



# Electronics hardware items

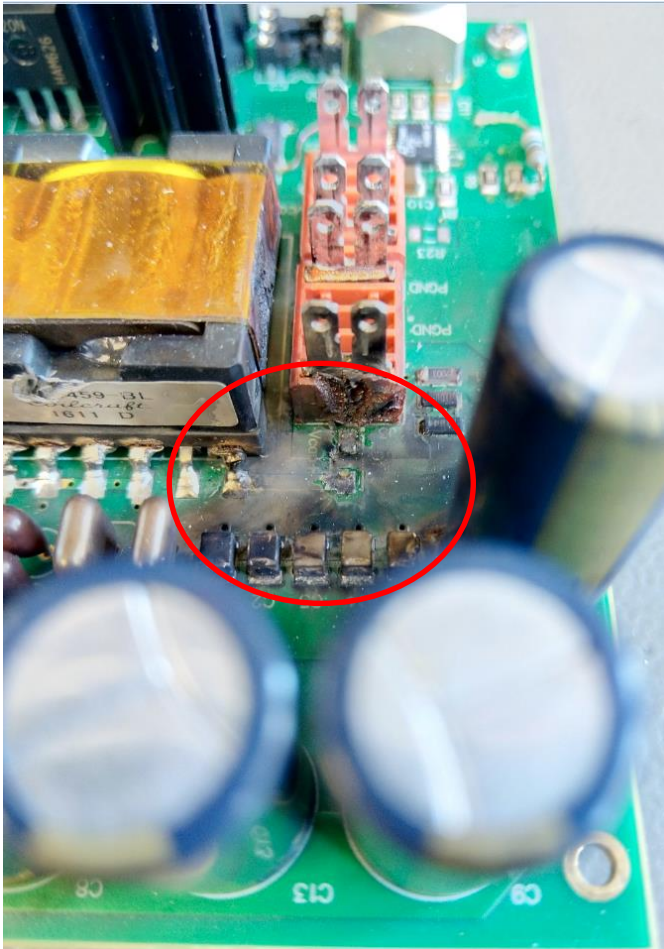
EDA	Designation	Description	Rev.	Status	
EDA-03592	BWSCPC	BWS – Capacitor Power Charger	V3	Issue with the design	Mitigation under tests
EDA-03519	BWSMIB	BWS – Motor Inverter Board	V2	Proto to test inside IDC	
EDA-03096	BWSAIF	BWS – Analog Interface FMC	V3	2 proto ready for tests	
EDA-03624	BWSFHE	BWS – FMC Height Extender	V2	ok	
EDA-03698	BWSVPA	BWS – VME Power Adapter	V1	ok	
EDA-03764	BWSPSA	BWS – Particle Shower Acquisition	V1	Tested with beam	
EDA-03634	BWSIDC	BWS – Intelligent Drive Crate	V2	Released in EDMS	
	BWSIDC	Mechanics	V2	Prototyping w BI/ML	
	BWSIDC	Cables harness	V1	Prototyping w EN/EA	
EDA-03697	BWSMCU	BWS – Motion Control Unit	V2	Released in EDMS	
	BWSMCU	Mechanics	V2	Pro. 25 units w PENTAIR	
	BWSMCU	Cables harness	V1	Prototyping w EN/EA	



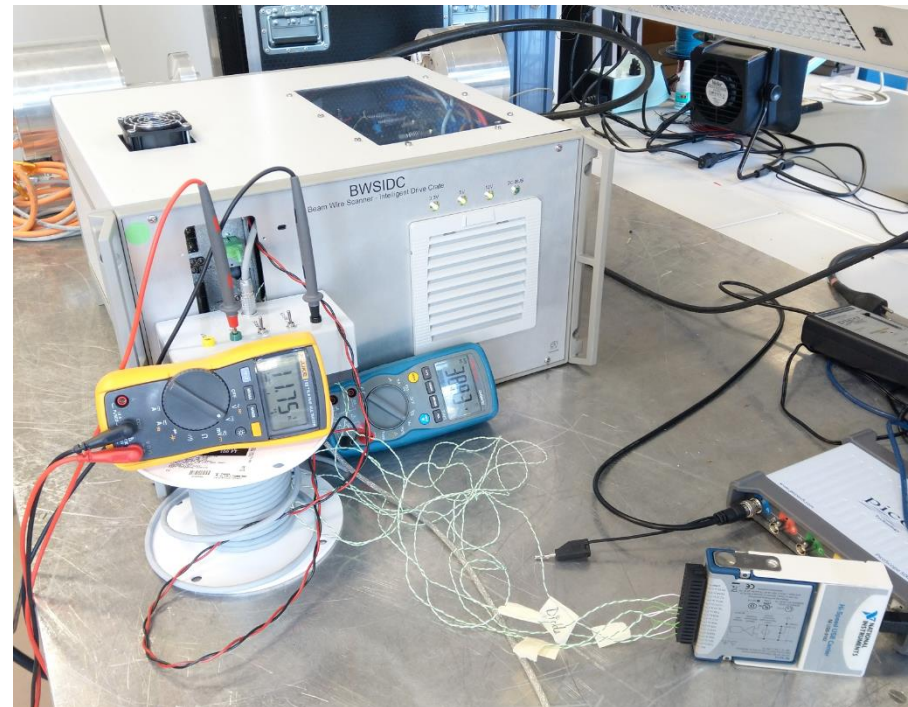
# EDA-03592 V3

## BWS – Capacitor Power Charger

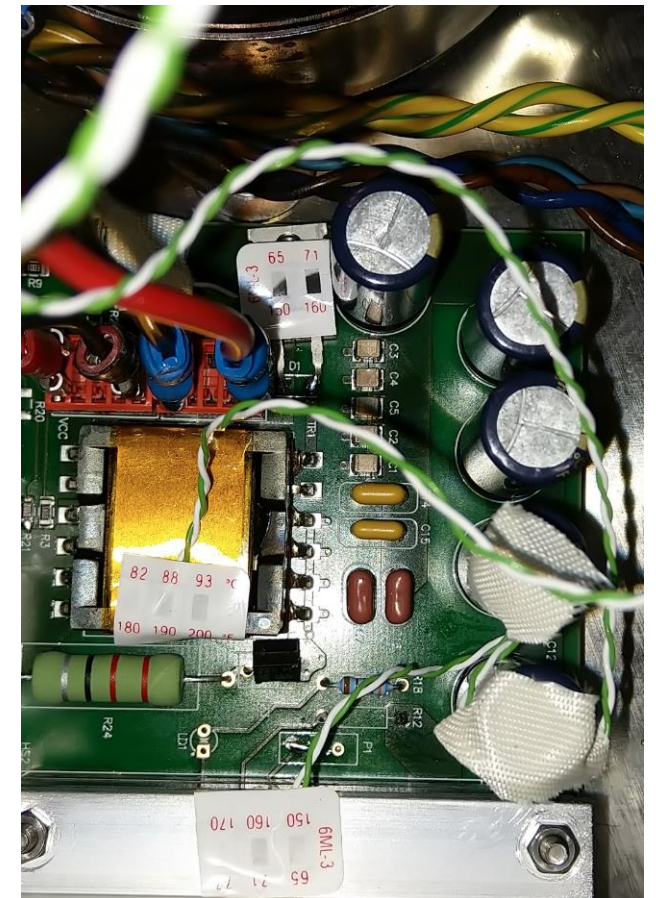
Charger V2 used in the PS run 2018  
Pushed to 140 rad every 10s – 50 times



Test setup – temperature measurements



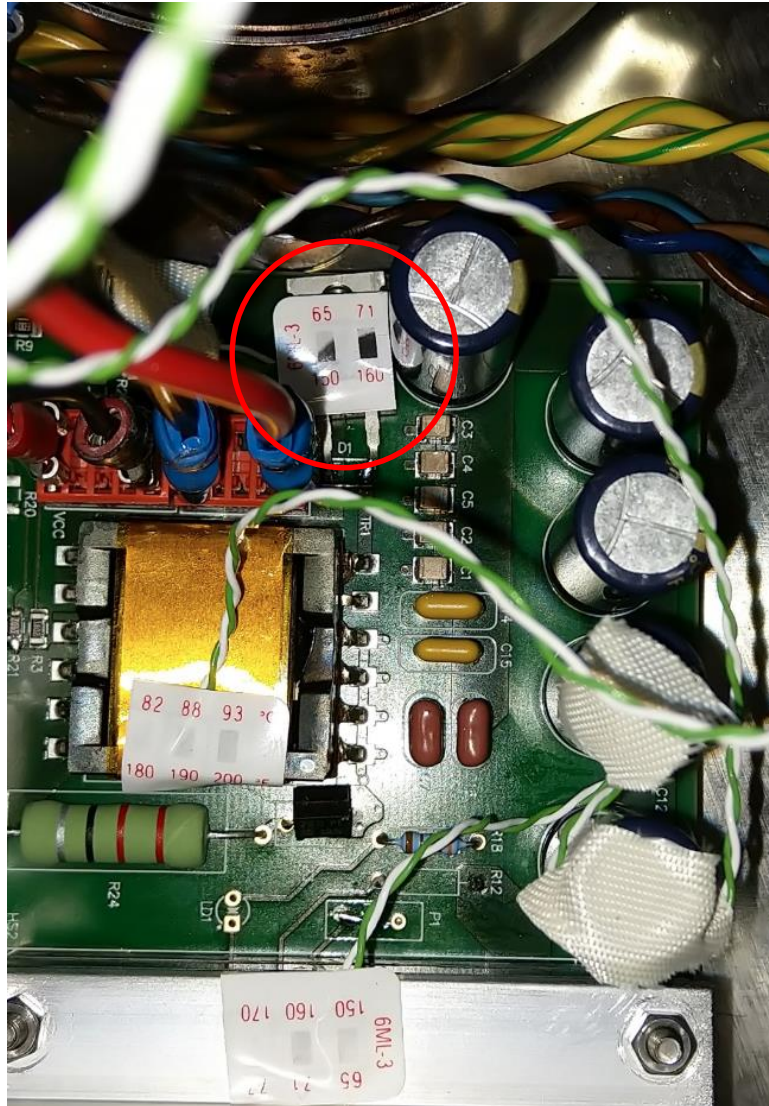
Charger V3  
with 1<sup>st</sup> replacement diode





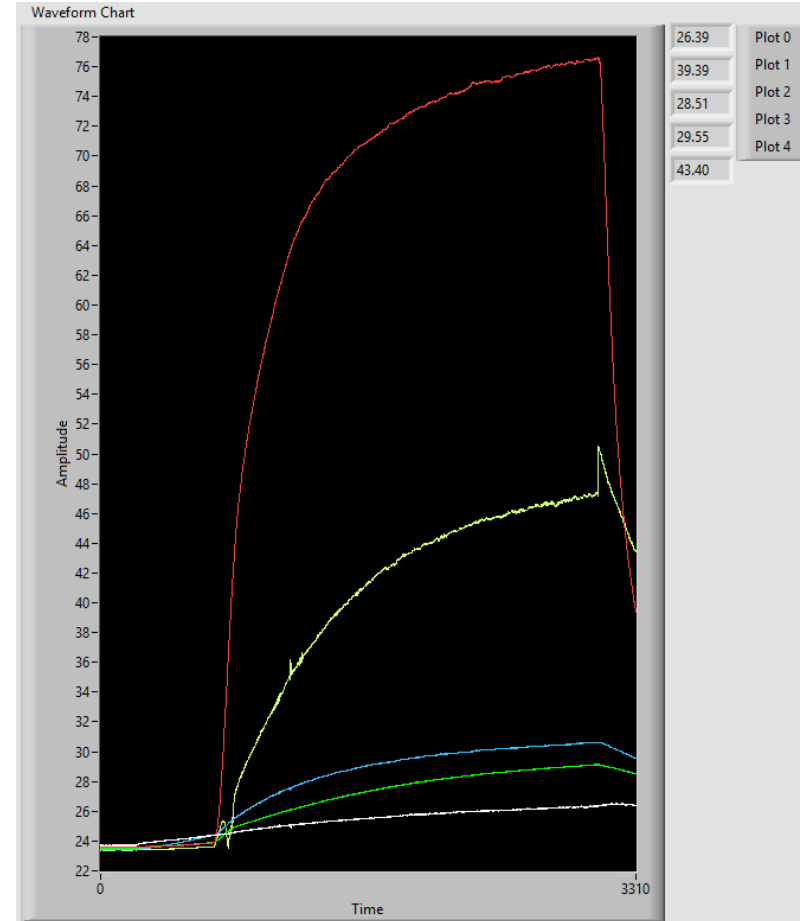
# EDA-03592 V3

## BWS – Capacitor Power Charger



Charger V3  
with 1<sup>st</sup> replacement diode

Goes to 78 deg – without scans...





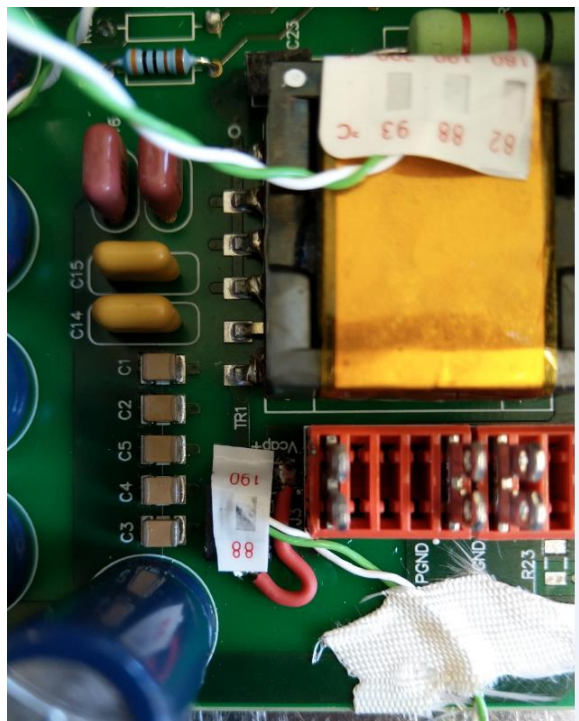
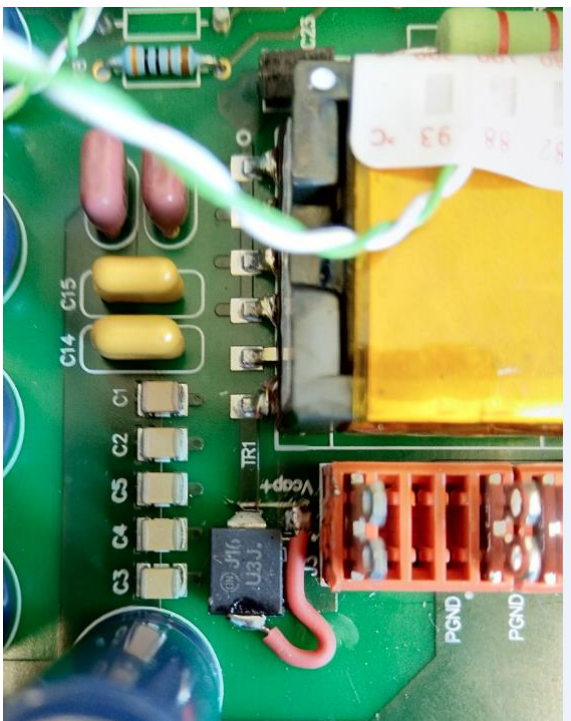
# EDA-03592 V3

## BWS – Capacitor Power Charger

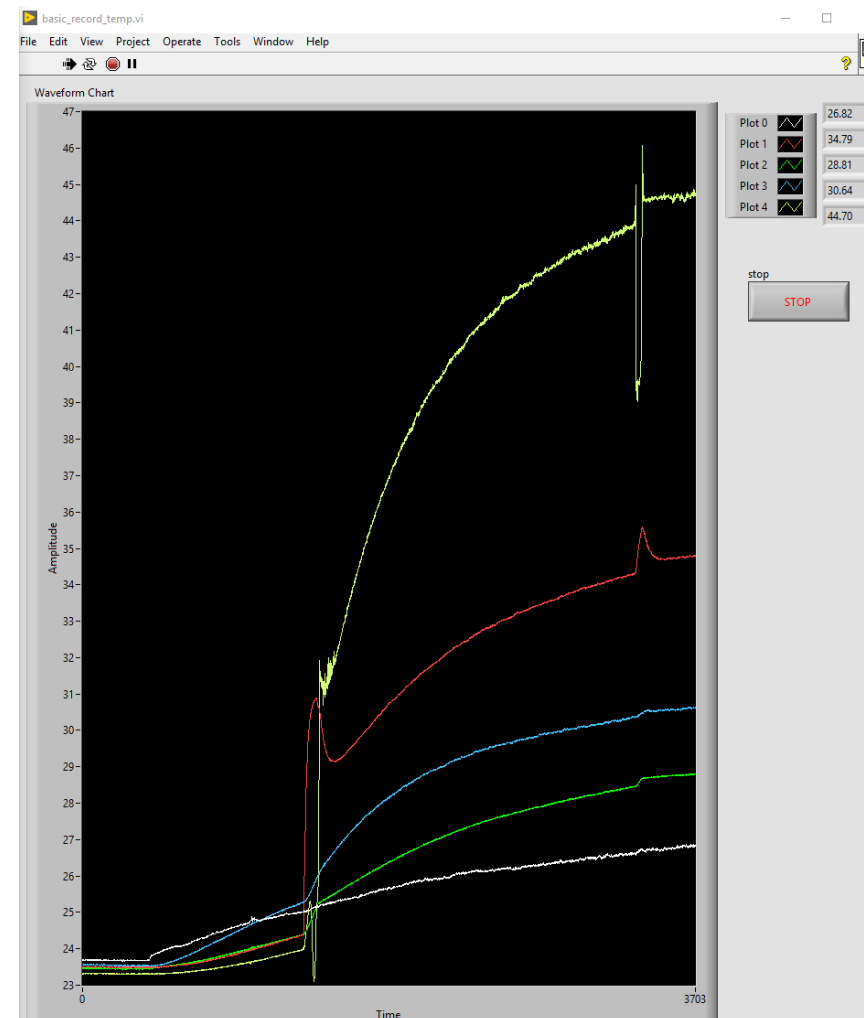
Charger V3

with 2<sup>st</sup> replacement diode MURS360

Temperature goes to 35 deg – NO SCANS



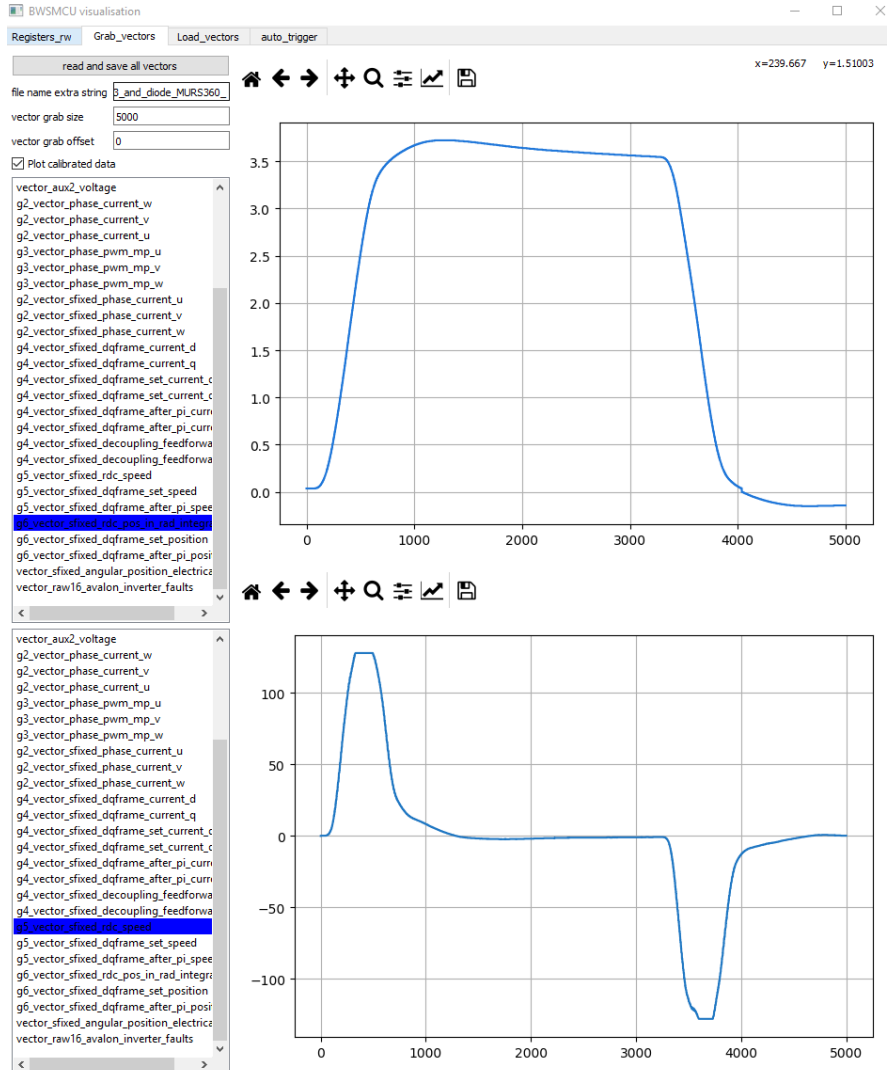
BWS - electroncis - status - 04.02.2019





# EDA-03592 V3

## BWS – Capacitor Power Charger

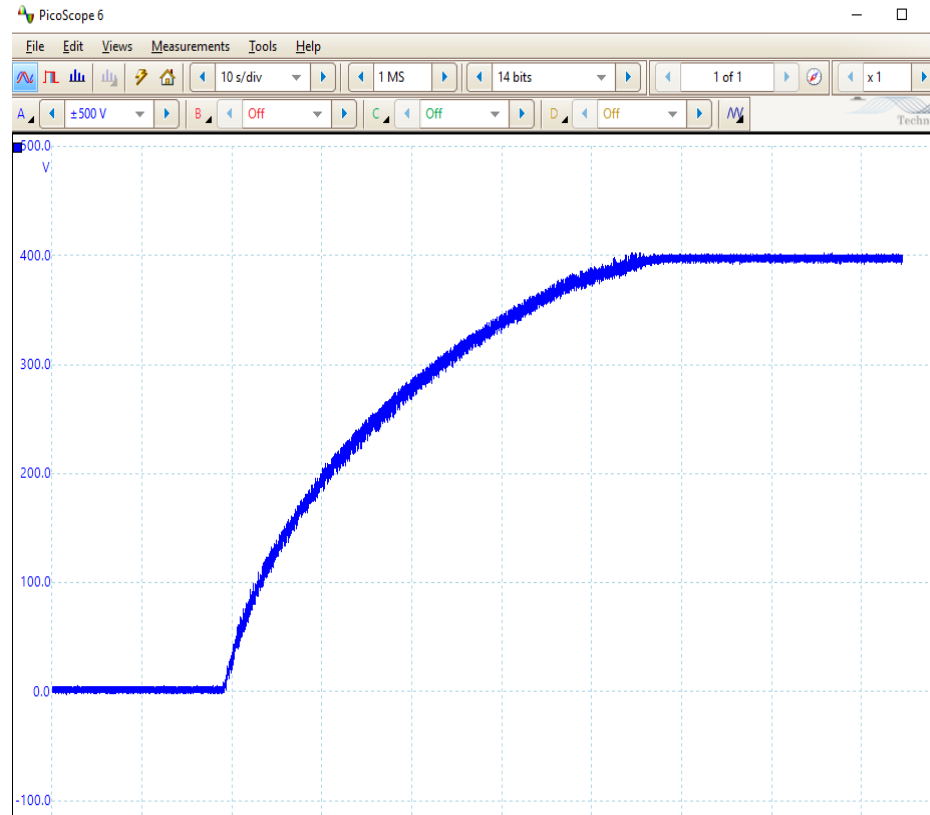




# EDA-03592 V3

## BWS – Capacitor Power Charger

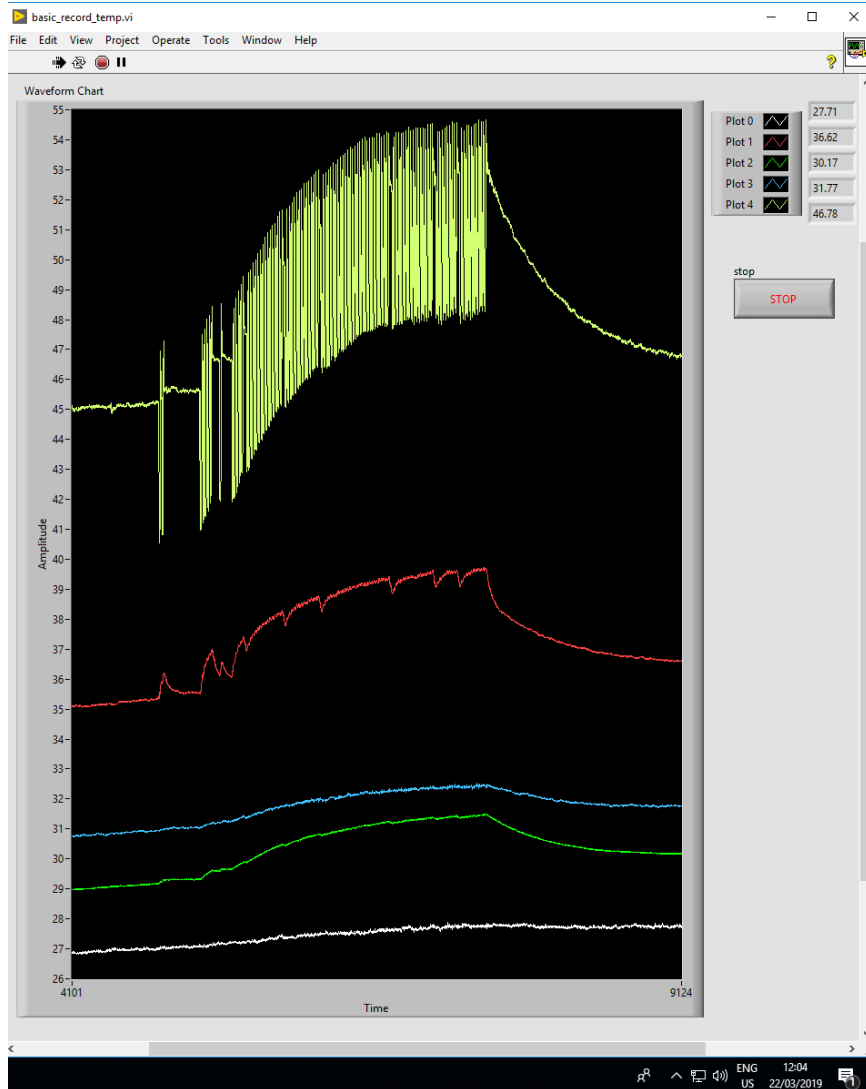
Charger V3  
with 2<sup>st</sup> replacement diode MURS360  
CHARGE TIME ~50s





# EDA-03592 V3

## BWS – Capacitor Power Charger

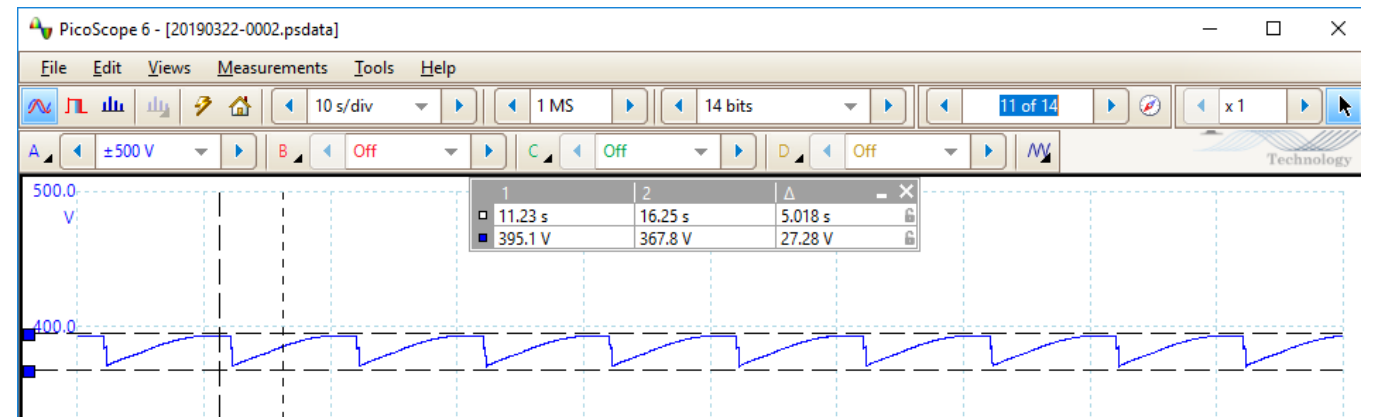


Charger V3

with 2<sup>st</sup> replacement diode  
MURS360

Scan every 10s – 50 scans

Temperature goes to 40[deg]  
Temperature DCDC transformer to  
max 55 [deg]





# EDA-03592 V3

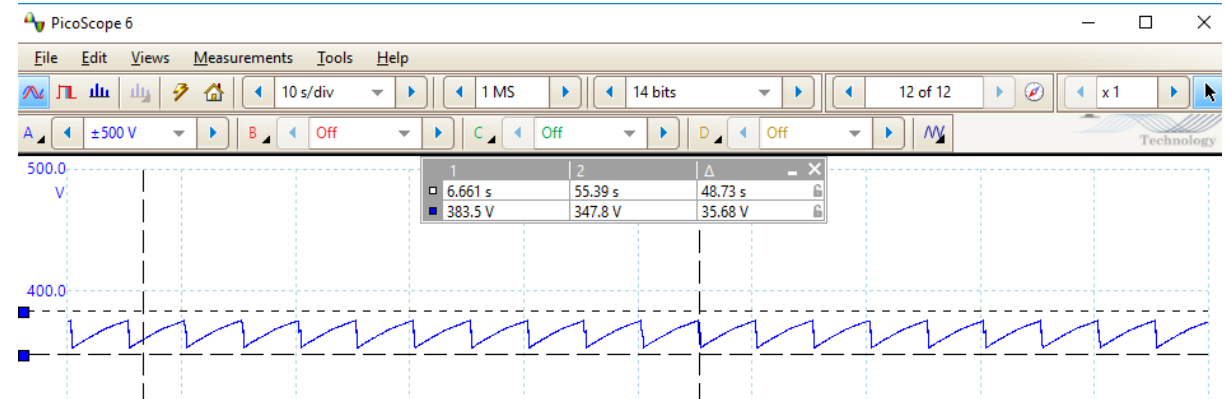
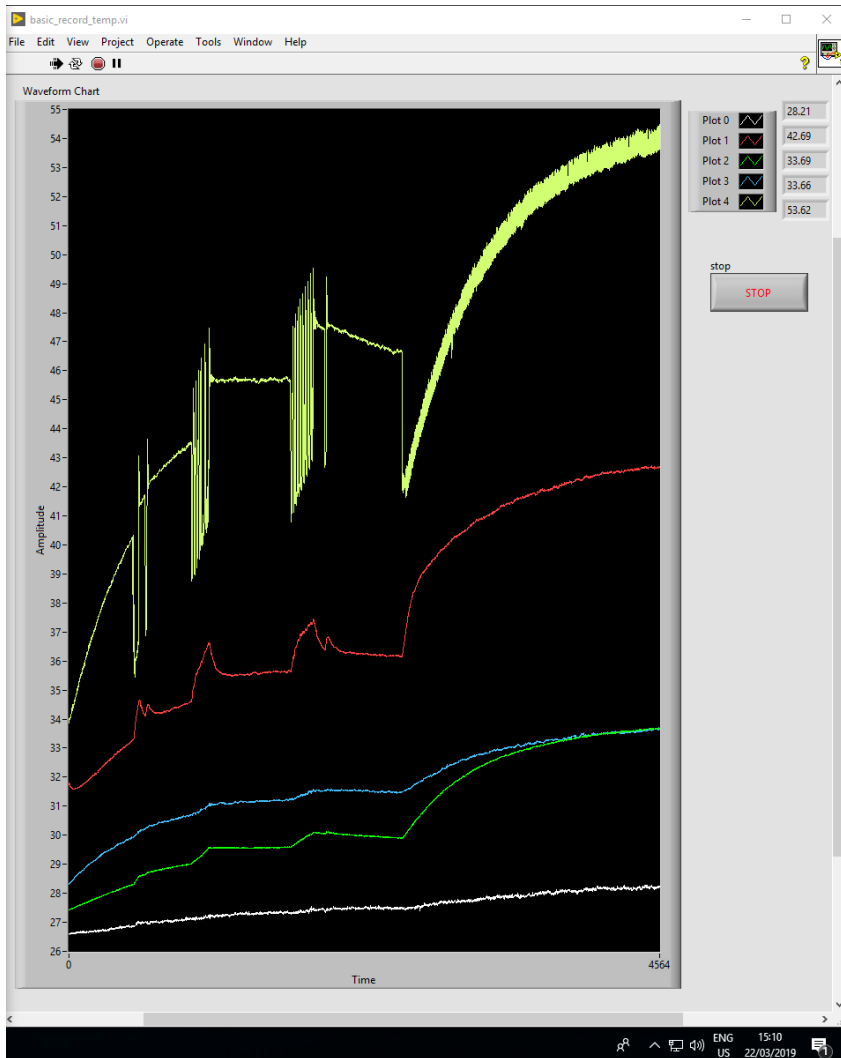
## BWS – Capacitor Power Charger

Charger V3

with 2<sup>st</sup> replacement diode  
MURS360

Scan every 5s – 201 scans

Temperature goes to 43[deg]  
Temperature DCDC transformer to  
max 55 [deg]







# EDA-03592 V3

## BWS – Capacitor Power Charger

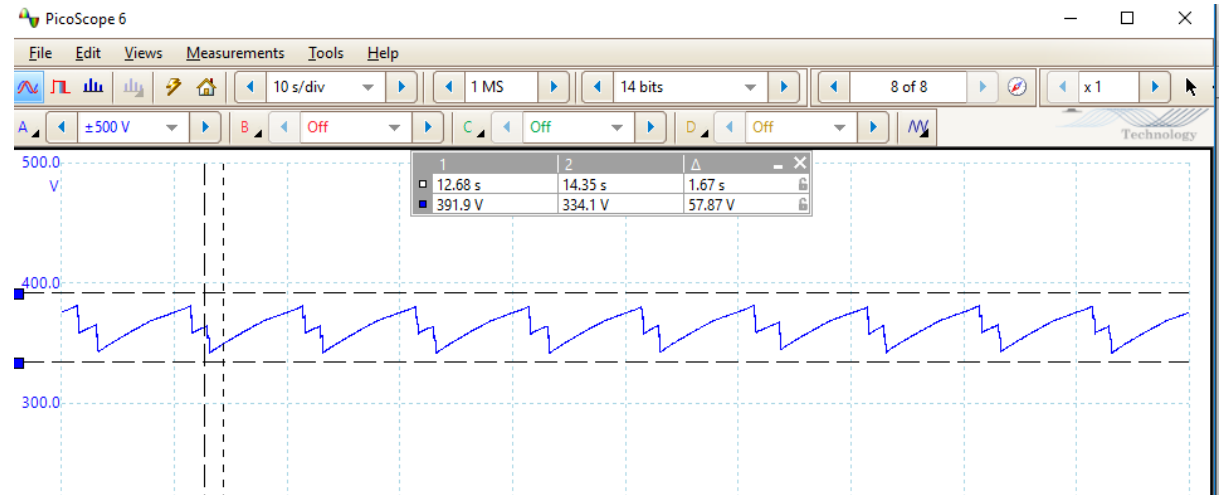
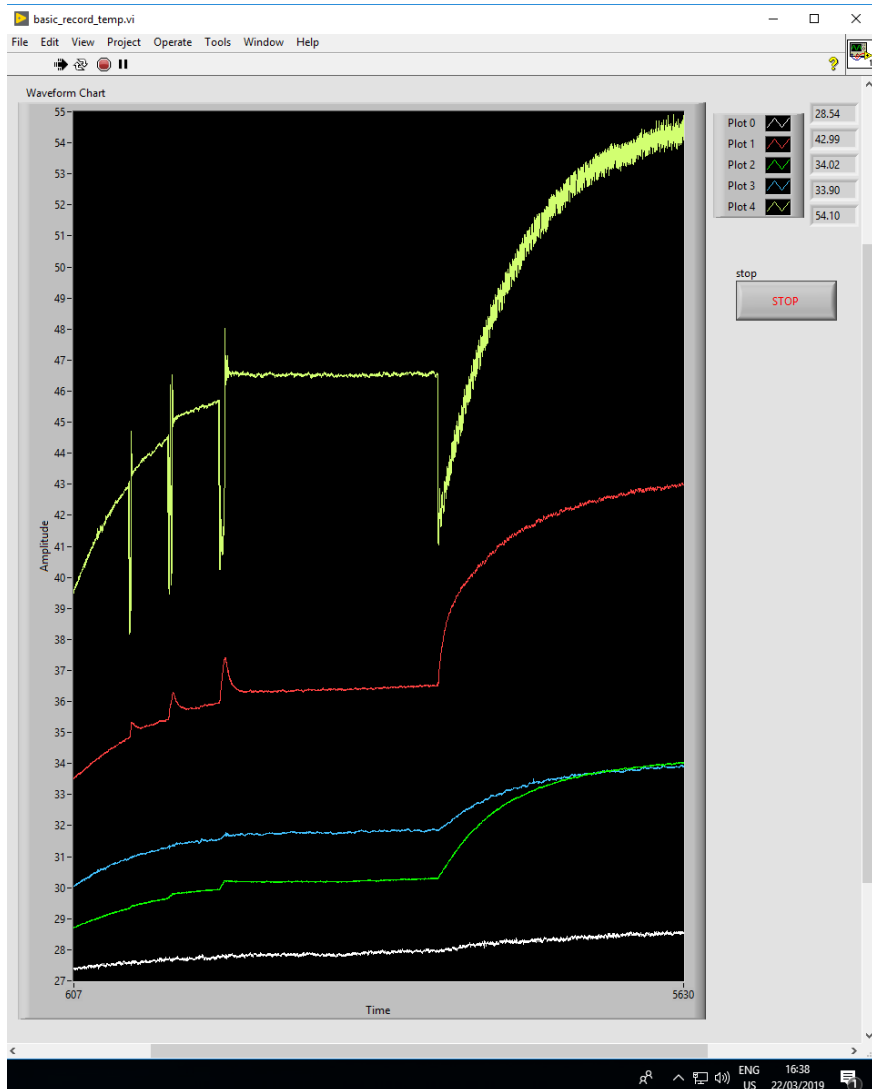
Charger V3

with 2<sup>st</sup> replacement diode MURS360

2 scans every 10s – 103 cycles (206 scans)

Temperature goes to 43[deg]

Temperature DCDC transformer to max 54 [deg]





# EDA-03592 V3

## BWS – Capacitor Power Charger

