



Power Factor
Controller (6x6)



Power Quality
Analyzer



Protection Relay

Harmonic Simulation

Capacitor & Reactor Rating Input

Cap Size : 10 kVar
Cap V rating : 525 V
Cap Freq rating : 50 Hz
Reactor Rating : 7 %

Network Phase - Phase Value Input

V_1st Harmonic : 415 V
V_1st Freq : 50 Hz

V_nth Harmonic : 30 V
V_nth angle : 180 °
V_nth Freq : 550 Hz

Warning

None

Computed Values

C =	38.5	uF x3	computed from rated capacitor
L =	6.1414	mH	computed from rated capacitor & i
I _{cap} (rated) =	11.0	A	rated current of capacitor
F [res] =	189.0	Hz	resonance frequency for rated cap
I _{rms} (50Hz) =	9.3	A	1st harmonic ampere of capacitor
I _{rms} (550Hz) =	0.9	A	nth harmonic ampere of capacitor
I _{rms} eff =	9.4	A	total rms ampere of capacitor
V _{rms} eff =	416.1	V	effective rms voltage value of netw
V[L] _{1st rms} =	18.0	V	1st harmonic voltage across reacto
V[L] _{nth rms} =	19.6	V	nth harmonic voltage across reacto
V[L] _{eff rms} =	26.7	V	effective rms voltage across reacto
V[C] _{1st rms} =	446.2	V	1st harmonic P-P rms voltage acro
V[C] _{nth rms} =	4.0	V	nth harmonic P-P rms voltage acro
V[C] _{eff rms} =	446.3	V	effective P-P rms voltage across ca
Q _{eff} =	6.8	kVar	effective kVar of capacitor
THD-V =	7.2	%	THD Voltage (reference to V _{rms} ef
THD-I =	9.9	%	THD Current (reference to I _{rms} eff

Voltage & Current Waveform

