

Titolo:	Report 02-26 – Test motors failure
Redatto da:	Nereo Talli
Data:	02/02/2026

Revisione	Data	Descrizione
00	02/02/2026	First draft

## Sommario

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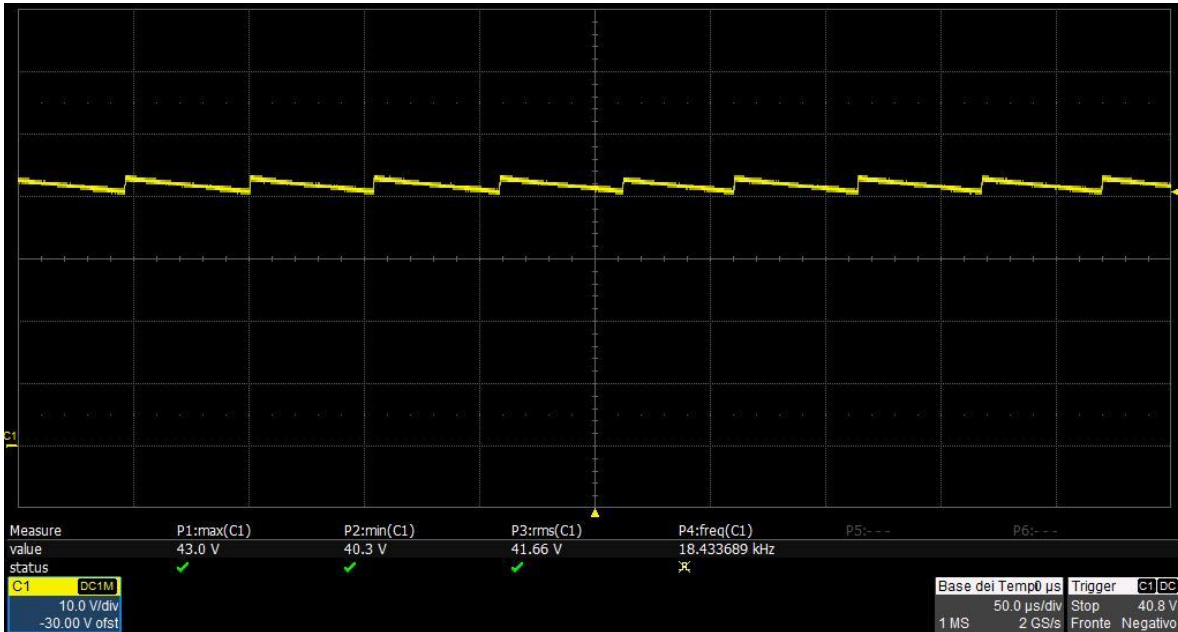
## 1. Introduction

Screenshot of test and test failure

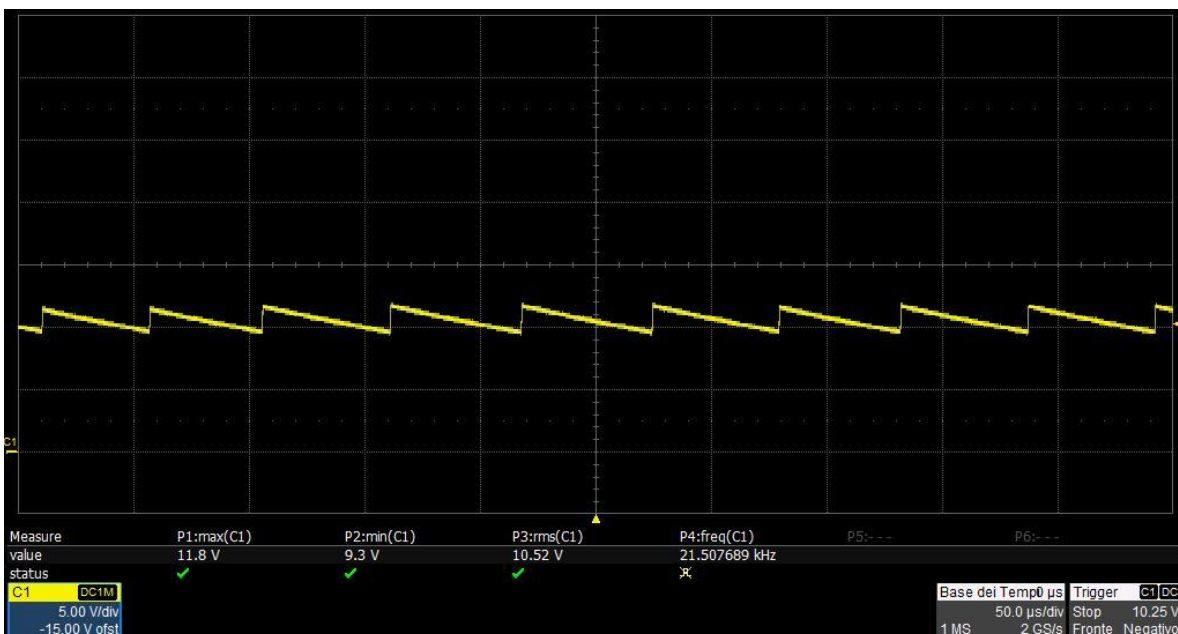
VM = 31VDC

MOSFET = STL50DN6F7 (VDS=50v, ID=57A, VGS treshold=4v)

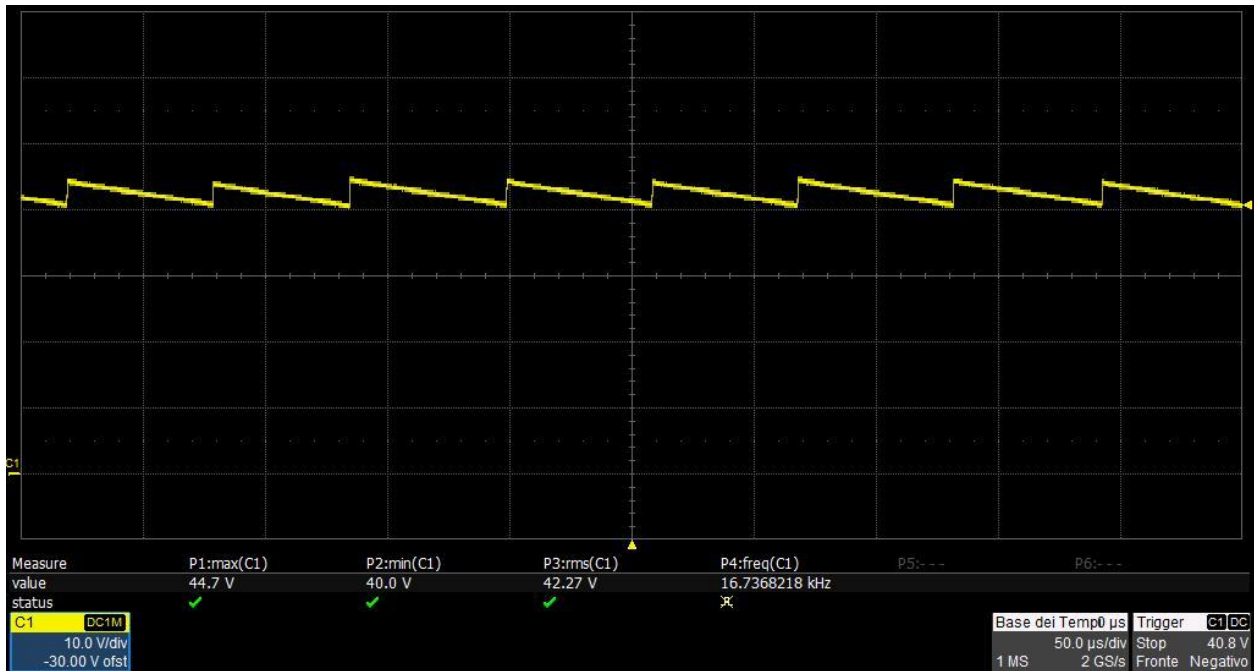
## Tests



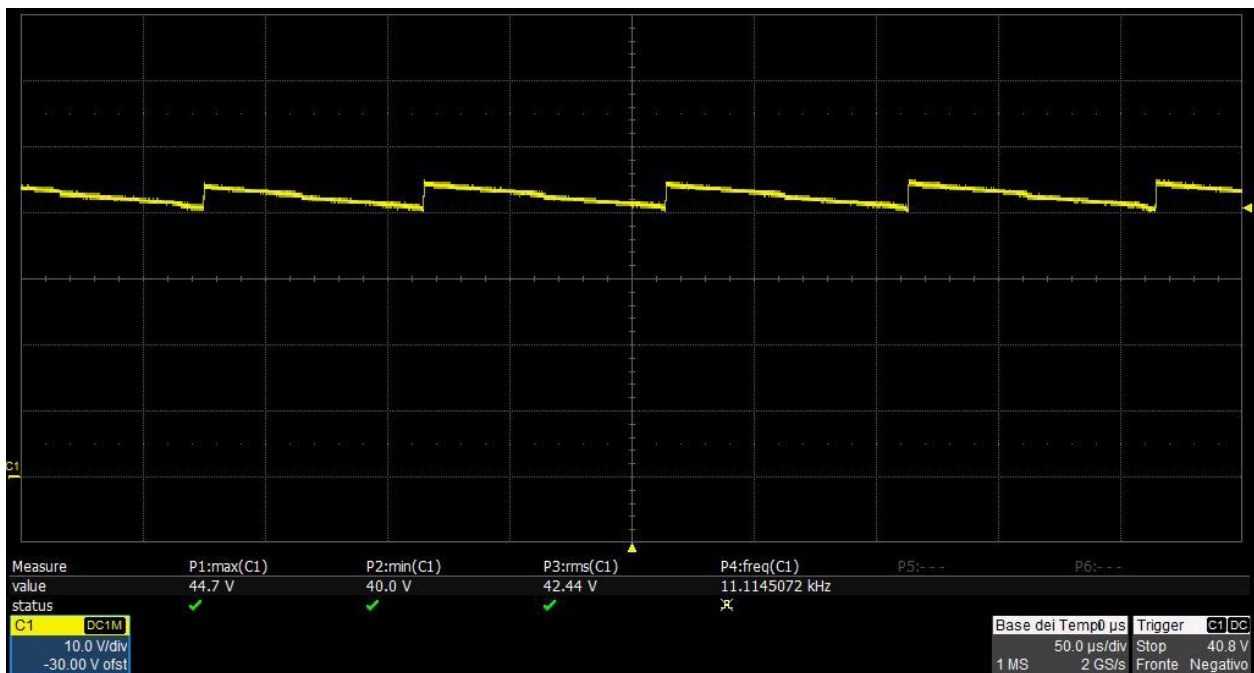
VCP voltage to GND with 1uF (motor ON or OFF, the voltage is the same)



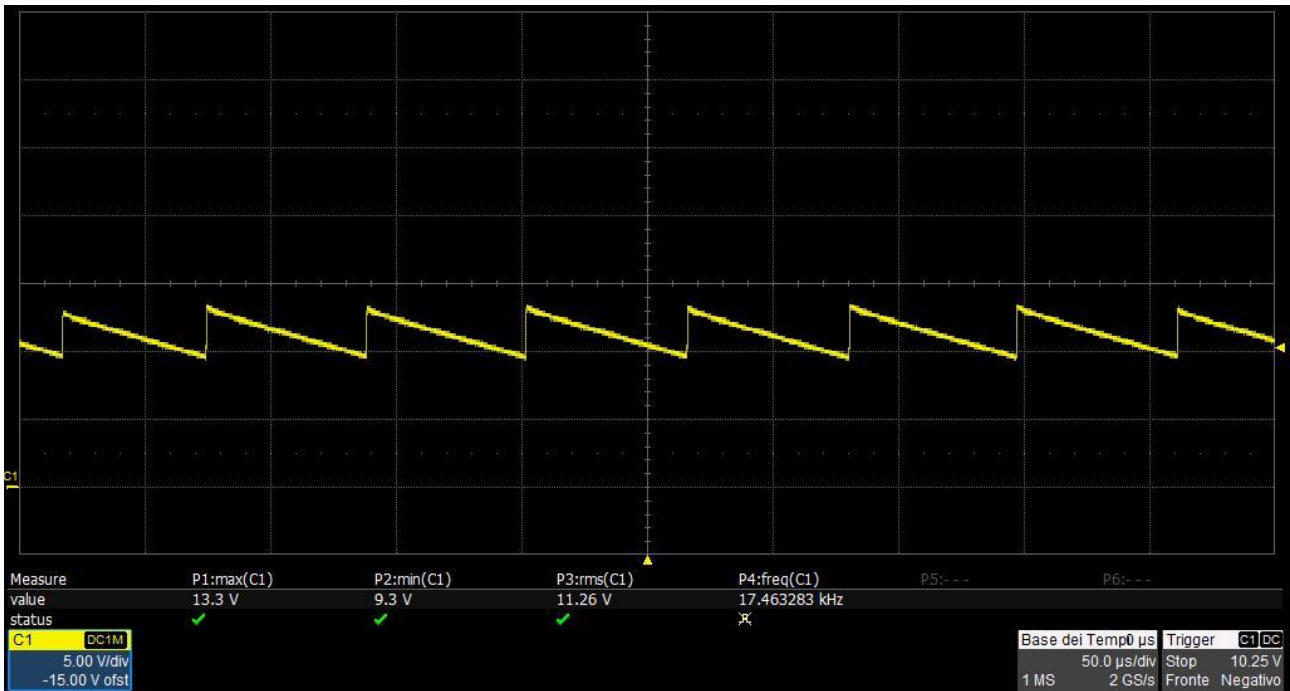
VCP voltage to VM with 1uF (motor ON or OFF, the voltage is the same)



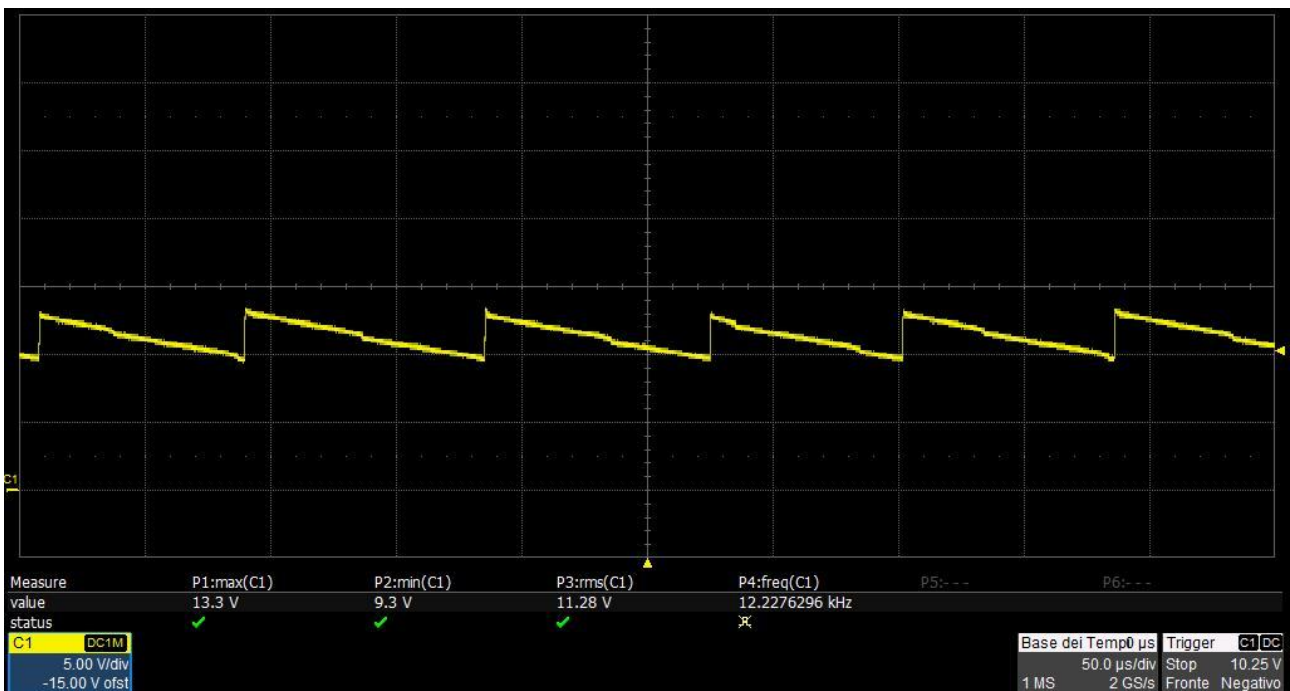
VCP voltage to GND with 100nF motor OFF (without command on motor)



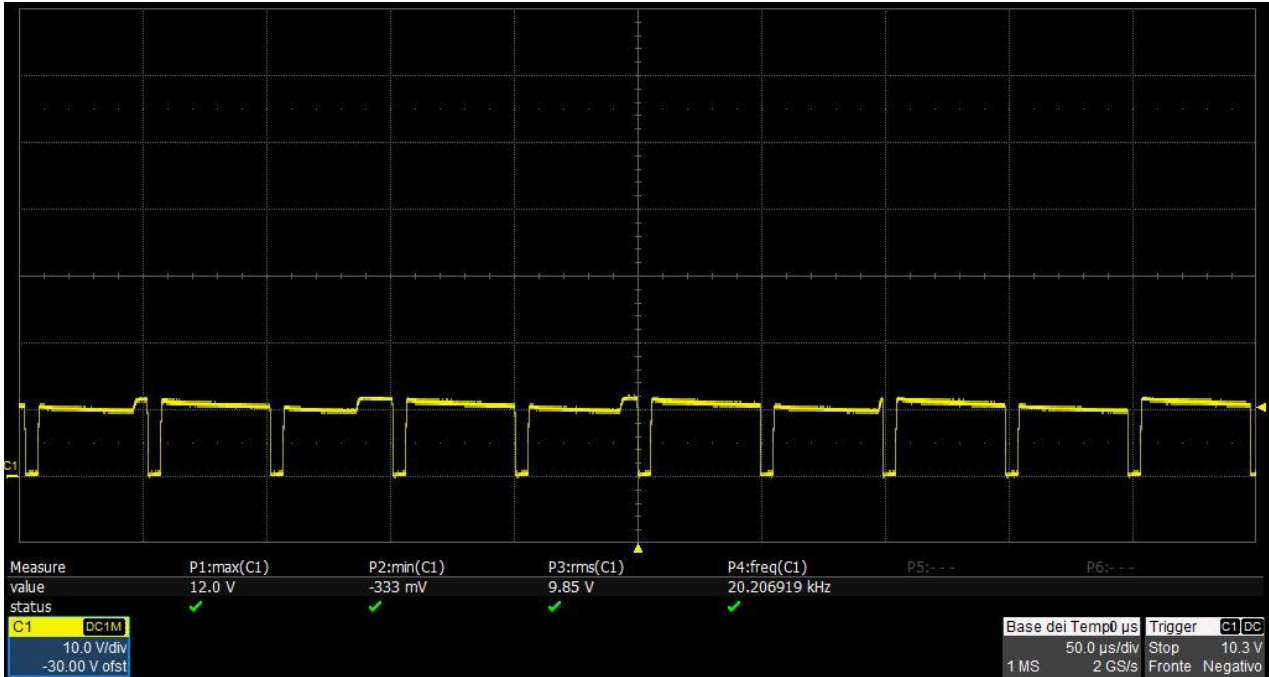
VCP voltage to GND with 100nF motor ON (with motor command, motor turns)



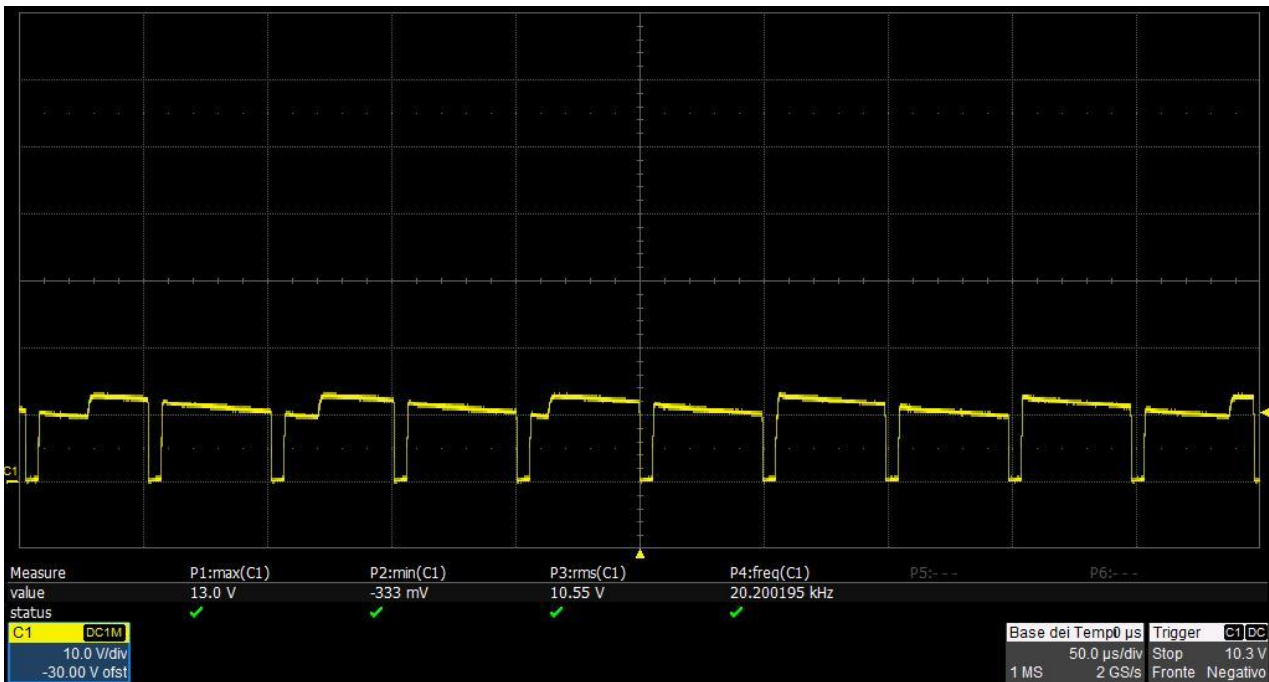
VCP voltage to VM with 100nF motor OFF (without command on motor)



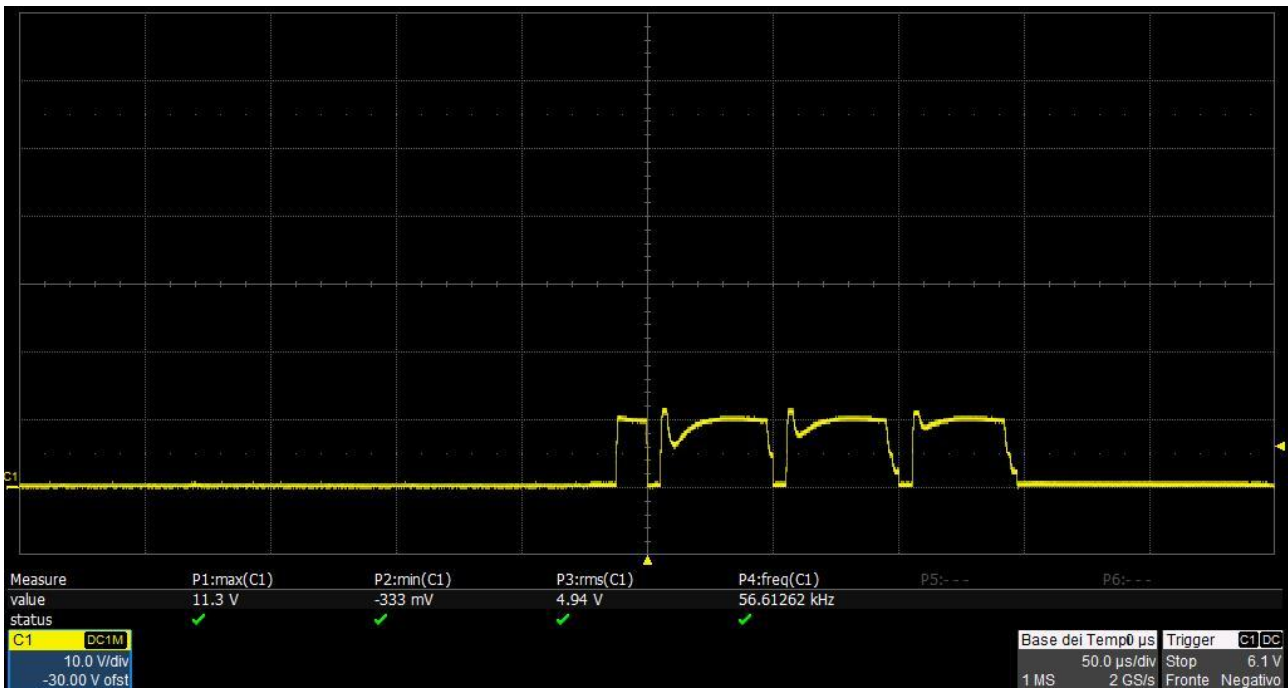
VCP voltage to VM with 100nF motor ON (with motor command, motor turns)



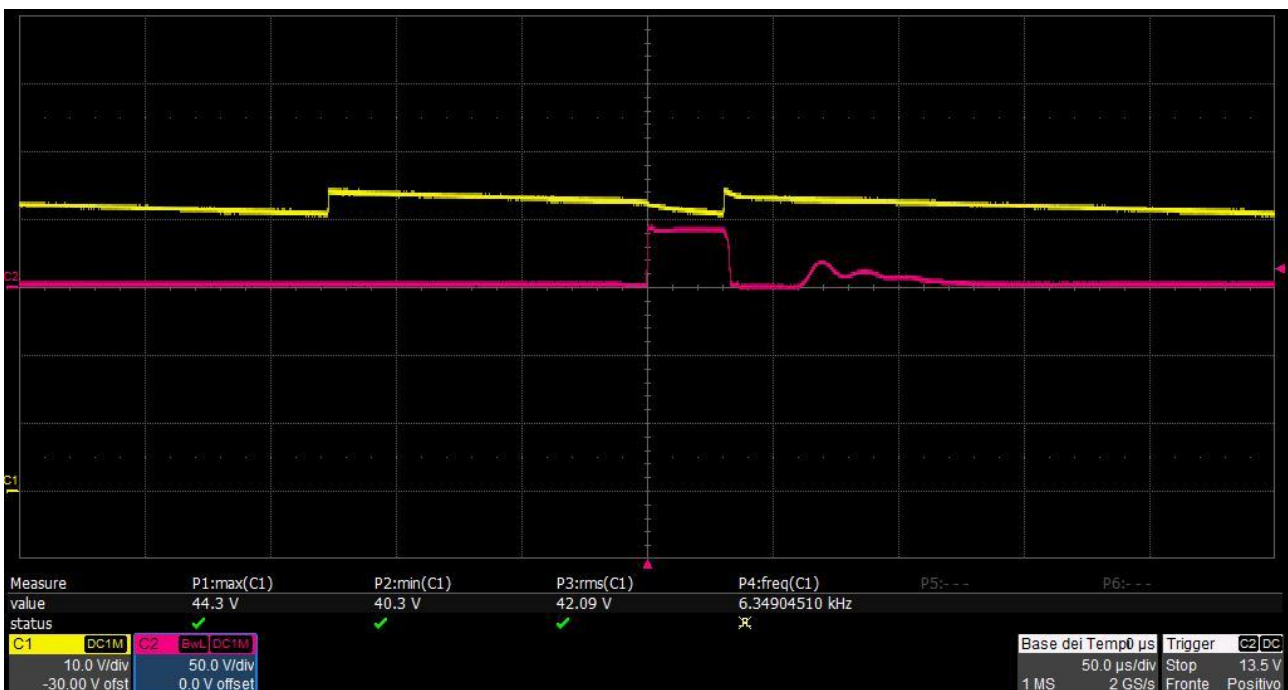
VGH2 voltage ( pin 26 ) with 1 $\mu$ F on VCP



VGH2 voltage ( pin 26 ) with 100nF on VCP without failure

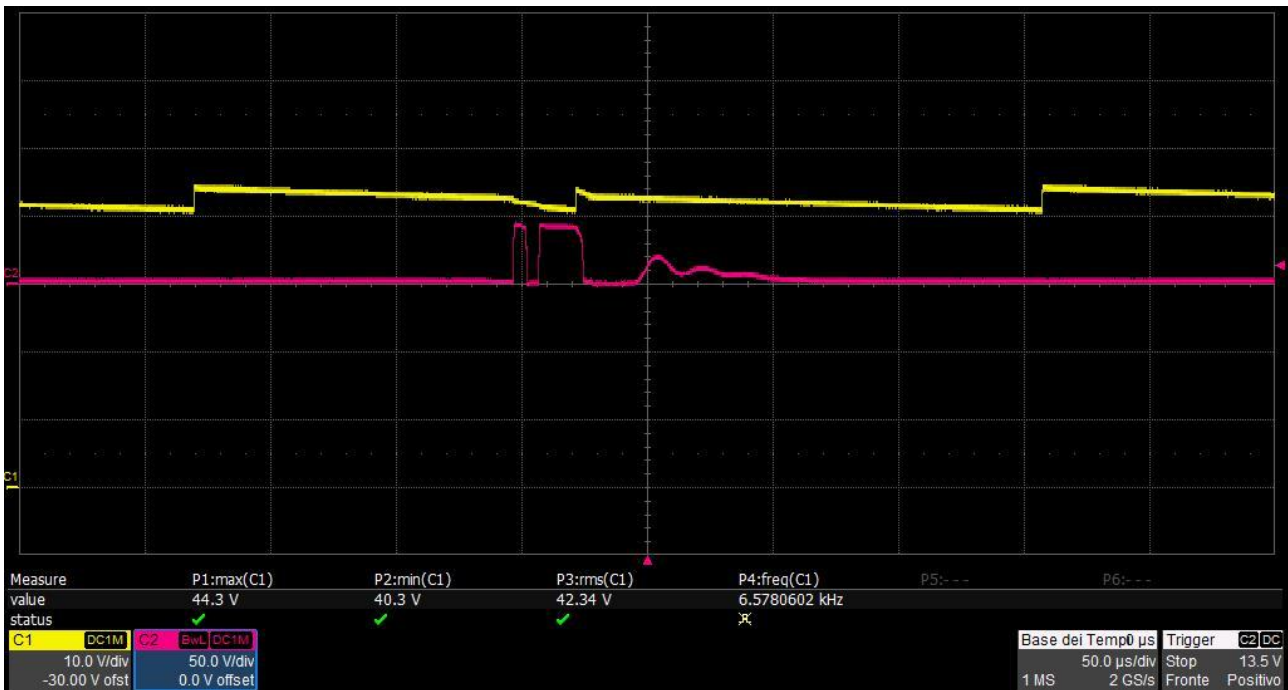


VGH2 voltage ( pin 26 ) with 100nF on VCP with failure



Trace 1 = VCP voltage to GND with 100nF with failure

Trace 2 = VGH2 voltage ( pin 26 ) with 100nF on VCP with failure



Same as previous trace

Trace 1 = VCP voltage to GND with 100nF with failure

Trace 2 = VGH2 voltage ( pin 26 ) with 100nF on VCP with failure