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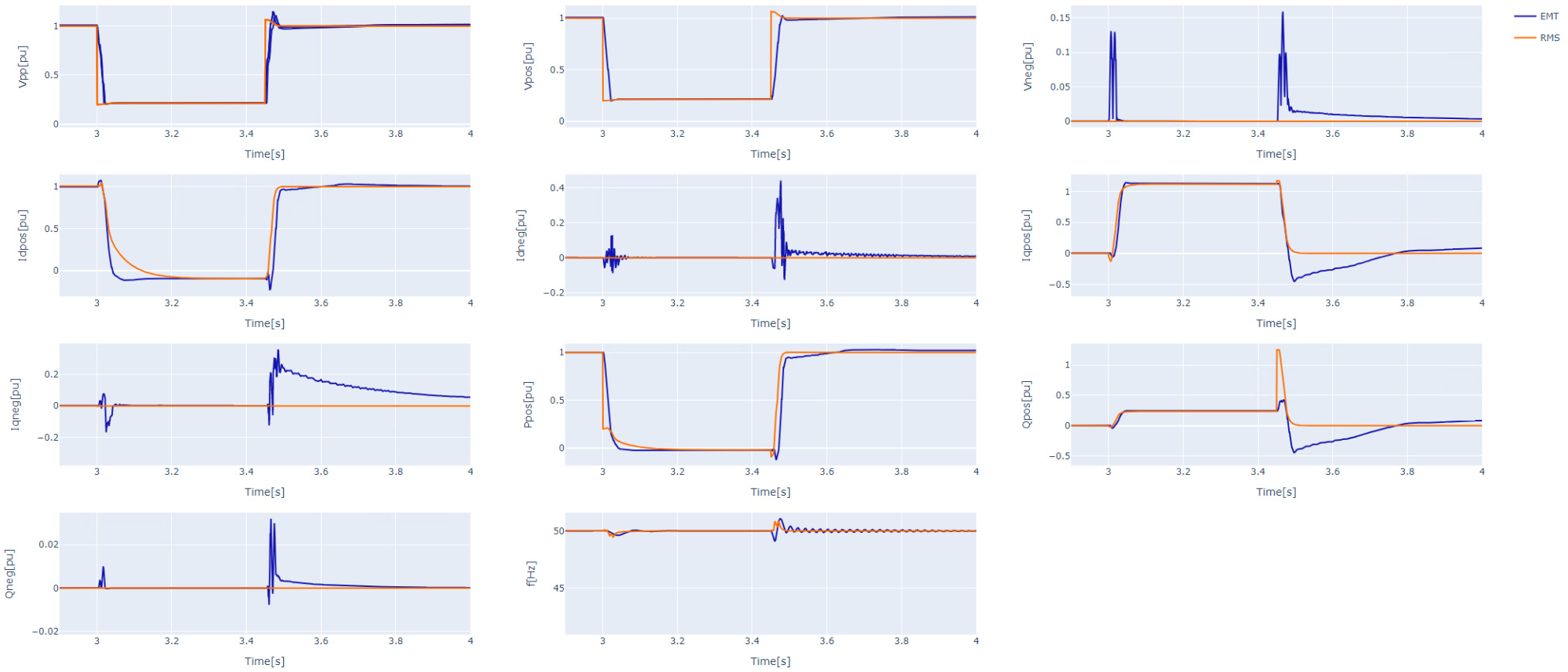
QUICKSTART GUIDE

Power Plant & Model Test Bench (PP-MTB) Plotter

0. DESCRIPTION

The PP-MTB plotter is a simple tool that allows plotting of the generated RMS and EMT results.



1. SYSTEM REQUIREMENTS

Developed with python 3.8.8. Dependencies are listed in requirements.txt and can be installed with the command:

python –m pip install –r requirements.txt

1. TOOL SETUP

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config.ini configures the plotter tool.

Parameter	type	default	Description
rmsDir	string	rms	Relative path to RMS results directory
emtDir	string	emt	Relative path to EMT results directory
resultsDir	string	results	Relative path to plotter results directory
figureSetupfilePath	string	figureSetup.csv	Relative path to figure setup csv
columns	integer	3	Number of columns in exported figures
startTime	float	2.9	Starttime of plots in seconds
genHTML	boolean	True	Export HTML figure
genJPEG	boolean	True	Export JPEG figure

2. FIGURE SETUP

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In figureSetup.csv the invidual plots can be configured. Three EMT and three RMS signals can be specified in each plot. Names of signals should be as they are in the csv header for RMS and in the ”Desc” attribute of the inf file for EMT.

	A	B	C	D	E	F	G	H	I
1	figure	title	units	emt_signal_1	emt_signal_2	emt_signal_3	rms_signal_1	rms_signal_2	rms_signal_3
2	1	Vpp	pu	V_A_RMS_pu_PoC_ENDK	V_B_RMS_pu_PoC_ENDK	V_B_RMS_pu_PoC_ENDK	m:u:bus2:A in p.u.	m:u:bus2:B in p.u.	m:u:bus2:C in p.u.
3	2	Vpos	pu	V_pos_pu_PoC_ENDK			m:u1:bus2 in p.u.		
4	3	Vneg	pu	V_neg_pu_PoC_ENDK			m:u2:bus2 in p.u.		
5	4	Idpos	pu	Id_pos_pu_PoC_ENDK			m:i1P:bus2 in p.u.		
6	5	Idneg	pu	Id_neg_pu_PoC_ENDK			m:i2P:bus2 in p.u.		
7	6	Iqpos	pu	Iq_pos_pu_PoC_ENDK			m:i1Q:bus2 in p.u.		
8	7	Iqneg	pu	Iq_neg_pu_PoC_ENDK			m:i2Q:bus2 in p.u.		
9	8	Ppos	pu	P_pos_pu_PoC_ENDK			s:p in p.u.		
10	9	Qpos	pu	Q_pos_pu_PoC_ENDK			s:q in p.u.		
11	10	Qneg	pu	Q_neg_pu_PoC_ENDK			s:q2 in p.u.		
12	11	f	Hz	f_ENDK			m:fehz in Hz		

2. PLOTTING

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1. Move the generated RMS results (.csv) from the selected PP-MTB PF export folder to the selected RMS results plotter folder.
2. Move the generated EMT results (.csv and .inf) from the Output folder in the PP-MTB PSCAD workspace to the selected EMT results plotter folder.
3. Execute the python script.
4. The exported figures can be found in the [resultsDir]/[project name] folder.