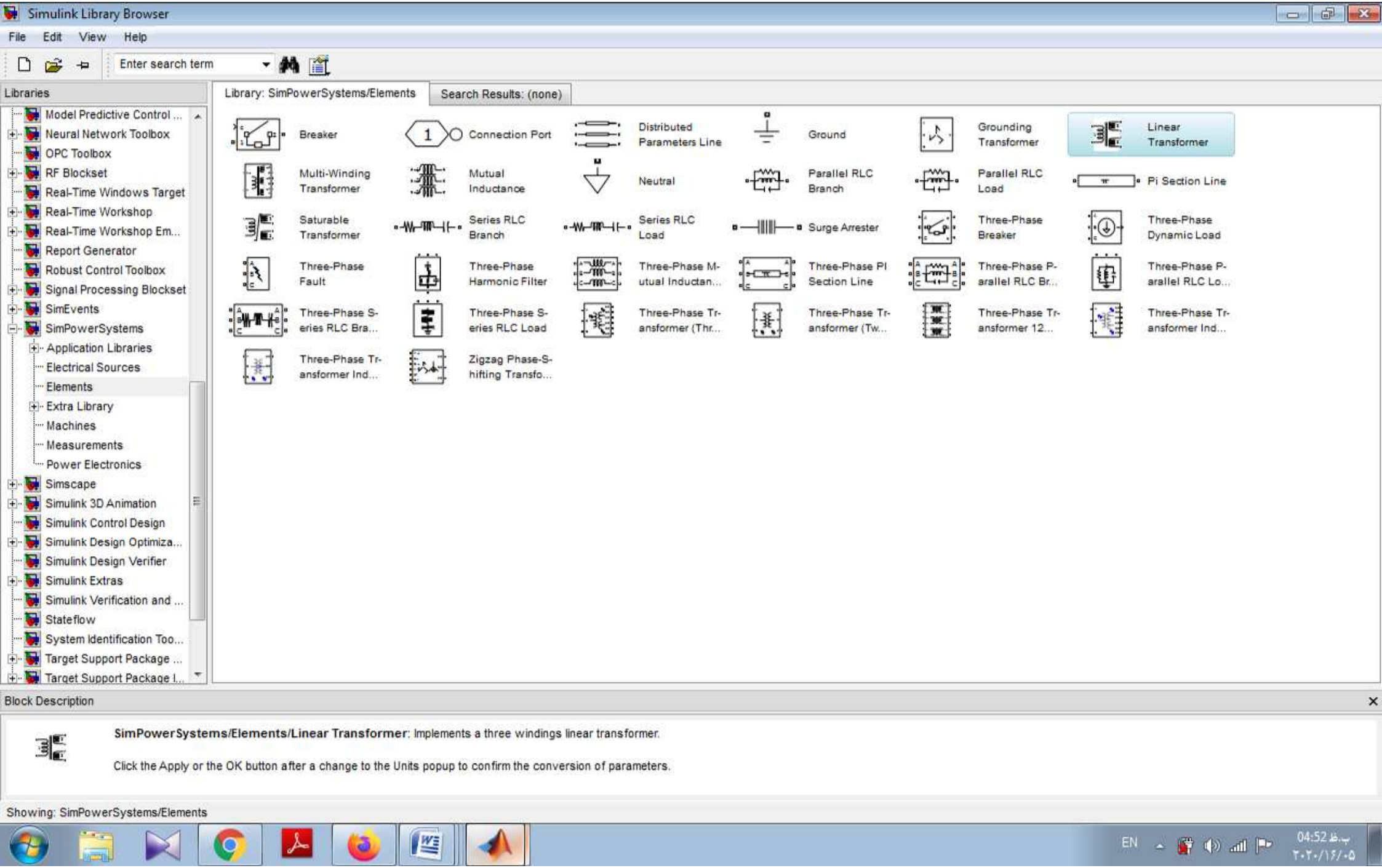
Simulink Library Browser
File Edit View Help
Enter search term
Libraries
Model Predictive Control ...
Neural Network Toolbox
OPC Toolbox
RF Blockset
Real-Time Windows Target
Real-Time Workshop
Real-Time Workshop Em...
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Simulink Design Verifier
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Stateflow
System Identification Too...
Target Support Package ...
Target Support Package I...
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Breaker
Connection Port
Distributed Parameters Line
Ground
Grounding Transformer
Linear Transformer
Multi-Winding Transformer
Mutual Inductance
Neutral
Parallel RLC Branch
Parallel RLC Load
Pi Section Line
Saturable Transformer
Series RLC Branch
Series RLC Load
Surge Arrester
Three-Phase Breaker
Three-Phase Dynamic Load
Three-Phase Fault
Three-Phase Harmonic Filter
Three-Phase M-utual Inductan...
Three-Phase PI Section Line
Three-Phase P-arallel RLC Br...
Three-Phase P-arallel RLC Lo...
Three-Phase S-eries RLC Bra...
Three-Phase S-eries RLC Load
Three-Phase Tr-ansformer (Thr...
Three-Phase Tr-ansformer (Tw...
Three-Phase Tr-ansformer 12...
Three-Phase Tr-ansformer Ind...
Three-Phase Tr-ansformer Ind...
Zigzag Phase-S-hifting Transfo...
Block Description
SimPowerSystems/Elements/Linear Transformer: Implements a three windings linear transformer.
Click the Apply or the OK button after a change to the Units popup to confirm the conversion of parameters.
Showing: SimPowerSystems/Elements
EN
04:52 ب.ظ
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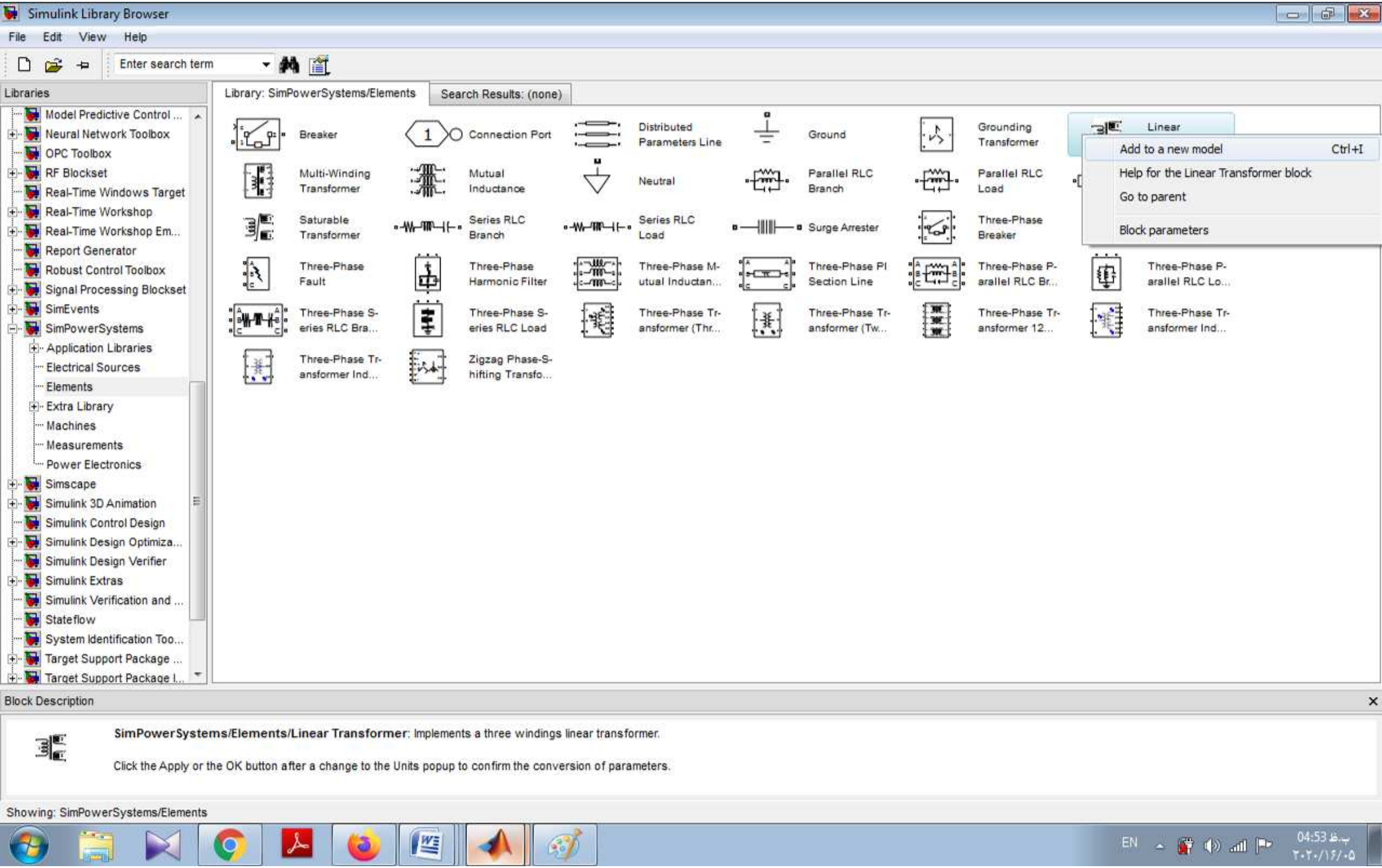
Simulink Library Browser
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Enter search term
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OPC Toolbox
RF Blockset
Real-Time Windows Target
Real-Time Workshop
Real-Time Workshop Em...
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Simulink Design Verifier
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Simulink Verification and ...
Stateflow
System Identification Too...
Target Support Package ...
Target Support Package I...
Library: SimPowerSystems/Elements
Search Results: (none)
Breaker
Connection Port
Distributed Parameters Line
Ground
Grounding Transformer
Linear
Add to a new model Ctrl+I
Help for the Linear Transformer block
Go to parent
Block parameters
Multi-Winding Transformer
Mutual Inductance
Neutral
Parallel RLC Branch
Parallel RLC Load
Saturable Transformer
Series RLC Branch
Series RLC Load
Surge Arrester
Three-Phase Breaker
Three-Phase Fault
Three-Phase Harmonic Filter
Three-Phase M-utual Inductan...
Three-Phase PI Section Line
Three-Phase P-arallel RLC Br...
Three-Phase P-arallel RLC Lo...
Three-Phase S-eries RLC Bra...
Three-Phase S-eries RLC Load
Three-Phase Tr-ansformer (Thr...
Three-Phase Tr-ansformer (Tw...
Three-Phase Tr-ansformer 12...
Three-Phase Tr-ansformer Ind...
Three-Phase Tr-ansformer Ind...
Zigzag Phase-S-hifting Transfo...
Block Description
SimPowerSystems/Elements/Linear Transformer: Implements a three windings linear transformer.
Click the Apply or the OK button after a change to the Units popup to confirm the conversion of parameters.
Showing: SimPowerSystems/Elements
EN
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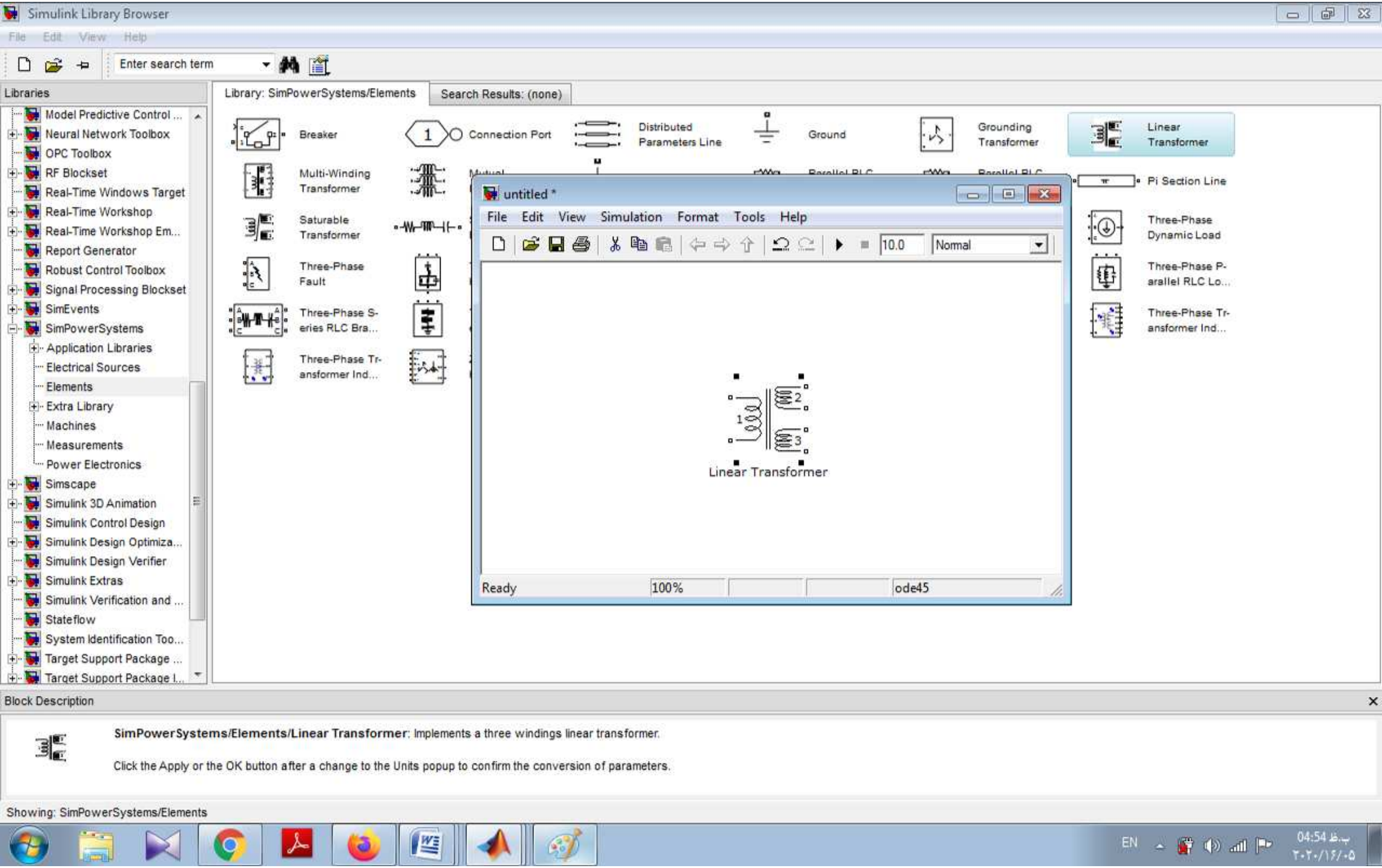
Simulink Library Browser
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Enter search term
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OPC Toolbox
RF Blockset
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Real-Time Workshop
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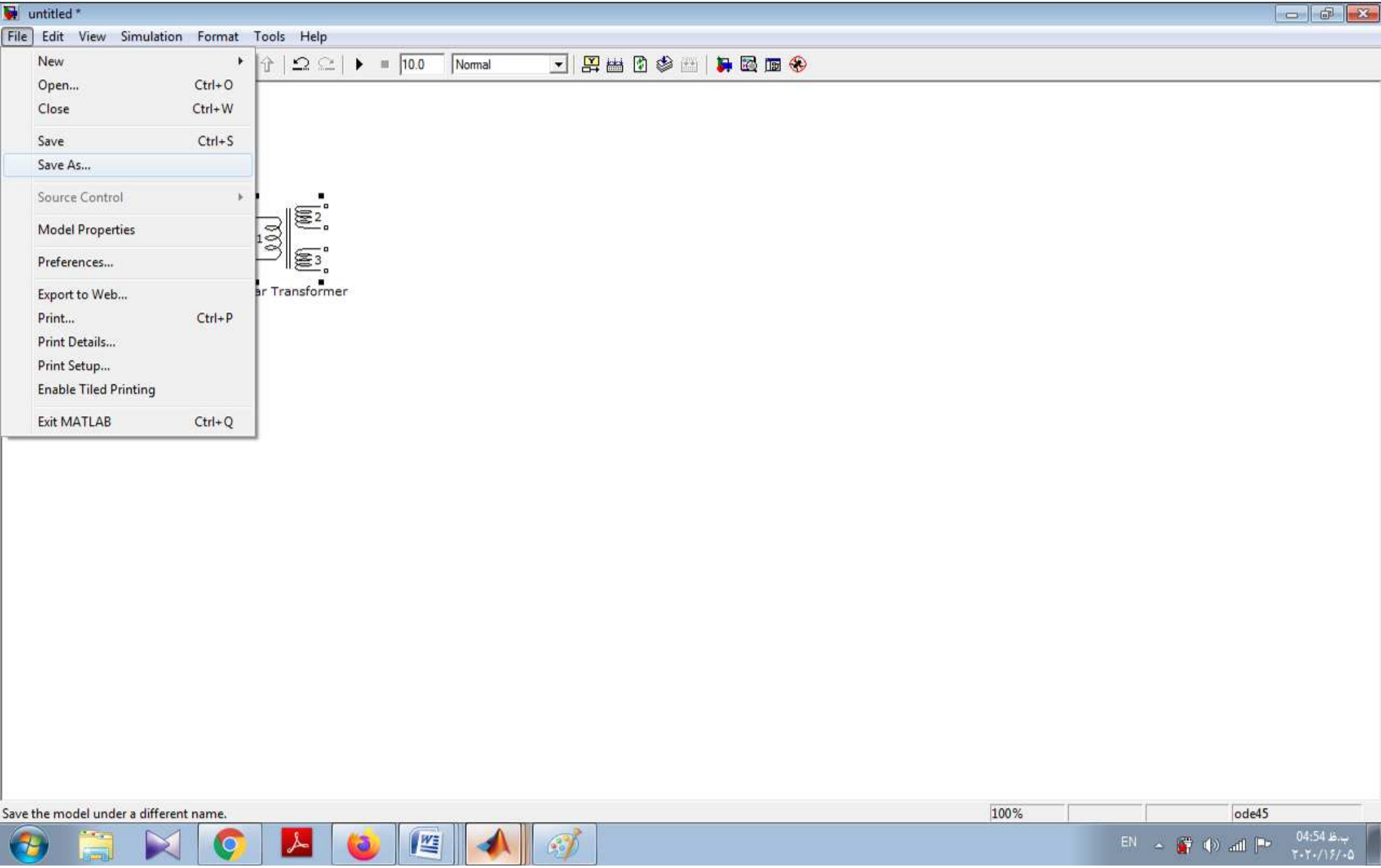
Stateflow
System Identification Too...
Target Support Package ...
Target Support Package I...
Library: SimPowerSystems/Elements
Search Results: (none)
Breaker
Connection Port
Distributed Parameters Line
Ground
Grounding Transformer
Linear Transformer
Multi-Winding Transformer
Saturable Transformer
Three-Phase Fault
Three-Phase S-eries RLC Bra...
Three-Phase Tr-ansformer Ind...
Pi Section Line
Three-Phase Dynamic Load
Three-Phase P-arallel RLC Lo...
Three-Phase Tr-ansformer Ind...
untitled *
File Edit View Simulation Format Tools Help
10.0
Normal
1
2
3
Linear Transformer
Ready
100%
ode45
Block Description
SimPowerSystems/Elements/Linear Transformer: Implements a three windings linear transformer.
Click the Apply or the OK button after a change to the Units popup to confirm the conversion of parameters.
Showing: SimPowerSystems/Elements
EN
04:54 ب.ظ
۲۰۲۰/۱۶/۰۵


untitled *
File Edit View Simulation Format Tools Help
New
Open... Ctrl+O
Close Ctrl+W
Save Ctrl+S
Save As...
Source Control
Model Properties
Preferences...
Export to Web...
Print... Ctrl+P
Print Details...
Print Setup...
Enable Tiled Printing
Exit MATLAB Ctrl+Q
10.0
Normal
1
2
3
r Transformer
Save the model under a different name.
100%
ode45
EN
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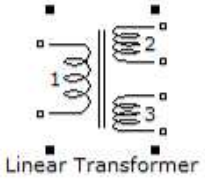
۲۰۲۰/۱۶/۰۵

trans *

File Edit View Simulation Format Tools Help

10.0 Normal



Linear Transformer

Block Parameters: Linear Transformer

Linear Transformer (mask) (link)

Implements a three windings linear transformer.

Click the Apply or the OK button after a change to the Units popup to confirm the conversion of parameters.

Parameters

Units: pu

Nominal power and frequency [Pn(VA) fn(Hz)]:

[250e6 60]

Winding 1 parameters [V1(Vrms) R1(pu) L1(pu)]:

[735e3 0.002 0.08]

Winding 2 parameters [V2(Vrms) R2(pu) L2(pu)]:

[315e3 0.002 0.08]

☑ Three windings transformer

Winding 3 parameters [V3(Vrms) R3(pu) L3(pu)]:

[315e3 0.002 0.08]

Magnetization resistance and reactance [Rm(pu) Lm(pu)]:

[500 500]

Measurements: None

☐ Use SI units

OK Cancel Help Apply

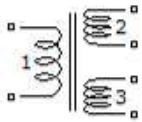
Ready 100% ode45

EN 04:55 ب.ظ ۲۰۲۰/۱۶/۰۵

trans *

File Edit View Simulation Format Tools Help

10.0 Normal



Linear Transformer

Block Parameters: Linear Transformer

Linear Transformer (mask) (link)

Implements a three windings linear transformer.

Click the Apply or the OK button after a change to the Units popup to confirm the conversion of parameters.

Parameters

Units: pu (SI / pu)

Nomin

[250e6 60]

Winding 1 parameters [V1(Vrms) R1(pu) L1(pu)]:

[735e3 0.002 0.08]

Winding 2 parameters [V2(Vrms) R2(pu) L2(pu)]:

[315e3 0.002 0.08]

☑ Three windings transformer

Winding 3 parameters [V3(Vrms) R3(pu) L3(pu)]:

[315e3 0.002 0.08]

Magnetization resistance and reactance [Rm(pu) Lm(pu)]:

[500 500]

Measurements: None

☐ Use SI units

OK Cancel Help Apply

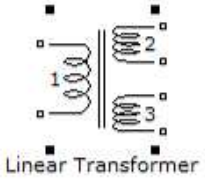
Ready 100% ode45

EN 04:56 ب.ظ ۲۰۲۰/۱۶/۰۵

trans *

File Edit View Simulation Format Tools Help

10.0 Normal



Block Parameters: Linear Transformer

Linear Transformer (mask) (link)

Implements a three windings linear transformer.

Click the Apply or the OK button after a change to the Units popup to confirm the conversion of parameters.

Parameters

Units: SI

Nominal power and frequency [Pn(VA) fn(Hz)]:

[250e6 60]

Winding 1 parameters [V1(Vrms) R1(ohm) L1(H)]:

[7.35e+005 4.3218 0.45856]

Winding 2 parameters [V2(Vrms) R2(ohm) L2(H)]:

[3.15e+005 0.7938 0.084225]

☑ Three windings transformer

Winding 3 parameters [V3(Vrms) R3(ohm) L3(H)]:

[3.15e+005 0.7938 0.084225]

Magnetization resistance and reactance [Rm(ohm) Lm(H)]:

[1.0805e+006 2866]

Measurements: None

☑ Use SI units

OK Cancel Help Apply

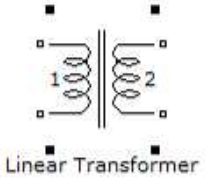
Ready 100% ode45

EN 04:57 ب.ظ ۲۰۲۰/۱۶/۰۵

trans *

File Edit View Simulation Format Tools Help

10.0 Normal



Linear Transformer

Block Parameters: Linear Transformer

Linear Transformer (mask) (link)

Implements a three windings linear transformer.

Click the Apply or the OK button after a change to the Units popup to confirm the conversion of parameters.

Parameters

Units: SI

Nominal power and frequency [Pn(VA) fn(Hz)]:

[250e6 60]

Winding 1 parameters [V1(Vrms) R1(ohm) L1(H)]:

[7.35e+005 4.3218 0.45856]

Winding 2 parameters [V2(Vrms) R2(ohm) L2(H)]:

[3.15e+005 0.7938 0.084225]

Three windings transformer

Winding 3 parameters [V3(Vrms) R3(ohm) L3(H)]:

[3.15e+005 0.7938 0.084225]

Magnetization resistance and reactance [Rm(ohm) Lm(H)]:

[1.0805e+006 2866]

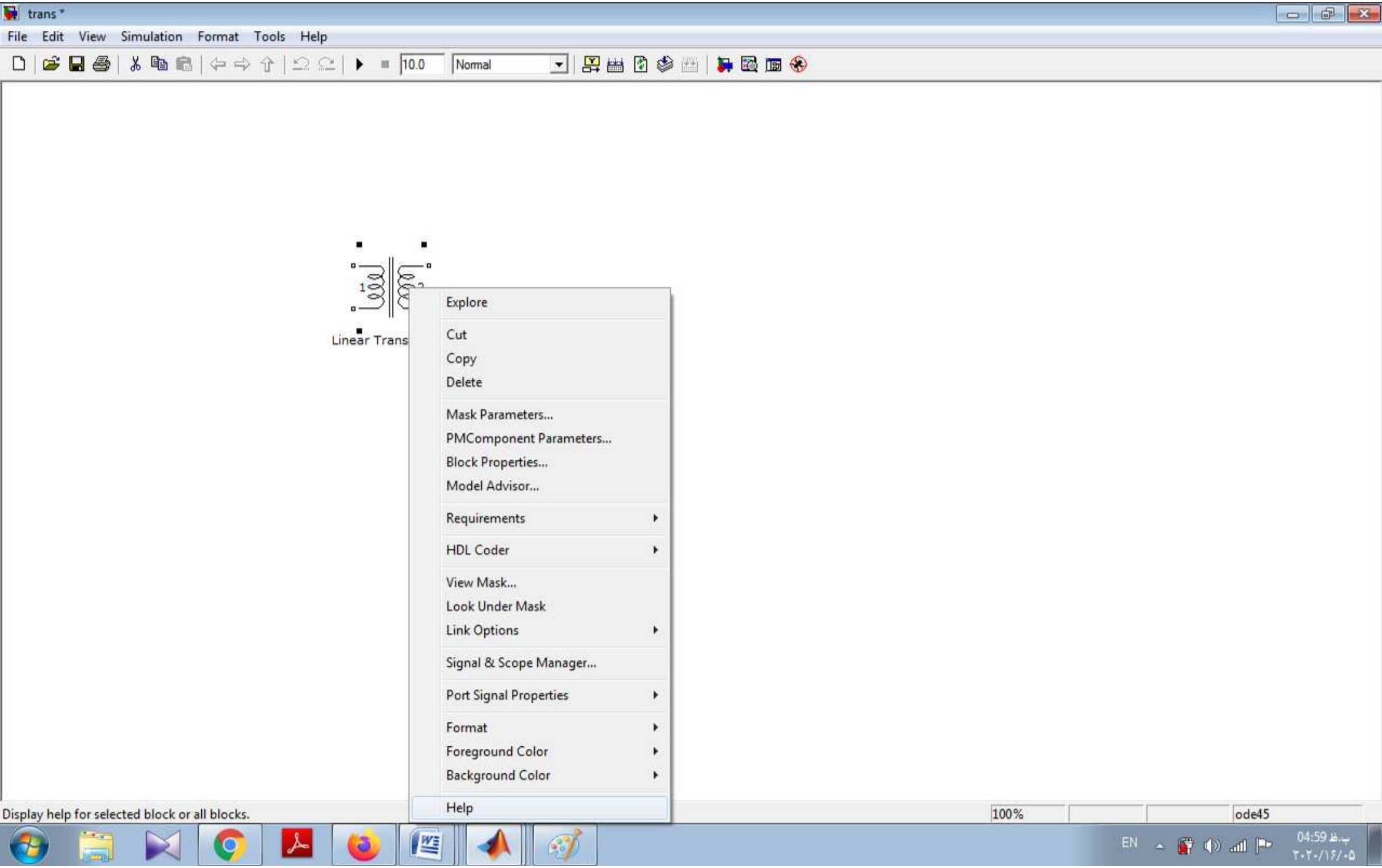
Measurements: None

Use SI units

OK Cancel Help Apply

Ready 100% ode45

EN 04:58 ب.ظ ۲۰۲۰/۱۶/۰۵


trans *
File Edit View Simulation Format Tools Help
10.0
Normal
Linear Trans
Explore
Cut
Copy
Delete
Mask Parameters...
PMComponent Parameters...
Block Properties...
Model Advisor...
Requirements
HDL Coder
View Mask...
Look Under Mask
Link Options
Signal & Scope Manager...
Port Signal Properties
Format
Foreground Color
Background Color
Help
Display help for selected block or all blocks.
100%
ode45

Help

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Help Navigator

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- Model-Based Calibration Toolbox

Title: Linear Transformer :: Blocks (SimPowerSystems™)

SimPowerSystems™

Provide feedback about this page

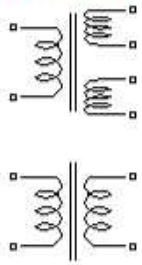
Linear Transformer

Implement two- or three-winding linear transformer

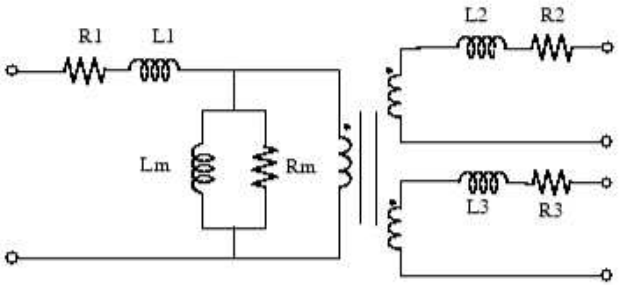
Library

Elements

Description



The Linear Transformer block model shown consists of three coupled windings wound on the same core.



The model takes into account the winding resistances (R1 R2 R3) and the leakage inductances (L1 L2 L3), as well as the magnetizing characteristics of the core, which is modeled by a linear (Rm Lm) branch.

http://www.mathworks.com/survey/support/docfeedback.html?jar:file:///C:/Program Files/MATLAB/R2009a/help/toolbox/physmod/powersys/help.jar!/ref/lineartransformer.html

EN 05:00 ب.ظ ۲۰۲۰/۱۶/۰۵