

Our measurements on the power input for VM, measured at the capacitors C4, C5 and C6 on the BOOSTXL. All measurements operated below 20 kHz of PWM frequency.

The following figures can be provided:

Figure DS0004.png: 10% duty cycle on PWM frequency → current flow 2 A

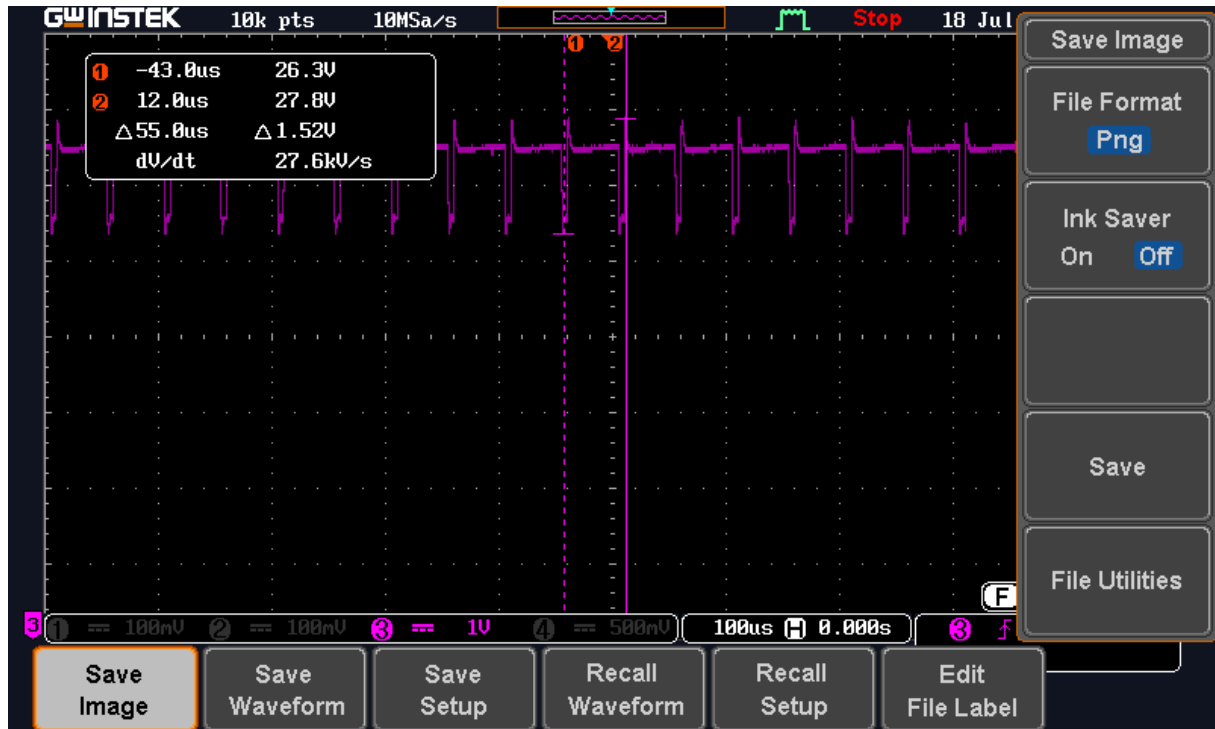


Figure DS0007.png: 15% duty cycle → current flow 5.7A

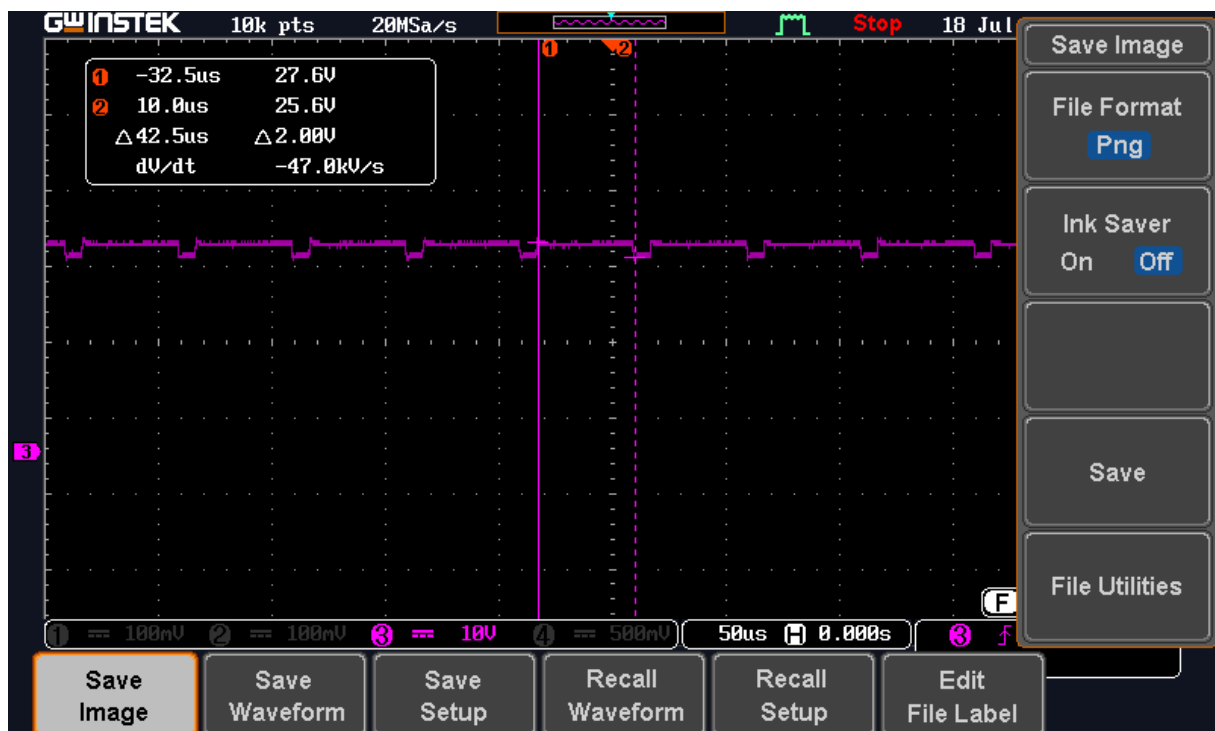


Figure DS0011.png: 15% duty cycle → investigation of peaks inside a PWM cycle – manual motor standstill .

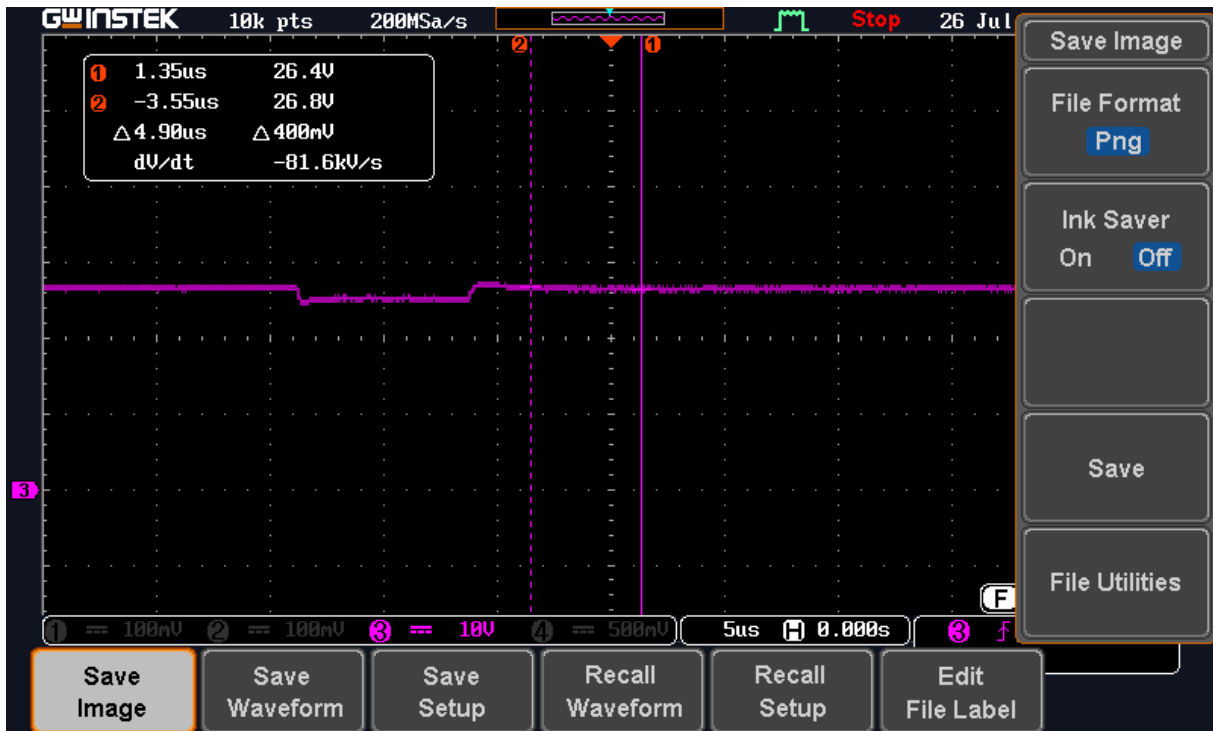


Figure DS0014.png: 15% duty cycle → saccade of the motor → current flow 5.7A

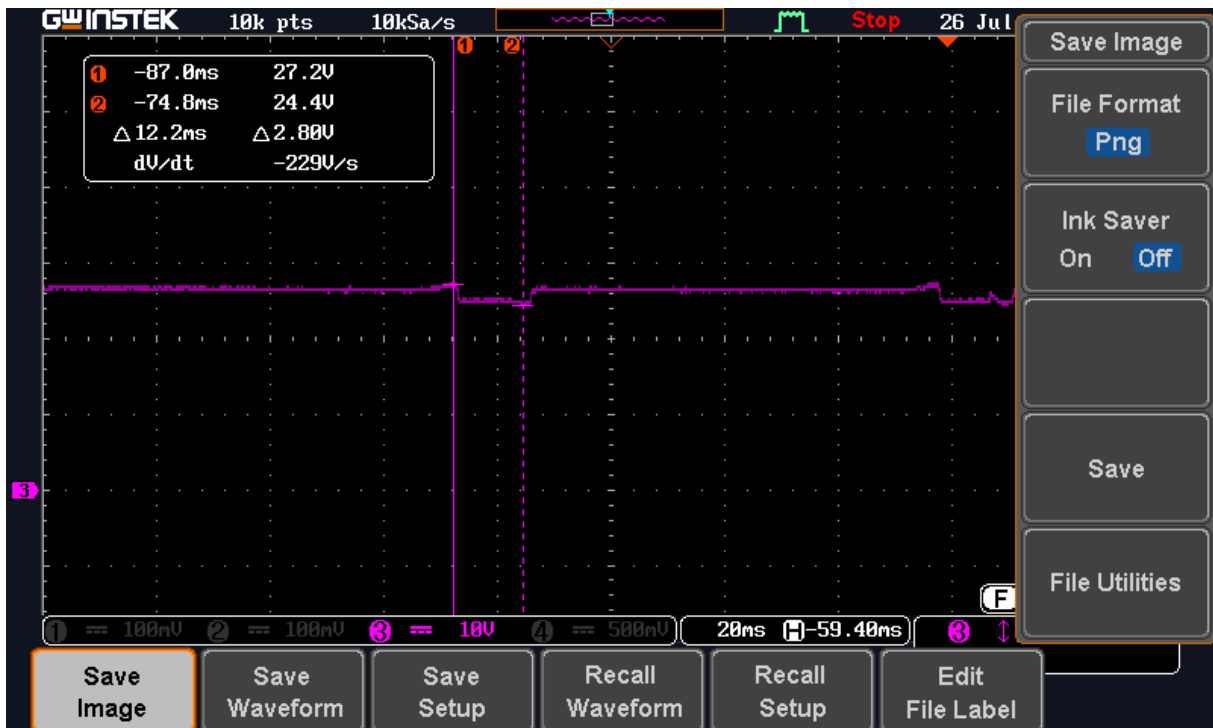


Figure DS0017.png: 15% duty cycle → saccade of the motor – higher resolution; difference voltage between low-level peak and high-level peak.

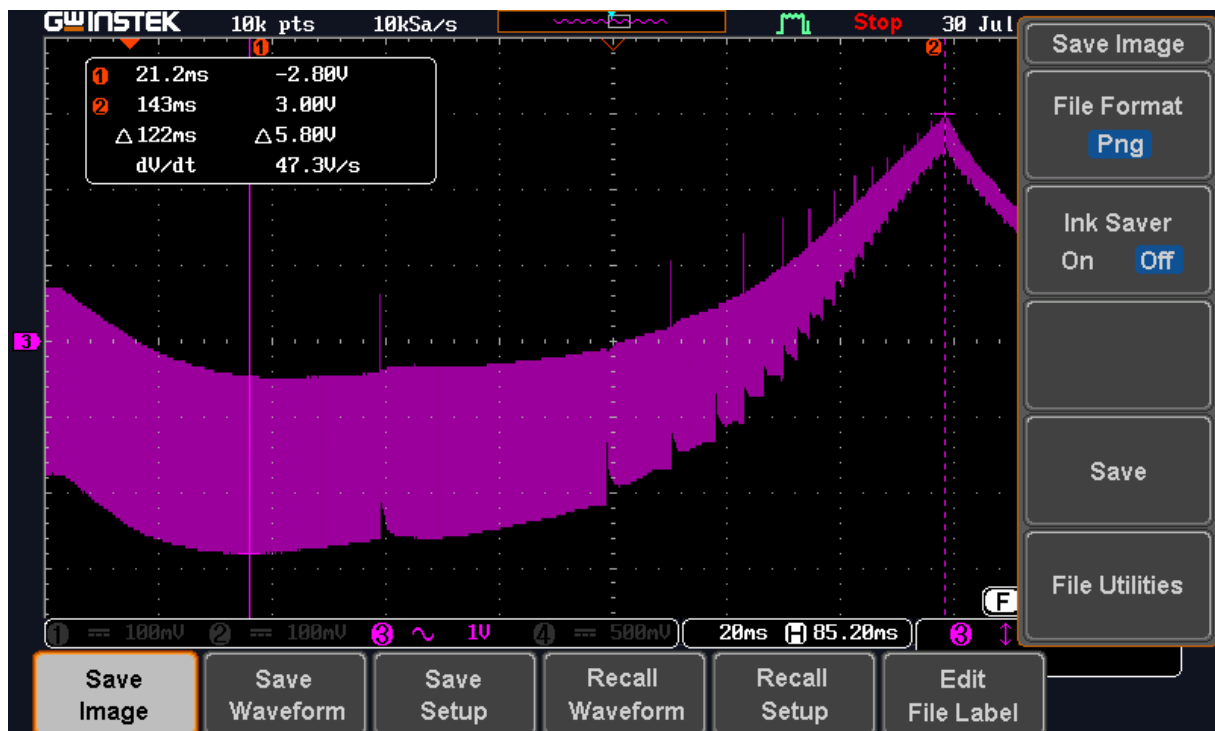


Figure DS0018.png: 15% duty cycle – saccade of the motor – higher resolution; attention to the markers.



Figure DS0019.png: 15% duty cycle – higher resolution – one marker set to the beginning of the manual brake process, next marker to the end of the manual brake process



Figure DS0012.png: 20% duty cycle → start-up the motor rotation. That is the point at time 0s when the motor starts moving.

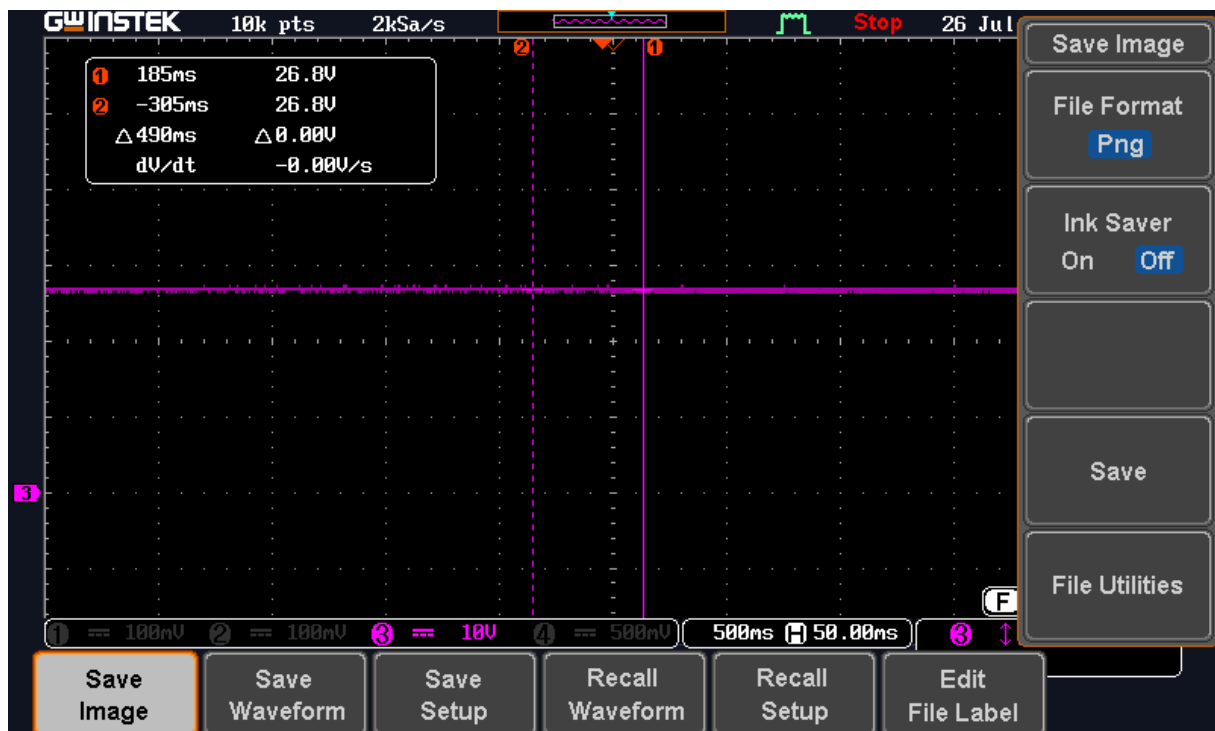


Figure DS0013.png: 20% duty cycle → start-up the motor. – no distortion visible

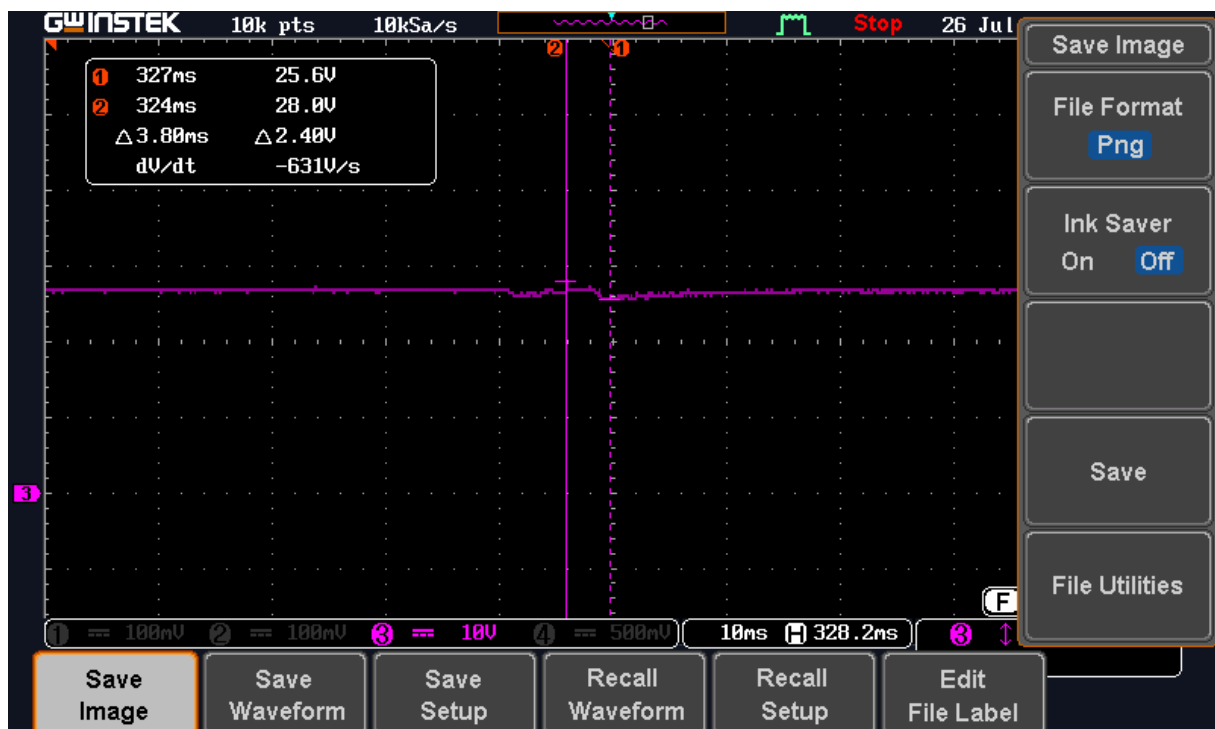


Figure DS0015.png: 20% duty cycle. → start-up of motor - higher resolution → no distortion signal visible

