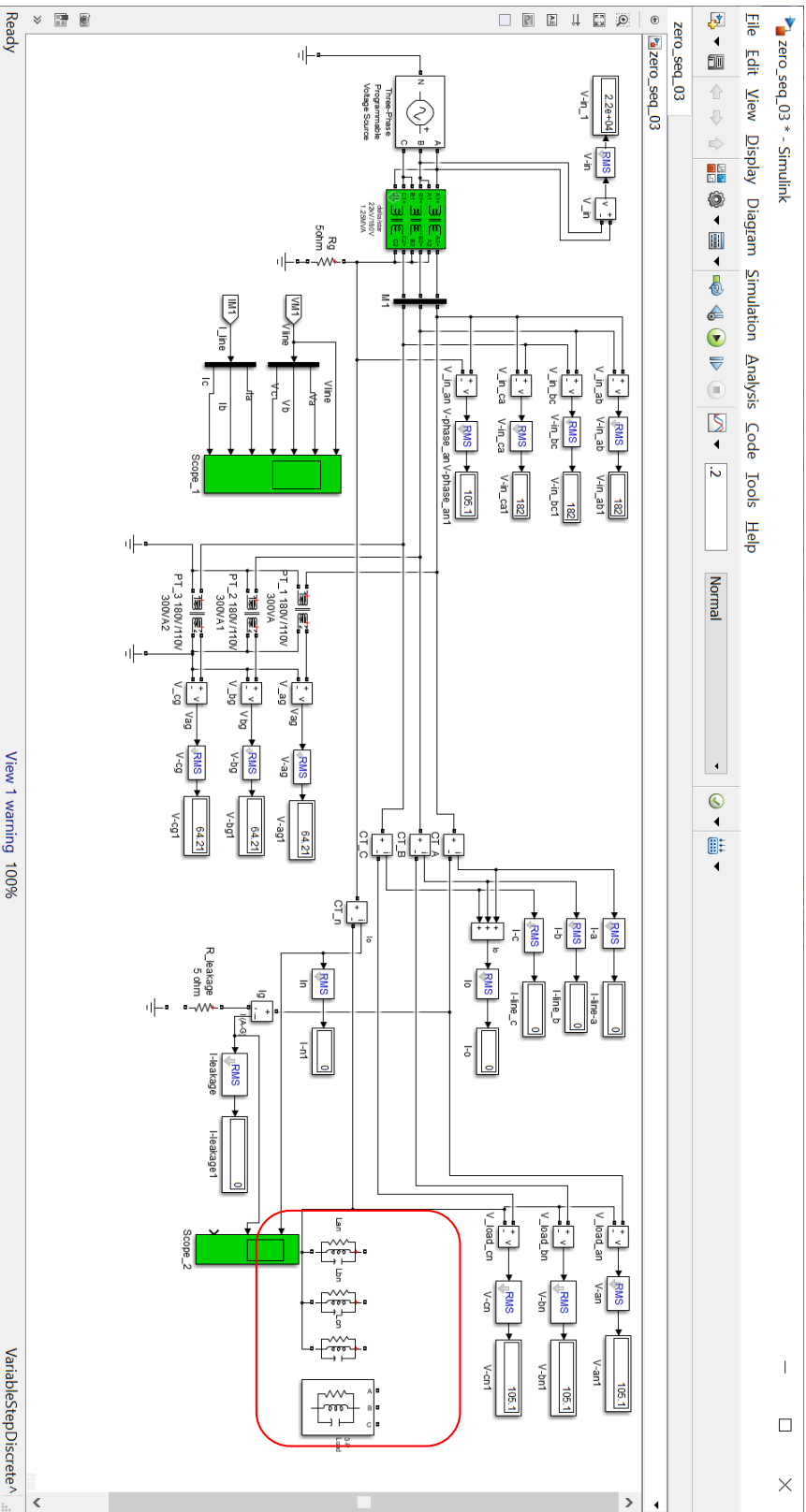
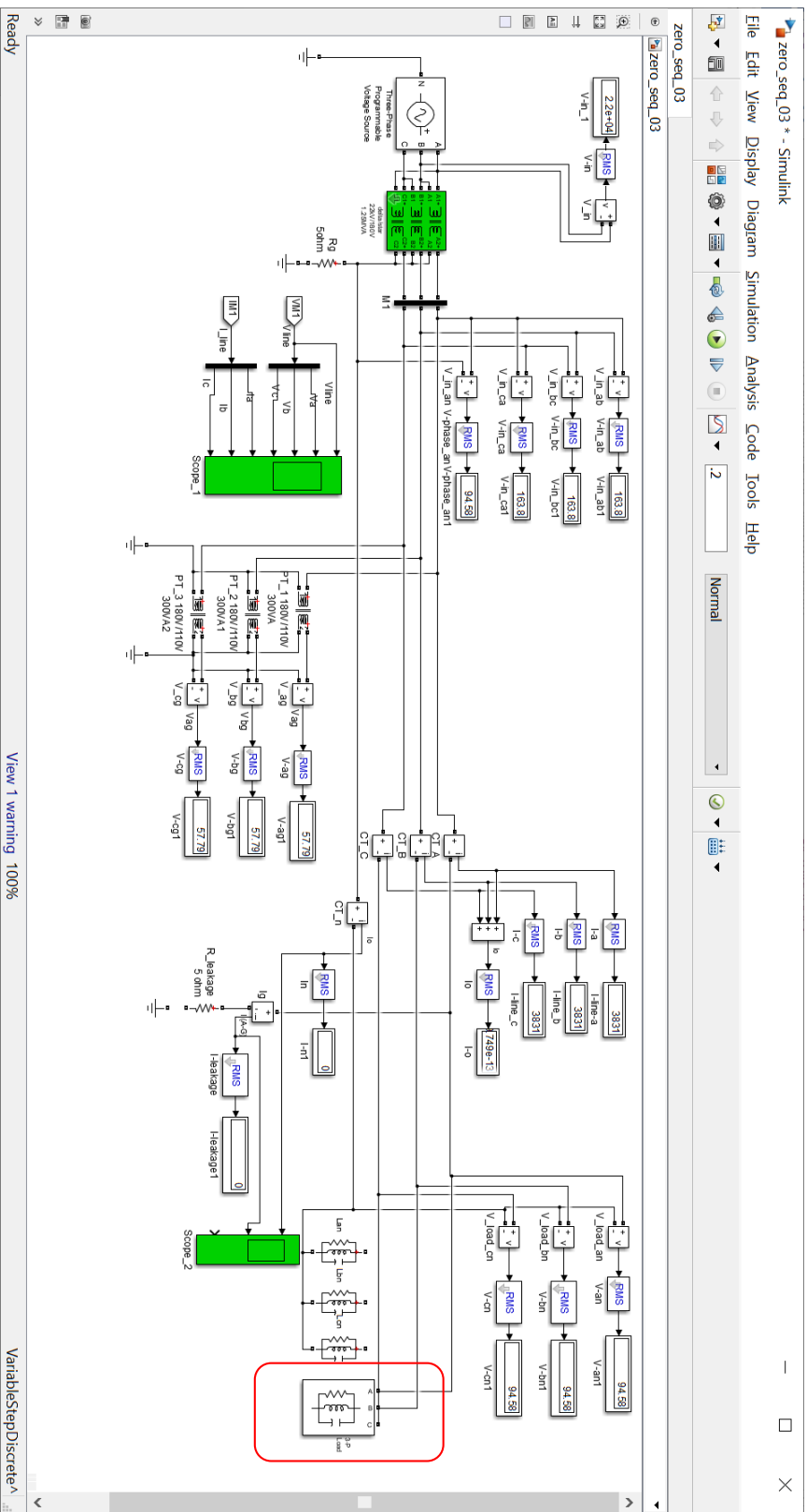


Earth fault



No-Load: Voltage Supply 182V, I_a , I_b , I_c , = 0A



Full-Load: Voltage supply drop to 163.8V

; Voltage regulation 100% 18.2V

; $I_a, I_b, I_c = 3831A$

View 1 warning 100%

VariableStepDiscrete

Block Parameters: delta/star 22kV/180V 1.25MVA

Three-Phase Linear Transformer 12-Terminals (mask) (link)

This block implements three single-phase two-winding transformers . All winding terminals are accessible.

Parameters

Three-phase rated power(VA) Frequency (Hz)

[1.25e6 50]

Winding 1 : [phase voltage(Vrms) R(pu) X(pu)] :
[22000 0.0175 0.09285]

Winding 2 : [phase voltage(Vrms) R(pu) X(pu)] :
[105.15 0.0175 0.09285]

Magnetizing branch : [Rm(pu) Xm(pu)] :
[200 200]

OK Cancel Help Apply

Block Parameters: Three-Phase Parallel RLC Load

Three-Phase Parallel RLC Load (mask) (link)

Implements a three-phase parallel RLC load.

parameters Load Flow

Configuration Y (floating)

Nominal phase-to-phase voltage Vn (Vrms)
180

Nominal frequency fn (Hz):
50

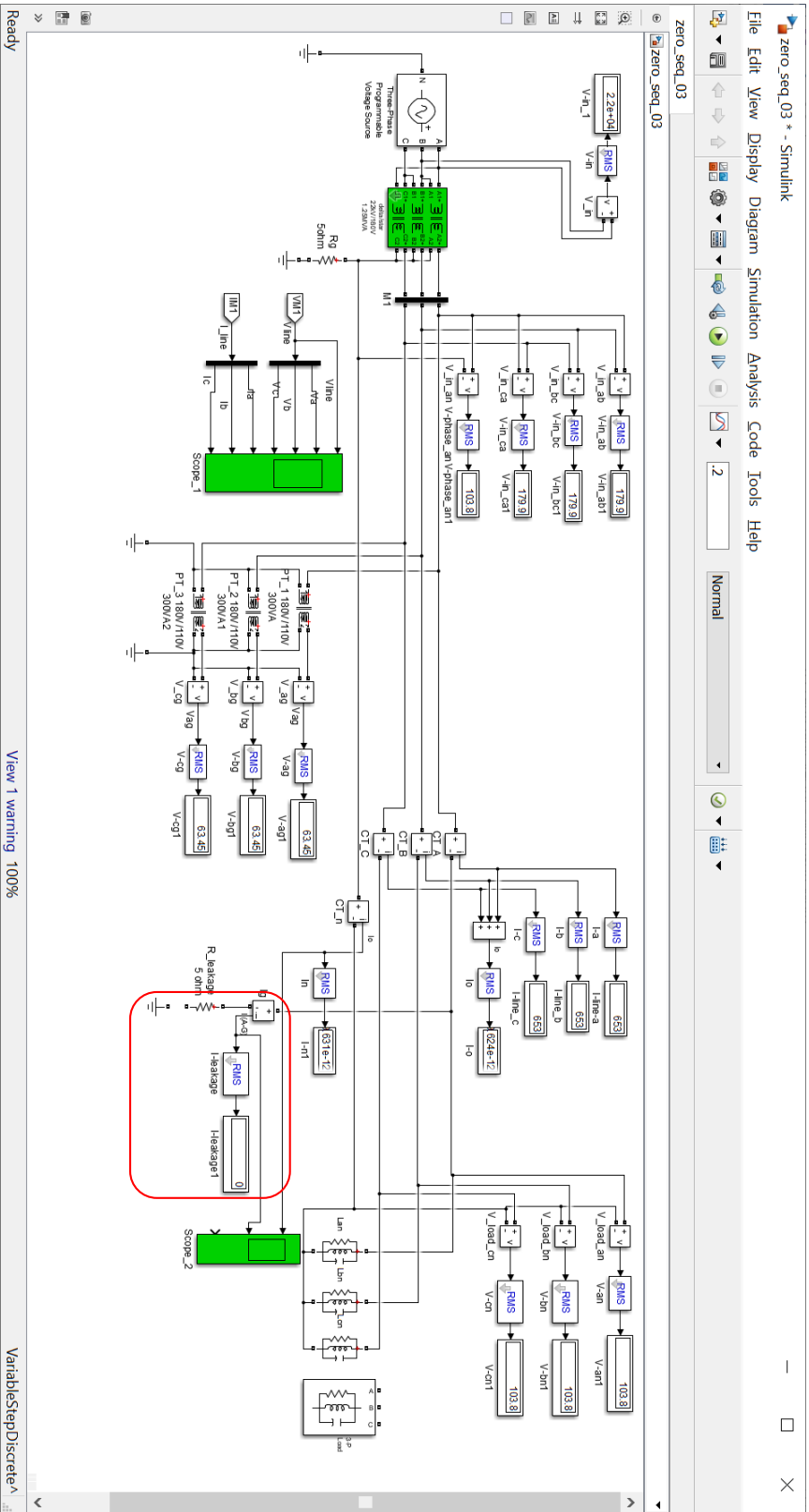
Active power P (W):
1.25e6

Inductive reactive Power QL (positive var):
400e3

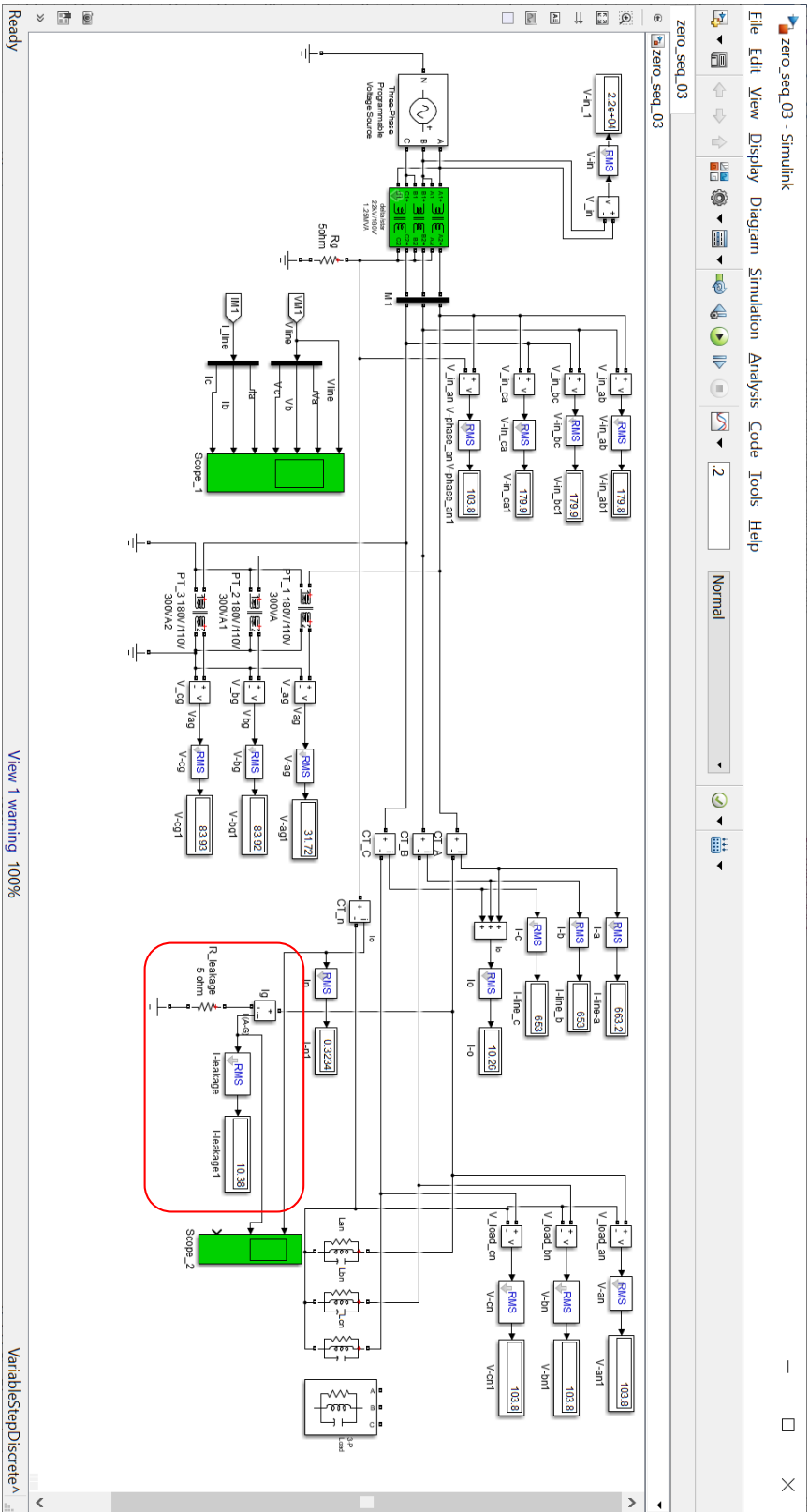
Capacitive reactive power Qc (negative var):
1e-6

Measurements Branch currents

OK Cancel Help Apply



V _{in_ab}	V _{in_bc}	V _{in_ca}	V _{phase_an}	V _{phase_bn}	V _{phase_cn}	I _{line-a}	I _{line-b}	I _{line-c}	R _{leak}	I _{leak}	V _{PT1(a)}	V _{PT2(b)}	V _{PT3(c)}
volt	volt	volt	volt	volt	volt	amp	amp	amp	ohm	amp	volt	volt	volt
179.9	179.9	179.9	103.8	103.8	103.8	653	653	653	Inf.	0	63.45	63.45	63.45



View 1 warning 100%

VariableStepDiscrete

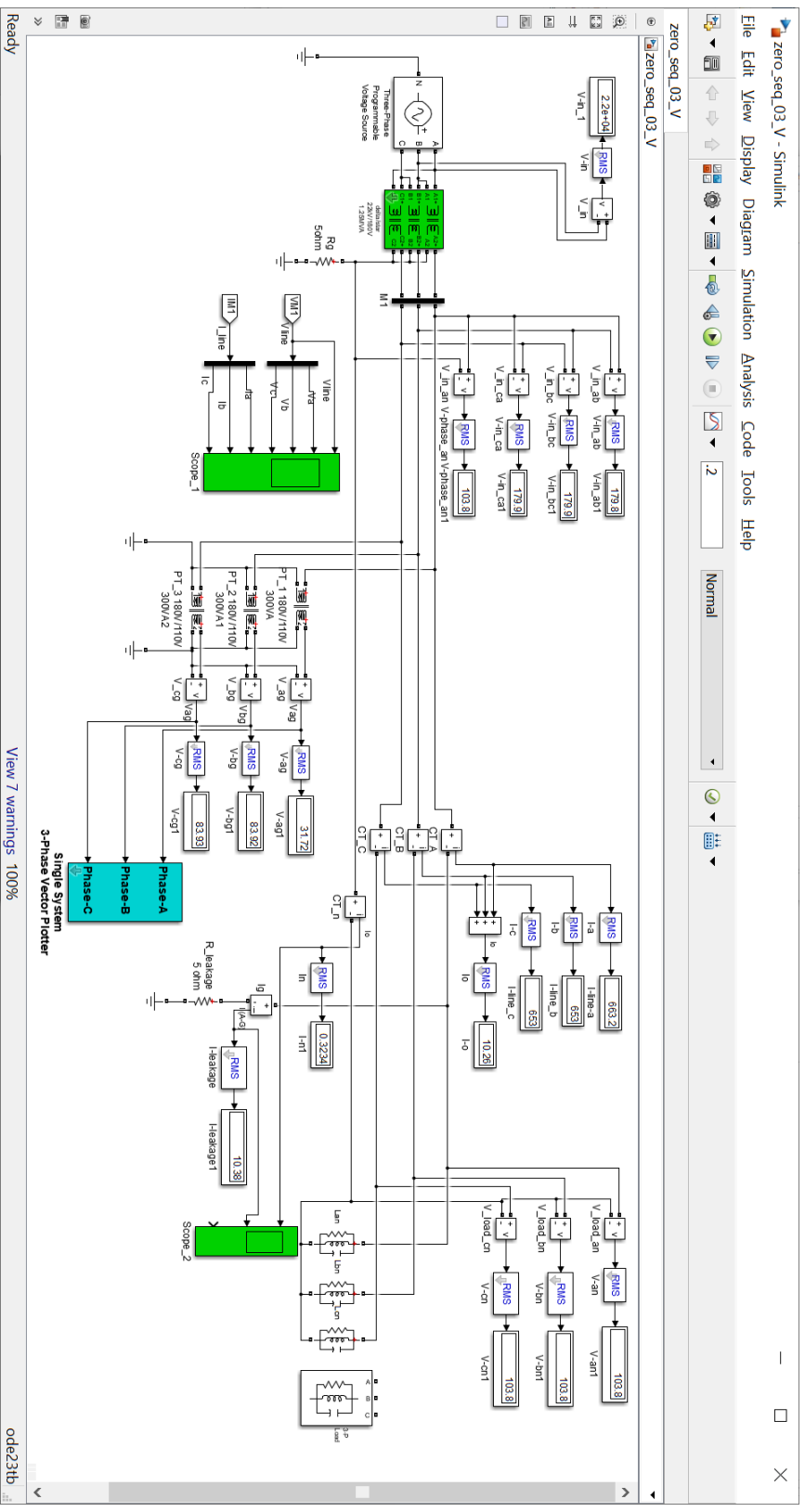
Balance Load; $I_a, I_b, I_c = 604.2A$
 And Leakage Current: 5 ohm, 10.38A

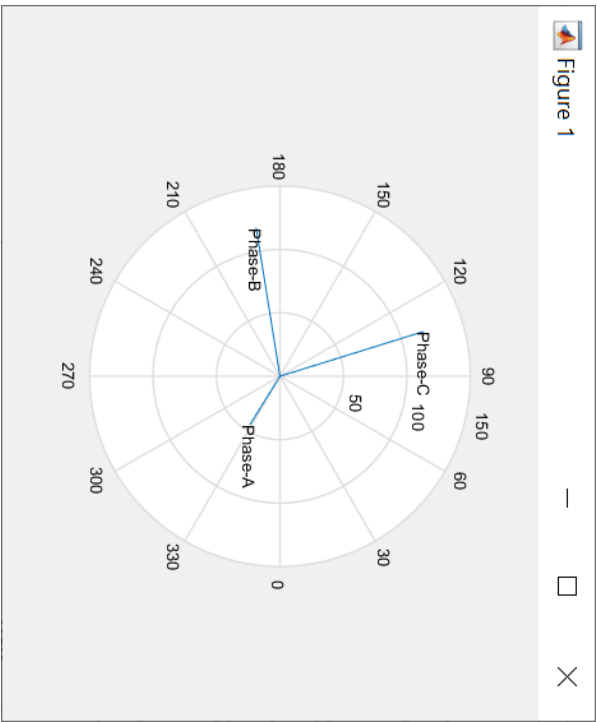
Table: Variable Rleakage

V _{in_ab} volt	V _{in_bc} volt	V _{in_ca} volt	V _{phase_an} volt	V _{phase_bn} volt	V _{phase_cn} volt	I _{line-a} amp	I _{line-b} amp	I _{line-c} amp	R _{leak} ohm	I _{leak} amp	V _{PT1(ae)} volt	V _{PT2(be)} volt	V _{PT3(ce)} volt
179.9	179.9	179.9	103.8	103.8	103.8	653	653	653	Inf.	0	63.45	63.45	63.45
179.8	179.8	179.9	103.8	103.8	103.8	657.1	653	653	20	2.789	50.75	70.65	70.65
179.8	179.9	179.9	103.8	103.8	103.8	659.8	653	653	10	6.923	42.3	76.25	76.25
179.8	179.9	179.9	103.8	103.8	103.8	663.2	653	653	5	10.38	31.72	83.92	83.93
179.8	179.9	179.9	103.8	103.8	103.8	666.5	653	653	2.5	13.85	21.15	92.16	92.19
179.8	179.9	179.9	103.8	103.8	103.8	669.9	653	653	1	17.31	10.57	100.8	100.9
179.8	179.9	179.9	103.8	103.8	103.8	672.9	653	653	0.1	20.36	1.244	108.8	108.8

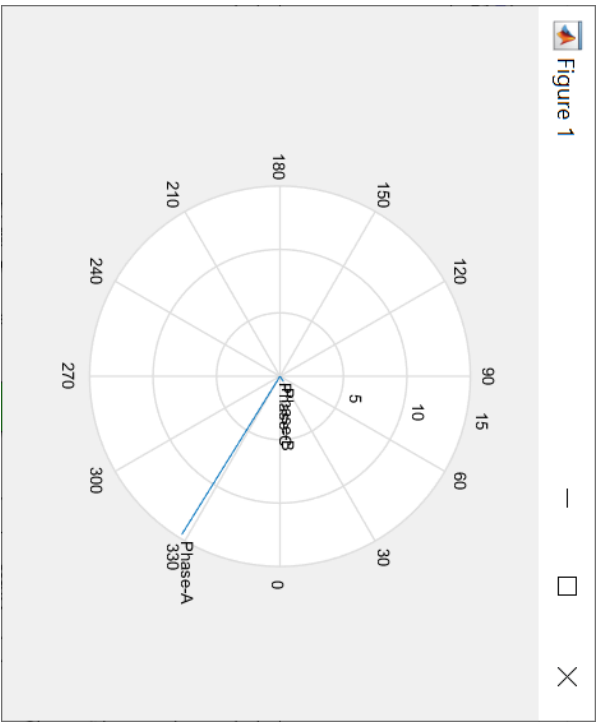
Commented [WU1]:

Voltage Vector diagram





Voltage Vector diagram



Leakage Current Vector diagram