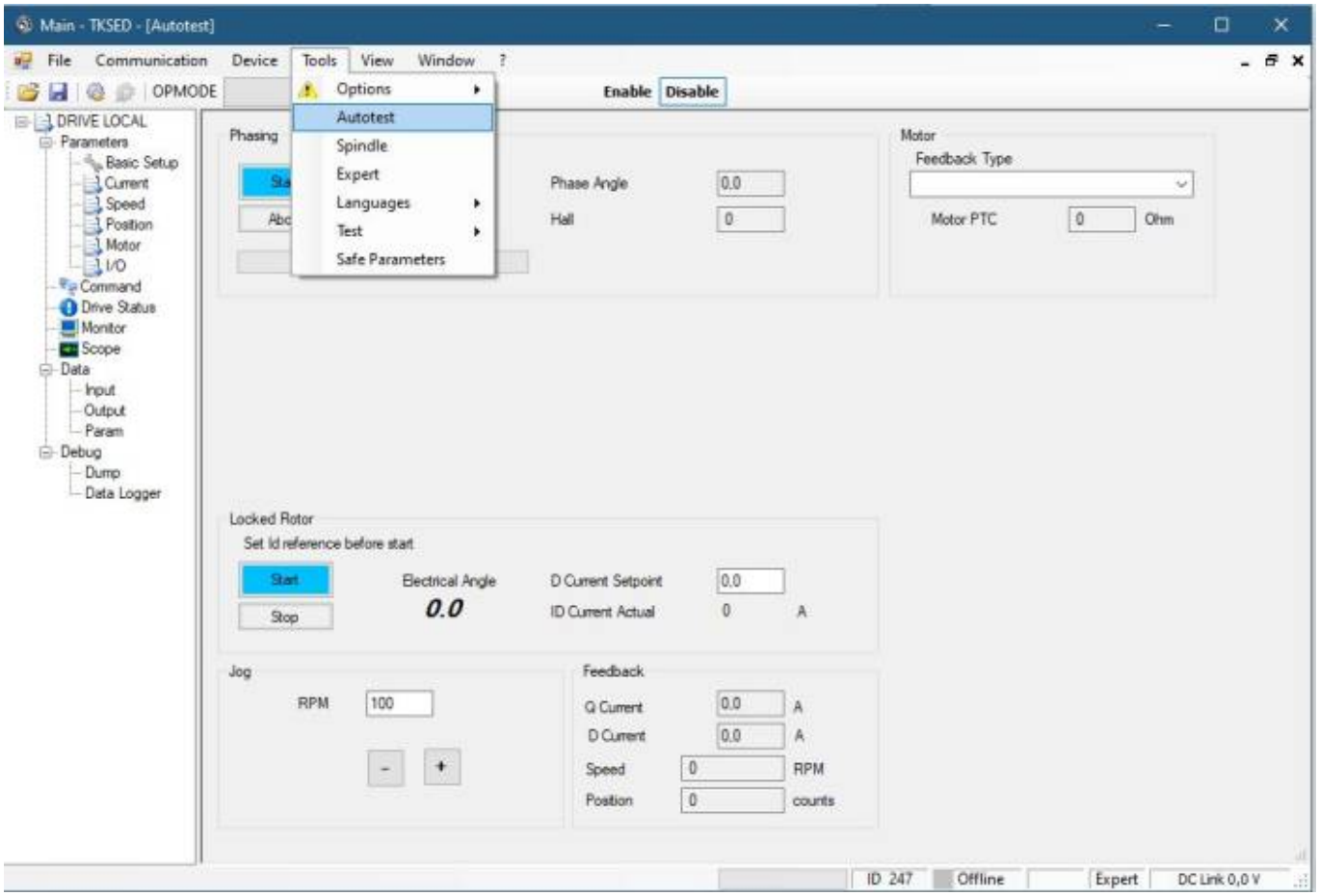
Please, check if the encoder is working correctly, using Mechanical angle information. When you rotate the shaft of the motor in clockwise direction the Mechanical angle value must increase from 0 to 360 degress. Consequently, the position counts must increase.
Please consider that Position counts are a normalized value (16 bits) from 0 to 65535.



Please, eneter in Amniistration mode using Device→Amministration menu with Password **BYstorm**.

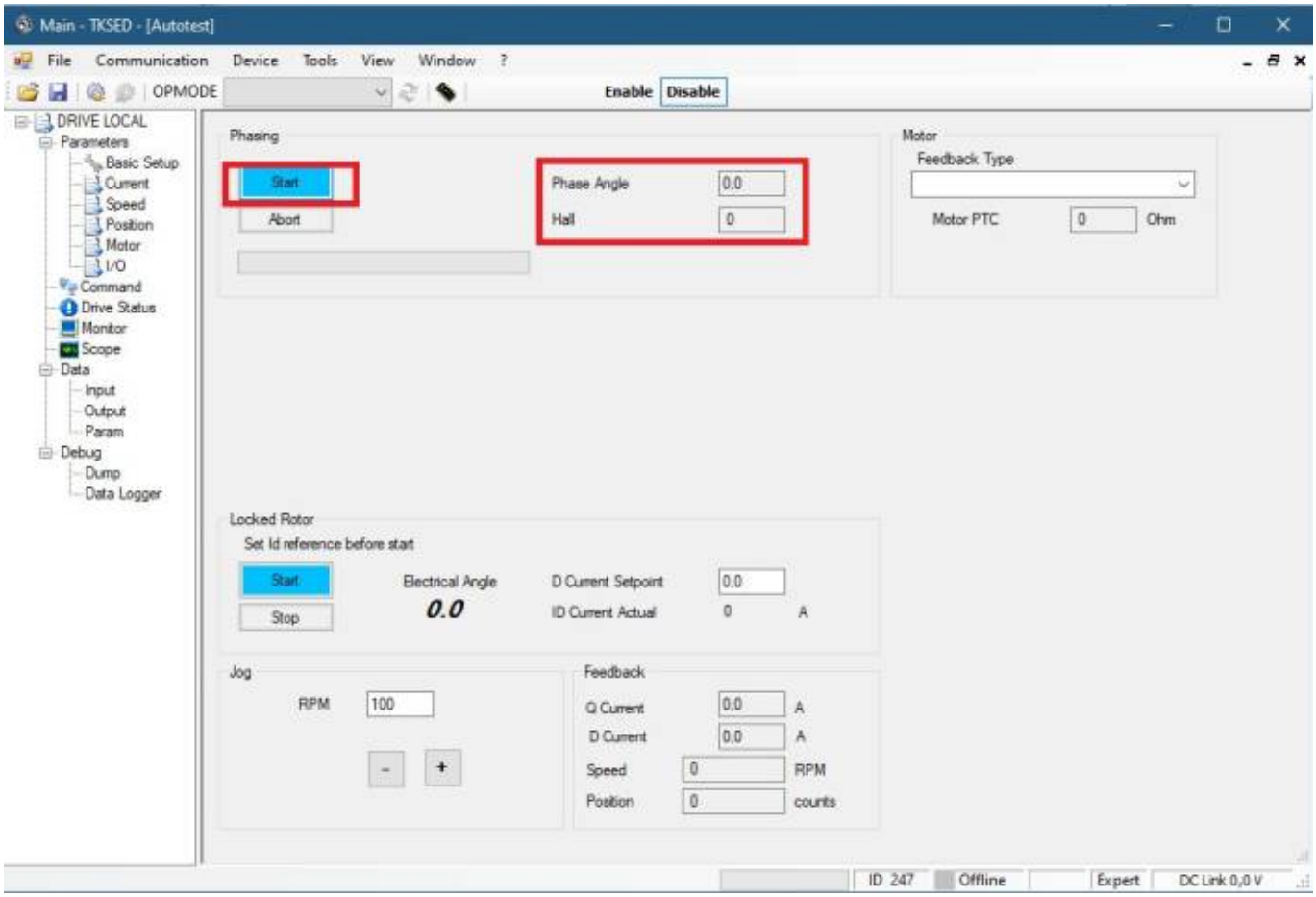


Then, select from Tools → Autotest to enter in setup window for the feedback.



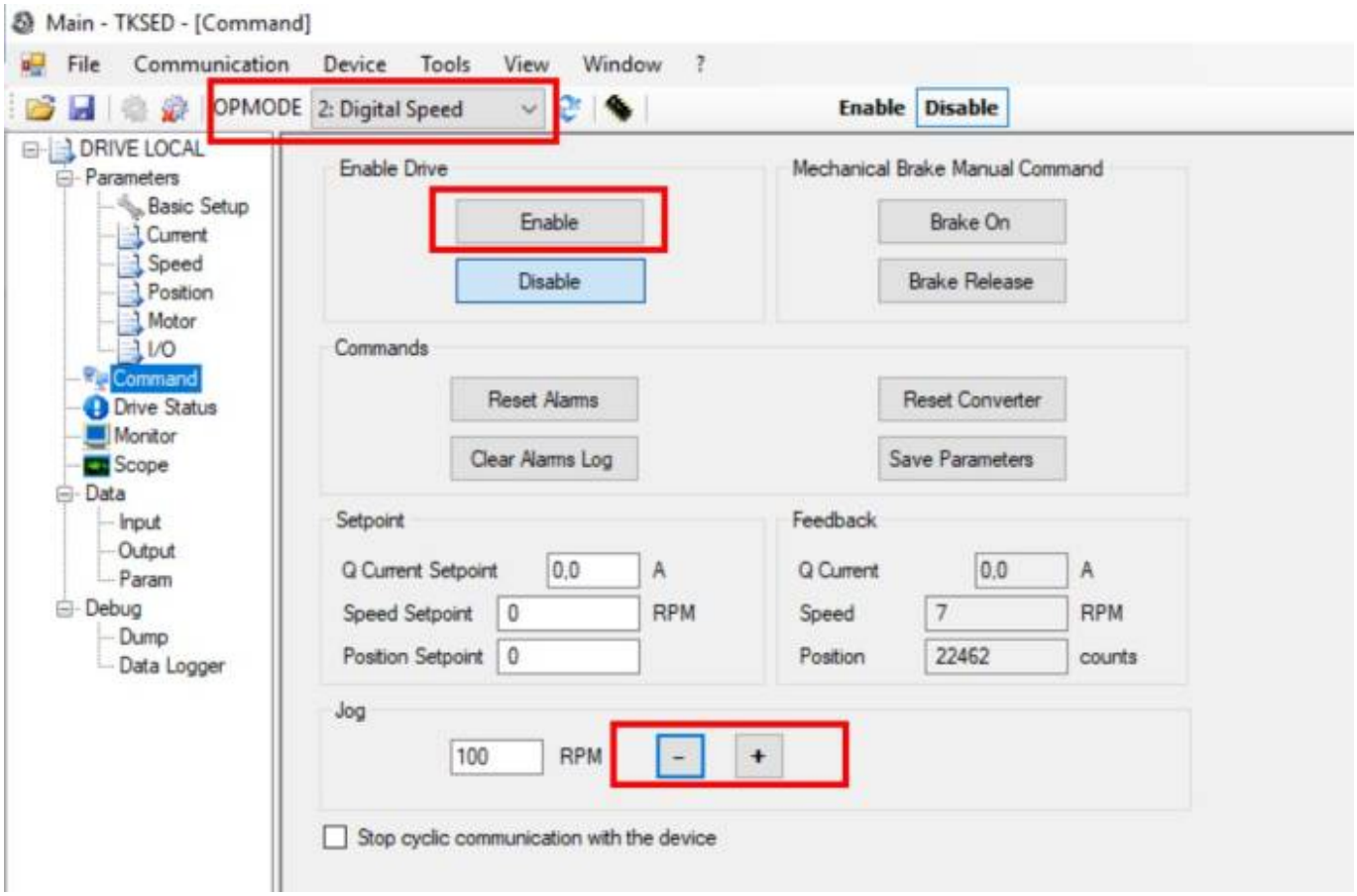
STEP 5

Please, press the button Start to start the procedure, the Hall number must increment during the phasing calculation. If the Hall numbers are not increasing the are faulty connections or the motor phases are not connected in the right sequences.At the end of the procedure the phase angle is calculated. The, write the phase value on the motor window on the field phase angle.



STEP 6

Use the command windon to step the correct functionality of the motor, setting the OPMODE to Digital speed, press the enable button and use the button + and - to move the motor. You can also specifiy a RPM speed.



STEP 7

Please, remember to store all the data inside the EEPROM of the drive using the button on the toolbar before switch-off the 24VDC.