

# INDEX

% Current Imbalance, 6-58, 6-63  
 % FLA, 6-62  
 % Full Load Amps, 6-58, 6-62, 6-74  
 % Slip, 6-57

## A

About, 3-16  
 Absorption Current, 5-64  
 AC Assets  
   Power Analysis, 1-14  
 AC EMAX Summary  
   Report, 3-46  
 AC Induction, 5-7  
   Analysis, 5-74  
   Polarization Index, 5-16  
   RIC, 5-20  
   Step Voltage, 5-24  
   Test Window  
     Current Analysis, 6-18  
     MCE, 5-7  
 AC Standard Test, 5-75, 5-77  
   AC Induction, 5-12  
   AC Standard Test, 5-12, 5-13  
   Analysis, 5-75  
   Step-By-Step Testing, 5-13  
   Wound Rotor, 5-77  
 AC Synchronous, 5-29  
   Analysis, 5-75, 5-76  
   Field Section, 5-30  
   Stator Section, 5-29  
   Synchronous, 5-30  
   Test Window  
     Current Analysis, 6-31  
     MCE, 5-29  
 AC Wound Rotor, 5-34  
   Analysis, 5-77  
   Recommended Actions, 5-77  
   Resistor Bank Section, 5-35  
   Resistor Bank Test, 5-36  
   Rotor Section, 5-35  
   Stator Section, 5-35  
   Test Window  
     Current Analysis, 6-32  
     MCE, 5-34  
 Accessory Bag, 1-9  
 Account Manager  
   Account Rights, 1-13  
   Add Accounts to Group, 1-11  
   Icon  
     Create

    Account, 1-7  
     Create Group, 1-7  
     Create Site, 1-7  
     Show Manager, 1-7  
     System Activity, 1-7  
 Menu  
   Data, 1-7  
   Windows, 1-7  
 Network, 1-6  
 Window, 1-8  
 Add  
   Asset, 3-17, 3-27  
     WatchList, 3-38  
 Air Gap, 5-68, 5-71, 5-73, 6-2, 6-58, 6-60  
   Current Analysis, 6-2  
 Aliasing  
   Rotor Influence Check, 5-68  
     Data Interpretation, 5-69  
   Rotor Position, 5-68  
 Analysis, 6-75  
   Current Analysis, 6-49  
     Demod, 6-68, 6-75  
     Eccentricity, 6-58  
     In-Rush/Start-Up, 6-63  
     Rotor Evaluation  
       Time Domain, 6-55  
 MCE  
   AC Induction Motors, 5-74  
   AC Standard Test, 5-75, 5-77  
     Wound Rotor, 5-77  
   AC Synchronous Motors, 5-75  
   AC Synchronous Test, 5-76  
   AC Wound Rotor Motors, 5-77  
   Average Inductance, 5-63  
   Bar-to-Bar, 5-79  
   Capacitance-to-Ground, 5-57  
   DC Assets, 5-79  
     Dielectric Absorption, 5-79  
     Polarization Index, 5-79  
   DC Bar-to-Bar, 5-74  
   DC Standard Test, 5-79  
   Dielectric Absorption, 5-75, 5-76, 5-78  
   Inductive Imbalance, 5-63  
   Phase-to-Phase Inductance, 5-61  
   Phase-to-Phase Resistance, 5-59  
   Polarization Index, 5-64, 5-75, 5-76, 5-77,  
     5-78  
     Wound Rotor, 5-78  
   Resistance-to-Ground, 5-53  
   Resistive Imbalance, 5-63  
   Resistor Bank, 5-78

- Rotor Influence Check, 5-74, 5-75, 5-77
  - Test Lead Resistance, 5-63
  - Power Analysis
    - Review
      - Power Time Domain, 1-36
      - Test History, 1-32, 1-37
    - Warning Levels
      - Current Crest Factor, 1-33
      - Current Imbalance, 1-33
      - Current RMS, 1-33
      - Current THD, 1-34, 1-38
      - Differential Current, 1-38
      - Harmonic Factor, 1-33
      - Self Impedance Imbalance, 1-34
      - Voltage Crest Factor, 1-33
      - Voltage Imbalance, 1-33
      - Voltage Line-to-Line, 1-33
      - Voltage THD, 1-38
      - VoltageTHD, 1-33
  - Rotor Evaluation
    - Change Speed, 6-51
    - Correct Displayed Data, 6-51
  - Test History
    - Rotor Evaluation
      - Current Analysis, 6-58
  - Armature Compensation, 5-74
  - Armature Section Tests, 5-40
    - DC Assets
      - MCE, 5-40
  - Armature Tab
    - Nameplate, 3-26
  - Asset
    - Add, 3-8
    - Copy, 3-9
    - Edit, 3-10
    - Move, 3-10
    - Remove, 3-10
  - Asset Condition
    - Message Center, 3-44
  - Asset Condition Code
    - Report, 3-47
  - Asset Diagnostic
    - Message Center, 3-44
  - Asset Information, 5-5
    - Power Analysis
      - Test Selection Window, 1-4
    - Test Selection
      - MCE, 5-5
  - Asset Inventory
    - Report, 3-48
  - Asset Manager, 3-3
  - Asset Scheduler, B-1
    - Create, B-1
    - Schedule Menu, B-7
  - View Menu, B-5
  - View Scheduled Jobs, B-4
  - Asset Summary, 3-17, 3-21
  - Asset Temperature
    - Test Selection
      - MCE, 5-6
  - Asset Test Location, 5-5
    - Power Analysis
      - AC Assets, 1-5
      - DC Assets, 1-8
    - Test Selection
      - MCE, 5-5
  - Asset Warning Levels
    - Message Center, 3-44
  - Average Inductance, 5-63
- ## B
- Bar-to-Bar
    - Data Interpretation, 5-74
    - Step-By-Step Testing, 5-49
    - Test, 5-48
    - Test Leads, 1-11
    - Test Procedure
      - DC Motors
        - Armature Circuit, 5-47
  - Baseline, 5-3, 5-54, 5-61
    - Change From, 5-57, 5-60, 5-62
    - Current Analysis, 6-2, 6-66, 6-67, 6-83, 6-84
      - Warning Settings, 6-90
    - From Last Baseline, 3-30
    - Power Analysis
      - Warning Settings, 1-38
    - Set As, 3-30
    - Show Tests, 3-30
    - Undo, 3-30
  - Battery
    - Charger, 1-8
    - Indicator, 1-5
    - Laptop, 1-8
    - Tester, 1-6
      - Care, 1-8
      - Holder, 1-2
  - Bearing Tab
    - Nameplate, 3-24
  - Brush Assembly Tab
    - Nameplate, 3-26
  - Button
    - Cancel, 5-6, 6-17, 1-8, 1-10
    - Reset, 5-6, 6-17, 1-7, 1-10
    - Save, 5-6, 6-17, 1-7, 1-10
    - Test, 5-6, 6-17, 1-7, 1-10

**C**

## Calculating

Eccentricity Frequency, 6-60

## Calibration

Returning Tester, 1-6

Tester, 1-1, 1-9

## Cancel Button

Test Selection

MCE, 5-6

## Capacitance-to-Ground, 1-1

Analysis, 5-57

Data Interpretation, 5-58

Warning Levels, 5-57

## Capacitors

Power Correction, 5-62

Power Factor, 5-29, 5-62

Power Factor Correction, 5-3, 5-7, 5-35

Surge, 5-3, 5-7, 5-29, 5-35, 5-58, 5-62

## Carrier Frequency, 6-74

## Carrier/Line Frequency, 1-6

Power Analysis

DC Power Test

Test Setup, 1-9

## Change Speed

Rotor Evaluation, 6-51

## Charge Time

Test Selection

MCE, 5-6

## Charging Current, 5-64

## Clear Local Database

Field Tester, 1-23

## Commutator Bar-to-Bar, 1-2

## Comparison, 5-3

## Compose

Message Center, 3-43

## Computer

Laptop, 1-6

Care, 1-8

Ports

Parallel, 1-8

PCMCIA, 1-8

Serial, 1-8

Specifications, 1-7

## Connector

Current Probe, 1-6

MCE Test Lead, 1-6

Voltage Probe, 1-6

## Contact

PdMA, 1-6

## Copy

Test History, 3-29

## Correct Displayed Data

Rotor Evaluation, 6-51

## Create

Icon

Group, 1-7

Site, 1-7

## Message

Test History, 3-29

New Account, 1-12

New Group, 1-10

Site, 1-9

WatchList, 3-37

## Create Icon

Account, 1-7

## Current, 1-31

Absorption, 5-64

Charging, 5-64

Leakage, 5-64

## Current Analysis

Air Gap, 6-2

Baseline, 6-2

## DC Current Analysis

Display Options, 6-78

Menu, 6-76

Edit, 6-77

Options, 6-77

Related Windows, 6-78

View, 6-77

## Review

Test History, 6-80

Time Domain, 6-80

## DC In-Rush/Start-Up

Display Options, 6-82

Menu

Edit, 6-81

File, 6-80

Options, 6-81

## Review

Spectrum, 6-83

Test History, 6-84

## Demod, 6-68

Analysis, 6-75

Display Options, 6-71

Menu

Edit, 6-70

File, 6-69

Options, 6-70

View, 6-70

Related Windows Menu, 6-71

## Review

Test History, 6-73

## Drive Input

Display Options, 6-88

Menu

Edit, 6-87

File, 6-86

Options, 6-87

Related Windows, 6-88

View, 6-87

- Eccentricity, 6-58
  - Review
    - Spectrum, 6-59
    - Test History, 6-61
    - Time Domain, 6-60
- EMAX Auto, 6-49
  - Icon, 6-3
- Getting Started, 6-2
- In-Rush/Start-Up, 6-2, 6-63
  - Display Options, 6-65
  - Menu
    - Edit, 6-64
    - File, 6-63
    - Options, 6-64
  - Review
    - Spectrum, 6-66
    - Test History, 6-67
- Introduction, 6-2
- Quick Start, 6-1
- Rotor Evaluation, 6-49, 6-57
  - Display Options, 6-52
  - Menu
    - Edit, 6-50
    - File, 6-49
    - Options, 6-51
    - Related Windows, 6-52
    - View, 6-50
  - Review Spectrum, 6-53
  - Test History
    - Analysis, 6-58
  - Test Result Values, 6-57
  - Time Domain, 6-55
- Setup Options
  - Asset Test Location, 6-13
  - Button
    - Cancel, 6-17
    - Reset, 6-17
    - Save, 6-17
    - Test, 6-17
  - Capture Length, 6-16
  - Carrier Frequency, 6-14
  - Channel, 6-16
  - Current Transformer Scale, 6-14
  - Missing Currents, 6-15
  - Phase Angle, 6-15
  - Phase Configuration, 6-15
  - Phase Sequence, 6-15
  - Potential Transformer Scale, 6-14
  - Pre-Trigger Length, 6-15
  - Probe Settings, 6-14
  - Starts With
    - EMAX Auto, 6-16
  - Trigger
    - Factor, 6-15
    - Type, 6-15
- Test Result Values, 6-62, 6-74
- Test Selection Window, 6-3
  - Asset Information, 6-5
  - Test
    - List, 6-4
    - Setup, 6-5
- Test Setup
  - DC Current Analysis, 6-11
  - DC EMAX Auto, 6-10
  - DC In-Rush/Start-Up, 6-12
  - Demod, 6-9
  - Drive Input, 6-13
  - Eccentricity, 6-7
  - EMAX Auto, 6-5
  - In-Rush/Start-Up, 6-8
  - Rotor Evaluation, 6-6
- Test Window, 6-17
  - AC Induction Assets, 6-18
    - Demod, 6-28
    - Eccentricity, 6-23
    - EMAX Auto, 6-18
    - In-Rush/Start-Up, 6-25
    - Rotor Evaluation, 6-20
    - Step-by-Step
      - Demod, 6-28
      - Eccentricity, 6-23
      - EMAX Auto, 6-18
      - In-Rush/Start-Up, 6-25
      - Rotor Evaluation, 6-20
  - AC Synchronous Assets, 6-31
    - Demod, 6-31
    - Eccentricity, 6-31
    - EMAX Auto, 6-31
    - In-Rush/Start-Up, 6-31
    - Rotor Evaluation, 6-31
  - AC Wound Rotor Assets, 6-32
    - Demod, 6-32
    - Eccentricity, 6-32
    - EMAX Auto, 6-32
    - In-Rush/Start-Up, 6-32
    - Rotor Evaluation, 6-32
  - DC Assets, 6-75
    - DC EMAX Auto, 6-32
    - Field Section Tests, 6-45
    - Step-by-Step
      - DC EMAX Auto, 6-32
      - Drive Input, 6-43
      - In-Rush/Start-Up, 6-45
    - Test Window, 6-32
  - DC Current Analysis, 6-76
  - DC EMAX Auto, 6-76
  - DC In-Rush/Start-Up, 6-80, 6-89
  - Drive Input, 6-85

- View Data, 6-1
  - Warning Settings, 6-89
    - Change, 6-91
  - Current Crest Factor, 1-33
  - Current Imbalance, 1-33
  - Current Probes, 6-2, 1-2
  - Current RMS, 1-33
  - Current Spikes, 1-2
  - Current THD, 1-34, 1-38
  - Current Transformer, 6-74
  - Current Transformer Scale, 1-6
    - DC Power Test
      - Test Setup, 1-10
  - Customer Service
    - Dell Computer, 1-8
- D**
- DAQ Cable, 1-5
  - Data
    - Analysis Assistance, 1-6
    - Export, 3-14, 3-15
    - Import, 3-15
    - Menu, 1-7
  - Data Interpretation
    - Bar-to-Bar, 5-74
    - Capacitance-to-Ground, 5-58
    - Phase-to-Phase Inductance, 5-62
    - Phase-to-Phase Resistance, 5-60
    - Polarization Index, 5-65
    - Rotor Influence Check, 5-69
  - DataSync
    - Field Tester, 1-19
  - DC
    - EMAX Auto
      - Test Window
        - Current Analysis, 6-32
    - Power Analysis
      - PowerTime Domain, 1-34
    - Power Test
      - Test Setup, 1-8
    - Test Results Window
      - Current Analysis
        - DC Current Analysis, 6-76
        - DC EMAX Auto, 6-76
        - DC In-Rush/Start-Up, 6-80, 6-89
  - DC Assets, 5-40
    - Bar-to-Bar Test
      - Raise/Lower Leads, 5-49
    - Menu
      - File, 5-48
      - Options, 5-48
      - View, 5-48
    - Test Window
      - MCE, 5-40
  - DC Bar-to-Bar
    - See Bar-to-Bar
  - DC Standard Test, 5-40, 5-41, 5-52
    - Analysis, 5-79
  - DC Assets
    - MCE, 5-40
  - Menu
    - File, 5-41
    - Options, 5-41
    - View, 5-41
  - Step-By-Step Testing, 5-42
  - Deck
    - Connections, 1-2
  - Deenergized, 1-1, 1-4
    - Multimeter, 1-5
    - Verifying, 1-5
  - Deleted Assets Folders, 1-26
  - Dell Computer
    - Customer Service, 1-8
  - Demod, 6-68
    - Current Transformer, 6-74
    - Test Window
      - Current Analysis
        - AC Induction Assets, 6-28
        - AC Synchronous Assets, 6-31
        - AC Wound Rotor Assets, 6-32
  - Demodulation
    - See Demod
  - Detailed
    - Report, 3-52
      - Create, 3-52
      - File Menu, 3-57
      - Multiple Asset, 3-59
      - Saved Reports List, 3-57
      - Single Asset, 3-52
  - Dielectric Absorption, 5-45, 5-53
    - Analysis, 5-75
  - Differential Current, 1-38
  - Dimensions
    - Shipping Case, 1-16
    - Tester Case, 1-16
  - Display Options
    - Current Analysis
      - DC Current Analysis, 6-78
      - DC In-Rush/Start-Up, 6-82
      - Demod, 6-71
      - Drive Input, 6-88
      - In-Rush/Start-Up, 6-65
    - Power Analysis
      - AC Assets
        - Power FFT, 1-25
        - Power Harmonics, 1-27
        - Power Instantaneous, 1-24
        - Power Phasor, 1-16
        - Power Voltage and Current FFT, 1-20

- Power Voltage and Current Harmonics, 1-22
  - PowerTime Domain, 1-18
  - DC Assets
    - PowerTime Domain, 1-36
  - Rotor Evaluation
    - Current Analysis, 6-52
  - DownSync
    - Field Tester, 1-19
  - Drive Input
    - Test Window
      - Current Analysis, 6-85
- E**
- EASA, 5-60
  - Eccentricity, 1-3, 6-2, 6-58, 1-2
    - Current Analysis
      - Calculating Frequency, 6-60
      - Test Window
        - AC Induction Assets, 6-23
        - AC Synchronous Assets, 6-31
        - AC Wound Rotor Assets, 6-32
    - Frequency, 6-62
    - MCE, 5-71
    - Power Analysis, 1-2, 1-22
  - Edit
    - Account, 1-14
    - Group, 1-17
    - Site, 1-18
  - Edit Menu
    - Current Analysis
      - DC Current Analysis, 6-77
      - DC In-Rush/Start-Up, 6-81
      - Demod, 6-70
      - Drive Input, 6-87
      - In-Rush/Start-Up, 6-64
      - Rotor Evaluation, 6-50
    - Power Analysis
      - DC PowerTime Domain, 1-35
      - Power Phasor, 1-15
      - PowerResults, 1-29
    - Site Navigator, 3-19
    - Test History, 3-29
    - WatchList, 3-36
  - Efficiency, 1-32
  - Electrical Safety, 1-3
    - EMAX, 1-5
    - MCE, 1-4
  - Electrical Symbols, 1-4
  - EMAX
    - Auto, 3-18, 3-40, 1-1
      - Current Analysis, 6-49
    - Icon, 6-1
  - Power Analysis, 1-3
    - Test
      - Current Analysis
        - AC Induction Assets, 6-18
        - AC Synchronous Assets, 6-31
        - AC Wound Rotor Assets, 6-32
    - Electrical Safety, 1-5
    - Philosophy, 1-2
    - Power Analysis, 1-1
    - Quick Start, Procedure, 1-1
    - Specifications, 1-15
    - Test Leads
      - Current, 1-12
      - Voltage, 1-12
    - Test Selection, 1-1
    - Testing, 1-2, 1-1
  - EMAX Power Analysis
    - EMAX Auto, 1-3
    - Getting Started, 1-2
    - Introduction, 1-2
    - Test Selection Window, 1-3
      - Asset Information, 1-4
      - Test List, 1-4
      - Test Setup, 1-5
    - Test Setup
      - DC Power Test, 1-8
        - Asset Test Location, 1-8
        - Carrier/LineFrequency, 1-9
        - Current Transformer Scale, 1-10
        - Potential Transformer Scale, 1-10
        - Probe Settings, 1-9
        - Starts With, 1-10
      - Power Test, 1-5
  - Energized, 1-2
  - Energy Cost Analysis, C-1
    - Perform, C-1
    - Report, C-5
    - Search, C-3
  - Tab
    - Asset Information, C-2
    - Energy Cost Analysis, C-5
    - Energy/Operating Hours, C-4
    - Replacement Asset, C-2
  - Environmental Conditions
    - Tester, 1-9
  - EPRI, 5-60
  - Exit MCEGold, 3-59
    - Shuttle Parking, 3-60
  - Export File, 3-18, 3-44
- F**
- Fast Fourier Transform (FFT), 6-53
  - Fault Zone Report, 5-10

- Menu
  - Edit, 5-11
  - File, 5-10
  - Options, 5-11
- Fault Zones, 3-18, 3-40
  - Export, 3-15
- Field Section Tests
  - DC Assets
    - Current Analysis, 6-45
    - MCE, 5-52
- Field Tester
  - DataSync, 1-19
  - DownSync, 1-19
  - Local, 1-18, 1-24
- File Menu, 5-12, 5-25, 5-30, 5-36
  - AC Standard Test, 5-12
  - Bar-to-Bar Test, 5-48
  - Current Analysis
    - DC Current Analysis, 6-76
    - DC In-Rush/Start-Up, 6-80
    - Demod, 6-69
    - Drive Input, 6-86
    - In-Rush/Start-Up, 6-63
    - Rotor Evaluation, 6-49
  - DC Standard Test, 5-41
  - Polarization Index, 5-17
  - Power Analysis
    - DC PowerTime Domain, 1-34
    - Power Phasor, 1-14
    - PowerResults, 1-29
  - Resistor Bank, 5-36
  - RIC, 5-20
  - Step Voltage, 5-25
  - Synchronous, 5-30
  - Test History, 3-29
  - WatchList, 3-36
- Find Peak
  - Current Spectrum, 6-54
  - In-Rush/Start-Up, 6-66, 6-83
- FLA, 6-58, 6-62, 6-74
- Folder
  - Add, 3-11
  - Deleted Assets, 1-26
  - Edit, 3-13
  - Move, 3-12
  - Remove, 3-13
- Fp Amplitude, 6-58
- Fp Frequency, 6-58
- From Last Baseline, 3-30

**G**

- Getting Started
  - Current Analysis, 6-2
  - EMAX Power Analysis, 1-2

- Graph
  - Current Analysis
    - Display Methods, 6-54
    - In-Rush/Start-Up, 6-66, 6-83
    - Spectrum, 6-53
  - MCE
    - Eccentricity, 5-71
    - Rotor Bars, 5-71
  - Power Analysis
    - Voltage and Current Time Domain, 1-19
- Graph Option Menu
  - Step Voltage, 5-25
- Group Assignments, 1-13

**H**

- harmonic, 1-30
- Harmonic Factor, 1-33
- Harmonics
  - Current Analysis
    - Eccentricity, 6-60
  - Power Analysis, 1-2
    - Current, THD, 1-31
    - Distortion, 1-33, 1-34
    - Voltage
      - Distortion, 1-31
      - Voltage and Current FFT, 1-22
- Help Menu
  - Network, 1-7
- High Resistance Connections, 1-2
- Home Screen, 3-1
  - Asset
    - Add, 3-27
    - Summary, 3-21
  - EMAX Auto, 3-40
  - Exit MCEGold, 3-59
  - Shuttle Parking, 3-60
- Export File, 3-44
- Fault Zones, 3-40
- Manage Templates, 3-4
- MCE Auto, 3-40
- Menu
  - Asset Manager
    - Asset
      - Add, 3-8
      - Copy, 3-9
      - Edit, 3-10
      - Move, 3-10
      - Remove, 3-10
    - Folder
      - Add, 3-11
      - Edit, 3-13
      - Move, 3-12
      - Remove, 3-13
    - Manage Templates, 3-3

- Warning Settings, 3-7
- Data
  - Export, 3-14
    - Fault Zones, 3-15
    - Single Asset, 3-14
  - Single Asset Import, 3-15
- File, 3-2
- Help
  - About, 3-16
  - Tutorial, 3-16
- Message, 3-14
- Options, 3-2
  - Date/Time, Time Zone, 3-3
  - Time Zone, 3-2
- Windows, 3-16
- Message Center, 3-41
- Asset
  - Condition, 3-44
  - Diagnostic, 3-44
  - Warning Levels, 3-44
- Compose, 3-43
- Menu
  - Edit, 3-42
  - File, 3-42
  - Option, 3-42
  - View, 3-42
- Trash, 3-44
- Nameplate, 3-22
- Report, 3-45
  - AC EMAX Summary, 3-46
  - Asset Condition Code, 3-47
  - Asset Inventory, 3-48
  - Detailed, 3-52
    - File Menu, 3-57
    - Multiple Asset, 3-59
    - Saved Reports List, 3-57
    - Single Asset, 3-52
  - MCE Summary, 3-49
  - Message History, 3-50
  - PI/DA Summary, 3-51
- Search, 3-32
- Site Condition, 3-27
- Site Navigator, 3-18
- Status Bar Icon, 3-18
- Test History, 3-27, 3-28
- Test Selection, 3-32
- Toolbar Icons, 3-17
  - Add Asset, 3-17, 3-27
  - Asset Summary, 3-17, 3-21
- EMAX
  - Auto, 3-18, 3-40
  - Export File, 3-18, 3-44
  - Fault Zones, 3-18, 3-40
  - MCE Auto, 3-18, 3-40

- Message, 3-18, 3-41
- Nameplate, 3-17, 3-22
- Report, 3-18
- Search, 3-17, 3-32
- Site Condition, 3-17, 3-27
- Site Navigator, 3-17
- Status Bar, 3-18
- Test History, 3-17, 3-27
- Test Selection, 3-17, 3-32
- Warning Settings, 3-17, 3-31
- WatchList, 3-18, 3-36
- Warning Settings, 3-31
- WatchList, 3-36
  - Add Asset, 3-38
  - Create, 3-37
- Menu
  - Edit, 3-36
  - File, 3-36
  - Remove
    - Asset, 3-38
    - WatchList, 3-38
  - Reorder List, 3-39
- Hot Stick, 1-5

## I

- Icon
  - Also See Home Screen, Toolbar Icons
  - Create
    - Account, 1-7
    - Group, 1-7
    - Site, 1-7
  - EMAX Auto, 6-1, 6-3, 1-1
  - Show Manager, 1-7
  - System Activity, 1-7
- Identification Tab
  - Nameplate, 3-22
- Impedance, 1-31
- Inductance Phase-to-Phase, 1-2
- Inductive Imbalance, 1-2, 5-75, 5-76
  - AC Asset
    - Standard Test, 5-53
  - AC Induction Motor
    - Standard Test, 5-75
  - AC Synchronous Motor
    - RIC, 5-74, 5-75
    - Standard Test, 5-76
  - AC Wound Rotor Motor
    - RIC, 5-77
    - Standard Test, 5-77, 5-78
  - Phase-to-Phase Inductance, 5-62, 5-63
- In-Rush/Start-Up, 1-3, 6-2, 6-63
  - Current Analysis
    - Test Window



- AC Induction Assets, 6-25
- AC Synchronous Assets, 6-31
- AC Wound Rotor Assets, 6-32
- Introduction
  - Current Analysis, 6-2
  - EMAX Power Analysis, 1-2
  - MCE, 5-2
- L**
- Label
  - Connection, 1-4
  - Identification, 1-4
- Laptop Computer
  - See Computer, Laptop
- Leakage Current, 5-64
- Line Frequency, 6-57, 6-63
  - See Also Carrier Frequency
- Load Variance
  - Maximum, 6-74
- M**
- Manage Templates, 3-4
- Manual Mode (MCE Testing)
  - AC Induction
    - Standard, 5-16, 5-40, 5-44
- Manufacturer Tab
  - Nameplate, 3-22
- MCE
  - AC Induction
    - MCE Auto Test, 5-7
      - Fault Zone Report, 5-10
    - Menu
      - File, 5-8
      - Options, 5-8
      - Test Button, 5-9
  - Analysis
    - AC Induction Motors
      - Rotor Influence Check, 5-74
    - AC Standard Test, 5-75
      - Wound Rotor, 5-77
    - AC Synchronous Motors, 5-75
    - AC Synchronous Test, 5-76
    - AC Wound Rotor Motors, 5-77
    - Average Inductance, 5-63
    - Bar-to-Bar, 5-74, 5-79
    - Capacitance-to-Ground, 5-57
    - DC Assets, 5-79
      - Dielectric Absorption, 5-79
      - Polarization Index, 5-79
    - DC Standard Test, 5-79
    - Dielectric Absorption, 5-75, 5-76, 5-78
    - Inductive Imbalance, 5-63
    - Phase-to-Phase Inductance, 5-61
    - Phase-to-Phase Resistance, 5-59
    - Polarization Index, 5-64, 5-75, 5-76, 5-77, 5-78
    - Resistance-to-Ground, 5-53
    - Resistive Imbalance, 5-63
    - Resistor Bank, 5-78
    - Rotor Influence Check, 5-67, 5-75, 5-77
    - Test Lead Resistance, 5-63
  - Capacitance-to-Ground, 1-1
  - Commutator Bar-to-Bar, 1-2
  - DC Assets
    - Analysis
      - Dielectric Absorption, 5-79
      - Polarization Index, 5-79
    - Armature Section Tests, 5-40
    - DC Standard Test, 5-40
    - Field Section
      - DC Standard, 5-52
      - MCE Auto, 5-52
      - Polarization Index, 5-52
      - Step Voltage, 5-53
      - Tests, 5-52
    - MCE Auto Test, 5-40
  - Electrical Safety, 1-4
  - Inductance Phase-to-Phase, 1-2
  - Inductive Imbalance, 1-2
  - Introduction, 5-2
  - Phase-to-Phase Resistance, 1-2
  - Polarization Index, 1-2
  - Quick Start
    - Procedure, 5-1, 6-1
  - Resistive Imbalance, 1-2
  - Rotor Influence Check, 1-2
  - Specifications, 1-14
  - Standard Test
    - Data Analysis, 5-53
  - Test Leads, 1-10
  - Test Procedure
    - AC Induction Motors
      - Rotor Influence Check (RIC), 5-21, 5-26, 5-31, 5-37
    - DC Motors
      - Armature Circuit
        - Bar-to-Bar, 5-47
        - Polarization Index, 5-45
        - Step Voltage, 5-47
      - Field Circuit
        - Polarization Index, 5-53
  - Test Selection, 5-3
    - Asset
      - Information, 5-5
      - Temperature, 5-6
      - Test Location, 5-5
    - Button
      - Cancel, 5-6

- Reset, 5-6
- Save, 5-6
- Test, 5-6
- Charge Time, 5-6
- Resistance-to-Ground, 5-6
- Span, 5-6
- Test
  - Frequency, 5-6
  - List, 5-4
  - Setup, 5-5
- Voltage, 5-6
- Test Window
  - AC Induction, 5-7
  - AC Synchronous, 5-29
    - Field Section, 5-30
    - Stator Section, 5-29
  - AC Wound Rotor, 5-34
    - Resistor Bank Section, 5-35
    - Rotor Section, 5-35
    - Stator Section, 5-35
  - ACWound Rotor
    - Resistor Bank Test, 5-36
  - DC Assets, 5-40
- MCE Auto, 3-18, 3-40, 5-52
  - AC Induction
    - MCE, 5-7
  - DC Assets
    - Field Section Tests
      - MCE, 5-52
    - MCE, 5-40
- MCE Auto Test, 5-7, 5-40
  - Fault Zone Report, 5-10
- Menu
  - File, 5-8
  - Options, 5-8
  - Test Button, 5-9
- MCE Summary
  - Report, 3-49
- MCEGold
  - Home Screen, 3-1
  - Starting, 3-1
  - Tutorials, 3-1
- MCE Gold Lite, 3-78
  - Starting Lite, 3-78
  - Lite Home Screen, 3-79
  - Title Bar, 3-80
  - Asset Selected, 3-80
  - Search, 3-80
  - Left Panel, 3-80
  - Center Panel, 3-80
  - Right Panel, 3-81
  - Testing Buttons, 3-81
  - Toolbar, 3-81
- Megger Voltage, 5-56

- Menus
  - Power Analysis
    - Power FFT, 1-25
    - Power Harmonics, 1-27
    - Power Instantaneous, 1-24
    - Power Time Domain, 1-18
    - Power Voltage and Current FFT, 1-20
    - Power Voltage and Current Harmonics, 1-22
- Message Center, 3-41
  - Asset
    - Condition, 3-44
    - Diagnostic, 3-44
    - Warning Levels, 3-44
  - Compose, 3-43
  - Menu
    - Edit, 3-42
    - File, 3-42
    - Option, 3-42
    - View, 3-42
  - Trash, 3-44
- Message History
  - Report, 3-50
- Multimeter, 1-5
- Multi-site Version, 3-19

## N

- Nameplate, 3-17, 3-22
  - Armature Tab, 3-26
  - Bearing Tab, 3-24
  - Brush Assembly Tab, 3-26
  - Identification Tab, 3-22
  - Manufacturer Tab, 3-22
  - Nameplate 1 Tab, 3-23
  - Nameplate 2 Tab, 3-24
  - Resistor Bank Tab, 3-25
- Network
  - Account Manager, 1-6
    - Icon
      - Create Account, 1-7
      - Create Group, 1-7
      - Create Site, 1-7
    - Menu
      - Data, 1-7
      - Help, 1-7
      - Windows, 1-7
    - Show Manager Icon, 1-7
    - System Activity Icon, 1-7
    - Window, 1-8
  - Add Account to Group, 1-11
  - Create
    - New Account, 1-12
    - New Group, 1-10
    - Site, 1-9

- Deleted Assets Folders, 1-26
- Desktop, 1-1
- Edit
  - Account, 1-14
  - Group, 1-17
  - Site, 1-18
- Field Tester
  - Clear Local Database, 1-23
  - DataSync, 1-19
  - DownSync, 1-19
  - Two Way Sync, 1-23
  - UpSync, 1-22
- Field Tester Local, 1-1, 1-18, 1-24
- Field Tester Network, 1-1, 1-18
- Group Assignments, 1-13
- New Assets Folders, 1-27
- Tutorials, 1-27
- Utility Program, 1-2
  - Calibration, 1-6
  - Database, 1-4
  - Desktop Database, 1-4
  - License Key, 1-3
  - Network Tester Database, 1-5
  - Server, 1-5
- New Assets Folders
  - Network, 1-27
- NP Speed RPM, 6-74

## O

- One-Up/Two Down
  - Two-Up/One-Down, 5-73
- Online, 1-2
- Option Menu
  - Message Center, 3-42
- Options Menu, 5-13, 5-26, 5-31, 5-37
  - AC Standard Test, 5-13
  - Bar-to-Bar Test, 5-48
  - Current Analysis
    - DC Current Analysis, 6-77
    - DC In-Rush/Start-Up, 6-81
    - Demod, 6-70
    - Drive Input, 6-87
    - In-Rush/Start-Up, 6-64
    - Rotor Evaluation, 6-51
  - DC Standard Test, 5-41
  - Polarization Index, 5-17
  - Power Analysis
    - DC PowerTime Domain, 1-35
    - Power Phasor, 1-16
    - PowerResults, 1-29
  - Resistor Bank, 5-37
  - RIC, 5-21
  - Step Voltage, 5-26
  - Synchronous, 5-31

## P

- Parallel Port, 1-8
- PCMCIA
  - Port, 1-8
  - Slot, 1-8
- PdMA
  - Contact Information, 1-6
- Peak, 6-62
  - Speed, 6-63
- Phase Angle, 1-7
- Phase Configuration, 1-7
- Phase Sequence, 1-7
- Phase-to-Phase Inductance, 5-61, 5-71
  - Data Interpretation, 5-62
  - See Inductance Phase-to-Phase
  - Warning Levels, 5-62
- Phase-to-Phase Resistance, 5-59
  - Data Interpretation, 5-60
  - Warning Levels, 5-60
- Phase-to-Phase Shorts, 5-73
- Philosophy
  - EMAX, 1-2
- PI/DA Summary
  - Report, 3-51
- Polarization Index, 1-2, 5-17, 5-52, 5-64
  - AC Induction, 5-16
  - Analysis, 5-64, 5-75
  - Data Interpretation, 5-65
  - Field Section Tests
    - DC Assets
    - MCE, 5-52
  - Menu
    - File, 5-17
    - Options, 5-17
  - Profile, 5-65
  - Test Procedure
    - DC Motors
      - Armature Circuit, 5-45
      - Field Circuit, 5-53
    - Warning Levels, 5-65
    - Wound Rotor, 5-77
- Pole Face, 5-69, 5-71
- Pole Pass
  - Alarm Level, 6-75
  - Peak Frequency, 6-75
  - Peak Level, 6-75
- Ports
  - Parallel, 1-8
  - PCMCIA, 1-8
  - Serial, 1-8
- Potential Transformer Scale, 1-7
  - DC Power Test
    - Test Setup
      - EMAX Power, 1-10
- Power Analysis, 1-3

- AC Assets
  - Power Phasor, 1-14
- Power FFT, 1-26
  - Display Options, 1-25
  - Menus, 1-25
  - Power FFT, 1-25
- Power Harmonics, 1-28
  - Display Options, 1-27
  - Menus, 1-27
  - PowerHarmonics, 1-27
- Power Instantaneous, 1-24
  - Display Options, 1-24
  - Menus, 1-24
  - Power Instantaneous, 1-23
- Power Phasor
  - AC Assets
    - Analysis, 1-14
  - Display Options, 1-16
  - Menu
    - Edit, 1-15
    - File, 1-14
    - Options, 1-16
    - View, 1-15
  - Related Windows Menu, 1-16
  - Review Phasor Diagram, 6-88, 1-17
- Power Results, 1-30
  - Menu
    - Edit, 1-29
    - File, 1-29
    - Options, 1-29
    - Related Windows, 1-30
  - Power Results, 1-28
- Power Time Domain
  - Display Options, 1-18
  - Review Time Domain, 1-19
- Power Voltage and Current
  - Display Options, 1-20
  - Menus, 1-20
- Power Voltage and Current FFT, 1-20, 1-21
- Power Voltage and Current Harmonics, 1-22, 1-23
  - Display Options, 1-22
  - Menus, 1-22
- PowerTime Domain, 1-18
  - Display Options, 1-36
- Menu
  - Edit, 1-35
  - File, 1-34
  - Options, 1-35
  - Menus, 1-18
- Results Page
  - Review
    - Current, 1-31
    - Efficiency, 1-32
    - Impedance, 1-31
    - Power, 1-31
    - Sequence, 1-32
    - Voltage, 1-30
- Setup Options
  - Asset Test Location, 1-5
  - Button
    - Cancel, 1-8, 1-10
    - Reset, 1-10
    - Save, 1-7, 1-10
    - Test, 1-7, 1-10
  - Carrier/Line Frequency, 1-6
  - Current Transformer Scale, 1-6
  - Phase
    - Angle, 1-7
    - Configuration, 1-7
    - Sequence, 1-7
  - Potential Transformer Scale, 1-7
  - Probe Settings, 1-6
  - Starts With, 1-7
- Setup Options Button
  - Reset, 1-7
- Test Window, 1-10
  - Step-by-Step Power
    - AC Induction Assets, 1-10
    - AC Synchronous Assets, 1-12
    - AC Wound Rotor Assets, 1-12
    - DC Assets
      - Armature, 1-12
      - Field Section, 1-14
- View Data, 1-1
- Warning Settings, 1-38
  - Change, 1-39
- Power and Current FFT, 1-20
- Power FFT
  - Power Analysis, 1-25
- Power Harmonics
  - Power Analysis, 1-27
- Power Instantaneous
  - Power Analysis, 1-23
- Power Results
  - Power Analysis, 1-28
- Power Test, 1-5
  - EMAX Power Analysis
    - Test Setup
      - Power Test, 1-5
- Power Time Domain, 1-18, 1-34
  - DC Power Analysis, 1-34
  - Power Analysis, 1-18
- Power Voltage and Current FFT, 1-21
  - Power Analysis, 1-20
- Power Voltage and Current Harmonics
  - Power Analysis, 1-22
- Probe Settings, 1-6
  - DC Power Test

- Test Setup
      - EMAX Power, 1-9
  - Probes
    - Current, 6-2
    - Voltage, 1-2
  - Procedure
    - MCE Testing
      - AC Induction Motors
        - Rotor Influence Check, 5-21, 5-26, 5-31, 5-37
      - DC Motors
        - Field Circuit
          - Polarization Index, 5-53
      - Quick Start, 5-1, 6-1
    - Quick Start
      - Current Analysis Testing, 6-1
      - EMAX Testing, 1-1
- Q**
- Quality Assurance, 1-1
  - Quick Start
    - Current Analysis, 6-1
    - EMAX, 1-1
    - MCE, 5-1, 6-1
- R**
- Raise/Lower Leads
    - Bar-to-Bar Test, 5-49
  - Raw Data
    - Test History, 3-29
  - Recommended Actions
    - MCE Analysis
      - AC Induction Motors, 5-75
      - AC Wound Rotor Motor, 5-77, 5-78
      - DC Motors, 5-79
      - Synchronous Motors, 5-75, 5-76
  - Related Windows Menu
    - Current Analysis
      - DC Current Analysis, 6-78
      - Demod, 6-71
      - Drive Input, 6-88
      - Rotor Evaluation, 6-52
    - Power Analysis
      - Power Phasor, 1-16
      - Power Results, 1-30
  - Remove
    - WatchList, 3-38
    - WatchList Asset, 3-38
  - Reorder
    - WatchList, 3-39
  - Report, 3-45
    - AC EMAX Summary, 3-46
    - Asset Condition Code, 3-47
  - Asset Inventory, 3-48
    - Detailed, 3-52
      - Create, 3-52
      - File Menu, 3-57
    - MCE Summary, 3-49
    - Message History, 3-50
    - PI/DA Summary, 3-51
    - Toolbar Icon, 3-18
  - Reset Button
    - Test Selection
      - MCE, 5-6
  - Resistance Phase-to-Phase, 1-2
  - Resistance-to-Ground, 1-1
    - Test Selection
      - MCE, 5-6
    - Warning Levels, 5-53
  - Resistive Imbalance, 1-2, 5-59, 5-63
  - Resistor Bank, 5-78
    - Step-By-Step Testing, 5-37
    - Test, 5-36
    - View Menu, 5-36
  - Resistor Bank Tab
    - Nameplate, 3-25
  - Returning
    - Tester, 1-6
  - Review
    - Power Analysis
      - Phasor Diagram, 1-17
        - Power Phasor, 6-88
      - Power FFT, 1-26
      - Power Harmonics, 1-28
      - Power Instantaneous, 1-24
      - Power Results, 1-30
      - Power Time Domain, 1-36
      - Power Voltage and Current FFT, 1-21
      - Power Voltage and Current Harmonics, 1-23
      - Test History, 1-32, 1-37
      - Time Domain, 1-19
    - Review Spectrum
      - Current Analysis
        - DC Current Analysis, 6-80
        - DC In-Rush/Start-Up, 6-83
        - Demod, 6-73
        - Eccentricity, 6-59
        - In-Rush/Start-Up, 6-66
        - Rotor Evaluation, 6-53
    - Review Test History
      - Current Analysis
        - DC In-Rush/Start-Up, 6-84
        - Demod, 6-73
        - Eccentricity, 6-61
        - In-Rush/Start-Up, 6-67
        - Rotor Evaluation, 6-57
    - Review Time Domain
      - Current Analysis

- DC Current Analysis, 6-80
  - Eccentricity, 6-60
  - RIC
    - AC Induction
      - RIC, 5-20
    - Menu
      - File, 5-20
      - Options, 5-21
      - View, 5-20
    - Step-By-Step Testing, 5-21
  - RJ45 Cable, 1-5
  - RMS Amps, 6-58, 6-63
  - RMS Amps 1, 6-75
  - Rotor
    - Position, 5-68
  - Rotor Bar
    - Defects, 5-68, 5-71, 6-2
    - Graph, 5-71
  - Rotor Evaluation, 1-3
    - Analysis, 6-49
    - Test Window
      - Current Analysis
        - AC induction Assets, 6-20
        - AC Synchronous Assets, 6-31
        - AC Wound Rotor Assets, 6-32
  - Rotor Influence Check, 1-2
    - AC Induction Motors
      - Test Procedure, 5-21, 5-26, 5-31, 5-37
    - Aliasing, 5-68, 5-69
    - Analysis, 5-67
      - AC Synchronous Motors, 5-75
      - AC Wound Rotor Motors, 5-77
      - Average Inductance, 5-63
      - Inductive Imbalance, 5-63
      - Phase-to-Phase Inductance, 5-61
    - Data Interpretation, 5-69
  - MCE
    - Analysis, 5-74
- S**
- Safety
    - Electrical, 1-3
      - EMAX, 1-5, 6-2, 1-2
      - MCE, 1-4
      - Precautions, 5-3
    - Equipment
      - Tagouts, 5-21, 5-26, 5-31, 5-37
    - Personnel, 1-5
  - Save As Excel
    - Test History, 3-29
  - Save Button
    - Test Selection
      - MCE, 5-6
  - Search, 3-32
    - Advanced, 3-33
      - Search Buttons, 3-35
      - Search Criteria, 3-34
      - Toolbar Icon, 3-17
  - Self Impedance Imbalance, 1-34
  - Sequence, 1-32
  - Serial
    - Number (of tester), 1-4
    - Port, 1-8
  - Set as Baseline
    - Test History, 3-30
  - Set Condition Code
    - Test History, 3-31
  - Shipping
    - Case, 1-1
      - Specifications, 1-16
    - Tester, 1-9
  - Shorts
    - Phase-to-Phase, 5-73
    - Turn-to-Turn, 5-73
  - Show All Tests
    - Test History, 3-29
  - Show Manager
    - Network, 1-7
  - Show/Hide
    - Test History, 3-30
  - Shuttle Parking, 3-60
  - Single Asset
    - Export, 3-14
    - Import, 3-15
  - Site Condition, 3-27
    - Icon, 3-17
  - Site Navigator, 3-18
    - Icon, 3-17
    - Menu
      - Edit, 3-19
      - View, 3-19
    - Multi-site Version, 3-19
  - Span
    - Test Selection
      - MCE, 5-6
  - Specifications
    - EMAX, 1-15
    - MCE, 1-14
    - Shipping Case, 1-16
    - Tester Case, 1-16
  - Spectrum
    - Eccentricity, 6-59
  - Speed
    - Alarm Level, 6-75
    - Peak Level, 6-75
    - PeakFrequency, 6-75
    - RPM, 6-57, 6-74

- Select, 6-54
- Standard Test
  - Data Analysis, 5-53
- Starts With
  - Test Selection
    - AC Power Test, 1-7
  - Test Setup
    - DC Power Test, 1-10
- Stator Winding Defects, 6-2, 1-2
- Status Bar Icon, 3-18
- Step Voltage, 1-2, 5-25, 5-26, 5-53
  - AC Induction
    - Step Voltage, 5-24
  - Field Section Tests
    - DC Assets
      - MCE, 5-53
  - Test Procedure
    - DC Motors
      - Armature Circuit, 5-47
- View Menu, 5-25
- Step-by-Step
  - Current Analysis
    - AC Induction Assets
      - Demod, 6-28
      - Eccentricity, 6-23
      - EMAX Auto, 6-18
      - In-Rush/Start-Up, 6-25
      - Rotor Evaluation, 6-20
    - DC Assets
      - DC EMAX Auto, 6-32
      - Drive Input, 6-43
      - In-Rush/Start-Up, 6-45
  - Power Analysis
    - Test Window
      - A C Wound Rotor Assets, 1-12
      - AC Induction Assets, 1-10
      - AC Synchronous Assets, 1-12
      - DC Assets
        - Armature Section, 1-12
        - Field Section, 1-14
- Step-By-Step Testing
  - AC Standard Test, 5-13
  - Bar-to-Bar, 5-49
  - DC Standard Test, 5-42
  - Polarization Index, 5-17
  - Resistor Bank, 5-37
  - RIC, 5-21
  - Step Voltage, 5-26
  - Synchronous, 5-31
- Surge
  - Capacitors, 5-3, 5-58
- Symbols
  - Electrical, 1-4
- Synchronous, 5-30, 5-31
  - Step-By-Step Testing, 5-31

- View Menu, 5-31
- Synchronous Test
  - Recommended Actions, 5-76
- System Activity Icon
  - Network, 1-7

## T

- Tab, Nameplate. See Nameplate
- Technical Support, 1-6
- Temperature Correction, 5-55
- Templates
  - Add New, 3-4
  - Change Name, 3-5
  - Change Values, 3-6
  - Copy, 3-5
  - Remove, 3-5
- Test
  - Leads
    - Current, 6-2
    - Voltage, 1-2
  - Procedure. See Procedure
- Test History, 3-27, 3-28
  - Icon, 3-17
- Menu
  - Edit, 3-29
    - Copy, 3-29
    - Create Message, 3-29
  - File, 3-29
    - Save As Excel, 3-29
  - Options
    - Set Condition Code, 3-31
  - Show/Hide, 3-30
  - View
    - Raw Data, 3-29
    - Warning Settings, 3-30
- Test Menu
  - Show Tests
    - All Tests, 3-29
    - From Last Baseline, 3-30
    - Set as Baseline, 3-30
  - Warning Settings Menu, 3-30
- Test Leads
  - Bar-to-Bar, 1-11
  - EMAX Current, 1-12
  - EMAX Voltage, 1-12
  - MCE, 1-10
- Test List
  - Test Selection Window
    - EMAX Power Analysis, 1-4
- Test Results
  - % Current Imbalance, 6-58
  - % Full Load Amps, 6-58
  - % Slip, 6-57
  - Current Analysis

- Demod, 6-74
- Eccentricity, 6-62
- Rotor Evaluation, 6-57
- FLA, 6-58
- Fp Amplitude, 6-58
- Fp Frequency, 6-58
- Line Frequency, 6-57
- RMS Amps, 6-58
- Speed RPM, 6-57
- Test Selection, 3-32
  - EMAX, 1-1
  - Icon, 3-17
  - MCE, 5-3
  - Test
    - Button, 5-6
    - Frequency, 5-6
    - List, 5-4
    - Setup, 5-5
- Test Selection Window
  - Asset Information, 6-5
  - Current Analysis, 6-3
  - EMAX Power Analysis, 1-3
  - Setup Options
    - Asset Test Location, 6-13, 1-5
    - Button
      - Cancel, 6-17, 1-8, 1-10
      - Reset, 6-17, 1-7, 1-10
      - Save, 6-17, 1-7, 1-10
    - Capture Length, 6-16
    - Carrier Frequency, 6-14
    - Carrier/Line Frequency, 1-6
    - Channel, 6-16
    - Current Transformer Scale, 6-14, 1-6
    - Missing Currents, 6-15
    - Phase Angle, 6-15, 1-7
    - Phase Configuration, 6-15, 1-7
    - Phase Sequence, 6-15, 1-7
    - Potential Transformer Scale, 6-14, 1-7
    - Pre-Trigger Length, 6-15
    - Probe Settings, 6-14, 1-6
    - Starts With, 1-7
      - EMAX Auto, 6-16
    - Test Button, 6-17, 1-7, 1-10
    - Trigger
      - Factor, 6-15
      - Type, 6-15
- Test List, 6-4
- Test Setup
  - Current Analysis, 6-5
  - DC Current Analysis, 6-11
  - DC EMAX Auto, 6-10
  - DC In-Rush/Start-Up, 6-12
  - Demod, 6-9
  - Drive Input, 6-13
  - Eccentricity, 6-7
  - EMAX Auto, 6-5
  - In-Rush/Start-Up, 6-8
  - Rotor Evaluation, 6-6
- Test Setup
  - Test Selection Window
    - EMAX Power Analysis
      - Test Setup, 1-5
- Test Voltage
  - Resistance-to-Ground, 5-56
- Test Window
  - Current Analysis, 6-17
  - MCE, 5-7
  - Power Analysis, 1-10
- Tester
  - Accessory Bag, 1-9
  - Battery, 1-6
    - Care, 1-8
    - Charger, 1-8
    - Indicator, 1-5
  - Calibration, 1-6, 1-1, 1-9
  - Care and Handling, 1-8
  - Case, 1-2
    - Care, 1-8
    - Specifications, 1-16
  - Components, 1-4
  - DAQ Cable, 1-5
  - Deck, 1-2
    - Connections, 1-2
  - Environmental Conditions, 1-9
  - Identification Label, 1-4
  - Laptop Computer, 1-2
  - Returning, 1-6
  - RJ45 Cable, 1-5
  - Serial Number, 1-4
  - Shipping, 1-9
- Testing
  - EMAX, 1-2
  - EMAX Auto, 3-40
  - MCE Auto, 3-40
- Time Domain, 6-60
- Trash
  - Message Center, 3-44
- Trending, 1-1, 5-3
- Turn-to-Turn Shorts, 5-73
- Tutorials, 3-16, 1-27
  - Network, 1-27
- Two Way Sync
  - Field Tester, 1-23
- Two-Up/One-Down
  - One-Up/Two Down, 5-73



**U**

## UpSync

Field Tester, 1-22

## Utility Program

Calibration, 1-6

Database, 1-4

Desktop Database, 1-4

License Key, 1-3

Network, 1-2

Network Tester Database, 1-5

Server, 1-5

**V**

## View

Current Analysis

Data, 6-1

## View Data

Power Analysis, 1-1

## View Menu

AC Standard Test, 5-13

Bar-to-Bar Test, 5-48

Current Analysis

DC Current Analysis, 6-77

Demod, 6-70

Drive Input, 6-87

Rotor Evaluation, 6-50

DC Standard Test, 5-41

Message Center, 3-42

Power Analysis

Power Phasor, 1-15

Resistor Bank, 5-36

RIC, 5-20

Site Navigator, 3-19

Step Voltage, 5-25

Synchronous, 5-31

Test History, 3-29

## Voltage, 1-30

Crest Factor, 1-33

Imbalance, 1-33

Line-to-Line, 1-33

Probes, 6-2, 1-2

Spikes, 1-2

Test Selection

MCE, 5-6

THD, 1-33, 1-38

Resistance Phase-to-Phase, 5-60

Resistance-to-Ground, 5-53

## Warning Settings, 3-31

Asset Manager, 3-7

Current Analysis, 6-89

Change, 6-91

Icon, 3-17

Power Analysis, 1-38

Change, 1-39

Test History, 3-30

## Warranty

Computer, 1-8

Data Analysis, 1-8

Extended, 1-8

Hardware, 1-7

Maintenance Contracts, 1-8

Replacement Parts, 1-8

Software, 1-8

## WatchList, 3-36

Icon, 3-18

## Windows, 3-16

Menu

Network, 1-7

## Wound Rotor

Recommended Actions, 5-77

Resistor Bank, 5-78

**W**

## Warning Levels, 5-65

Capacitance-to-Ground, 5-57

Inductance Phase-to-Phase, 5-62

Message Center, 3-44

Phase-to-Phase Resistance, 5-60

Polarization Index, 5-65



# INDEX

% Current Imbalance, 6-58, 6-63  
 % FLA, 6-62  
 % Full Load Amps, 6-58, 6-62, 6-74  
 % Slip, 6-57

## A

About, 3-16  
 Absorption Current, 5-64  
 AC Assets  
   Power Analysis, 1-14  
 AC EMAX Summary  
   Report, 3-46  
 AC Induction, 5-7  
   Analysis, 5-74  
   Polarization Index, 5-16  
   RIC, 5-20  
   Step Voltage, 5-24  
   Test Window  
     Current Analysis, 6-18  
     MCE, 5-7  
 AC Standard Test, 5-75, 5-77  
   AC Induction, 5-12  
   AC Standard Test, 5-12, 5-13  
   Analysis, 5-75  
   Step-By-Step Testing, 5-13  
   Wound Rotor, 5-77  
 AC Synchronous, 5-29  
   Analysis, 5-75, 5-76  
   Field Section, 5-30  
   Stator Section, 5-29  
   Synchronous, 5-30  
   Test Window  
     Current Analysis, 6-31  
     MCE, 5-29  
 AC Wound Rotor, 5-34  
   Analysis, 5-77  
   Recommended Actions, 5-77  
   Resistor Bank Section, 5-35  
   Resistor Bank Test, 5-36  
   Rotor Section, 5-35  
   Stator Section, 5-35  
   Test Window  
     Current Analysis, 6-32  
     MCE, 5-34  
 Accessory Bag, 1-9  
 Account Manager  
   Account Rights, 1-13  
   Add Accounts to Group, 1-11  
   Icon  
     Create

    Account, 1-7  
     Create Group, 1-7  
     Create Site, 1-7  
     Show Manager, 1-7  
     System Activity, 1-7  
 Menu  
   Data, 1-7  
   Windows, 1-7  
 Network, 1-6  
 Window, 1-8  
 Add  
   Asset, 3-17, 3-27  
     WatchList, 3-38  
 Air Gap, 5-68, 5-71, 5-73, 6-2, 6-58, 6-60  
   Current Analysis, 6-2  
 Aliasing  
   Rotor Influence Check, 5-68  
     Data Interpretation, 5-69  
   Rotor Position, 5-68  
 Analysis, 6-75  
   Current Analysis, 6-49  
     Demod, 6-68, 6-75  
     Eccentricity, 6-58  
     In-Rush/Start-Up, 6-63  
     Rotor Evaluation  
       Time Domain, 6-55  
 MCE  
   AC Induction Motors, 5-74  
   AC Standard Test, 5-75, 5-77  
     Wound Rotor, 5-77  
   AC Synchronous Motors, 5-75  
   AC Synchronous Test, 5-76  
   AC Wound Rotor Motors, 5-77  
   Average Inductance, 5-63  
   Bar-to-Bar, 5-79  
   Capacitance-to-Ground, 5-57  
   DC Assets, 5-79  
     Dielectric Absorption, 5-79  
     Polarization Index, 5-79  
   DC Bar-to-Bar, 5-74  
   DC Standard Test, 5-79  
   Dielectric Absorption, 5-75, 5-76, 5-78  
   Inductive Imbalance, 5-63  
   Phase-to-Phase Inductance, 5-61  
   Phase-to-Phase Resistance, 5-59  
   Polarization Index, 5-64, 5-75, 5-76, 5-77,  
     5-78  
     Wound Rotor, 5-78  
   Resistance-to-Ground, 5-53  
   Resistive Imbalance, 5-63  
   Resistor Bank, 5-78

- Rotor Influence Check, 5-74, 5-75, 5-77
  - Test Lead Resistance, 5-63
  - Power Analysis
    - Review
      - Power Time Domain, 1-36
      - Test History, 1-32, 1-37
    - Warning Levels
      - Current Crest Factor, 1-33
      - Current Imbalance, 1-33
      - Current RMS, 1-33
      - Current THD, 1-34, 1-38
      - Differential Current, 1-38
      - Harmonic Factor, 1-33
      - Self Impedance Imbalance, 1-34
      - Voltage Crest Factor, 1-33
      - Voltage Imbalance, 1-33
      - Voltage Line-to-Line, 1-33
      - Voltage THD, 1-38
      - VoltageTHD, 1-33
  - Rotor Evaluation
    - Change Speed, 6-51
    - Correct Displayed Data, 6-51
  - Test History
    - Rotor Evaluation
      - Current Analysis, 6-58
  - Armature Compensation, 5-74
  - Armature Section Tests, 5-40
    - DC Assets
      - MCE, 5-40
  - Armature Tab
    - Nameplate, 3-26
  - Asset
    - Add, 3-8
    - Copy, 3-9
    - Edit, 3-10
    - Move, 3-10
    - Remove, 3-10
  - Asset Condition
    - Message Center, 3-44
  - Asset Condition Code
    - Report, 3-47
  - Asset Diagnostic
    - Message Center, 3-44
  - Asset Information, 5-5
    - Power Analysis
      - Test Selection Window, 1-4
    - Test Selection
      - MCE, 5-5
  - Asset Inventory
    - Report, 3-48
  - Asset Manager, 3-3
  - Asset Scheduler, B-1
    - Create, B-1
    - Schedule Menu, B-7
  - View Menu, B-5
  - View Scheduled Jobs, B-4
  - Asset Summary, 3-17, 3-21
  - Asset Temperature
    - Test Selection
      - MCE, 5-6
  - Asset Test Location, 5-5
    - Power Analysis
      - AC Assets, 1-5
      - DC Assets, 1-8
    - Test Selection
      - MCE, 5-5
  - Asset Warning Levels
    - Message Center, 3-44
  - Average Inductance, 5-63
- ## B
- Bar-to-Bar
    - Data Interpretation, 5-74
    - Step-By-Step Testing, 5-49
    - Test, 5-48
    - Test Leads, 1-11
    - Test Procedure
      - DC Motors
        - Armature Circuit, 5-47
  - Baseline, 5-3, 5-54, 5-61
    - Change From, 5-57, 5-60, 5-62
    - Current Analysis, 6-2, 6-66, 6-67, 6-83, 6-84
      - Warning Settings, 6-90
    - From Last Baseline, 3-30
    - Power Analysis
      - Warning Settings, 1-38
    - Set As, 3-30
    - Show Tests, 3-30
    - Undo, 3-30
  - Battery
    - Charger, 1-8
    - Indicator, 1-5
    - Laptop, 1-8
    - Tester, 1-6
      - Care, 1-8
      - Holder, 1-2
  - Bearing Tab
    - Nameplate, 3-24
  - Brush Assembly Tab
    - Nameplate, 3-26
  - Button
    - Cancel, 5-6, 6-17, 1-8, 1-10
    - Reset, 5-6, 6-17, 1-7, 1-10
    - Save, 5-6, 6-17, 1-7, 1-10
    - Test, 5-6, 6-17, 1-7, 1-10

**C**

## Calculating

Eccentricity Frequency, 6-60

## Calibration

Returning Tester, 1-6

Tester, 1-1, 1-9

## Cancel Button

Test Selection

MCE, 5-6

## Capacitance-to-Ground, 1-1

Analysis, 5-57

Data Interpretation, 5-58

Warning Levels, 5-57

## Capacitors

Power Correction, 5-62

Power Factor, 5-29, 5-62

Power Factor Correction, 5-3, 5-7, 5-35

Surge, 5-3, 5-7, 5-29, 5-35, 5-58, 5-62

## Carrier Frequency, 6-74

## Carrier/Line Frequency, 1-6

Power Analysis

DC Power Test

Test Setup, 1-9

## Change Speed

Rotor Evaluation, 6-51

## Charge Time

Test Selection

MCE, 5-6

## Charging Current, 5-64

## Clear Local Database

Field Tester, 1-23

## Commutator Bar-to-Bar, 1-2

## Comparison, 5-3

## Compose

Message Center, 3-43

## Computer

Laptop, 1-6

Care, 1-8

Ports

Parallel, 1-8

PCMCIA, 1-8

Serial, 1-8

Specifications, 1-7

## Connector

Current Probe, 1-6

MCE Test Lead, 1-6

Voltage Probe, 1-6

## Contact

PdMA, 1-6

## Copy

Test History, 3-29

## Correct Displayed Data

Rotor Evaluation, 6-51

## Create

Icon

Group, 1-7

Site, 1-7

## Message

Test History, 3-29

New Account, 1-12

New Group, 1-10

Site, 1-9

WatchList, 3-37

## Create Icon

Account, 1-7

## Current, 1-31

Absorption, 5-64

Charging, 5-64

Leakage, 5-64

## Current Analysis

Air Gap, 6-2

Baseline, 6-2

## DC Current Analysis

Display Options, 6-78

Menu, 6-76

Edit, 6-77

Options, 6-77

Related Windows, 6-78

View, 6-77

## Review

Test History, 6-80

Time Domain, 6-80

## DC In-Rush/Start-Up

Display Options, 6-82

Menu

Edit, 6-81

File, 6-80

Options, 6-81

## Review

Spectrum, 6-83

Test History, 6-84

## Demod, 6-68

Analysis, 6-75

Display Options, 6-71

Menu

Edit, 6-70

File, 6-69

Options, 6-70

View, 6-70

Related Windows Menu, 6-71

## Review

Test History, 6-73

## Drive Input

Display Options, 6-88

Menu

Edit, 6-87

File, 6-86

Options, 6-87

Related Windows, 6-88

View, 6-87

- Eccentricity, 6-58
  - Review
    - Spectrum, 6-59
    - Test History, 6-61
    - Time Domain, 6-60
- EMAX Auto, 6-49
  - Icon, 6-3
- Getting Started, 6-2
- In-Rush/Start-Up, 6-2, 6-63
  - Display Options, 6-65
  - Menu
    - Edit, 6-64
    - File, 6-63
    - Options, 6-64
  - Review
    - Spectrum, 6-66
    - Test History, 6-67
- Introduction, 6-2
- Quick Start, 6-1
- Rotor Evaluation, 6-49, 6-57
  - Display Options, 6-52
  - Menu
    - Edit, 6-50
    - File, 6-49
    - Options, 6-51
    - Related Windows, 6-52
    - View, 6-50
  - Review Spectrum, 6-53
  - Test History
    - Analysis, 6-58
  - Test Result Values, 6-57
  - Time Domain, 6-55
- Setup Options
  - Asset Test Location, 6-13
  - Button
    - Cancel, 6-17
    - Reset, 6-17
    - Save, 6-17
    - Test, 6-17
  - Capture Length, 6-16
  - Carrier Frequency, 6-14
  - Channel, 6-16
  - Current Transformer Scale, 6-14
  - Missing Currents, 6-15
  - Phase Angle, 6-15
  - Phase Configuration, 6-15
  - Phase Sequence, 6-15
  - Potential Transformer Scale, 6-14
  - Pre-Trigger Length, 6-15
  - Probe Settings, 6-14
  - Starts With
    - EMAX Auto, 6-16
  - Trigger
    - Factor, 6-15
    - Type, 6-15
- Test Result Values, 6-62, 6-74
- Test Selection Window, 6-3
  - Asset Information, 6-5
  - Test
    - List, 6-4
    - Setup, 6-5
- Test Setup
  - DC Current Analysis, 6-11
  - DC EMAX Auto, 6-10
  - DC In-Rush/Start-Up, 6-12
  - Demod, 6-9
  - Drive Input, 6-13
  - Eccentricity, 6-7
  - EMAX Auto, 6-5
  - In-Rush/Start-Up, 6-8
  - Rotor Evaluation, 6-6
- Test Window, 6-17
  - AC Induction Assets, 6-18
    - Demod, 6-28
    - Eccentricity, 6-23
    - EMAX Auto, 6-18
    - In-Rush/Start-Up, 6-25
    - Rotor Evaluation, 6-20
    - Step-by-Step
      - Demod, 6-28
      - Eccentricity, 6-23
      - EMAX Auto, 6-18
      - In-Rush/Start-Up, 6-25
      - Rotor Evaluation, 6-20
  - AC Synchronous Assets, 6-31
    - Demod, 6-31
    - Eccentricity, 6-31
    - EMAX Auto, 6-31
    - In-Rush/Start-Up, 6-31
    - Rotor Evaluation, 6-31
  - AC Wound Rotor Assets, 6-32
    - Demod, 6-32
    - Eccentricity, 6-32
    - EMAX Auto, 6-32
    - In-Rush/Start-Up, 6-32
    - Rotor Evaluation, 6-32
  - DC Assets, 6-75
    - DC EMAX Auto, 6-32
    - Field Section Tests, 6-45
    - Step-by-Step
      - DC EMAX Auto, 6-32
      - Drive Input, 6-43
      - In-Rush/Start-Up, 6-45
    - Test Window, 6-32
  - DC Current Analysis, 6-76
  - DC EMAX Auto, 6-76
  - DC In-Rush/Start-Up, 6-80, 6-89
  - Drive Input, 6-85

- View Data, 6-1
  - Warning Settings, 6-89
    - Change, 6-91
  - Current Crest Factor, 1-33
  - Current Imbalance, 1-33
  - Current Probes, 6-2, 1-2
  - Current RMS, 1-33
  - Current Spikes, 1-2
  - Current THD, 1-34, 1-38
  - Current Transformer, 6-74
  - Current Transformer Scale, 1-6
    - DC Power Test
      - Test Setup, 1-10
  - Customer Service
    - Dell Computer, 1-8
- D**
- DAQ Cable, 1-5
  - Data
    - Analysis Assistance, 1-6
    - Export, 3-14, 3-15
    - Import, 3-15
    - Menu, 1-7
  - Data Interpretation
    - Bar-to-Bar, 5-74
    - Capacitance-to-Ground, 5-58
    - Phase-to-Phase Inductance, 5-62
    - Phase-to-Phase Resistance, 5-60
    - Polarization Index, 5-65
    - Rotor Influence Check, 5-69
  - DataSync
    - Field Tester, 1-19
  - DC
    - EMAX Auto
      - Test Window
        - Current Analysis, 6-32
    - Power Analysis
      - PowerTime Domain, 1-34
    - Power Test
      - Test Setup, 1-8
    - Test Results Window
      - Current Analysis
        - DC Current Analysis, 6-76
        - DC EMAX Auto, 6-76
        - DC In-Rush/Start-Up, 6-80, 6-89
  - DC Assets, 5-40
    - Bar-to-Bar Test
      - Raise/Lower Leads, 5-49
    - Menu
      - File, 5-48
      - Options, 5-48
      - View, 5-48
    - Test Window
      - MCE, 5-40
  - DC Bar-to-Bar
    - See Bar-to-Bar
  - DC Standard Test, 5-40, 5-41, 5-52
    - Analysis, 5-79
  - DC Assets
    - MCE, 5-40
  - Menu
    - File, 5-41
    - Options, 5-41
    - View, 5-41
  - Step-By-Step Testing, 5-42
  - Deck
    - Connections, 1-2
  - Deenergized, 1-1, 1-4
    - Multimeter, 1-5
    - Verifying, 1-5
  - Deleted Assets Folders, 1-26
  - Dell Computer
    - Customer Service, 1-8
  - Demod, 6-68
    - Current Transformer, 6-74
    - Test Window
      - Current Analysis
        - AC Induction Assets, 6-28
        - AC Synchronous Assets, 6-31
        - AC Wound Rotor Assets, 6-32
  - Demodulation
    - See Demod
  - Detailed
    - Report, 3-52
      - Create, 3-52
      - File Menu, 3-57
      - Multiple Asset, 3-59
      - Saved Reports List, 3-57
      - Single Asset, 3-52
  - Dielectric Absorption, 5-45, 5-53
    - Analysis, 5-75
  - Differential Current, 1-38
  - Dimensions
    - Shipping Case, 1-16
    - Tester Case, 1-16
  - Display Options
    - Current Analysis
      - DC Current Analysis, 6-78
      - DC In-Rush/Start-Up, 6-82
      - Demod, 6-71
      - Drive Input, 6-88
      - In-Rush/Start-Up, 6-65
    - Power Analysis
      - AC Assets
        - Power FFT, 1-25
        - Power Harmonics, 1-27
        - Power Instantaneous, 1-24
        - Power Phasor, 1-16
        - Power Voltage and Current FFT, 1-20

- Power Voltage and Current Harmonics, 1-22
  - PowerTime Domain, 1-18
  - DC Assets
    - PowerTime Domain, 1-36
  - Rotor Evaluation
    - Current Analysis, 6-52
  - DownSync
    - Field Tester, 1-19
  - Drive Input
    - Test Window
      - Current Analysis, 6-85
- E**
- EASA, 5-60
  - Eccentricity, 1-3, 6-2, 6-58, 1-2
    - Current Analysis
      - Calculating Frequency, 6-60
      - Test Window
        - AC Induction Assets, 6-23
        - AC Synchronous Assets, 6-31
        - AC Wound Rotor Assets, 6-32
    - Frequency, 6-62
    - MCE, 5-71
    - Power Analysis, 1-2, 1-22
  - Edit
    - Account, 1-14
    - Group, 1-17
    - Site, 1-18
  - Edit Menu
    - Current Analysis
      - DC Current Analysis, 6-77
      - DC In-Rush/Start-Up, 6-81
      - Demod, 6-70
      - Drive Input, 6-87
      - In-Rush/Start-Up, 6-64
      - Rotor Evaluation, 6-50
    - Power Analysis
      - DC PowerTime Domain, 1-35
      - Power Phasor, 1-15
      - PowerResults, 1-29
    - Site Navigator, 3-19
    - Test History, 3-29
    - WatchList, 3-36
  - Efficiency, 1-32
  - Electrical Safety, 1-3
    - EMAX, 1-5
    - MCE, 1-4
  - Electrical Symbols, 1-4
  - EMAX
    - Auto, 3-18, 3-40, 1-1
      - Current Analysis, 6-49
    - Icon, 6-1
  - Power Analysis, 1-3
    - Test
      - Current Analysis
        - AC Induction Assets, 6-18
        - AC Synchronous Assets, 6-31
        - AC Wound Rotor Assets, 6-32
    - Electrical Safety, 1-5
    - Philosophy, 1-2
    - Power Analysis, 1-1
    - Quick Start, Procedure, 1-1
    - Specifications, 1-15
    - Test Leads
      - Current, 1-12
      - Voltage, 1-12
    - Test Selection, 1-1
    - Testing, 1-2, 1-1
  - EMAX Power Analysis
    - EMAX Auto, 1-3
    - Getting Started, 1-2
    - Introduction, 1-2
    - Test Selection Window, 1-3
      - Asset Information, 1-4
      - Test List, 1-4
      - Test Setup, 1-5
    - Test Setup
      - DC Power Test, 1-8
        - Asset Test Location, 1-8
        - Carrier/LineFrequency, 1-9
        - Current Transformer Scale, 1-10
        - Potential Transformer Scale, 1-10
        - Probe Settings, 1-9
        - Starts With, 1-10
      - Power Test, 1-5
  - Energized, 1-2
  - Energy Cost Analysis, C-1
    - Perform, C-1
    - Report, C-5
    - Search, C-3
  - Tab
    - Asset Information, C-2
    - Energy Cost Analysis, C-5
    - Energy/Operating Hours, C-4
    - Replacement Asset, C-2
  - Environmental Conditions
    - Tester, 1-9
  - EPRI, 5-60
  - Exit MCEGold, 3-59
    - Shuttle Parking, 3-60
  - Export File, 3-18, 3-44
- F**
- Fast Fourier Transform (FFT), 6-53
  - Fault Zone Report, 5-10



- Menu
  - Edit, 5-11
  - File, 5-10
  - Options, 5-11
- Fault Zones, 3-18, 3-40
  - Export, 3-15
- Field Section Tests
  - DC Assets
    - Current Analysis, 6-45
    - MCE, 5-52
- Field Tester
  - DataSync, 1-19
  - DownSync, 1-19
  - Local, 1-18, 1-24
- File Menu, 5-12, 5-25, 5-30, 5-36
  - AC Standard Test, 5-12
  - Bar-to-Bar Test, 5-48
  - Current Analysis
    - DC Current Analysis, 6-76
    - DC In-Rush/Start-Up, 6-80
    - Demod, 6-69
    - Drive Input, 6-86
    - In-Rush/Start-Up, 6-63
    - Rotor Evaluation, 6-49
  - DC Standard Test, 5-41
  - Polarization Index, 5-17
  - Power Analysis
    - DC PowerTime Domain, 1-34
    - Power Phasor, 1-14
    - PowerResults, 1-29
  - Resistor Bank, 5-36
  - RIC, 5-20
  - Step Voltage, 5-25
  - Synchronous, 5-30
  - Test History, 3-29
  - WatchList, 3-36
- Find Peak
  - Current Spectrum, 6-54
  - In-Rush/Start-Up, 6-66, 6-83
- FLA, 6-58, 6-62, 6-74
- Folder
  - Add, 3-11
  - Deleted Assets, 1-26
  - Edit, 3-13
  - Move, 3-12
  - Remove, 3-13
- Fp Amplitude, 6-58
- Fp Frequency, 6-58
- From Last Baseline, 3-30

**G**

- Getting Started
  - Current Analysis, 6-2
  - EMAX Power Analysis, 1-2

- Graph
  - Current Analysis
    - Display Methods, 6-54
    - In-Rush/Start-Up, 6-66, 6-83
    - Spectrum, 6-53
  - MCE
    - Eccentricity, 5-71
    - Rotor Bars, 5-71
  - Power Analysis
    - Voltage and Current Time Domain, 1-19
- Graph Option Menu
  - Step Voltage, 5-25
- Group Assignments, 1-13

**H**

- harmonic, 1-30
- Harmonic Factor, 1-33
- Harmonics
  - Current Analysis
    - Eccentricity, 6-60
  - Power Analysis, 1-2
    - Current, THD, 1-31
    - Distortion, 1-33, 1-34
    - Voltage
      - Distortion, 1-31
      - Voltage and Current FFT, 1-22
- Help Menu
  - Network, 1-7
- High Resistance Connections, 1-2
- Home Screen, 3-1
  - Asset
    - Add, 3-27
    - Summary, 3-21
  - EMAX Auto, 3-40
  - Exit MCEGold, 3-59
  - Shuttle Parking, 3-60
- Export File, 3-44
- Fault Zones, 3-40
- Manage Templates, 3-4
- MCE Auto, 3-40
- Menu
  - Asset Manager
    - Asset
      - Add, 3-8
      - Copy, 3-9
      - Edit, 3-10
      - Move, 3-10
      - Remove, 3-10
    - Folder
      - Add, 3-11
      - Edit, 3-13
      - Move, 3-12
      - Remove, 3-13
    - Manage Templates, 3-3

- Warning Settings, 3-7
- Data
  - Export, 3-14
    - Fault Zones, 3-15
    - Single Asset, 3-14
  - Single Asset Import, 3-15
- File, 3-2
- Help
  - About, 3-16
  - Tutorial, 3-16
- Message, 3-14
- Options, 3-2
  - Date/Time, Time Zone, 3-3
  - Time Zone, 3-2
- Windows, 3-16
- Message Center, 3-41
- Asset
  - Condition, 3-44
  - Diagnostic, 3-44
  - Warning Levels, 3-44
- Compose, 3-43
- Menu
  - Edit, 3-42
  - File, 3-42
  - Option, 3-42
  - View, 3-42
- Trash, 3-44
- Nameplate, 3-22
- Report, 3-45
  - AC EMAX Summary, 3-46
  - Asset Condition Code, 3-47
  - Asset Inventory, 3-48
  - Detailed, 3-52
    - File Menu, 3-57
    - Multiple Asset, 3-59
    - Saved Reports List, 3-57
    - Single Asset, 3-52
  - MCE Summary, 3-49
  - Message History, 3-50
  - PI/DA Summary, 3-51
- Search, 3-32
- Site Condition, 3-27
- Site Navigator, 3-18
- Status Bar Icon, 3-18
- Test History, 3-27, 3-28
- Test Selection, 3-32
- Toolbar Icons, 3-17
  - Add Asset, 3-17, 3-27
  - Asset Summary, 3-17, 3-21
- EMAX
  - Auto, 3-18, 3-40
  - Export File, 3-18, 3-44
  - Fault Zones, 3-18, 3-40
  - MCE Auto, 3-18, 3-40

- Message, 3-18, 3-41
- Nameplate, 3-17, 3-22
- Report, 3-18
- Search, 3-17, 3-32
- Site Condition, 3-17, 3-27
- Site Navigator, 3-17
- Status Bar, 3-18
- Test History, 3-17, 3-27
- Test Selection, 3-17, 3-32
- Warning Settings, 3-17, 3-31
- WatchList, 3-18, 3-36
- Warning Settings, 3-31
- WatchList, 3-36
  - Add Asset, 3-38
  - Create, 3-37
- Menu
  - Edit, 3-36
  - File, 3-36
  - Remove
    - Asset, 3-38
    - WatchList, 3-38
  - Reorder List, 3-39
- Hot Stick, 1-5

## I

- Icon
  - Also See Home Screen, Toolbar Icons
  - Create
    - Account, 1-7
    - Group, 1-7
    - Site, 1-7
  - EMAX Auto, 6-1, 6-3, 1-1
  - Show Manager, 1-7
  - System Activity, 1-7
- Identification Tab
  - Nameplate, 3-22
- Impedance, 1-31
- Inductance Phase-to-Phase, 1-2
- Inductive Imbalance, 1-2, 5-75, 5-76
  - AC Asset
    - Standard Test, 5-53
  - AC Induction Motor
    - Standard Test, 5-75
  - AC Synchronous Motor
    - RIC, 5-74, 5-75
    - Standard Test, 5-76
  - AC Wound Rotor Motor
    - RIC, 5-77
    - Standard Test, 5-77, 5-78
  - Phase-to-Phase Inductance, 5-62, 5-63
- In-Rush/Start-Up, 1-3, 6-2, 6-63
  - Current Analysis
    - Test Window

- AC Induction Assets, 6-25
- AC Synchronous Assets, 6-31
- AC Wound Rotor Assets, 6-32
- Introduction
  - Current Analysis, 6-2
  - EMAX Power Analysis, 1-2
  - MCE, 5-2
- L**
- Label
  - Connection, 1-4
  - Identification, 1-4
- Laptop Computer
  - See Computer, Laptop
- Leakage Current, 5-64
- Line Frequency, 6-57, 6-63
  - See Also Carrier Frequency
- Load Variance
  - Maximum, 6-74
- M**
- Manage Templates, 3-4
- Manual Mode (MCE Testing)
  - AC Induction
    - Standard, 5-16, 5-40, 5-44
- Manufacturer Tab
  - Nameplate, 3-22
- MCE
  - AC Induction
    - MCE Auto Test, 5-7
      - Fault Zone Report, 5-10
    - Menu
      - File, 5-8
      - Options, 5-8
      - Test Button, 5-9
  - Analysis
    - AC Induction Motors
      - Rotor Influence Check, 5-74
    - AC Standard Test, 5-75
      - Wound Rotor, 5-77
    - AC Synchronous Motors, 5-75
    - AC Synchronous Test, 5-76
    - AC Wound Rotor Motors, 5-77
    - Average Inductance, 5-63
    - Bar-to-Bar, 5-74, 5-79
    - Capacitance-to-Ground, 5-57
    - DC Assets, 5-79
      - Dielectric Absorption, 5-79
      - Polarization Index, 5-79
    - DC Standard Test, 5-79
    - Dielectric Absorption, 5-75, 5-76, 5-78
    - Inductive Imbalance, 5-63
    - Phase-to-Phase Inductance, 5-61
    - Phase-to-Phase Resistance, 5-59
    - Polarization Index, 5-64, 5-75, 5-76, 5-77, 5-78
    - Resistance-to-Ground, 5-53
    - Resistive Imbalance, 5-63
    - Resistor Bank, 5-78
    - Rotor Influence Check, 5-67, 5-75, 5-77
    - Test Lead Resistance, 5-63
  - Capacitance-to-Ground, 1-1
  - Commutator Bar-to-Bar, 1-2
  - DC Assets
    - Analysis
      - Dielectric Absorption, 5-79
      - Polarization Index, 5-79
    - Armature Section Tests, 5-40
    - DC Standard Test, 5-40
    - Field Section
      - DC Standard, 5-52
      - MCE Auto, 5-52
      - Polarization Index, 5-52
      - Step Voltage, 5-53
      - Tests, 5-52
    - MCE Auto Test, 5-40
  - Electrical Safety, 1-4
  - Inductance Phase-to-Phase, 1-2
  - Inductive Imbalance, 1-2
  - Introduction, 5-2
  - Phase-to-Phase Resistance, 1-2
  - Polarization Index, 1-2
  - Quick Start
    - Procedure, 5-1, 6-1
  - Resistive Imbalance, 1-2
  - Rotor Influence Check, 1-2
  - Specifications, 1-14
  - Standard Test
    - Data Analysis, 5-53
  - Test Leads, 1-10
  - Test Procedure
    - AC Induction Motors
      - Rotor Influence Check (RIC), 5-21, 5-26, 5-31, 5-37
    - DC Motors
      - Armature Circuit
        - Bar-to-Bar, 5-47
        - Polarization Index, 5-45
        - Step Voltage, 5-47
      - Field Circuit
        - Polarization Index, 5-53
  - Test Selection, 5-3
    - Asset
      - Information, 5-5
      - Temperature, 5-6
      - Test Location, 5-5
    - Button
      - Cancel, 5-6

- Reset, 5-6
- Save, 5-6
- Test, 5-6
- Charge Time, 5-6
- Resistance-to-Ground, 5-6
- Span, 5-6
- Test
  - Frequency, 5-6
  - List, 5-4
  - Setup, 5-5
- Voltage, 5-6
- Test Window
  - AC Induction, 5-7
  - AC Synchronous, 5-29
    - Field Section, 5-30
    - Stator Section, 5-29
  - AC Wound Rotor, 5-34
    - Resistor Bank Section, 5-35
    - Rotor Section, 5-35
    - Stator Section, 5-35
  - ACWound Rotor
    - Resistor Bank Test, 5-36
  - DC Assets, 5-40
- MCE Auto, 3-18, 3-40, 5-52
  - AC Induction
    - MCE, 5-7
  - DC Assets
    - Field Section Tests
      - MCE, 5-52
    - MCE, 5-40
- MCE Auto Test, 5-7, 5-40
  - Fault Zone Report, 5-10
- Menu
  - File, 5-8
  - Options, 5-8
  - Test Button, 5-9
- MCE Summary
  - Report, 3-49
- MCEGold
  - Home Screen, 3-1
  - Starting, 3-1
  - Tutorials, 3-1
- MCE Gold Lite, 3-78
  - Starting Lite, 3-78
  - Lite Home Screen, 3-79
  - Title Bar, 3-80
    - Asset Selected, 3-80
  - Search, 3-80
    - Left Panel, 3-80
    - Center Panel, 3-80
    - Right Panel, 3-81
  - Testing Buttons, 3-81
  - Toolbar, 3-81
- Megger Voltage, 5-56

- Menus
  - Power Analysis
    - Power FFT, 1-25
    - Power Harmonics, 1-27
    - Power Instantaneous, 1-24
    - Power Time Domain, 1-18
    - Power Voltage and Current FFT, 1-20
    - Power Voltage and Current Harmonics, 1-22
- Message Center, 3-41
  - Asset
    - Condition, 3-44
    - Diagnostic, 3-44
    - Warning Levels, 3-44
  - Compose, 3-43
  - Menu
    - Edit, 3-42
    - File, 3-42
    - Option, 3-42
    - View, 3-42
  - Trash, 3-44
- Message History
  - Report, 3-50
- Multimeter, 1-5
- Multi-site Version, 3-19

## N

- Nameplate, 3-17, 3-22
  - Armature Tab, 3-26
  - Bearing Tab, 3-24
  - Brush Assembly Tab, 3-26
  - Identification Tab, 3-22
  - Manufacturer Tab, 3-22
  - Nameplate 1 Tab, 3-23
  - Nameplate 2 Tab, 3-24
  - Resistor Bank Tab, 3-25
- Network
  - Account Manager, 1-6
    - Icon
      - Create Account, 1-7
      - Create Group, 1-7
      - Create Site, 1-7
    - Menu
      - Data, 1-7
      - Help, 1-7
      - Windows, 1-7
    - Show Manager Icon, 1-7
    - System Activity Icon, 1-7
    - Window, 1-8
  - Add Account to Group, 1-11
  - Create
    - New Account, 1-12
    - New Group, 1-10
    - Site, 1-9

- Deleted Assets Folders, 1-26
- Desktop, 1-1
- Edit
  - Account, 1-14
  - Group, 1-17
  - Site, 1-18
- Field Tester
  - Clear Local Database, 1-23
  - DataSync, 1-19
  - DownSync, 1-19
  - Two Way Sync, 1-23
  - UpSync, 1-22
- Field Tester Local, 1-1, 1-18, 1-24
- Field Tester Network, 1-1, 1-18
- Group Assignments, 1-13
- New Assets Folders, 1-27
- Tutorials, 1-27
- Utility Program, 1-2
  - Calibration, 1-6
  - Database, 1-4
  - Desktop Database, 1-4
  - License Key, 1-3
  - Network Tester Database, 1-5
  - Server, 1-5
- New Assets Folders
  - Network, 1-27
- NP Speed RPM, 6-74

## O

- One-Up/Two Down
  - Two-Up/One-Down, 5-73
- Online, 1-2
- Option Menu
  - Message Center, 3-42
- Options Menu, 5-13, 5-26, 5-31, 5-37
  - AC Standard Test, 5-13
  - Bar-to-Bar Test, 5-48
  - Current Analysis
    - DC Current Analysis, 6-77
    - DC In-Rush/Start-Up, 6-81
    - Demod, 6-70
    - Drive Input, 6-87
    - In-Rush/Start-Up, 6-64
    - Rotor Evaluation, 6-51
  - DC Standard Test, 5-41
  - Polarization Index, 5-17
  - Power Analysis
    - DC PowerTime Domain, 1-35
    - Power Phasor, 1-16
    - PowerResults, 1-29
  - Resistor Bank, 5-37
  - RIC, 5-21
  - Step Voltage, 5-26
  - Synchronous, 5-31

## P

- Parallel Port, 1-8
- PCMCIA
  - Port, 1-8
  - Slot, 1-8
- PdMA
  - Contact Information, 1-6
- Peak, 6-62
  - Speed, 6-63
- Phase Angle, 1-7
- Phase Configuration, 1-7
- Phase Sequence, 1-7
- Phase-to-Phase Inductance, 5-61, 5-71
  - Data Interpretation, 5-62
  - See Inductance Phase-to-Phase
  - Warning Levels, 5-62
- Phase-to-Phase Resistance, 5-59
  - Data Interpretation, 5-60
  - Warning Levels, 5-60
- Phase-to-Phase Shorts, 5-73
- Philosophy
  - EMAX, 1-2
- PI/DA Summary
  - Report, 3-51
- Polarization Index, 1-2, 5-17, 5-52, 5-64
  - AC Induction, 5-16
  - Analysis, 5-64, 5-75
  - Data Interpretation, 5-65
  - Field Section Tests
    - DC Assets
    - MCE, 5-52
  - Menu
    - File, 5-17
    - Options, 5-17
  - Profile, 5-65
  - Test Procedure
    - DC Motors
      - Armature Circuit, 5-45
      - Field Circuit, 5-53
    - Warning Levels, 5-65
    - Wound Rotor, 5-77
- Pole Face, 5-69, 5-71
- Pole Pass
  - Alarm Level, 6-75
  - Peak Frequency, 6-75
  - Peak Level, 6-75
- Ports
  - Parallel, 1-8
  - PCMCIA, 1-8
  - Serial, 1-8
- Potential Transformer Scale, 1-7
  - DC Power Test
    - Test Setup
      - EMAX Power, 1-10
- Power Analysis, 1-3

- AC Assets
  - Power Phasor, 1-14
- Power FFT, 1-26
  - Display Options, 1-25
  - Menus, 1-25
  - Power FFT, 1-25
- Power Harmonics, 1-28
  - Display Options, 1-27
  - Menus, 1-27
  - PowerHarmonics, 1-27
- Power Instantaneous, 1-24
  - Display Options, 1-24
  - Menus, 1-24
  - Power Instantaneous, 1-23
- Power Phasor
  - AC Assets
    - Analysis, 1-14
  - Display Options, 1-16
  - Menu
    - Edit, 1-15
    - File, 1-14
    - Options, 1-16
    - View, 1-15
  - Related Windows Menu, 1-16
  - Review Phasor Diagram, 6-88, 1-17
- Power Results, 1-30
  - Menu
    - Edit, 1-29
    - File, 1-29
    - Options, 1-29
    - Related Windows, 1-30
  - Power Results, 1-28
- Power Time Domain
  - Display Options, 1-18
  - Review Time Domain, 1-19
- Power Voltage and Current
  - Display Options, 1-20
  - Menus, 1-20
- Power Voltage and Current FFT, 1-20, 1-21
- Power Voltage and Current Harmonics, 1-22, 1-23
  - Display Options, 1-22
  - Menus, 1-22
- PowerTime Domain, 1-18
  - Display Options, 1-36
- Menu
  - Edit, 1-35
  - File, 1-34
  - Options, 1-35
  - Menus, 1-18
- Results Page
  - Review
    - Current, 1-31
    - Efficiency, 1-32
    - Impedance, 1-31
    - Power, 1-31
    - Sequence, 1-32
    - Voltage, 1-30
- Setup Options
  - Asset Test Location, 1-5
  - Button
    - Cancel, 1-8, 1-10
    - Reset, 1-10
    - Save, 1-7, 1-10
    - Test, 1-7, 1-10
  - Carrier/Line Frequency, 1-6
  - Current Transformer Scale, 1-6
  - Phase
    - Angle, 1-7
    - Configuration, 1-7
    - Sequence, 1-7
  - Potential Transformer Scale, 1-7
  - Probe Settings, 1-6
  - Starts With, 1-7
- Setup Options Button
  - Reset, 1-7
- Test Window, 1-10
  - Step-by-Step Power
    - AC Induction Assets, 1-10
    - AC Synchronous Assets, 1-12
    - AC Wound Rotor Assets, 1-12
    - DC Assets
      - Armature, 1-12
      - Field Section, 1-14
- View Data, 1-1
- Warning Settings, 1-38
  - Change, 1-39
- Power and Current FFT, 1-20
- Power FFT
  - Power Analysis, 1-25
- Power Harmonics
  - Power Analysis, 1-27
- Power Instantaneous
  - Power Analysis, 1-23
- Power Results
  - Power Analysis, 1-28
- Power Test, 1-5
  - EMAX Power Analysis
    - Test Setup
      - Power Test, 1-5
- Power Time Domain, 1-18, 1-34
  - DC Power Analysis, 1-34
  - Power Analysis, 1-18
- Power Voltage and Current FFT, 1-21
  - Power Analysis, 1-20
- Power Voltage and Current Harmonics
  - Power Analysis, 1-22
- Probe Settings, 1-6
  - DC Power Test

- Test Setup
      - EMAX Power, 1-9
  - Probes
    - Current, 6-2
    - Voltage, 1-2
  - Procedure
    - MCE Testing
      - AC Induction Motors
        - Rotor Influence Check, 5-21, 5-26, 5-31, 5-37
      - DC Motors
        - Field Circuit
          - Polarization Index, 5-53
      - Quick Start, 5-1, 6-1
    - Quick Start
      - Current Analysis Testing, 6-1
      - EMAX Testing, 1-1
- Q**
- Quality Assurance, 1-1
  - Quick Start
    - Current Analysis, 6-1
    - EMAX, 1-1
    - MCE, 5-1, 6-1
- R**
- Raise/Lower Leads
    - Bar-to-Bar Test, 5-49
  - Raw Data
    - Test History, 3-29
  - Recommended Actions
    - MCE Analysis
      - AC Induction Motors, 5-75
      - AC Wound Rotor Motor, 5-77, 5-78
      - DC Motors, 5-79
      - Synchronous Motors, 5-75, 5-76
  - Related Windows Menu
    - Current Analysis
      - DC Current Analysis, 6-78
      - Demod, 6-71
      - Drive Input, 6-88
      - Rotor Evaluation, 6-52
    - Power Analysis
      - Power Phasor, 1-16
      - Power Results, 1-30
  - Remove
    - WatchList, 3-38
    - WatchList Asset, 3-38
  - Reorder
    - WatchList, 3-39
  - Report, 3-45
    - AC EMAX Summary, 3-46
    - Asset Condition Code, 3-47
  - Asset Inventory, 3-48
    - Detailed, 3-52
      - Create, 3-52
      - File Menu, 3-57
    - MCE Summary, 3-49
    - Message History, 3-50
    - PI/DA Summary, 3-51
    - Toolbar Icon, 3-18
  - Reset Button
    - Test Selection
      - MCE, 5-6
  - Resistance Phase-to-Phase, 1-2
  - Resistance-to-Ground, 1-1
    - Test Selection
      - MCE, 5-6
    - Warning Levels, 5-53
  - Resistive Imbalance, 1-2, 5-59, 5-63
  - Resistor Bank, 5-78
    - Step-By-Step Testing, 5-37
    - Test, 5-36
    - View Menu, 5-36
  - Resistor Bank Tab
    - Nameplate, 3-25
  - Returning
    - Tester, 1-6
  - Review
    - Power Analysis
      - Phasor Diagram, 1-17
        - Power Phasor, 6-88
      - Power FFT, 1-26
      - Power Harmonics, 1-28
      - Power Instantaneous, 1-24
      - Power Results, 1-30
      - Power Time Domain, 1-36
      - Power Voltage and Current FFT, 1-21
      - Power Voltage and Current Harmonics, 1-23
      - Test History, 1-32, 1-37
      - Time Domain, 1-19
    - Review Spectrum
      - Current Analysis
        - DC Current Analysis, 6-80
        - DC In-Rush/Start-Up, 6-83
        - Demod, 6-73
        - Eccentricity, 6-59
        - In-Rush/Start-Up, 6-66
        - Rotor Evaluation, 6-53
    - Review Test History
      - Current Analysis
        - DC In-Rush/Start-Up, 6-84
        - Demod, 6-73
        - Eccentricity, 6-61
        - In-Rush/Start-Up, 6-67
        - Rotor Evaluation, 6-57
    - Review Time Domain
      - Current Analysis

- DC Current Analysis, 6-80
  - Eccentricity, 6-60
  - RIC
    - AC Induction
      - RIC, 5-20
    - Menu
      - File, 5-20
      - Options, 5-21
      - View, 5-20
    - Step-By-Step Testing, 5-21
  - RJ45 Cable, 1-5
  - RMS Amps, 6-58, 6-63
  - RMS Amps 1, 6-75
  - Rotor
    - Position, 5-68
  - Rotor Bar
    - Defects, 5-68, 5-71, 6-2
    - Graph, 5-71
  - Rotor Evaluation, 1-3
    - Analysis, 6-49
    - Test Window
      - Current Analysis
        - AC induction Assets, 6-20
        - AC Synchronous Assets, 6-31
        - AC Wound Rotor Assets, 6-32
  - Rotor Influence Check, 1-2
    - AC Induction Motors
      - Test Procedure, 5-21, 5-26, 5-31, 5-37
    - Aliasing, 5-68, 5-69
    - Analysis, 5-67
      - AC Synchronous Motors, 5-75
      - AC Wound Rotor Motors, 5-77
      - Average Inductance, 5-63
      - Inductive Imbalance, 5-63
      - Phase-to-Phase Inductance, 5-61
    - Data Interpretation, 5-69
  - MCE
    - Analysis, 5-74
- S**
- Safety
    - Electrical, 1-3
      - EMAX, 1-5, 6-2, 1-2
      - MCE, 1-4
      - Precautions, 5-3
    - Equipment
      - Tagouts, 5-21, 5-26, 5-31, 5-37
    - Personnel, 1-5
  - Save As Excel
    - Test History, 3-29
  - Save Button
    - Test Selection
      - MCE, 5-6
  - Search, 3-32
    - Advanced, 3-33
      - Search Buttons, 3-35
      - Search Criteria, 3-34
      - Toolbar Icon, 3-17
  - Self Impedance Imbalance, 1-34
  - Sequence, 1-32
  - Serial
    - Number (of tester), 1-4
    - Port, 1-8
  - Set as Baseline
    - Test History, 3-30
  - Set Condition Code
    - Test History, 3-31
  - Shipping
    - Case, 1-1
      - Specifications, 1-16
    - Tester, 1-9
  - Shorts
    - Phase-to-Phase, 5-73
    - Turn-to-Turn, 5-73
  - Show All Tests
    - Test History, 3-29
  - Show Manager
    - Network, 1-7
  - Show/Hide
    - Test History, 3-30
  - Shuttle Parking, 3-60
  - Single Asset
    - Export, 3-14
    - Import, 3-15
  - Site Condition, 3-27
    - Icon, 3-17
  - Site Navigator, 3-18
    - Icon, 3-17
    - Menu
      - Edit, 3-19
      - View, 3-19
    - Multi-site Version, 3-19
  - Span
    - Test Selection
      - MCE, 5-6
  - Specifications
    - EMAX, 1-15
    - MCE, 1-14
    - Shipping Case, 1-16
    - Tester Case, 1-16
  - Spectrum
    - Eccentricity, 6-59
  - Speed
    - Alarm Level, 6-75
    - Peak Level, 6-75
    - PeakFrequency, 6-75
    - RPM, 6-57, 6-74



- Select, 6-54
- Standard Test
  - Data Analysis, 5-53
- Starts With
  - Test Selection
    - AC Power Test, 1-7
  - Test Setup
    - DC Power Test, 1-10
- Stator Winding Defects, 6-2, 1-2
- Status Bar Icon, 3-18
- Step Voltage, 1-2, 5-25, 5-26, 5-53
  - AC Induction
    - Step Voltage, 5-24
  - Field Section Tests
    - DC Assets
      - MCE, 5-53
  - Test Procedure
    - DC Motors
      - Armature Circuit, 5-47
- View Menu, 5-25
- Step-by-Step
  - Current Analysis
    - AC Induction Assets
      - Demod, 6-28
      - Eccentricity, 6-23
      - EMAX Auto, 6-18
      - In-Rush/Start-Up, 6-25
      - Rotor Evaluation, 6-20
    - DC Assets
      - DC EMAX Auto, 6-32
      - Drive Input, 6-43
      - In-Rush/Start-Up, 6-45
  - Power Analysis
    - Test Window
      - A C Wound Rotor Assets, 1-12
      - AC Induction Assets, 1-10
      - AC Synchronous Assets, 1-12
      - DC Assets
        - Armature Section, 1-12
        - Field Section, 1-14
- Step-By-Step Testing
  - AC Standard Test, 5-13
  - Bar-to-Bar, 5-49
  - DC Standard Test, 5-42
  - Polarization Index, 5-17
  - Resistor Bank, 5-37
  - RIC, 5-21
  - Step Voltage, 5-26
  - Synchronous, 5-31
- Surge
  - Capacitors, 5-3, 5-58
- Symbols
  - Electrical, 1-4
- Synchronous, 5-30, 5-31
  - Step-By-Step Testing, 5-31

- View Menu, 5-31
- Synchronous Test
  - Recommended Actions, 5-76
- System Activity Icon
  - Network, 1-7

## T

- Tab, Nameplate. See Nameplate
- Technical Support, 1-6
- Temperature Correction, 5-55
- Templates
  - Add New, 3-4
  - Change Name, 3-5
  - Change Values, 3-6
  - Copy, 3-5
  - Remove, 3-5
- Test
  - Leads
    - Current, 6-2
    - Voltage, 1-2
  - Procedure. See Procedure
- Test History, 3-27, 3-28
  - Icon, 3-17
- Menu
  - Edit, 3-29
    - Copy, 3-29
    - Create Message, 3-29
  - File, 3-29
    - Save As Excel, 3-29
  - Options
    - Set Condition Code, 3-31
  - Show/Hide, 3-30
  - View
    - Raw Data, 3-29
    - Warning Settings, 3-30
- Test Menu
  - Show Tests
    - All Tests, 3-29
    - From Last Baseline, 3-30
    - Set as Baseline, 3-30
  - Warning Settings Menu, 3-30
- Test Leads
  - Bar-to-Bar, 1-11
  - EMAX Current, 1-12
  - EMAX Voltage, 1-12
  - MCE, 1-10
- Test List
  - Test Selection Window
    - EMAX Power Analysis, 1-4
- Test Results
  - % Current Imbalance, 6-58
  - % Full Load Amps, 6-58
  - % Slip, 6-57
  - Current Analysis

- Demod, 6-74
- Eccentricity, 6-62
- Rotor Evaluation, 6-57
- FLA, 6-58
- Fp Amplitude, 6-58
- Fp Frequency, 6-58
- Line Frequency, 6-57
- RMS Amps, 6-58
- Speed RPM, 6-57
- Test Selection, 3-32
  - EMAX, 1-1
  - Icon, 3-17
  - MCE, 5-3
  - Test
    - Button, 5-6
    - Frequency, 5-6
    - List, 5-4
    - Setup, 5-5
- Test Selection Window
  - Asset Information, 6-5
  - Current Analysis, 6-3
  - EMAX Power Analysis, 1-3
  - Setup Options
    - Asset Test Location, 6-13, 1-5
    - Button
      - Cancel, 6-17, 1-8, 1-10
      - Reset, 6-17, 1-7, 1-10
      - Save, 6-17, 1-7, 1-10
    - Capture Length, 6-16
    - Carrier Frequency, 6-14
    - Carrier/Line Frequency, 1-6
    - Channel, 6-16
    - Current Transformer Scale, 6-14, 1-6
    - Missing Currents, 6-15
    - Phase Angle, 6-15, 1-7
    - Phase Configuration, 6-15, 1-7
    - Phase Sequence, 6-15, 1-7
    - Potential Transformer Scale, 6-14, 1-7
    - Pre-Trigger Length, 6-15
    - Probe Settings, 6-14, 1-6
    - Starts With, 1-7
      - EMAX Auto, 6-16
    - Test Button, 6-17, 1-7, 1-10
    - Trigger
      - Factor, 6-15
      - Type, 6-15
- Test List, 6-4
- Test Setup
  - Current Analysis, 6-5
  - DC Current Analysis, 6-11
  - DC EMAX Auto, 6-10
  - DC In-Rush/Start-Up, 6-12
  - Demod, 6-9
  - Drive Input, 6-13
  - Eccentricity, 6-7
  - EMAX Auto, 6-5
  - In-Rush/Start-Up, 6-8
  - Rotor Evaluation, 6-6
- Test Setup
  - Test Selection Window
    - EMAX Power Analysis
      - Test Setup, 1-5
- Test Voltage
  - Resistance-to-Ground, 5-56
- Test Window
  - Current Analysis, 6-17
  - MCE, 5-7
  - Power Analysis, 1-10
- Tester
  - Accessory Bag, 1-9
  - Battery, 1-6
    - Care, 1-8
    - Charger, 1-8
    - Indicator, 1-5
  - Calibration, 1-6, 1-1, 1-9
  - Care and Handling, 1-8
  - Case, 1-2
    - Care, 1-8
    - Specifications, 1-16
  - Components, 1-4
  - DAQ Cable, 1-5
  - Deck, 1-2
    - Connections, 1-2
  - Environmental Conditions, 1-9
  - Identification Label, 1-4
  - Laptop Computer, 1-2
  - Returning, 1-6
  - RJ45 Cable, 1-5
  - Serial Number, 1-4
  - Shipping, 1-9
- Testing
  - EMAX, 1-2
  - EMAX Auto, 3-40
  - MCE Auto, 3-40
- Time Domain, 6-60
- Trash
  - Message Center, 3-44
- Trending, 1-1, 5-3
- Turn-to-Turn Shorts, 5-73
- Tutorials, 3-16, 1-27
  - Network, 1-27
- Two Way Sync
  - Field Tester, 1-23
- Two-Up/One-Down
  - One-Up/Two Down, 5-73

**U**

## UpSync

Field Tester, 1-22

## Utility Program

Calibration, 1-6

Database, 1-4

Desktop Database, 1-4

License Key, 1-3

Network, 1-2

Network Tester Database, 1-5

Server, 1-5

**V**

## View

Current Analysis

Data, 6-1

## View Data

Power Analysis, 1-1

## View Menu

AC Standard Test, 5-13

Bar-to-Bar Test, 5-48

Current Analysis

DC Current Analysis, 6-77

Demod, 6-70

Drive Input, 6-87

Rotor Evaluation, 6-50

DC Standard Test, 5-41

Message Center, 3-42

Power Analysis

Power Phasor, 1-15

Resistor Bank, 5-36

RIC, 5-20

Site Navigator, 3-19

Step Voltage, 5-25

Synchronous, 5-31

Test History, 3-29

## Voltage, 1-30

Crest Factor, 1-33

Imbalance, 1-33

Line-to-Line, 1-33

Probes, 6-2, 1-2

Spikes, 1-2

Test Selection

MCE, 5-6

THD, 1-33, 1-38

Resistance Phase-to-Phase, 5-60

Resistance-to-Ground, 5-53

## Warning Settings, 3-31

Asset Manager, 3-7

Current Analysis, 6-89

Change, 6-91

Icon, 3-17

Power Analysis, 1-38

Change, 1-39

Test History, 3-30

## Warranty

Computer, 1-8

Data Analysis, 1-8

Extended, 1-8

Hardware, 1-7

Maintenance Contracts, 1-8

Replacement Parts, 1-8

Software, 1-8

## WatchList, 3-36

Icon, 3-18

## Windows, 3-16

Menu

Network, 1-7

## Wound Rotor

Recommended Actions, 5-77

Resistor Bank, 5-78

**W**

## Warning Levels, 5-65

Capacitance-to-Ground, 5-57

Inductance Phase-to-Phase, 5-62

Message Center, 3-44

Phase-to-Phase Resistance, 5-60

Polarization Index, 5-65



# INDEX

% Current Imbalance, 6-58, 6-63  
 % FLA, 6-62  
 % Full Load Amps, 6-58, 6-62, 6-74  
 % Slip, 6-57

## A

About, 3-16  
 Absorption Current, 5-64  
 AC Assets  
   Power Analysis, 1-14  
 AC EMAX Summary  
   Report, 3-46  
 AC Induction, 5-7  
   Analysis, 5-74  
   Polarization Index, 5-16  
   RIC, 5-20  
   Step Voltage, 5-24  
   Test Window  
     Current Analysis, 6-18  
     MCE, 5-7  
 AC Standard Test, 5-75, 5-77  
   AC Induction, 5-12  
   AC Standard Test, 5-12, 5-13  
   Analysis, 5-75  
   Step-By-Step Testing, 5-13  
   Wound Rotor, 5-77  
 AC Synchronous, 5-29  
   Analysis, 5-75, 5-76  
   Field Section, 5-30  
   Stator Section, 5-29  
   Synchronous, 5-30  
   Test Window  
     Current Analysis, 6-31  
     MCE, 5-29  
 AC Wound Rotor, 5-34  
   Analysis, 5-77  
   Recommended Actions, 5-77  
   Resistor Bank Section, 5-35  
   Resistor Bank Test, 5-36  
   Rotor Section, 5-35  
   Stator Section, 5-35  
   Test Window  
     Current Analysis, 6-32  
     MCE, 5-34  
 Accessory Bag, 1-9  
 Account Manager  
   Account Rights, 1-13  
   Add Accounts to Group, 1-11  
   Icon  
     Create

    Account, 1-7  
     Create Group, 1-7  
     Create Site, 1-7  
     Show Manager, 1-7  
     System Activity, 1-7  
 Menu  
   Data, 1-7  
   Windows, 1-7  
 Network, 1-6  
 Window, 1-8  
 Add  
   Asset, 3-17, 3-27  
     WatchList, 3-38  
 Air Gap, 5-68, 5-71, 5-73, 6-2, 6-58, 6-60  
   Current Analysis, 6-2  
 Aliasing  
   Rotor Influence Check, 5-68  
     Data Interpretation, 5-69  
   Rotor Position, 5-68  
 Analysis, 6-75  
   Current Analysis, 6-49  
     Demod, 6-68, 6-75  
     Eccentricity, 6-58  
     In-Rush/Start-Up, 6-63  
     Rotor Evaluation  
       Time Domain, 6-55  
 MCE  
   AC Induction Motors, 5-74  
   AC Standard Test, 5-75, 5-77  
     Wound Rotor, 5-77  
   AC Synchronous Motors, 5-75  
   AC Synchronous Test, 5-76  
   AC Wound Rotor Motors, 5-77  
   Average Inductance, 5-63  
   Bar-to-Bar, 5-79  
   Capacitance-to-Ground, 5-57  
   DC Assets, 5-79  
     Dielectric Absorption, 5-79  
     Polarization Index, 5-79  
   DC Bar-to-Bar, 5-74  
   DC Standard Test, 5-79  
   Dielectric Absorption, 5-75, 5-76, 5-78  
   Inductive Imbalance, 5-63  
   Phase-to-Phase Inductance, 5-61  
   Phase-to-Phase Resistance, 5-59  
   Polarization Index, 5-64, 5-75, 5-76, 5-77,  
     5-78  
     Wound Rotor, 5-78  
   Resistance-to-Ground, 5-53  
   Resistive Imbalance, 5-63  
   Resistor Bank, 5-78

- Rotor Influence Check, 5-74, 5-75, 5-77
  - Test Lead Resistance, 5-63
  - Power Analysis
    - Review
      - Power Time Domain, 1-36
      - Test History, 1-32, 1-37
    - Warning Levels
      - Current Crest Factor, 1-33
      - Current Imbalance, 1-33
      - Current RMS, 1-33
      - Current THD, 1-34, 1-38
      - Differential Current, 1-38
      - Harmonic Factor, 1-33
      - Self Impedance Imbalance, 1-34
      - Voltage Crest Factor, 1-33
      - Voltage Imbalance, 1-33
      - Voltage Line-to-Line, 1-33
      - Voltage THD, 1-38
      - VoltageTHD, 1-33
  - Rotor Evaluation
    - Change Speed, 6-51
    - Correct Displayed Data, 6-51
  - Test History
    - Rotor Evaluation
      - Current Analysis, 6-58
  - Armature Compensation, 5-74
  - Armature Section Tests, 5-40
    - DC Assets
      - MCE, 5-40
  - Armature Tab
    - Nameplate, 3-26
  - Asset
    - Add, 3-8
    - Copy, 3-9
    - Edit, 3-10
    - Move, 3-10
    - Remove, 3-10
  - Asset Condition
    - Message Center, 3-44
  - Asset Condition Code
    - Report, 3-47
  - Asset Diagnostic
    - Message Center, 3-44
  - Asset Information, 5-5
    - Power Analysis
      - Test Selection Window, 1-4
    - Test Selection
      - MCE, 5-5
  - Asset Inventory
    - Report, 3-48
  - Asset Manager, 3-3
  - Asset Scheduler, B-1
    - Create, B-1
    - Schedule Menu, B-7
  - View Menu, B-5
  - View Scheduled Jobs, B-4
  - Asset Summary, 3-17, 3-21
  - Asset Temperature
    - Test Selection
      - MCE, 5-6
  - Asset Test Location, 5-5
    - Power Analysis
      - AC Assets, 1-5
      - DC Assets, 1-8
    - Test Selection
      - MCE, 5-5
  - Asset Warning Levels
    - Message Center, 3-44
  - Average Inductance, 5-63
- ## B
- Bar-to-Bar
    - Data Interpretation, 5-74
    - Step-By-Step Testing, 5-49
    - Test, 5-48
    - Test Leads, 1-11
    - Test Procedure
      - DC Motors
        - Armature Circuit, 5-47
  - Baseline, 5-3, 5-54, 5-61
    - Change From, 5-57, 5-60, 5-62
    - Current Analysis, 6-2, 6-66, 6-67, 6-83, 6-84
      - Warning Settings, 6-90
    - From Last Baseline, 3-30
    - Power Analysis
      - Warning Settings, 1-38
    - Set As, 3-30
    - Show Tests, 3-30
    - Undo, 3-30
  - Battery
    - Charger, 1-8
    - Indicator, 1-5
    - Laptop, 1-8
    - Tester, 1-6
      - Care, 1-8
      - Holder, 1-2
  - Bearing Tab
    - Nameplate, 3-24
  - Brush Assembly Tab
    - Nameplate, 3-26
  - Button
    - Cancel, 5-6, 6-17, 1-8, 1-10
    - Reset, 5-6, 6-17, 1-7, 1-10
    - Save, 5-6, 6-17, 1-7, 1-10
    - Test, 5-6, 6-17, 1-7, 1-10

**C**

## Calculating

Eccentricity Frequency, 6-60

## Calibration

Returning Tester, 1-6

Tester, 1-1, 1-9

## Cancel Button

Test Selection

MCE, 5-6

## Capacitance-to-Ground, 1-1

Analysis, 5-57

Data Interpretation, 5-58

Warning Levels, 5-57

## Capacitors

Power Correction, 5-62

Power Factor, 5-29, 5-62

Power Factor Correction, 5-3, 5-7, 5-35

Surge, 5-3, 5-7, 5-29, 5-35, 5-58, 5-62

## Carrier Frequency, 6-74

## Carrier/Line Frequency, 1-6

Power Analysis

DC Power Test

Test Setup, 1-9

## Change Speed

Rotor Evaluation, 6-51

## Charge Time

Test Selection

MCE, 5-6

## Charging Current, 5-64

## Clear Local Database

Field Tester, 1-23

## Commutator Bar-to-Bar, 1-2

## Comparison, 5-3

## Compose

Message Center, 3-43

## Computer

Laptop, 1-6

Care, 1-8

Ports

Parallel, 1-8

PCMCIA, 1-8

Serial, 1-8

Specifications, 1-7

## Connector

Current Probe, 1-6

MCE Test Lead, 1-6

Voltage Probe, 1-6

## Contact

PdMA, 1-6

## Copy

Test History, 3-29

## Correct Displayed Data

Rotor Evaluation, 6-51

## Create

Icon

Group, 1-7

Site, 1-7

## Message

Test History, 3-29

New Account, 1-12

New Group, 1-10

Site, 1-9

WatchList, 3-37

## Create Icon

Account, 1-7

## Current, 1-31

Absorption, 5-64

Charging, 5-64

Leakage, 5-64

## Current Analysis

Air Gap, 6-2

Baseline, 6-2

## DC Current Analysis

Display Options, 6-78

Menu, 6-76

Edit, 6-77

Options, 6-77

Related Windows, 6-78

View, 6-77

## Review

Test History, 6-80

Time Domain, 6-80

## DC In-Rush/Start-Up

Display Options, 6-82

Menu

Edit, 6-81

File, 6-80

Options, 6-81

## Review

Spectrum, 6-83

Test History, 6-84

## Demod, 6-68

Analysis, 6-75

Display Options, 6-71

Menu

Edit, 6-70

File, 6-69

Options, 6-70

View, 6-70

Related Windows Menu, 6-71

## Review

Test History, 6-73

## Drive Input

Display Options, 6-88

Menu

Edit, 6-87

File, 6-86

Options, 6-87

Related Windows, 6-88

View, 6-87

- Eccentricity, 6-58
  - Review
    - Spectrum, 6-59
    - Test History, 6-61
    - Time Domain, 6-60
- EMAX Auto, 6-49
  - Icon, 6-3
- Getting Started, 6-2
- In-Rush/Start-Up, 6-2, 6-63
  - Display Options, 6-65
  - Menu
    - Edit, 6-64
    - File, 6-63
    - Options, 6-64
  - Review
    - Spectrum, 6-66
    - Test History, 6-67
- Introduction, 6-2
- Quick Start, 6-1
- Rotor Evaluation, 6-49, 6-57
  - Display Options, 6-52
  - Menu
    - Edit, 6-50
    - File, 6-49
    - Options, 6-51
    - Related Windows, 6-52
    - View, 6-50
  - Review Spectrum, 6-53
  - Test History
    - Analysis, 6-58
  - Test Result Values, 6-57
  - Time Domain, 6-55
- Setup Options
  - Asset Test Location, 6-13
  - Button
    - Cancel, 6-17
    - Reset, 6-17
    - Save, 6-17
    - Test, 6-17
  - Capture Length, 6-16
  - Carrier Frequency, 6-14
  - Channel, 6-16
  - Current Transformer Scale, 6-14
  - Missing Currents, 6-15
  - Phase Angle, 6-15
  - Phase Configuration, 6-15
  - Phase Sequence, 6-15
  - Potential Transformer Scale, 6-14
  - Pre-Trigger Length, 6-15
  - Probe Settings, 6-14
  - Starts With
    - EMAX Auto, 6-16
  - Trigger
    - Factor, 6-15
    - Type, 6-15
- Test Result Values, 6-62, 6-74
- Test Selection Window, 6-3
  - Asset Information, 6-5
  - Test
    - List, 6-4
    - Setup, 6-5
- Test Setup
  - DC Current Analysis, 6-11
  - DC EMAX Auto, 6-10
  - DC In-Rush/Start-Up, 6-12
  - Demod, 6-9
  - Drive Input, 6-13
  - Eccentricity, 6-7
  - EMAX Auto, 6-5
  - In-Rush/Start-Up, 6-8
  - Rotor Evaluation, 6-6
- Test Window, 6-17
  - AC Induction Assets, 6-18
    - Demod, 6-28
    - Eccentricity, 6-23
    - EMAX Auto, 6-18
    - In-Rush/Start-Up, 6-25
    - Rotor Evaluation, 6-20
    - Step-by-Step
      - Demod, 6-28
      - Eccentricity, 6-23
      - EMAX Auto, 6-18
      - In-Rush/Start-Up, 6-25
      - Rotor Evaluation, 6-20
  - AC Synchronous Assets, 6-31
    - Demod, 6-31
    - Eccentricity, 6-31
    - EMAX Auto, 6-31
    - In-Rush/Start-Up, 6-31
    - Rotor Evaluation, 6-31
  - AC Wound Rotor Assets, 6-32
    - Demod, 6-32
    - Eccentricity, 6-32
    - EMAX Auto, 6-32
    - In-Rush/Start-Up, 6-32
    - Rotor Evaluation, 6-32
  - DC Assets, 6-75
    - DC EMAX Auto, 6-32
    - Field Section Tests, 6-45
    - Step-by-Step
      - DC EMAX Auto, 6-32
      - Drive Input, 6-43
      - In-Rush/Start-Up, 6-45
    - Test Window, 6-32
  - DC Current Analysis, 6-76
  - DC EMAX Auto, 6-76
  - DC In-Rush/Start-Up, 6-80, 6-89
  - Drive Input, 6-85



- View Data, 6-1
  - Warning Settings, 6-89
    - Change, 6-91
  - Current Crest Factor, 1-33
  - Current Imbalance, 1-33
  - Current Probes, 6-2, 1-2
  - Current RMS, 1-33
  - Current Spikes, 1-2
  - Current THD, 1-34, 1-38
  - Current Transformer, 6-74
  - Current Transformer Scale, 1-6
    - DC Power Test
      - Test Setup, 1-10
  - Customer Service
    - Dell Computer, 1-8
- D**
- DAQ Cable, 1-5
  - Data
    - Analysis Assistance, 1-6
    - Export, 3-14, 3-15
    - Import, 3-15
    - Menu, 1-7
  - Data Interpretation
    - Bar-to-Bar, 5-74
    - Capacitance-to-Ground, 5-58
    - Phase-to-Phase Inductance, 5-62
    - Phase-to-Phase Resistance, 5-60
    - Polarization Index, 5-65
    - Rotor Influence Check, 5-69
  - DataSync
    - Field Tester, 1-19
  - DC
    - EMAX Auto
      - Test Window
        - Current Analysis, 6-32
    - Power Analysis
      - PowerTime Domain, 1-34
    - Power Test
      - Test Setup, 1-8
    - Test Results Window
      - Current Analysis
        - DC Current Analysis, 6-76
        - DC EMAX Auto, 6-76
        - DC In-Rush/Start-Up, 6-80, 6-89
  - DC Assets, 5-40
    - Bar-to-Bar Test
      - Raise/Lower Leads, 5-49
    - Menu
      - File, 5-48
      - Options, 5-48
      - View, 5-48
    - Test Window
      - MCE, 5-40
  - DC Bar-to-Bar
    - See Bar-to-Bar
  - DC Standard Test, 5-40, 5-41, 5-52
    - Analysis, 5-79
  - DC Assets
    - MCE, 5-40
  - Menu
    - File, 5-41
    - Options, 5-41
    - View, 5-41
  - Step-By-Step Testing, 5-42
  - Deck
    - Connections, 1-2
  - Deenergized, 1-1, 1-4
    - Multimeter, 1-5
    - Verifying, 1-5
  - Deleted Assets Folders, 1-26
  - Dell Computer
    - Customer Service, 1-8
  - Demod, 6-68
    - Current Transformer, 6-74
    - Test Window
      - Current Analysis
        - AC Induction Assets, 6-28
        - AC Synchronous Assets, 6-31
        - AC Wound Rotor Assets, 6-32
  - Demodulation
    - See Demod
  - Detailed
    - Report, 3-52
      - Create, 3-52
      - File Menu, 3-57
      - Multiple Asset, 3-59
      - Saved Reports List, 3-57
      - Single Asset, 3-52
  - Dielectric Absorption, 5-45, 5-53
    - Analysis, 5-75
  - Differential Current, 1-38
  - Dimensions
    - Shipping Case, 1-16
    - Tester Case, 1-16
  - Display Options
    - Current Analysis
      - DC Current Analysis, 6-78
      - DC In-Rush/Start-Up, 6-82
      - Demod, 6-71
      - Drive Input, 6-88
      - In-Rush/Start-Up, 6-65
    - Power Analysis
      - AC Assets
        - Power FFT, 1-25
        - Power Harmonics, 1-27
        - Power Instantaneous, 1-24
        - Power Phasor, 1-16
        - Power Voltage and Current FFT, 1-20

- Power Voltage and Current Harmonics, 1-22
  - PowerTime Domain, 1-18
  - DC Assets
    - PowerTime Domain, 1-36
  - Rotor Evaluation
    - Current Analysis, 6-52
  - DownSync
    - Field Tester, 1-19
  - Drive Input
    - Test Window
      - Current Analysis, 6-85
- E**
- EASA, 5-60
  - Eccentricity, 1-3, 6-2, 6-58, 1-2
    - Current Analysis
      - Calculating Frequency, 6-60
      - Test Window
        - AC Induction Assets, 6-23
        - AC Synchronous Assets, 6-31
        - AC Wound Rotor Assets, 6-32
    - Frequency, 6-62
    - MCE, 5-71
    - Power Analysis, 1-2, 1-22
  - Edit
    - Account, 1-14
    - Group, 1-17
    - Site, 1-18
  - Edit Menu
    - Current Analysis
      - DC Current Analysis, 6-77
      - DC In-Rush/Start-Up, 6-81
      - Demod, 6-70
      - Drive Input, 6-87
      - In-Rush/Start-Up, 6-64
      - Rotor Evaluation, 6-50
    - Power Analysis
      - DC PowerTime Domain, 1-35
      - Power Phasor, 1-15
      - PowerResults, 1-29
    - Site Navigator, 3-19
    - Test History, 3-29
    - WatchList, 3-36
  - Efficiency, 1-32
  - Electrical Safety, 1-3
    - EMAX, 1-5
    - MCE, 1-4
  - Electrical Symbols, 1-4
  - EMAX
    - Auto, 3-18, 3-40, 1-1
      - Current Analysis, 6-49
    - Icon, 6-1
  - Power Analysis, 1-3
    - Test
      - Current Analysis
        - AC Induction Assets, 6-18
        - AC Synchronous Assets, 6-31
        - AC Wound Rotor Assets, 6-32
    - Electrical Safety, 1-5
    - Philosophy, 1-2
    - Power Analysis, 1-1
    - Quick Start, Procedure, 1-1
    - Specifications, 1-15
    - Test Leads
      - Current, 1-12
      - Voltage, 1-12
    - Test Selection, 1-1
    - Testing, 1-2, 1-1
  - EMAX Power Analysis
    - EMAX Auto, 1-3
    - Getting Started, 1-2
    - Introduction, 1-2
    - Test Selection Window, 1-3
      - Asset Information, 1-4
      - Test List, 1-4
      - Test Setup, 1-5
    - Test Setup
      - DC Power Test, 1-8
        - Asset Test Location, 1-8
        - Carrier/LineFrequency, 1-9
        - Current Transformer Scale, 1-10
        - Potential Transformer Scale, 1-10
        - Probe Settings, 1-9
        - Starts With, 1-10
      - Power Test, 1-5
  - Energized, 1-2
  - Energy Cost Analysis, C-1
    - Perform, C-1
    - Report, C-5
    - Search, C-3
  - Tab
    - Asset Information, C-2
    - Energy Cost Analysis, C-5
    - Energy/Operating Hours, C-4
    - Replacement Asset, C-2
  - Environmental Conditions
    - Tester, 1-9
  - EPRI, 5-60
  - Exit MCEGold, 3-59
    - Shuttle Parking, 3-60
  - Export File, 3-18, 3-44
- F**
- Fast Fourier Transform (FFT), 6-53
  - Fault Zone Report, 5-10

- Menu
  - Edit, 5-11
  - File, 5-10
  - Options, 5-11
- Fault Zones, 3-18, 3-40
  - Export, 3-15
- Field Section Tests
  - DC Assets
    - Current Analysis, 6-45
    - MCE, 5-52
- Field Tester
  - DataSync, 1-19
  - DownSync, 1-19
  - Local, 1-18, 1-24
- File Menu, 5-12, 5-25, 5-30, 5-36
  - AC Standard Test, 5-12
  - Bar-to-Bar Test, 5-48
  - Current Analysis
    - DC Current Analysis, 6-76
    - DC In-Rush/Start-Up, 6-80
    - Demod, 6-69
    - Drive Input, 6-86
    - In-Rush/Start-Up, 6-63
    - Rotor Evaluation, 6-49
  - DC Standard Test, 5-41
  - Polarization Index, 5-17
  - Power Analysis
    - DC PowerTime Domain, 1-34
    - Power Phasor, 1-14
    - PowerResults, 1-29
  - Resistor Bank, 5-36
  - RIC, 5-20
  - Step Voltage, 5-25
  - Synchronous, 5-30
  - Test History, 3-29
  - WatchList, 3-36
- Find Peak
  - Current Spectrum, 6-54
  - In-Rush/Start-Up, 6-66, 6-83
- FLA, 6-58, 6-62, 6-74
- Folder
  - Add, 3-11
  - Deleted Assets, 1-26
  - Edit, 3-13
  - Move, 3-12
  - Remove, 3-13
- Fp Amplitude, 6-58
- Fp Frequency, 6-58
- From Last Baseline, 3-30

**G**

- Getting Started
  - Current Analysis, 6-2
  - EMAX Power Analysis, 1-2

- Graph
  - Current Analysis
    - Display Methods, 6-54
    - In-Rush/Start-Up, 6-66, 6-83
    - Spectrum, 6-53
  - MCE
    - Eccentricity, 5-71
    - Rotor Bars, 5-71
  - Power Analysis
    - Voltage and Current Time Domain, 1-19
- Graph Option Menu
  - Step Voltage, 5-25
- Group Assignments, 1-13

**H**

- harmonic, 1-30
- Harmonic Factor, 1-33
- Harmonics
  - Current Analysis
    - Eccentricity, 6-60
  - Power Analysis, 1-2
    - Current, THD, 1-31
    - Distortion, 1-33, 1-34
    - Voltage
      - Distortion, 1-31
      - Voltage and Current FFT, 1-22
- Help Menu
  - Network, 1-7
- High Resistance Connections, 1-2
- Home Screen, 3-1
  - Asset
    - Add, 3-27
    - Summary, 3-21
  - EMAX Auto, 3-40
  - Exit MCEGold, 3-59
  - Shuttle Parking, 3-60
- Export File, 3-44
- Fault Zones, 3-40
- Manage Templates, 3-4
- MCE Auto, 3-40
- Menu
  - Asset Manager
    - Asset
      - Add, 3-8
      - Copy, 3-9
      - Edit, 3-10
      - Move, 3-10
      - Remove, 3-10
    - Folder
      - Add, 3-11
      - Edit, 3-13
      - Move, 3-12
      - Remove, 3-13
    - Manage Templates, 3-3

- Warning Settings, 3-7
- Data
  - Export, 3-14
    - Fault Zones, 3-15
    - Single Asset, 3-14
  - Single Asset Import, 3-15
- File, 3-2
- Help
  - About, 3-16
  - Tutorial, 3-16
- Message, 3-14
- Options, 3-2
  - Date/Time, Time Zone, 3-3
  - Time Zone, 3-2
- Windows, 3-16
- Message Center, 3-41
- Asset
  - Condition, 3-44
  - Diagnostic, 3-44
  - Warning Levels, 3-44
- Compose, 3-43
- Menu
  - Edit, 3-42
  - File, 3-42
  - Option, 3-42
  - View, 3-42
- Trash, 3-44
- Nameplate, 3-22
- Report, 3-45
  - AC EMAX Summary, 3-46
  - Asset Condition Code, 3-47
  - Asset Inventory, 3-48
  - Detailed, 3-52
    - File Menu, 3-57
    - Multiple Asset, 3-59
    - Saved Reports List, 3-57
    - Single Asset, 3-52
  - MCE Summary, 3-49
  - Message History, 3-50
  - PI/DA Summary, 3-51
- Search, 3-32
- Site Condition, 3-27
- Site Navigator, 3-18
- Status Bar Icon, 3-18
- Test History, 3-27, 3-28
- Test Selection, 3-32
- Toolbar Icons, 3-17
  - Add Asset, 3-17, 3-27
  - Asset Summary, 3-17, 3-21
- EMAX
  - Auto, 3-18, 3-40
  - Export File, 3-18, 3-44
  - Fault Zones, 3-18, 3-40
  - MCE Auto, 3-18, 3-40

- Message, 3-18, 3-41
- Nameplate, 3-17, 3-22
- Report, 3-18
- Search, 3-17, 3-32
- Site Condition, 3-17, 3-27
- Site Navigator, 3-17
- Status Bar, 3-18
- Test History, 3-17, 3-27
- Test Selection, 3-17, 3-32
- Warning Settings, 3-17, 3-31
- WatchList, 3-18, 3-36
- Warning Settings, 3-31
- WatchList, 3-36
  - Add Asset, 3-38
  - Create, 3-37
- Menu
  - Edit, 3-36
  - File, 3-36
  - Remove
    - Asset, 3-38
    - WatchList, 3-38
  - Reorder List, 3-39
- Hot Stick, 1-5

## I

- Icon
  - Also See Home Screen, Toolbar Icons
  - Create
    - Account, 1-7
    - Group, 1-7
    - Site, 1-7
  - EMAX Auto, 6-1, 6-3, 1-1
  - Show Manager, 1-7
  - System Activity, 1-7
- Identification Tab
  - Nameplate, 3-22
- Impedance, 1-31
- Inductance Phase-to-Phase, 1-2
- Inductive Imbalance, 1-2, 5-75, 5-76
  - AC Asset
    - Standard Test, 5-53
  - AC Induction Motor
    - Standard Test, 5-75
  - AC Synchronous Motor
    - RIC, 5-74, 5-75
    - Standard Test, 5-76
  - AC Wound Rotor Motor
    - RIC, 5-77
    - Standard Test, 5-77, 5-78
  - Phase-to-Phase Inductance, 5-62, 5-63
- In-Rush/Start-Up, 1-3, 6-2, 6-63
  - Current Analysis
    - Test Window

- AC Induction Assets, 6-25
- AC Synchronous Assets, 6-31
- AC Wound Rotor Assets, 6-32
- Introduction
  - Current Analysis, 6-2
  - EMAX Power Analysis, 1-2
  - MCE, 5-2
- L**
- Label
  - Connection, 1-4
  - Identification, 1-4
- Laptop Computer
  - See Computer, Laptop
- Leakage Current, 5-64
- Line Frequency, 6-57, 6-63
  - See Also Carrier Frequency
- Load Variance
  - Maximum, 6-74
- M**
- Manage Templates, 3-4
- Manual Mode (MCE Testing)
  - AC Induction
    - Standard, 5-16, 5-40, 5-44
- Manufacturer Tab
  - Nameplate, 3-22
- MCE
  - AC Induction
    - MCE Auto Test, 5-7
      - Fault Zone Report, 5-10
    - Menu
      - File, 5-8
      - Options, 5-8
      - Test Button, 5-9
  - Analysis
    - AC Induction Motors
      - Rotor Influence Check, 5-74
    - AC Standard Test, 5-75
      - Wound Rotor, 5-77
    - AC Synchronous Motors, 5-75
    - AC Synchronous Test, 5-76
    - AC Wound Rotor Motors, 5-77
    - Average Inductance, 5-63
    - Bar-to-Bar, 5-74, 5-79
    - Capacitance-to-Ground, 5-57
    - DC Assets, 5-79
      - Dielectric Absorption, 5-79
      - Polarization Index, 5-79
    - DC Standard Test, 5-79
    - Dielectric Absorption, 5-75, 5-76, 5-78
    - Inductive Imbalance, 5-63
    - Phase-to-Phase Inductance, 5-61
    - Phase-to-Phase Resistance, 5-59
    - Polarization Index, 5-64, 5-75, 5-76, 5-77, 5-78
    - Resistance-to-Ground, 5-53
    - Resistive Imbalance, 5-63
    - Resistor Bank, 5-78
    - Rotor Influence Check, 5-67, 5-75, 5-77
    - Test Lead Resistance, 5-63
  - Capacitance-to-Ground, 1-1
  - Commutator Bar-to-Bar, 1-2
  - DC Assets
    - Analysis
      - Dielectric Absorption, 5-79
      - Polarization Index, 5-79
    - Armature Section Tests, 5-40
    - DC Standard Test, 5-40
    - Field Section
      - DC Standard, 5-52
      - MCE Auto, 5-52
      - Polarization Index, 5-52
      - Step Voltage, 5-53
      - Tests, 5-52
    - MCE Auto Test, 5-40
  - Electrical Safety, 1-4
  - Inductance Phase-to-Phase, 1-2
  - Inductive Imbalance, 1-2
  - Introduction, 5-2
  - Phase-to-Phase Resistance, 1-2
  - Polarization Index, 1-2
  - Quick Start
    - Procedure, 5-1, 6-1
  - Resistive Imbalance, 1-2
  - Rotor Influence Check, 1-2
  - Specifications, 1-14
  - Standard Test
    - Data Analysis, 5-53
  - Test Leads, 1-10
  - Test Procedure
    - AC Induction Motors
      - Rotor Influence Check (RIC), 5-21, 5-26, 5-31, 5-37
    - DC Motors
      - Armature Circuit
        - Bar-to-Bar, 5-47
        - Polarization Index, 5-45
        - Step Voltage, 5-47
      - Field Circuit
        - Polarization Index, 5-53
  - Test Selection, 5-3
    - Asset
      - Information, 5-5
      - Temperature, 5-6
      - Test Location, 5-5
    - Button
      - Cancel, 5-6

- Reset, 5-6
- Save, 5-6
- Test, 5-6
- Charge Time, 5-6
- Resistance-to-Ground, 5-6
- Span, 5-6
- Test
  - Frequency, 5-6
  - List, 5-4
  - Setup, 5-5
- Voltage, 5-6
- Test Window
  - AC Induction, 5-7
  - AC Synchronous, 5-29
    - Field Section, 5-30
    - Stator Section, 5-29
  - AC Wound Rotor, 5-34
    - Resistor Bank Section, 5-35
    - Rotor Section, 5-35
    - Stator Section, 5-35
  - ACWound Rotor
    - Resistor Bank Test, 5-36
  - DC Assets, 5-40
- MCE Auto, 3-18, 3-40, 5-52
  - AC Induction
    - MCE, 5-7
  - DC Assets
    - Field Section Tests
      - MCE, 5-52
    - MCE, 5-40
- MCE Auto Test, 5-7, 5-40
  - Fault Zone Report, 5-10
- Menu
  - File, 5-8
  - Options, 5-8
  - Test Button, 5-9
- MCE Summary
  - Report, 3-49
- MCEGold
  - Home Screen, 3-1
  - Starting, 3-1
  - Tutorials, 3-1
- MCE Gold Lite, 3-78
  - Starting Lite, 3-78
  - Lite Home Screen, 3-79
  - Title Bar, 3-80
  - Asset Selected, 3-80
  - Search, 3-80
  - Left Panel, 3-80
  - Center Panel, 3-80
  - Right Panel, 3-81
  - Testing Buttons, 3-81
  - Toolbar, 3-81
- Megger Voltage, 5-56

- Menus
  - Power Analysis
    - Power FFT, 1-25
    - Power Harmonics, 1-27
    - Power Instantaneous, 1-24
    - Power Time Domain, 1-18
    - Power Voltage and Current FFT, 1-20
    - Power Voltage and Current Harmonics, 1-22
- Message Center, 3-41
  - Asset
    - Condition, 3-44
    - Diagnostic, 3-44
    - Warning Levels, 3-44
  - Compose, 3-43
  - Menu
    - Edit, 3-42
    - File, 3-42
    - Option, 3-42
    - View, 3-42
  - Trash, 3-44
- Message History
  - Report, 3-50
- Multimeter, 1-5
- Multi-site Version, 3-19

## N

- Nameplate, 3-17, 3-22
  - Armature Tab, 3-26
  - Bearing Tab, 3-24
  - Brush Assembly Tab, 3-26
  - Identification Tab, 3-22
  - Manufacturer Tab, 3-22
  - Nameplate 1 Tab, 3-23
  - Nameplate 2 Tab, 3-24
  - Resistor Bank Tab, 3-25
- Network
  - Account Manager, 1-6
    - Icon
      - Create Account, 1-7
      - Create Group, 1-7
      - Create Site, 1-7
    - Menu
      - Data, 1-7
      - Help, 1-7
      - Windows, 1-7
    - Show Manager Icon, 1-7
    - System Activity Icon, 1-7
    - Window, 1-8
  - Add Account to Group, 1-11
  - Create
    - New Account, 1-12
    - New Group, 1-10
    - Site, 1-9

- Deleted Assets Folders, 1-26
- Desktop, 1-1
- Edit
  - Account, 1-14
  - Group, 1-17
  - Site, 1-18
- Field Tester
  - Clear Local Database, 1-23
  - DataSync, 1-19
  - DownSync, 1-19
  - Two Way Sync, 1-23
  - UpSync, 1-22
- Field Tester Local, 1-1, 1-18, 1-24
- Field Tester Network, 1-1, 1-18
- Group Assignments, 1-13
- New Assets Folders, 1-27
- Tutorials, 1-27
- Utility Program, 1-2
  - Calibration, 1-6
  - Database, 1-4
  - Desktop Database, 1-4
  - License Key, 1-3
  - Network Tester Database, 1-5
  - Server, 1-5
- New Assets Folders
  - Network, 1-27
- NP Speed RPM, 6-74

## O

- One-Up/Two Down
  - Two-Up/One-Down, 5-73
- Online, 1-2
- Option Menu
  - Message Center, 3-42
- Options Menu, 5-13, 5-26, 5-31, 5-37
  - AC Standard Test, 5-13
  - Bar-to-Bar Test, 5-48
  - Current Analysis
    - DC Current Analysis, 6-77
    - DC In-Rush/Start-Up, 6-81
    - Demod, 6-70
    - Drive Input, 6-87
    - In-Rush/Start-Up, 6-64
    - Rotor Evaluation, 6-51
  - DC Standard Test, 5-41
  - Polarization Index, 5-17
  - Power Analysis
    - DC PowerTime Domain, 1-35
    - Power Phasor, 1-16
    - PowerResults, 1-29
  - Resistor Bank, 5-37
  - RIC, 5-21
  - Step Voltage, 5-26
  - Synchronous, 5-31

## P

- Parallel Port, 1-8
- PCMCIA
  - Port, 1-8
  - Slot, 1-8
- PdMA
  - Contact Information, 1-6
- Peak, 6-62
  - Speed, 6-63
- Phase Angle, 1-7
- Phase Configuration, 1-7
- Phase Sequence, 1-7
- Phase-to-Phase Inductance, 5-61, 5-71
  - Data Interpretation, 5-62
  - See Inductance Phase-to-Phase
  - Warning Levels, 5-62
- Phase-to-Phase Resistance, 5-59
  - Data Interpretation, 5-60
  - Warning Levels, 5-60
- Phase-to-Phase Shorts, 5-73
- Philosophy
  - EMAX, 1-2
- PI/DA Summary
  - Report, 3-51
- Polarization Index, 1-2, 5-17, 5-52, 5-64
  - AC Induction, 5-16
  - Analysis, 5-64, 5-75
  - Data Interpretation, 5-65
  - Field Section Tests
    - DC Assets
    - MCE, 5-52
  - Menu
    - File, 5-17
    - Options, 5-17
  - Profile, 5-65
  - Test Procedure
    - DC Motors
      - Armature Circuit, 5-45
      - Field Circuit, 5-53
    - Warning Levels, 5-65
    - Wound Rotor, 5-77
- Pole Face, 5-69, 5-71
- Pole Pass
  - Alarm Level, 6-75
  - Peak Frequency, 6-75
  - Peak Level, 6-75
- Ports
  - Parallel, 1-8
  - PCMCIA, 1-8
  - Serial, 1-8
- Potential Transformer Scale, 1-7
  - DC Power Test
    - Test Setup
      - EMAX Power, 1-10
- Power Analysis, 1-3

- AC Assets
  - Power Phasor, 1-14
- Power FFT, 1-26
  - Display Options, 1-25
  - Menus, 1-25
  - Power FFT, 1-25
- Power Harmonics, 1-28
  - Display Options, 1-27
  - Menus, 1-27
  - PowerHarmonics, 1-27
- Power Instantaneous, 1-24
  - Display Options, 1-24
  - Menus, 1-24
  - Power Instantaneous, 1-23
- Power Phasor
  - AC Assets
    - Analysis, 1-14
  - Display Options, 1-16
  - Menu
    - Edit, 1-15
    - File, 1-14
    - Options, 1-16
    - View, 1-15
  - Related Windows Menu, 1-16
  - Review Phasor Diagram, 6-88, 1-17
- Power Results, 1-30
  - Menu
    - Edit, 1-29
    - File, 1-29
    - Options, 1-29
    - Related Windows, 1-30
  - Power Results, 1-28
- Power Time Domain
  - Display Options, 1-18
  - Review Time Domain, 1-19
- Power Voltage and Current
  - Display Options, 1-20
  - Menus, 1-20
- Power Voltage and Current FFT, 1-20, 1-21
- Power Voltage and Current Harmonics, 1-22, 1-23
  - Display Options, 1-22
  - Menus, 1-22
- PowerTime Domain, 1-18
  - Display Options, 1-36
- Menu
  - Edit, 1-35
  - File, 1-34
  - Options, 1-35
  - Menus, 1-18
- Results Page
  - Review
    - Current, 1-31
    - Efficiency, 1-32
    - Impedance, 1-31
    - Power, 1-31
    - Sequence, 1-32
    - Voltage, 1-30
- Setup Options
  - Asset Test Location, 1-5
  - Button
    - Cancel, 1-8, 1-10
    - Reset, 1-10
    - Save, 1-7, 1-10
    - Test, 1-7, 1-10
  - Carrier/Line Frequency, 1-6
  - Current Transformer Scale, 1-6
  - Phase
    - Angle, 1-7
    - Configuration, 1-7
    - Sequence, 1-7
  - Potential Transformer Scale, 1-7
  - Probe Settings, 1-6
  - Starts With, 1-7
- Setup Options Button
  - Reset, 1-7
- Test Window, 1-10
  - Step-by-Step Power
    - AC Induction Assets, 1-10
    - AC Synchronous Assets, 1-12
    - AC Wound Rotor Assets, 1-12
    - DC Assets
      - Armature, 1-12
      - Field Section, 1-14
- View Data, 1-1
- Warning Settings, 1-38
  - Change, 1-39
- Power and Current FFT, 1-20
- Power FFT
  - Power Analysis, 1-25
- Power Harmonics
  - Power Analysis, 1-27
- Power Instantaneous
  - Power Analysis, 1-23
- Power Results
  - Power Analysis, 1-28
- Power Test, 1-5
  - EMAX Power Analysis
    - Test Setup
      - Power Test, 1-5
- Power Time Domain, 1-18, 1-34
  - DC Power Analysis, 1-34
  - Power Analysis, 1-18
- Power Voltage and Current FFT, 1-21
  - Power Analysis, 1-20
- Power Voltage and Current Harmonics
  - Power Analysis, 1-22
- Probe Settings, 1-6
  - DC Power Test



- Test Setup
      - EMAX Power, 1-9
  - Probes
    - Current, 6-2
    - Voltage, 1-2
  - Procedure
    - MCE Testing
      - AC Induction Motors
        - Rotor Influence Check, 5-21, 5-26, 5-31, 5-37
      - DC Motors
        - Field Circuit
          - Polarization Index, 5-53
      - Quick Start, 5-1, 6-1
    - Quick Start
      - Current Analysis Testing, 6-1
      - EMAX Testing, 1-1
- Q**
- Quality Assurance, 1-1
  - Quick Start
    - Current Analysis, 6-1
    - EMAX, 1-1
    - MCE, 5-1, 6-1
- R**
- Raise/Lower Leads
    - Bar-to-Bar Test, 5-49
  - Raw Data
    - Test History, 3-29
  - Recommended Actions
    - MCE Analysis
      - AC Induction Motors, 5-75
      - AC Wound Rotor Motor, 5-77, 5-78
      - DC Motors, 5-79
      - Synchronous Motors, 5-75, 5-76
  - Related Windows Menu
    - Current Analysis
      - DC Current Analysis, 6-78
      - Demod, 6-71
      - Drive Input, 6-88
      - Rotor Evaluation, 6-52
    - Power Analysis
      - Power Phasor, 1-16
      - Power Results, 1-30
  - Remove
    - WatchList, 3-38
    - WatchList Asset, 3-38
  - Reorder
    - WatchList, 3-39
  - Report, 3-45
    - AC EMAX Summary, 3-46
    - Asset Condition Code, 3-47
    - Asset Inventory, 3-48
      - Detailed, 3-52
        - Create, 3-52
        - File Menu, 3-57
      - MCE Summary, 3-49
      - Message History, 3-50
      - PI/DA Summary, 3-51
      - Toolbar Icon, 3-18
    - Reset Button
      - Test Selection
        - MCE, 5-6
    - Resistance Phase-to-Phase, 1-2
    - Resistance-to-Ground, 1-1
      - Test Selection
        - MCE, 5-6
      - Warning Levels, 5-53
    - Resistive Imbalance, 1-2, 5-59, 5-63
    - Resistor Bank, 5-78
      - Step-By-Step Testing, 5-37
      - Test, 5-36
      - View Menu, 5-36
    - Resistor Bank Tab
      - Nameplate, 3-25
    - Returning
      - Tester, 1-6
    - Review
      - Power Analysis
        - Phasor Diagram, 1-17
          - Power Phasor, 6-88
        - Power FFT, 1-26
        - Power Harmonics, 1-28
        - Power Instantaneous, 1-24
        - Power Results, 1-30
        - Power Time Domain, 1-36
        - Power Voltage and Current FFT, 1-21
        - Power Voltage and Current Harmonics, 1-23
        - Test History, 1-32, 1-37
        - Time Domain, 1-19
      - Review Spectrum
        - Current Analysis
          - DC Current Analysis, 6-80
          - DC In-Rush/Start-Up, 6-83
          - Demod, 6-73
          - Eccentricity, 6-59
          - In-Rush/Start-Up, 6-66
          - Rotor Evaluation, 6-53
      - Review Test History
        - Current Analysis
          - DC In-Rush/Start-Up, 6-84
          - Demod, 6-73
          - Eccentricity, 6-61
          - In-Rush/Start-Up, 6-67
          - Rotor Evaluation, 6-57
      - Review Time Domain
        - Current Analysis

- DC Current Analysis, 6-80
  - Eccentricity, 6-60
  - RIC
    - AC Induction
      - RIC, 5-20
    - Menu
      - File, 5-20
      - Options, 5-21
      - View, 5-20
    - Step-By-Step Testing, 5-21
  - RJ45 Cable, 1-5
  - RMS Amps, 6-58, 6-63
  - RMS Amps 1, 6-75
  - Rotor
    - Position, 5-68
  - Rotor Bar
    - Defects, 5-68, 5-71, 6-2
    - Graph, 5-71
  - Rotor Evaluation, 1-3
    - Analysis, 6-49
    - Test Window
      - Current Analysis
        - AC induction Assets, 6-20
        - AC Synchronous Assets, 6-31
        - AC Wound Rotor Assets, 6-32
  - Rotor Influence Check, 1-2
    - AC Induction Motors
      - Test Procedure, 5-21, 5-26, 5-31, 5-37
    - Aliasing, 5-68, 5-69
    - Analysis, 5-67
      - AC Synchronous Motors, 5-75
      - AC Wound Rotor Motors, 5-77
      - Average Inductance, 5-63
      - Inductive Imbalance, 5-63
      - Phase-to-Phase Inductance, 5-61
    - Data Interpretation, 5-69
  - MCE
    - Analysis, 5-74
- S**
- Safety
    - Electrical, 1-3
      - EMAX, 1-5, 6-2, 1-2
      - MCE, 1-4
      - Precautions, 5-3
    - Equipment
      - Tagouts, 5-21, 5-26, 5-31, 5-37
    - Personnel, 1-5
  - Save As Excel
    - Test History, 3-29
  - Save Button
    - Test Selection
      - MCE, 5-6
  - Search, 3-32
    - Advanced, 3-33
      - Search Buttons, 3-35
      - Search Criteria, 3-34
      - Toolbar Icon, 3-17
    - Self Impedance Imbalance, 1-34
    - Sequence, 1-32
    - Serial
      - Number (of tester), 1-4
      - Port, 1-8
    - Set as Baseline
      - Test History, 3-30
    - Set Condition Code
      - Test History, 3-31
    - Shipping
      - Case, 1-1
      - Specifications, 1-16
      - Tester, 1-9
    - Shorts
      - Phase-to-Phase, 5-73
      - Turn-to-Turn, 5-73
    - Show All Tests
      - Test History, 3-29
    - Show Manager
      - Network, 1-7
    - Show/Hide
      - Test History, 3-30
    - Shuttle Parking, 3-60
    - Single Asset
      - Export, 3-14
      - Import, 3-15
    - Site Condition, 3-27
      - Icon, 3-17
    - Site Navigator, 3-18
      - Icon, 3-17
      - Menu
        - Edit, 3-19
        - View, 3-19
      - Multi-site Version, 3-19
    - Span
      - Test Selection
        - MCE, 5-6
    - Specifications
      - EMAX, 1-15
      - MCE, 1-14
      - Shipping Case, 1-16
      - Tester Case, 1-16
    - Spectrum
      - Eccentricity, 6-59
    - Speed
      - Alarm Level, 6-75
      - Peak Level, 6-75
      - PeakFrequency, 6-75
      - RPM, 6-57, 6-74

- Select, 6-54
- Standard Test
  - Data Analysis, 5-53
- Starts With
  - Test Selection
    - AC Power Test, 1-7
  - Test Setup
    - DC Power Test, 1-10
- Stator Winding Defects, 6-2, 1-2
- Status Bar Icon, 3-18
- Step Voltage, 1-2, 5-25, 5-26, 5-53
  - AC Induction
    - Step Voltage, 5-24
  - Field Section Tests
    - DC Assets
      - MCE, 5-53
  - Test Procedure
    - DC Motors
      - Armature Circuit, 5-47
- View Menu, 5-25
- Step-by-Step
  - Current Analysis
    - AC Induction Assets
      - Demod, 6-28
      - Eccentricity, 6-23
      - EMAX Auto, 6-18
      - In-Rush/Start-Up, 6-25
      - Rotor Evaluation, 6-20
    - DC Assets
      - DC EMAX Auto, 6-32
      - Drive Input, 6-43
      - In-Rush/Start-Up, 6-45
  - Power Analysis
    - Test Window
      - A C Wound Rotor Assets, 1-12
      - AC Induction Assets, 1-10
      - AC Synchronous Assets, 1-12
      - DC Assets
        - Armature Section, 1-12
        - Field Section, 1-14
- Step-By-Step Testing
  - AC Standard Test, 5-13
  - Bar-to-Bar, 5-49
  - DC Standard Test, 5-42
  - Polarization Index, 5-17
  - Resistor Bank, 5-37
  - RIC, 5-21
  - Step Voltage, 5-26
  - Synchronous, 5-31
- Surge
  - Capacitors, 5-3, 5-58
- Symbols
  - Electrical, 1-4
- Synchronous, 5-30, 5-31
  - Step-By-Step Testing, 5-31

- View Menu, 5-31
- Synchronous Test
  - Recommended Actions, 5-76
- System Activity Icon
  - Network, 1-7

## T

- Tab, Nameplate. See Nameplate
- Technical Support, 1-6
- Temperature Correction, 5-55
- Templates
  - Add New, 3-4
  - Change Name, 3-5
  - Change Values, 3-6
  - Copy, 3-5
  - Remove, 3-5
- Test
  - Leads
    - Current, 6-2
    - Voltage, 1-2
  - Procedure. See Procedure
- Test History, 3-27, 3-28
  - Icon, 3-17
- Menu
  - Edit, 3-29
    - Copy, 3-29
    - Create Message, 3-29
  - File, 3-29
    - Save As Excel, 3-29
  - Options
    - Set Condition Code, 3-31
  - Show/Hide, 3-30
  - View
    - Raw Data, 3-29
    - Warning Settings, 3-30
- Test Menu
  - Show Tests
    - All Tests, 3-29
    - From Last Baseline, 3-30
    - Set as Baseline, 3-30
  - Warning Settings Menu, 3-30
- Test Leads
  - Bar-to-Bar, 1-11
  - EMAX Current, 1-12
  - EMAX Voltage, 1-12
  - MCE, 1-10
- Test List
  - Test Selection Window
    - EMAX Power Analysis, 1-4
- Test Results
  - % Current Imbalance, 6-58
  - % Full Load Amps, 6-58
  - % Slip, 6-57
  - Current Analysis

- Demod, 6-74
- Eccentricity, 6-62
- Rotor Evaluation, 6-57
- FLA, 6-58
- Fp Amplitude, 6-58
- Fp Frequency, 6-58
- Line Frequency, 6-57
- RMS Amps, 6-58
- Speed RPM, 6-57
- Test Selection, 3-32
  - EMAX, 1-1
  - Icon, 3-17
  - MCE, 5-3
  - Test
    - Button, 5-6
    - Frequency, 5-6
    - List, 5-4
    - Setup, 5-5
- Test Selection Window
  - Asset Information, 6-5
  - Current Analysis, 6-3
  - EMAX Power Analysis, 1-3
  - Setup Options
    - Asset Test Location, 6-13, 1-5
    - Button
      - Cancel, 6-17, 1-8, 1-10
      - Reset, 6-17, 1-7, 1-10
      - Save, 6-17, 1-7, 1-10
    - Capture Length, 6-16
    - Carrier Frequency, 6-14
    - Carrier/Line Frequency, 1-6
    - Channel, 6-16
    - Current Transformer Scale, 6-14, 1-6
    - Missing Currents, 6-15
    - Phase Angle, 6-15, 1-7
    - Phase Configuration, 6-15, 1-7
    - Phase Sequence, 6-15, 1-7
    - Potential Transformer Scale, 6-14, 1-7
    - Pre-Trigger Length, 6-15
    - Probe Settings, 6-14, 1-6
    - Starts With, 1-7
      - EMAX Auto, 6-16
    - Test Button, 6-17, 1-7, 1-10
    - Trigger
      - Factor, 6-15
      - Type, 6-15
- Test List, 6-4
- Test Setup
  - Current Analysis, 6-5
  - DC Current Analysis, 6-11
  - DC EMAX Auto, 6-10
  - DC In-Rush/Start-Up, 6-12
  - Demod, 6-9
  - Drive Input, 6-13
  - Eccentricity, 6-7
  - EMAX Auto, 6-5
  - In-Rush/Start-Up, 6-8
  - Rotor Evaluation, 6-6
- Test Setup
  - Test Selection Window
    - EMAX Power Analysis
      - Test Setup, 1-5
- Test Voltage
  - Resistance-to-Ground, 5-56
- Test Window
  - Current Analysis, 6-17
  - MCE, 5-7
  - Power Analysis, 1-10
- Tester
  - Accessory Bag, 1-9
  - Battery, 1-6
    - Care, 1-8
    - Charger, 1-8
    - Indicator, 1-5
  - Calibration, 1-6, 1-1, 1-9
  - Care and Handling, 1-8
  - Case, 1-2
    - Care, 1-8
    - Specifications, 1-16
  - Components, 1-4
  - DAQ Cable, 1-5
  - Deck, 1-2
    - Connections, 1-2
  - Environmental Conditions, 1-9
  - Identification Label, 1-4
  - Laptop Computer, 1-2
  - Returning, 1-6
  - RJ45 Cable, 1-5
  - Serial Number, 1-4
  - Shipping, 1-9
- Testing
  - EMAX, 1-2
  - EMAX Auto, 3-40
  - MCE Auto, 3-40
- Time Domain, 6-60
- Trash
  - Message Center, 3-44
- Trending, 1-1, 5-3
- Turn-to-Turn Shorts, 5-73
- Tutorials, 3-16, 1-27
  - Network, 1-27
- Two Way Sync
  - Field Tester, 1-23
- Two-Up/One-Down
  - One-Up/Two Down, 5-73

**U**

## UpSync

Field Tester, 1-22

## Utility Program

Calibration, 1-6

Database, 1-4

Desktop Database, 1-4

License Key, 1-3

Network, 1-2

Network Tester Database, 1-5

Server, 1-5

**V**

## View

Current Analysis

Data, 6-1

## View Data

Power Analysis, 1-1

## View Menu

AC Standard Test, 5-13

Bar-to-Bar Test, 5-48

Current Analysis

DC Current Analysis, 6-77

Demod, 6-70

Drive Input, 6-87

Rotor Evaluation, 6-50

DC Standard Test, 5-41

Message Center, 3-42

Power Analysis

Power Phasor, 1-15

Resistor Bank, 5-36

RIC, 5-20

Site Navigator, 3-19

Step Voltage, 5-25

Synchronous, 5-31

Test History, 3-29

## Voltage, 1-30

Crest Factor, 1-33

Imbalance, 1-33

Line-to-Line, 1-33

Probes, 6-2, 1-2

Spikes, 1-2

Test Selection

MCE, 5-6

THD, 1-33, 1-38

Resistance Phase-to-Phase, 5-60

Resistance-to-Ground, 5-53

## Warning Settings, 3-31

Asset Manager, 3-7

Current Analysis, 6-89

Change, 6-91

Icon, 3-17

Power Analysis, 1-38

Change, 1-39

Test History, 3-30

## Warranty

Computer, 1-8

Data Analysis, 1-8

Extended, 1-8

Hardware, 1-7

Maintenance Contracts, 1-8

Replacement Parts, 1-8

Software, 1-8

## WatchList, 3-36

Icon, 3-18

## Windows, 3-16

Menu

Network, 1-7

## Wound Rotor

Recommended Actions, 5-77

Resistor Bank, 5-78

**W**

## Warning Levels, 5-65

Capacitance-to-Ground, 5-57

Inductance Phase-to-Phase, 5-62

Message Center, 3-44

Phase-to-Phase Resistance, 5-60

Polarization Index, 5-65



# INDEX

% Current Imbalance, 6-58, 6-63  
 % FLA, 6-62  
 % Full Load Amps, 6-58, 6-62, 6-74  
 % Slip, 6-57

## A

About, 3-16  
 Absorption Current, 5-64  
 AC Assets  
   Power Analysis, 1-14  
 AC EMAX Summary  
   Report, 3-46  
 AC Induction, 5-7  
   Analysis, 5-74  
   Polarization Index, 5-16  
   RIC, 5-20  
   Step Voltage, 5-24  
   Test Window  
   Current Analysis, 6-18  
   MCE, 5-7  
 AC Standard Test, 5-75, 5-77  
   AC Induction, 5-12  
   AC Standard Test, 5-12, 5-13  
   Analysis, 5-75  
   Step-By-Step Testing, 5-13  
   Wound Rotor, 5-77  
 AC Synchronous, 5-29  
   Analysis, 5-75, 5-76  
   Field Section, 5-30  
   Stator Section, 5-29  
   Synchronous, 5-30  
   Test Window  
   Current Analysis, 6-31  
   MCE, 5-29  
 AC Wound Rotor, 5-34  
   Analysis, 5-77  
   Recommended Actions, 5-77  
   Resistor Bank Section, 5-35  
   Resistor Bank Test, 5-36  
   Rotor Section, 5-35  
   Stator Section, 5-35  
   Test Window  
   Current Analysis, 6-32  
   MCE, 5-34  
 Accessory Bag, 1-9  
 Account Manager  
   Account Rights, 1-13  
   Add Accounts to Group, 1-11  
   Icon  
   Create

  Account, 1-7  
   Create Group, 1-7  
   Create Site, 1-7  
   Show Manager, 1-7  
   System Activity, 1-7  
 Menu  
   Data, 1-7  
   Windows, 1-7  
 Network, 1-6  
 Window, 1-8  
 Add  
   Asset, 3-17, 3-27  
   WatchList, 3-38  
 Air Gap, 5-68, 5-71, 5-73, 6-2, 6-58, 6-60  
   Current Analysis, 6-2  
 Aliasing  
   Rotor Influence Check, 5-68  
   Data Interpretation, 5-69  
   Rotor Position, 5-68  
 Analysis, 6-75  
   Current Analysis, 6-49  
   Demod, 6-68, 6-75  
   Eccentricity, 6-58  
   In-Rush/Start-Up, 6-63  
   Rotor Evaluation  
   Time Domain, 6-55  
 MCE  
   AC Induction Motors, 5-74  
   AC Standard Test, 5-75, 5-77  
   Wound Rotor, 5-77  
   AC Synchronous Motors, 5-75  
   AC Synchronous Test, 5-76  
   AC Wound Rotor Motors, 5-77  
   Average Inductance, 5-63  
   Bar-to-Bar, 5-79  
   Capacitance-to-Ground, 5-57  
   DC Assets, 5-79  
   Dielectric Absorption, 5-79  
   Polarization Index, 5-79  
   DC Bar-to-Bar, 5-74  
   DC Standard Test, 5-79  
   Dielectric Absorption, 5-75, 5-76, 5-78  
   Inductive Imbalance, 5-63  
   Phase-to-Phase Inductance, 5-61  
   Phase-to-Phase Resistance, 5-59  
   Polarization Index, 5-64, 5-75, 5-76, 5-77,  
   5-78  
   Wound Rotor, 5-78  
   Resistance-to-Ground, 5-53  
   Resistive Imbalance, 5-63  
   Resistor Bank, 5-78

- Rotor Influence Check, 5-74, 5-75, 5-77
  - Test Lead Resistance, 5-63
  - Power Analysis
    - Review
      - Power Time Domain, 1-36
      - Test History, 1-32, 1-37
    - Warning Levels
      - Current Crest Factor, 1-33
      - Current Imbalance, 1-33
      - Current RMS, 1-33
      - Current THD, 1-34, 1-38
      - Differential Current, 1-38
      - Harmonic Factor, 1-33
      - Self Impedance Imbalance, 1-34
      - Voltage Crest Factor, 1-33
      - Voltage Imbalance, 1-33
      - Voltage Line-to-Line, 1-33
      - Voltage THD, 1-38
      - VoltageTHD, 1-33
  - Rotor Evaluation
    - Change Speed, 6-51
    - Correct Displayed Data, 6-51
  - Test History
    - Rotor Evaluation
      - Current Analysis, 6-58
  - Armature Compensation, 5-74
  - Armature Section Tests, 5-40
    - DC Assets
      - MCE, 5-40
  - Armature Tab
    - Nameplate, 3-26
  - Asset
    - Add, 3-8
    - Copy, 3-9
    - Edit, 3-10
    - Move, 3-10
    - Remove, 3-10
  - Asset Condition
    - Message Center, 3-44
  - Asset Condition Code
    - Report, 3-47
  - Asset Diagnostic
    - Message Center, 3-44
  - Asset Information, 5-5
    - Power Analysis
      - Test Selection Window, 1-4
    - Test Selection
      - MCE, 5-5
  - Asset Inventory
    - Report, 3-48
  - Asset Manager, 3-3
  - Asset Scheduler, B-1
    - Create, B-1
    - Schedule Menu, B-7
    - View Menu, B-5
    - View Scheduled Jobs, B-4
  - Asset Summary, 3-17, 3-21
  - Asset Temperature
    - Test Selection
      - MCE, 5-6
  - Asset Test Location, 5-5
    - Power Analysis
      - AC Assets, 1-5
      - DC Assets, 1-8
    - Test Selection
      - MCE, 5-5
  - Asset Warning Levels
    - Message Center, 3-44
  - Average Inductance, 5-63
- ## B
- Bar-to-Bar
    - Data Interpretation, 5-74
    - Step-By-Step Testing, 5-49
    - Test, 5-48
    - Test Leads, 1-11
    - Test Procedure
      - DC Motors
        - Armature Circuit, 5-47
  - Baseline, 5-3, 5-54, 5-61
    - Change From, 5-57, 5-60, 5-62
    - Current Analysis, 6-2, 6-66, 6-67, 6-83, 6-84
      - Warning Settings, 6-90
    - From Last Baseline, 3-30
    - Power Analysis
      - Warning Settings, 1-38
    - Set As, 3-30
    - Show Tests, 3-30
    - Undo, 3-30
  - Battery
    - Charger, 1-8
    - Indicator, 1-5
    - Laptop, 1-8
    - Tester, 1-6
      - Care, 1-8
      - Holder, 1-2
  - Bearing Tab
    - Nameplate, 3-24
  - Brush Assembly Tab
    - Nameplate, 3-26
  - Button
    - Cancel, 5-6, 6-17, 1-8, 1-10
    - Reset, 5-6, 6-17, 1-7, 1-10
    - Save, 5-6, 6-17, 1-7, 1-10
    - Test, 5-6, 6-17, 1-7, 1-10



**C**

## Calculating

Eccentricity Frequency, 6-60

## Calibration

Returning Tester, 1-6

Tester, 1-1, 1-9

## Cancel Button

Test Selection

MCE, 5-6

## Capacitance-to-Ground, 1-1

Analysis, 5-57

Data Interpretation, 5-58

Warning Levels, 5-57

## Capacitors

Power Correction, 5-62

Power Factor, 5-29, 5-62

Power Factor Correction, 5-3, 5-7, 5-35

Surge, 5-3, 5-7, 5-29, 5-35, 5-58, 5-62

## Carrier Frequency, 6-74

## Carrier/Line Frequency, 1-6

Power Analysis

DC Power Test

Test Setup, 1-9

## Change Speed

Rotor Evaluation, 6-51

## Charge Time

Test Selection

MCE, 5-6

## Charging Current, 5-64

## Clear Local Database

Field Tester, 1-23

## Commutator Bar-to-Bar, 1-2

## Comparison, 5-3

## Compose

Message Center, 3-43

## Computer

Laptop, 1-6

Care, 1-8

Ports

Parallel, 1-8

PCMCIA, 1-8

Serial, 1-8

Specifications, 1-7

## Connector

Current Probe, 1-6

MCE Test Lead, 1-6

Voltage Probe, 1-6

## Contact

PdMA, 1-6

## Copy

Test History, 3-29

## Correct Displayed Data

Rotor Evaluation, 6-51

## Create

Icon

Group, 1-7

Site, 1-7

## Message

Test History, 3-29

New Account, 1-12

New Group, 1-10

Site, 1-9

WatchList, 3-37

## Create Icon

Account, 1-7

## Current, 1-31

Absorption, 5-64

Charging, 5-64

Leakage, 5-64

## Current Analysis

Air Gap, 6-2

Baseline, 6-2

## DC Current Analysis

Display Options, 6-78

Menu, 6-76

Edit, 6-77

Options, 6-77

Related Windows, 6-78

View, 6-77

## Review

Test History, 6-80

Time Domain, 6-80

## DC In-Rush/Start-Up

Display Options, 6-82

Menu

Edit, 6-81

File, 6-80

Options, 6-81

## Review

Spectrum, 6-83

Test History, 6-84

## Demod, 6-68

Analysis, 6-75

Display Options, 6-71

Menu

Edit, 6-70

File, 6-69

Options, 6-70

View, 6-70

Related Windows Menu, 6-71

## Review

Test History, 6-73

## Drive Input

Display Options, 6-88

Menu

Edit, 6-87

File, 6-86

Options, 6-87

Related Windows, 6-88

View, 6-87

- Eccentricity, 6-58
  - Review
    - Spectrum, 6-59
    - Test History, 6-61
    - Time Domain, 6-60
- EMAX Auto, 6-49
  - Icon, 6-3
- Getting Started, 6-2
- In-Rush/Start-Up, 6-2, 6-63
  - Display Options, 6-65
  - Menu
    - Edit, 6-64
    - File, 6-63
    - Options, 6-64
  - Review
    - Spectrum, 6-66
    - Test History, 6-67
- Introduction, 6-2
- Quick Start, 6-1
- Rotor Evaluation, 6-49, 6-57
  - Display Options, 6-52
  - Menu
    - Edit, 6-50
    - File, 6-49
    - Options, 6-51
    - Related Windows, 6-52
    - View, 6-50
  - Review Spectrum, 6-53
  - Test History
    - Analysis, 6-58
  - Test Result Values, 6-57
  - Time Domain, 6-55
- Setup Options
  - Asset Test Location, 6-13
  - Button
    - Cancel, 6-17
    - Reset, 6-17
    - Save, 6-17
    - Test, 6-17
  - Capture Length, 6-16
  - Carrier Frequency, 6-14
  - Channel, 6-16
  - Current Transformer Scale, 6-14
  - Missing Currents, 6-15
  - Phase Angle, 6-15
  - Phase Configuration, 6-15
  - Phase Sequence, 6-15
  - Potential Transformer Scale, 6-14
  - Pre-Trigger Length, 6-15
  - Probe Settings, 6-14
  - Starts With
    - EMAX Auto, 6-16
  - Trigger
    - Factor, 6-15
    - Type, 6-15
- Test Result Values, 6-62, 6-74
- Test Selection Window, 6-3
  - Asset Information, 6-5
  - Test
    - List, 6-4
    - Setup, 6-5
- Test Setup
  - DC Current Analysis, 6-11
  - DC EMAX Auto, 6-10
  - DC In-Rush/Start-Up, 6-12
  - Demod, 6-9
  - Drive Input, 6-13
  - Eccentricity, 6-7
  - EMAX Auto, 6-5
  - In-Rush/Start-Up, 6-8
  - Rotor Evaluation, 6-6
- Test Window, 6-17
  - AC Induction Assets, 6-18
    - Demod, 6-28
    - Eccentricity, 6-23
    - EMAX Auto, 6-18
    - In-Rush/Start-Up, 6-25
    - Rotor Evaluation, 6-20
    - Step-by-Step
      - Demod, 6-28
      - Eccentricity, 6-23
      - EMAX Auto, 6-18
      - In-Rush/Start-Up, 6-25
      - Rotor Evaluation, 6-20
  - AC Synchronous Assets, 6-31
    - Demod, 6-31
    - Eccentricity, 6-31
    - EMAX Auto, 6-31
    - In-Rush/Start-Up, 6-31
    - Rotor Evaluation, 6-31
  - AC Wound Rotor Assets, 6-32
    - Demod, 6-32
    - Eccentricity, 6-32
    - EMAX Auto, 6-32
    - In-Rush/Start-Up, 6-32
    - Rotor Evaluation, 6-32
  - DC Assets, 6-75
    - DC EMAX Auto, 6-32
    - Field Section Tests, 6-45
    - Step-by-Step
      - DC EMAX Auto, 6-32
      - Drive Input, 6-43
      - In-Rush/Start-Up, 6-45
    - Test Window, 6-32
  - DC Current Analysis, 6-76
  - DC EMAX Auto, 6-76
  - DC In-Rush/Start-Up, 6-80, 6-89
  - Drive Input, 6-85

- View Data, 6-1
  - Warning Settings, 6-89
    - Change, 6-91
  - Current Crest Factor, 1-33
  - Current Imbalance, 1-33
  - Current Probes, 6-2, 1-2
  - Current RMS, 1-33
  - Current Spikes, 1-2
  - Current THD, 1-34, 1-38
  - Current Transformer, 6-74
  - Current Transformer Scale, 1-6
    - DC Power Test
      - Test Setup, 1-10
  - Customer Service
    - Dell Computer, 1-8
- D**
- DAQ Cable, 1-5
  - Data
    - Analysis Assistance, 1-6
    - Export, 3-14, 3-15
    - Import, 3-15
    - Menu, 1-7
  - Data Interpretation
    - Bar-to-Bar, 5-74
    - Capacitance-to-Ground, 5-58
    - Phase-to-Phase Inductance, 5-62
    - Phase-to-Phase Resistance, 5-60
    - Polarization Index, 5-65
    - Rotor Influence Check, 5-69
  - DataSync
    - Field Tester, 1-19
  - DC
    - EMAX Auto
      - Test Window
        - Current Analysis, 6-32
    - Power Analysis
      - PowerTime Domain, 1-34
    - Power Test
      - Test Setup, 1-8
    - Test Results Window
      - Current Analysis
        - DC Current Analysis, 6-76
        - DC EMAX Auto, 6-76
        - DC In-Rush/Start-Up, 6-80, 6-89
  - DC Assets, 5-40
    - Bar-to-Bar Test
      - Raise/Lower Leads, 5-49
    - Menu
      - File, 5-48
      - Options, 5-48
      - View, 5-48
    - Test Window
      - MCE, 5-40
  - DC Bar-to-Bar
    - See Bar-to-Bar
  - DC Standard Test, 5-40, 5-41, 5-52
    - Analysis, 5-79
  - DC Assets
    - MCE, 5-40
  - Menu
    - File, 5-41
    - Options, 5-41
    - View, 5-41
  - Step-By-Step Testing, 5-42
  - Deck
    - Connections, 1-2
  - Deenergized, 1-1, 1-4
    - Multimeter, 1-5
    - Verifying, 1-5
  - Deleted Assets Folders, 1-26
  - Dell Computer
    - Customer Service, 1-8
  - Demod, 6-68
    - Current Transformer, 6-74
    - Test Window
      - Current Analysis
        - AC Induction Assets, 6-28
        - AC Synchronous Assets, 6-31
        - AC Wound Rotor Assets, 6-32
  - Demodulation
    - See Demod
  - Detailed
    - Report, 3-52
      - Create, 3-52
      - File Menu, 3-57
      - Multiple Asset, 3-59
      - Saved Reports List, 3-57
      - Single Asset, 3-52
  - Dielectric Absorption, 5-45, 5-53
    - Analysis, 5-75
  - Differential Current, 1-38
  - Dimensions
    - Shipping Case, 1-16
    - Tester Case, 1-16
  - Display Options
    - Current Analysis
      - DC Current Analysis, 6-78
      - DC In-Rush/Start-Up, 6-82
      - Demod, 6-71
      - Drive Input, 6-88
      - In-Rush/Start-Up, 6-65
    - Power Analysis
      - AC Assets
        - Power FFT, 1-25
        - Power Harmonics, 1-27
        - Power Instantaneous, 1-24
        - Power Phasor, 1-16
        - Power Voltage and Current FFT, 1-20

- Power Voltage and Current Harmonics, 1-22
  - PowerTime Domain, 1-18
  - DC Assets
    - PowerTime Domain, 1-36
  - Rotor Evaluation
    - Current Analysis, 6-52
  - DownSync
    - Field Tester, 1-19
  - Drive Input
    - Test Window
      - Current Analysis, 6-85
- E**
- EASA, 5-60
  - Eccentricity, 1-3, 6-2, 6-58, 1-2
    - Current Analysis
      - Calculating Frequency, 6-60
      - Test Window
        - AC Induction Assets, 6-23
        - AC Synchronous Assets, 6-31
        - AC Wound Rotor Assets, 6-32
    - Frequency, 6-62
    - MCE, 5-71
    - Power Analysis, 1-2, 1-22
  - Edit
    - Account, 1-14
    - Group, 1-17
    - Site, 1-18
  - Edit Menu
    - Current Analysis
      - DC Current Analysis, 6-77
      - DC In-Rush/Start-Up, 6-81
      - Demod, 6-70
      - Drive Input, 6-87
      - In-Rush/Start-Up, 6-64
      - Rotor Evaluation, 6-50
    - Power Analysis
      - DC PowerTime Domain, 1-35
      - Power Phasor, 1-15
      - PowerResults, 1-29
    - Site Navigator, 3-19
    - Test History, 3-29
    - WatchList, 3-36
  - Efficiency, 1-32
  - Electrical Safety, 1-3
    - EMAX, 1-5
    - MCE, 1-4
  - Electrical Symbols, 1-4
  - EMAX
    - Auto, 3-18, 3-40, 1-1
      - Current Analysis, 6-49
    - Icon, 6-1
  - Power Analysis, 1-3
    - Test
      - Current Analysis
        - AC Induction Assets, 6-18
        - AC Synchronous Assets, 6-31
        - AC Wound Rotor Assets, 6-32
    - Electrical Safety, 1-5
    - Philosophy, 1-2
    - Power Analysis, 1-1
    - Quick Start, Procedure, 1-1
    - Specifications, 1-15
    - Test Leads
      - Current, 1-12
      - Voltage, 1-12
    - Test Selection, 1-1
    - Testing, 1-2, 1-1
  - EMAX Power Analysis
    - EMAX Auto, 1-3
    - Getting Started, 1-2
    - Introduction, 1-2
    - Test Selection Window, 1-3
      - Asset Information, 1-4
      - Test List, 1-4
      - Test Setup, 1-5
    - Test Setup
      - DC Power Test, 1-8
        - Asset Test Location, 1-8
        - Carrier/LineFrequency, 1-9
        - Current Transformer Scale, 1-10
        - Potential Transformer Scale, 1-10
        - Probe Settings, 1-9
        - Starts With, 1-10
      - Power Test, 1-5
  - Energized, 1-2
  - Energy Cost Analysis, C-1
    - Perform, C-1
    - Report, C-5
    - Search, C-3
  - Tab
    - Asset Information, C-2
    - Energy Cost Analysis, C-5
    - Energy/Operating Hours, C-4
    - Replacement Asset, C-2
  - Environmental Conditions
    - Tester, 1-9
  - EPRI, 5-60
  - Exit MCEGold, 3-59
    - Shuttle Parking, 3-60
  - Export File, 3-18, 3-44
- F**
- Fast Fourier Transform (FFT), 6-53
  - Fault Zone Report, 5-10

- Menu
  - Edit, 5-11
  - File, 5-10
  - Options, 5-11
- Fault Zones, 3-18, 3-40
  - Export, 3-15
- Field Section Tests
  - DC Assets
    - Current Analysis, 6-45
    - MCE, 5-52
- Field Tester
  - DataSync, 1-19
  - DownSync, 1-19
  - Local, 1-18, 1-24
- File Menu, 5-12, 5-25, 5-30, 5-36
  - AC Standard Test, 5-12
  - Bar-to-Bar Test, 5-48
  - Current Analysis
    - DC Current Analysis, 6-76
    - DC In-Rush/Start-Up, 6-80
    - Demod, 6-69
    - Drive Input, 6-86
    - In-Rush/Start-Up, 6-63
    - Rotor Evaluation, 6-49
  - DC Standard Test, 5-41
  - Polarization Index, 5-17
  - Power Analysis
    - DC PowerTime Domain, 1-34
    - Power Phasor, 1-14
    - PowerResults, 1-29
  - Resistor Bank, 5-36
  - RIC, 5-20
  - Step Voltage, 5-25
  - Synchronous, 5-30
  - Test History, 3-29
  - WatchList, 3-36
- Find Peak
  - Current Spectrum, 6-54
  - In-Rush/Start-Up, 6-66, 6-83
- FLA, 6-58, 6-62, 6-74
- Folder
  - Add, 3-11
  - Deleted Assets, 1-26
  - Edit, 3-13
  - Move, 3-12
  - Remove, 3-13
- Fp Amplitude, 6-58
- Fp Frequency, 6-58
- From Last Baseline, 3-30

## G

- Getting Started
  - Current Analysis, 6-2
  - EMAX Power Analysis, 1-2

- Graph
  - Current Analysis
    - Display Methods, 6-54
    - In-Rush/Start-Up, 6-66, 6-83
    - Spectrum, 6-53
  - MCE
    - Eccentricity, 5-71
    - Rotor Bars, 5-71
  - Power Analysis
    - Voltage and Current Time Domain, 1-19
- Graph Option Menu
  - Step Voltage, 5-25
- Group Assignments, 1-13

## H

- harmonic, 1-30
- Harmonic Factor, 1-33
- Harmonics
  - Current Analysis
    - Eccentricity, 6-60
  - Power Analysis, 1-2
    - Current, THD, 1-31
    - Distortion, 1-33, 1-34
    - Voltage
      - Distortion, 1-31
      - Voltage and Current FFT, 1-22
- Help Menu
  - Network, 1-7
- High Resistance Connections, 1-2
- Home Screen, 3-1
  - Asset
    - Add, 3-27
    - Summary, 3-21
  - EMAX Auto, 3-40
  - Exit MCEGold, 3-59
  - Shuttle Parking, 3-60
- Export File, 3-44
- Fault Zones, 3-40
- Manage Templates, 3-4
- MCE Auto, 3-40
- Menu
  - Asset Manager
    - Asset
      - Add, 3-8
      - Copy, 3-9
      - Edit, 3-10
      - Move, 3-10
      - Remove, 3-10
    - Folder
      - Add, 3-11
      - Edit, 3-13
      - Move, 3-12
      - Remove, 3-13
    - Manage Templates, 3-3

- Warning Settings, 3-7
- Data
  - Export, 3-14
    - Fault Zones, 3-15
    - Single Asset, 3-14
  - Single Asset Import, 3-15
- File, 3-2
- Help
  - About, 3-16
  - Tutorial, 3-16
- Message, 3-14
- Options, 3-2
  - Date/Time, Time Zone, 3-3
  - Time Zone, 3-2
- Windows, 3-16
- Message Center, 3-41
- Asset
  - Condition, 3-44
  - Diagnostic, 3-44
  - Warning Levels, 3-44
- Compose, 3-43
- Menu
  - Edit, 3-42
  - File, 3-42
  - Option, 3-42
  - View, 3-42
- Trash, 3-44
- Nameplate, 3-22
- Report, 3-45
  - AC EMAX Summary, 3-46
  - Asset Condition Code, 3-47
  - Asset Inventory, 3-48
  - Detailed, 3-52
    - File Menu, 3-57
    - Multiple Asset, 3-59
    - Saved Reports List, 3-57
    - Single Asset, 3-52
  - MCE Summary, 3-49
  - Message History, 3-50
  - PI/DA Summary, 3-51
- Search, 3-32
- Site Condition, 3-27
- Site Navigator, 3-18
- Status Bar Icon, 3-18
- Test History, 3-27, 3-28
- Test Selection, 3-32
- Toolbar Icons, 3-17
  - Add Asset, 3-17, 3-27
  - Asset Summary, 3-17, 3-21
- EMAX
  - Auto, 3-18, 3-40
  - Export File, 3-18, 3-44
  - Fault Zones, 3-18, 3-40
  - MCE Auto, 3-18, 3-40

- Message, 3-18, 3-41
- Nameplate, 3-17, 3-22
- Report, 3-18
- Search, 3-17, 3-32
- Site Condition, 3-17, 3-27
- Site Navigator, 3-17
- Status Bar, 3-18
- Test History, 3-17, 3-27
- Test Selection, 3-17, 3-32
- Warning Settings, 3-17, 3-31
- WatchList, 3-18, 3-36
- Warning Settings, 3-31
- WatchList, 3-36
  - Add Asset, 3-38
  - Create, 3-37
- Menu
  - Edit, 3-36
  - File, 3-36
  - Remove
    - Asset, 3-38
    - WatchList, 3-38
  - Reorder List, 3-39
- Hot Stick, 1-5

## I

- Icon
  - Also See Home Screen, Toolbar Icons
  - Create
    - Account, 1-7
    - Group, 1-7
    - Site, 1-7
  - EMAX Auto, 6-1, 6-3, 1-1
  - Show Manager, 1-7
  - System Activity, 1-7
- Identification Tab
  - Nameplate, 3-22
- Impedance, 1-31
- Inductance Phase-to-Phase, 1-2
- Inductive Imbalance, 1-2, 5-75, 5-76
  - AC Asset
    - Standard Test, 5-53
  - AC Induction Motor
    - Standard Test, 5-75
  - AC Synchronous Motor
    - RIC, 5-74, 5-75
    - Standard Test, 5-76
  - AC Wound Rotor Motor
    - RIC, 5-77
    - Standard Test, 5-77, 5-78
  - Phase-to-Phase Inductance, 5-62, 5-63
- In-Rush/Start-Up, 1-3, 6-2, 6-63
  - Current Analysis
    - Test Window

- AC Induction Assets, 6-25
- AC Synchronous Assets, 6-31
- AC Wound Rotor Assets, 6-32
- Introduction
  - Current Analysis, 6-2
  - EMAX Power Analysis, 1-2
  - MCE, 5-2
- L**
- Label
  - Connection, 1-4
  - Identification, 1-4
- Laptop Computer
  - See Computer, Laptop
- Leakage Current, 5-64
- Line Frequency, 6-57, 6-63
  - See Also Carrier Frequency
- Load Variance
  - Maximum, 6-74
- M**
- Manage Templates, 3-4
- Manual Mode (MCE Testing)
  - AC Induction
    - Standard, 5-16, 5-40, 5-44
- Manufacturer Tab
  - Nameplate, 3-22
- MCE
  - AC Induction
    - MCE Auto Test, 5-7
      - Fault Zone Report, 5-10
    - Menu
      - File, 5-8
      - Options, 5-8
      - Test Button, 5-9
  - Analysis
    - AC Induction Motors
      - Rotor Influence Check, 5-74
    - AC Standard Test, 5-75
      - Wound Rotor, 5-77
    - AC Synchronous Motors, 5-75
    - AC Synchronous Test, 5-76
    - AC Wound Rotor Motors, 5-77
    - Average Inductance, 5-63
    - Bar-to-Bar, 5-74, 5-79
    - Capacitance-to-Ground, 5-57
    - DC Assets, 5-79
      - Dielectric Absorption, 5-79
      - Polarization Index, 5-79
    - DC Standard Test, 5-79
    - Dielectric Absorption, 5-75, 5-76, 5-78
    - Inductive Imbalance, 5-63
    - Phase-to-Phase Inductance, 5-61
    - Phase-to-Phase Resistance, 5-59
    - Polarization Index, 5-64, 5-75, 5-76, 5-77, 5-78
    - Resistance-to-Ground, 5-53
    - Resistive Imbalance, 5-63
    - Resistor Bank, 5-78
    - Rotor Influence Check, 5-67, 5-75, 5-77
    - Test Lead Resistance, 5-63
- Capacitance-to-Ground, 1-1
- Commutator Bar-to-Bar, 1-2
- DC Assets
  - Analysis
    - Dielectric Absorption, 5-79
    - Polarization Index, 5-79
  - Armature Section Tests, 5-40
  - DC Standard Test, 5-40
  - Field Section
    - DC Standard, 5-52
    - MCE Auto, 5-52
    - Polarization Index, 5-52
    - Step Voltage, 5-53
    - Tests, 5-52
  - MCE Auto Test, 5-40
- Electrical Safety, 1-4
- Inductance Phase-to-Phase, 1-2
- Inductive Imbalance, 1-2
- Introduction, 5-2
- Phase-to-Phase Resistance, 1-2
- Polarization Index, 1-2
- Quick Start
  - Procedure, 5-1, 6-1
- Resistive Imbalance, 1-2
- Rotor Influence Check, 1-2
- Specifications, 1-14
- Standard Test
  - Data Analysis, 5-53
- Test Leads, 1-10
- Test Procedure
  - AC Induction Motors
    - Rotor Influence Check (RIC), 5-21, 5-26, 5-31, 5-37
  - DC Motors
    - Armature Circuit
      - Bar-to-Bar, 5-47
      - Polarization Index, 5-45
      - Step Voltage, 5-47
    - Field Circuit
      - Polarization Index, 5-53
- Test Selection, 5-3
  - Asset
    - Information, 5-5
    - Temperature, 5-6
    - Test Location, 5-5
  - Button
    - Cancel, 5-6

- Reset, 5-6
- Save, 5-6
- Test, 5-6
- Charge Time, 5-6
- Resistance-to-Ground, 5-6
- Span, 5-6
- Test
  - Frequency, 5-6
  - List, 5-4
  - Setup, 5-5
- Voltage, 5-6
- Test Window
  - AC Induction, 5-7
  - AC Synchronous, 5-29
    - Field Section, 5-30
    - Stator Section, 5-29
  - AC Wound Rotor, 5-34
    - Resistor Bank Section, 5-35
    - Rotor Section, 5-35
    - Stator Section, 5-35
  - ACWound Rotor
    - Resistor Bank Test, 5-36
  - DC Assets, 5-40
- MCE Auto, 3-18, 3-40, 5-52
  - AC Induction
    - MCE, 5-7
  - DC Assets
    - Field Section Tests
      - MCE, 5-52
    - MCE, 5-40
- MCE Auto Test, 5-7, 5-40
  - Fault Zone Report, 5-10
- Menu
  - File, 5-8
  - Options, 5-8
  - Test Button, 5-9
- MCE Summary
  - Report, 3-49
- MCEGold
  - Home Screen, 3-1
  - Starting, 3-1
  - Tutorials, 3-1
- MCE Gold Lite, 3-78
  - Starting Lite, 3-78
  - Lite Home Screen, 3-79
  - Title Bar, 3-80
  - Asset Selected, 3-80
  - Search, 3-80
  - Left Panel, 3-80
  - Center Panel, 3-80
  - Right Panel, 3-81
  - Testing Buttons, 3-81
  - Toolbar, 3-81
- Megger Voltage, 5-56

- Menus
  - Power Analysis
    - Power FFT, 1-25
    - Power Harmonics, 1-27
    - Power Instantaneous, 1-24
    - Power Time Domain, 1-18
    - Power Voltage and Current FFT, 1-20
    - Power Voltage and Current Harmonics, 1-22
- Message Center, 3-41
  - Asset
    - Condition, 3-44
    - Diagnostic, 3-44
    - Warning Levels, 3-44
  - Compose, 3-43
  - Menu
    - Edit, 3-42
    - File, 3-42
    - Option, 3-42
    - View, 3-42
  - Trash, 3-44
- Message History
  - Report, 3-50
- Multimeter, 1-5
- Multi-site Version, 3-19

## N

- Nameplate, 3-17, 3-22
  - Armature Tab, 3-26
  - Bearing Tab, 3-24
  - Brush Assembly Tab, 3-26
  - Identification Tab, 3-22
  - Manufacturer Tab, 3-22
  - Nameplate 1 Tab, 3-23
  - Nameplate 2 Tab, 3-24
  - Resistor Bank Tab, 3-25
- Network
  - Account Manager, 1-6
    - Icon
      - Create Account, 1-7
      - Create Group, 1-7
      - Create Site, 1-7
    - Menu
      - Data, 1-7
      - Help, 1-7
      - Windows, 1-7
    - Show Manager Icon, 1-7
    - System Activity Icon, 1-7
    - Window, 1-8
  - Add Account to Group, 1-11
  - Create
    - New Account, 1-12
    - New Group, 1-10
    - Site, 1-9



- Deleted Assets Folders, 1-26
- Desktop, 1-1
- Edit
  - Account, 1-14
  - Group, 1-17
  - Site, 1-18
- Field Tester
  - Clear Local Database, 1-23
  - DataSync, 1-19
  - DownSync, 1-19
  - Two Way Sync, 1-23
  - UpSync, 1-22
- Field Tester Local, 1-1, 1-18, 1-24
- Field Tester Network, 1-1, 1-18
- Group Assignments, 1-13
- New Assets Folders, 1-27
- Tutorials, 1-27
- Utility Program, 1-2
  - Calibration, 1-6
  - Database, 1-4
  - Desktop Database, 1-4
  - License Key, 1-3
  - Network Tester Database, 1-5
  - Server, 1-5
- New Assets Folders
  - Network, 1-27
- NP Speed RPM, 6-74

## O

- One-Up/Two Down
  - Two-Up/One-Down, 5-73
- Online, 1-2
- Option Menu
  - Message Center, 3-42
- Options Menu, 5-13, 5-26, 5-31, 5-37
  - AC Standard Test, 5-13
  - Bar-to-Bar Test, 5-48
  - Current Analysis
    - DC Current Analysis, 6-77
    - DC In-Rush/Start-Up, 6-81
    - Demod, 6-70
    - Drive Input, 6-87
    - In-Rush/Start-Up, 6-64
    - Rotor Evaluation, 6-51
  - DC Standard Test, 5-41
  - Polarization Index, 5-17
  - Power Analysis
    - DC PowerTime Domain, 1-35
    - Power Phasor, 1-16
    - PowerResults, 1-29
  - Resistor Bank, 5-37
  - RIC, 5-21
  - Step Voltage, 5-26
  - Synchronous, 5-31

## P

- Parallel Port, 1-8
- PCMCIA
  - Port, 1-8
  - Slot, 1-8
- PdMA
  - Contact Information, 1-6
- Peak, 6-62
  - Speed, 6-63
- Phase Angle, 1-7
- Phase Configuration, 1-7
- Phase Sequence, 1-7
- Phase-to-Phase Inductance, 5-61, 5-71
  - Data Interpretation, 5-62
  - See Inductance Phase-to-Phase
  - Warning Levels, 5-62
- Phase-to-Phase Resistance, 5-59
  - Data Interpretation, 5-60
  - Warning Levels, 5-60
- Phase-to-Phase Shorts, 5-73
- Philosophy
  - EMAX, 1-2
- PI/DA Summary
  - Report, 3-51
- Polarization Index, 1-2, 5-17, 5-52, 5-64
  - AC Induction, 5-16
  - Analysis, 5-64, 5-75
  - Data Interpretation, 5-65
  - Field Section Tests
    - DC Assets
    - MCE, 5-52
  - Menu
    - File, 5-17
    - Options, 5-17
  - Profile, 5-65
  - Test Procedure
    - DC Motors
      - Armature Circuit, 5-45
      - Field Circuit, 5-53
    - Warning Levels, 5-65
    - Wound Rotor, 5-77
- Pole Face, 5-69, 5-71
- Pole Pass
  - Alarm Level, 6-75
  - Peak Frequency, 6-75
  - Peak Level, 6-75
- Ports
  - Parallel, 1-8
  - PCMCIA, 1-8
  - Serial, 1-8
- Potential Transformer Scale, 1-7
  - DC Power Test
    - Test Setup
      - EMAX Power, 1-10
- Power Analysis, 1-3

- AC Assets
  - Power Phasor, 1-14
- Power FFT, 1-26
  - Display Options, 1-25
  - Menus, 1-25
  - Power FFT, 1-25
- Power Harmonics, 1-28
  - Display Options, 1-27
  - Menus, 1-27
  - PowerHarmonics, 1-27
- Power Instantaneous, 1-24
  - Display Options, 1-24
  - Menus, 1-24
  - Power Instantaneous, 1-23
- Power Phasor
  - AC Assets
    - Analysis, 1-14
  - Display Options, 1-16
  - Menu
    - Edit, 1-15
    - File, 1-14
    - Options, 1-16
    - View, 1-15
  - Related Windows Menu, 1-16
  - Review Phasor Diagram, 6-88, 1-17
- Power Results, 1-30
  - Menu
    - Edit, 1-29
    - File, 1-29
    - Options, 1-29
    - Related Windows, 1-30
  - Power Results, 1-28
- Power Time Domain
  - Display Options, 1-18
  - Review Time Domain, 1-19
- Power Voltage and Current
  - Display Options, 1-20
  - Menus, 1-20
- Power Voltage and Current FFT, 1-20, 1-21
- Power Voltage and Current Harmonics, 1-22, 1-23
  - Display Options, 1-22
  - Menus, 1-22
- PowerTime Domain, 1-18
  - Display Options, 1-36
- Menu
  - Edit, 1-35
  - File, 1-34
  - Options, 1-35
  - Menus, 1-18
- Results Page
  - Review
    - Current, 1-31
    - Efficiency, 1-32
    - Impedance, 1-31
    - Power, 1-31
    - Sequence, 1-32
    - Voltage, 1-30
- Setup Options
  - Asset Test Location, 1-5
  - Button
    - Cancel, 1-8, 1-10
    - Reset, 1-10
    - Save, 1-7, 1-10
    - Test, 1-7, 1-10
  - Carrier/Line Frequency, 1-6
  - Current Transformer Scale, 1-6
  - Phase
    - Angle, 1-7
    - Configuration, 1-7
    - Sequence, 1-7
  - Potential Transformer Scale, 1-7
  - Probe Settings, 1-6
  - Starts With, 1-7
- Setup Options Button
  - Reset, 1-7
- Test Window, 1-10
  - Step-by-Step Power
    - AC Induction Assets, 1-10
    - AC Synchronous Assets, 1-12
    - AC Wound Rotor Assets, 1-12
    - DC Assets
      - Armature, 1-12
      - Field Section, 1-14
- View Data, 1-1
- Warning Settings, 1-38
  - Change, 1-39
- Power and Current FFT, 1-20
- Power FFT
  - Power Analysis, 1-25
- Power Harmonics
  - Power Analysis, 1-27
- Power Instantaneous
  - Power Analysis, 1-23
- Power Results
  - Power Analysis, 1-28
- Power Test, 1-5
  - EMAX Power Analysis
    - Test Setup
      - Power Test, 1-5
- Power Time Domain, 1-18, 1-34
  - DC Power Analysis, 1-34
  - Power Analysis, 1-18
- Power Voltage and Current FFT, 1-21
  - Power Analysis, 1-20
- Power Voltage and Current Harmonics
  - Power Analysis, 1-22
- Probe Settings, 1-6
  - DC Power Test

- Test Setup
      - EMAX Power, 1-9
  - Probes
    - Current, 6-2
    - Voltage, 1-2
  - Procedure
    - MCE Testing
      - AC Induction Motors
        - Rotor Influence Check, 5-21, 5-26, 5-31, 5-37
      - DC Motors
        - Field Circuit
          - Polarization Index, 5-53
      - Quick Start, 5-1, 6-1
    - Quick Start
      - Current Analysis Testing, 6-1
      - EMAX Testing, 1-1
- Q**
- Quality Assurance, 1-1
  - Quick Start
    - Current Analysis, 6-1
    - EMAX, 1-1
    - MCE, 5-1, 6-1
- R**
- Raise/Lower Leads
    - Bar-to-Bar Test, 5-49
  - Raw Data
    - Test History, 3-29
  - Recommended Actions
    - MCE Analysis
      - AC Induction Motors, 5-75
      - AC Wound Rotor Motor, 5-77, 5-78
      - DC Motors, 5-79
      - Synchronous Motors, 5-75, 5-76
  - Related Windows Menu
    - Current Analysis
      - DC Current Analysis, 6-78
      - Demod, 6-71
      - Drive Input, 6-88
      - Rotor Evaluation, 6-52
    - Power Analysis
      - Power Phasor, 1-16
      - Power Results, 1-30
  - Remove
    - WatchList, 3-38
    - WatchList Asset, 3-38
  - Reorder
    - WatchList, 3-39
  - Report, 3-45
    - AC EMAX Summary, 3-46
    - Asset Condition Code, 3-47
    - Asset Inventory, 3-48
      - Detailed, 3-52
        - Create, 3-52
        - File Menu, 3-57
      - MCE Summary, 3-49
      - Message History, 3-50
      - PI/DA Summary, 3-51
      - Toolbar Icon, 3-18
  - Reset Button
    - Test Selection
      - MCE, 5-6
  - Resistance Phase-to-Phase, 1-2
  - Resistance-to-Ground, 1-1
    - Test Selection
      - MCE, 5-6
    - Warning Levels, 5-53
  - Resistive Imbalance, 1-2, 5-59, 5-63
  - Resistor Bank, 5-78
    - Step-By-Step Testing, 5-37
    - Test, 5-36
    - View Menu, 5-36
  - Resistor Bank Tab
    - Nameplate, 3-25
  - Returning
    - Tester, 1-6
  - Review
    - Power Analysis
      - Phasor Diagram, 1-17
        - Power Phasor, 6-88
      - Power FFT, 1-26
      - Power Harmonics, 1-28
      - Power Instantaneous, 1-24
      - Power Results, 1-30
      - Power Time Domain, 1-36
      - Power Voltage and Current FFT, 1-21
      - Power Voltage and Current Harmonics, 1-23
      - Test History, 1-32, 1-37
      - Time Domain, 1-19
    - Review Spectrum
      - Current Analysis
        - DC Current Analysis, 6-80
        - DC In-Rush/Start-Up, 6-83
        - Demod, 6-73
        - Eccentricity, 6-59
        - In-Rush/Start-Up, 6-66
        - Rotor Evaluation, 6-53
    - Review Test History
      - Current Analysis
        - DC In-Rush/Start-Up, 6-84
        - Demod, 6-73
        - Eccentricity, 6-61
        - In-Rush/Start-Up, 6-67
        - Rotor Evaluation, 6-57
    - Review Time Domain
      - Current Analysis

- DC Current Analysis, 6-80
  - Eccentricity, 6-60
  - RIC
    - AC Induction
      - RIC, 5-20
    - Menu
      - File, 5-20
      - Options, 5-21
      - View, 5-20
    - Step-By-Step Testing, 5-21
  - RJ45 Cable, 1-5
  - RMS Amps, 6-58, 6-63
  - RMS Amps 1, 6-75
  - Rotor
    - Position, 5-68
  - Rotor Bar
    - Defects, 5-68, 5-71, 6-2
    - Graph, 5-71
  - Rotor Evaluation, 1-3
    - Analysis, 6-49
    - Test Window
      - Current Analysis
        - AC induction Assets, 6-20
        - AC Synchronous Assets, 6-31
        - AC Wound Rotor Assets, 6-32
  - Rotor Influence Check, 1-2
    - AC Induction Motors
      - Test Procedure, 5-21, 5-26, 5-31, 5-37
    - Aliasing, 5-68, 5-69
    - Analysis, 5-67
      - AC Synchronous Motors, 5-75
      - AC Wound Rotor Motors, 5-77
      - Average Inductance, 5-63
      - Inductive Imbalance, 5-63
      - Phase-to-Phase Inductance, 5-61
    - Data Interpretation, 5-69
  - MCE
    - Analysis, 5-74
- S**
- Safety
    - Electrical, 1-3
      - EMAX, 1-5, 6-2, 1-2
      - MCE, 1-4
      - Precautions, 5-3
    - Equipment
      - Tagouts, 5-21, 5-26, 5-31, 5-37
    - Personnel, 1-5
  - Save As Excel
    - Test History, 3-29
  - Save Button
    - Test Selection
      - MCE, 5-6
  - Search, 3-32
    - Advanced, 3-33
      - Search Buttons, 3-35
      - Search Criteria, 3-34
      - Toolbar Icon, 3-17
  - Self Impedance Imbalance, 1-34
  - Sequence, 1-32
  - Serial
    - Number (of tester), 1-4
    - Port, 1-8
  - Set as Baseline
    - Test History, 3-30
  - Set Condition Code
    - Test History, 3-31
  - Shipping
    - Case, 1-1
      - Specifications, 1-16
    - Tester, 1-9
  - Shorts
    - Phase-to-Phase, 5-73
    - Turn-to-Turn, 5-73
  - Show All Tests
    - Test History, 3-29
  - Show Manager
    - Network, 1-7
  - Show/Hide
    - Test History, 3-30
  - Shuttle Parking, 3-60
  - Single Asset
    - Export, 3-14
    - Import, 3-15
  - Site Condition, 3-27
    - Icon, 3-17
  - Site Navigator, 3-18
    - Icon, 3-17
    - Menu
      - Edit, 3-19
      - View, 3-19
    - Multi-site Version, 3-19
  - Span
    - Test Selection
      - MCE, 5-6
  - Specifications
    - EMAX, 1-15
    - MCE, 1-14
    - Shipping Case, 1-16
    - Tester Case, 1-16
  - Spectrum
    - Eccentricity, 6-59
  - Speed
    - Alarm Level, 6-75
    - Peak Level, 6-75
    - PeakFrequency, 6-75
    - RPM, 6-57, 6-74

- Select, 6-54
- Standard Test
  - Data Analysis, 5-53
- Starts With
  - Test Selection
    - AC Power Test, 1-7
  - Test Setup
    - DC Power Test, 1-10
- Stator Winding Defects, 6-2, 1-2
- Status Bar Icon, 3-18
- Step Voltage, 1-2, 5-25, 5-26, 5-53
  - AC Induction
    - Step Voltage, 5-24
  - Field Section Tests
    - DC Assets
      - MCE, 5-53
  - Test Procedure
    - DC Motors
      - Armature Circuit, 5-47
- View Menu, 5-25
- Step-by-Step
  - Current Analysis
    - AC Induction Assets
      - Demod, 6-28
      - Eccentricity, 6-23
      - EMAX Auto, 6-18
      - In-Rush/Start-Up, 6-25
      - Rotor Evaluation, 6-20
    - DC Assets
      - DC EMAX Auto, 6-32
      - Drive Input, 6-43
      - In-Rush/Start-Up, 6-45
  - Power Analysis
    - Test Window
      - A C Wound Rotor Assets, 1-12
      - AC Induction Assets, 1-10
      - AC Synchronous Assets, 1-12
      - DC Assets
        - Armature Section, 1-12
        - Field Section, 1-14
- Step-By-Step Testing
  - AC Standard Test, 5-13
  - Bar-to-Bar, 5-49
  - DC Standard Test, 5-42
  - Polarization Index, 5-17
  - Resistor Bank, 5-37
  - RIC, 5-21
  - Step Voltage, 5-26
  - Synchronous, 5-31
- Surge
  - Capacitors, 5-3, 5-58
- Symbols
  - Electrical, 1-4
- Synchronous, 5-30, 5-31
  - Step-By-Step Testing, 5-31

- View Menu, 5-31
- Synchronous Test
  - Recommended Actions, 5-76
- System Activity Icon
  - Network, 1-7

## T

- Tab, Nameplate. See Nameplate
- Technical Support, 1-6
- Temperature Correction, 5-55
- Templates
  - Add New, 3-4
  - Change Name, 3-5
  - Change Values, 3-6
  - Copy, 3-5
  - Remove, 3-5
- Test
  - Leads
    - Current, 6-2
    - Voltage, 1-2
  - Procedure. See Procedure
- Test History, 3-27, 3-28
  - Icon, 3-17
- Menu
  - Edit, 3-29
    - Copy, 3-29
    - Create Message, 3-29
  - File, 3-29
    - Save As Excel, 3-29
  - Options
    - Set Condition Code, 3-31
  - Show/Hide, 3-30
  - View
    - Raw Data, 3-29
    - Warning Settings, 3-30
- Test Menu
  - Show Tests
    - All Tests, 3-29
    - From Last Baseline, 3-30
    - Set as Baseline, 3-30
  - Warning Settings Menu, 3-30
- Test Leads
  - Bar-to-Bar, 1-11
  - EMAX Current, 1-12
  - EMAX Voltage, 1-12
  - MCE, 1-10
- Test List
  - Test Selection Window
    - EMAX Power Analysis, 1-4
- Test Results
  - % Current Imbalance, 6-58
  - % Full Load Amps, 6-58
  - % Slip, 6-57
  - Current Analysis

- Demod, 6-74
- Eccentricity, 6-62
- Rotor Evaluation, 6-57
- FLA, 6-58
- Fp Amplitude, 6-58
- Fp Frequency, 6-58
- Line Frequency, 6-57
- RMS Amps, 6-58
- Speed RPM, 6-57
- Test Selection, 3-32
  - EMAX, 1-1
  - Icon, 3-17
  - MCE, 5-3
  - Test
    - Button, 5-6
    - Frequency, 5-6
    - List, 5-4
    - Setup, 5-5
- Test Selection Window
  - Asset Information, 6-5
  - Current Analysis, 6-3
  - EMAX Power Analysis, 1-3
  - Setup Options
    - Asset Test Location, 6-13, 1-5
    - Button
      - Cancel, 6-17, 1-8, 1-10
      - Reset, 6-17, 1-7, 1-10
      - Save, 6-17, 1-7, 1-10
    - Capture Length, 6-16
    - Carrier Frequency, 6-14
    - Carrier/Line Frequency, 1-6
    - Channel, 6-16
    - Current Transformer Scale, 6-14, 1-6
    - Missing Currents, 6-15
    - Phase Angle, 6-15, 1-7
    - Phase Configuration, 6-15, 1-7
    - Phase Sequence, 6-15, 1-7
    - Potential Transformer Scale, 6-14, 1-7
    - Pre-Trigger Length, 6-15
    - Probe Settings, 6-14, 1-6
    - Starts With, 1-7
      - EMAX Auto, 6-16
    - Test Button, 6-17, 1-7, 1-10
    - Trigger
      - Factor, 6-15
      - Type, 6-15
- Test List, 6-4
- Test Setup
  - Current Analysis, 6-5
  - DC Current Analysis, 6-11
  - DC EMAX Auto, 6-10
  - DC In-Rush/Start-Up, 6-12
  - Demod, 6-9
  - Drive Input, 6-13
  - Eccentricity, 6-7
  - EMAX Auto, 6-5
  - In-Rush/Start-Up, 6-8
  - Rotor Evaluation, 6-6
- Test Setup
  - Test Selection Window
    - EMAX Power Analysis
      - Test Setup, 1-5
- Test Voltage
  - Resistance-to-Ground, 5-56
- Test Window
  - Current Analysis, 6-17
  - MCE, 5-7
  - Power Analysis, 1-10
- Tester
  - Accessory Bag, 1-9
  - Battery, 1-6
    - Care, 1-8
    - Charger, 1-8
    - Indicator, 1-5
  - Calibration, 1-6, 1-1, 1-9
  - Care and Handling, 1-8
  - Case, 1-2
    - Care, 1-8
    - Specifications, 1-16
  - Components, 1-4
  - DAQ Cable, 1-5
  - Deck, 1-2
    - Connections, 1-2
  - Environmental Conditions, 1-9
  - Identification Label, 1-4
  - Laptop Computer, 1-2
  - Returning, 1-6
  - RJ45 Cable, 1-5
  - Serial Number, 1-4
  - Shipping, 1-9
- Testing
  - EMAX, 1-2
  - EMAX Auto, 3-40
  - MCE Auto, 3-40
- Time Domain, 6-60
- Trash
  - Message Center, 3-44
- Trending, 1-1, 5-3
- Turn-to-Turn Shorts, 5-73
- Tutorials, 3-16, 1-27
  - Network, 1-27
- Two Way Sync
  - Field Tester, 1-23
- Two-Up/One-Down
  - One-Up/Two Down, 5-73

**U**

## UpSync

Field Tester, 1-22

## Utility Program

Calibration, 1-6

Database, 1-4

Desktop Database, 1-4

License Key, 1-3

Network, 1-2

Network Tester Database, 1-5

Server, 1-5

**V**

## View

Current Analysis

Data, 6-1

## View Data

Power Analysis, 1-1

## View Menu

AC Standard Test, 5-13

Bar-to-Bar Test, 5-48

Current Analysis

DC Current Analysis, 6-77

Demod, 6-70

Drive Input, 6-87

Rotor Evaluation, 6-50

DC Standard Test, 5-41

Message Center, 3-42

Power Analysis

Power Phasor, 1-15

Resistor Bank, 5-36

RIC, 5-20

Site Navigator, 3-19

Step Voltage, 5-25

Synchronous, 5-31

Test History, 3-29

## Voltage, 1-30

Crest Factor, 1-33

Imbalance, 1-33

Line-to-Line, 1-33

Probes, 6-2, 1-2

Spikes, 1-2

Test Selection

MCE, 5-6

THD, 1-33, 1-38

Resistance Phase-to-Phase, 5-60

Resistance-to-Ground, 5-53

## Warning Settings, 3-31

Asset Manager, 3-7

Current Analysis, 6-89

Change, 6-91

Icon, 3-17

Power Analysis, 1-38

Change, 1-39

Test History, 3-30

## Warranty

Computer, 1-8

Data Analysis, 1-8

Extended, 1-8

Hardware, 1-7

Maintenance Contracts, 1-8

Replacement Parts, 1-8

Software, 1-8

## WatchList, 3-36

Icon, 3-18

## Windows, 3-16

Menu

Network, 1-7

## Wound Rotor

Recommended Actions, 5-77

Resistor Bank, 5-78

**W**

## Warning Levels, 5-65

Capacitance-to-Ground, 5-57

Inductance Phase-to-Phase, 5-62

Message Center, 3-44

Phase-to-Phase Resistance, 5-60

Polarization Index, 5-65





# INDEX

% Current Imbalance, 6-58, 6-63  
 % FLA, 6-62  
 % Full Load Amps, 6-58, 6-62, 6-74  
 % Slip, 6-57

## A

About, 3-16  
 Absorption Current, 5-64  
 AC Assets  
   Power Analysis, 1-14  
 AC EMAX Summary  
   Report, 3-46  
 AC Induction, 5-7  
   Analysis, 5-74  
   Polarization Index, 5-16  
   RIC, 5-20  
   Step Voltage, 5-24  
   Test Window  
     Current Analysis, 6-18  
     MCE, 5-7  
 AC Standard Test, 5-75, 5-77  
   AC Induction, 5-12  
   AC Standard Test, 5-12, 5-13  
   Analysis, 5-75  
   Step-By-Step Testing, 5-13  
   Wound Rotor, 5-77  
 AC Synchronous, 5-29  
   Analysis, 5-75, 5-76  
   Field Section, 5-30  
   Stator Section, 5-29  
   Synchronous, 5-30  
   Test Window  
     Current Analysis, 6-31  
     MCE, 5-29  
 AC Wound Rotor, 5-34  
   Analysis, 5-77  
   Recommended Actions, 5-77  
   Resistor Bank Section, 5-35  
   Resistor Bank Test, 5-36  
   Rotor Section, 5-35  
   Stator Section, 5-35  
   Test Window  
     Current Analysis, 6-32  
     MCE, 5-34  
 Accessory Bag, 1-9  
 Account Manager  
   Account Rights, 1-13  
   Add Accounts to Group, 1-11  
   Icon  
     Create

    Account, 1-7  
     Create Group, 1-7  
     Create Site, 1-7  
     Show Manager, 1-7  
     System Activity, 1-7  
 Menu  
   Data, 1-7  
   Windows, 1-7  
 Network, 1-6  
 Window, 1-8  
 Add  
   Asset, 3-17, 3-27  
   WatchList, 3-38  
 Air Gap, 5-68, 5-71, 5-73, 6-2, 6-58, 6-60  
   Current Analysis, 6-2  
 Aliasing  
   Rotor Influence Check, 5-68  
   Data Interpretation, 5-69  
   Rotor Position, 5-68  
 Analysis, 6-75  
   Current Analysis, 6-49  
   Demod, 6-68, 6-75  
   Eccentricity, 6-58  
   In-Rush/Start-Up, 6-63  
   Rotor Evaluation  
     Time Domain, 6-55  
 MCE  
   AC Induction Motors, 5-74  
   AC Standard Test, 5-75, 5-77  
     Wound Rotor, 5-77  
   AC Synchronous Motors, 5-75  
   AC Synchronous Test, 5-76  
   AC Wound Rotor Motors, 5-77  
   Average Inductance, 5-63  
   Bar-to-Bar, 5-79  
   Capacitance-to-Ground, 5-57  
   DC Assets, 5-79  
     Dielectric Absorption, 5-79  
     Polarization Index, 5-79  
   DC Bar-to-Bar, 5-74  
   DC Standard Test, 5-79  
   Dielectric Absorption, 5-75, 5-76, 5-78  
   Inductive Imbalance, 5-63  
   Phase-to-Phase Inductance, 5-61  
   Phase-to-Phase Resistance, 5-59  
   Polarization Index, 5-64, 5-75, 5-76, 5-77,  
     5-78  
     Wound Rotor, 5-78  
   Resistance-to-Ground, 5-53  
   Resistive Imbalance, 5-63  
   Resistor Bank, 5-78

- Rotor Influence Check, 5-74, 5-75, 5-77
  - Test Lead Resistance, 5-63
  - Power Analysis
    - Review
      - Power Time Domain, 1-36
      - Test History, 1-32, 1-37
    - Warning Levels
      - Current Crest Factor, 1-33
      - Current Imbalance, 1-33
      - Current RMS, 1-33
      - Current THD, 1-34, 1-38
      - Differential Current, 1-38
      - Harmonic Factor, 1-33
      - Self Impedance Imbalance, 1-34
      - Voltage Crest Factor, 1-33
      - Voltage Imbalance, 1-33
      - Voltage Line-to-Line, 1-33
      - Voltage THD, 1-38
      - VoltageTHD, 1-33
  - Rotor Evaluation
    - Change Speed, 6-51
    - Correct Displayed Data, 6-51
  - Test History
    - Rotor Evaluation
      - Current Analysis, 6-58
  - Armature Compensation, 5-74
  - Armature Section Tests, 5-40
    - DC Assets
      - MCE, 5-40
  - Armature Tab
    - Nameplate, 3-26
  - Asset
    - Add, 3-8
    - Copy, 3-9
    - Edit, 3-10
    - Move, 3-10
    - Remove, 3-10
  - Asset Condition
    - Message Center, 3-44
  - Asset Condition Code
    - Report, 3-47
  - Asset Diagnostic
    - Message Center, 3-44
  - Asset Information, 5-5
    - Power Analysis
      - Test Selection Window, 1-4
    - Test Selection
      - MCE, 5-5
  - Asset Inventory
    - Report, 3-48
  - Asset Manager, 3-3
  - Asset Scheduler, B-1
    - Create, B-1
    - Schedule Menu, B-7
  - View Menu, B-5
  - View Scheduled Jobs, B-4
  - Asset Summary, 3-17, 3-21
  - Asset Temperature
    - Test Selection
      - MCE, 5-6
  - Asset Test Location, 5-5
    - Power Analysis
      - AC Assets, 1-5
      - DC Assets, 1-8
    - Test Selection
      - MCE, 5-5
  - Asset Warning Levels
    - Message Center, 3-44
  - Average Inductance, 5-63
- ## B
- Bar-to-Bar
    - Data Interpretation, 5-74
    - Step-By-Step Testing, 5-49
    - Test, 5-48
    - Test Leads, 1-11
    - Test Procedure
      - DC Motors
        - Armature Circuit, 5-47
  - Baseline, 5-3, 5-54, 5-61
    - Change From, 5-57, 5-60, 5-62
    - Current Analysis, 6-2, 6-66, 6-67, 6-83, 6-84
      - Warning Settings, 6-90
    - From Last Baseline, 3-30
    - Power Analysis
      - Warning Settings, 1-38
    - Set As, 3-30
    - Show Tests, 3-30
    - Undo, 3-30
  - Battery
    - Charger, 1-8
    - Indicator, 1-5
    - Laptop, 1-8
    - Tester, 1-6
      - Care, 1-8
      - Holder, 1-2
  - Bearing Tab
    - Nameplate, 3-24
  - Brush Assembly Tab
    - Nameplate, 3-26
  - Button
    - Cancel, 5-6, 6-17, 1-8, 1-10
    - Reset, 5-6, 6-17, 1-7, 1-10
    - Save, 5-6, 6-17, 1-7, 1-10
    - Test, 5-6, 6-17, 1-7, 1-10

**C**

## Calculating

Eccentricity Frequency, 6-60

## Calibration

Returning Tester, 1-6

Tester, 1-1, 1-9

## Cancel Button

Test Selection

MCE, 5-6

## Capacitance-to-Ground, 1-1

Analysis, 5-57

Data Interpretation, 5-58

Warning Levels, 5-57

## Capacitors

Power Correction, 5-62

Power Factor, 5-29, 5-62

Power Factor Correction, 5-3, 5-7, 5-35

Surge, 5-3, 5-7, 5-29, 5-35, 5-58, 5-62

## Carrier Frequency, 6-74

## Carrier/Line Frequency, 1-6

Power Analysis

DC Power Test

Test Setup, 1-9

## Change Speed

Rotor Evaluation, 6-51

## Charge Time

Test Selection

MCE, 5-6

## Charging Current, 5-64

## Clear Local Database

Field Tester, 1-23

## Commutator Bar-to-Bar, 1-2

## Comparison, 5-3

## Compose

Message Center, 3-43

## Computer

Laptop, 1-6

Care, 1-8

Ports

Parallel, 1-8

PCMCIA, 1-8

Serial, 1-8

Specifications, 1-7

## Connector

Current Probe, 1-6

MCE Test Lead, 1-6

Voltage Probe, 1-6

## Contact

PdMA, 1-6

## Copy

Test History, 3-29

## Correct Displayed Data

Rotor Evaluation, 6-51

## Create

Icon

Group, 1-7

Site, 1-7

## Message

Test History, 3-29

New Account, 1-12

New Group, 1-10

Site, 1-9

WatchList, 3-37

## Create Icon

Account, 1-7

## Current, 1-31

Absorption, 5-64

Charging, 5-64

Leakage, 5-64

## Current Analysis

Air Gap, 6-2

Baseline, 6-2

## DC Current Analysis

Display Options, 6-78

Menu, 6-76

Edit, 6-77

Options, 6-77

Related Windows, 6-78

View, 6-77

## Review

Test History, 6-80

Time Domain, 6-80

## DC In-Rush/Start-Up

Display Options, 6-82

Menu

Edit, 6-81

File, 6-80

Options, 6-81

## Review

Spectrum, 6-83

Test History, 6-84

## Demod, 6-68

Analysis, 6-75

Display Options, 6-71

Menu

Edit, 6-70

File, 6-69

Options, 6-70

View, 6-70

Related Windows Menu, 6-71

## Review

Test History, 6-73

## Drive Input

Display Options, 6-88

Menu

Edit, 6-87

File, 6-86

Options, 6-87

Related Windows, 6-88

View, 6-87

- Eccentricity, 6-58
  - Review
    - Spectrum, 6-59
    - Test History, 6-61
    - Time Domain, 6-60
- EMAX Auto, 6-49
  - Icon, 6-3
- Getting Started, 6-2
- In-Rush/Start-Up, 6-2, 6-63
  - Display Options, 6-65
  - Menu
    - Edit, 6-64
    - File, 6-63
    - Options, 6-64
  - Review
    - Spectrum, 6-66
    - Test History, 6-67
- Introduction, 6-2
- Quick Start, 6-1
- Rotor Evaluation, 6-49, 6-57
  - Display Options, 6-52
  - Menu
    - Edit, 6-50
    - File, 6-49
    - Options, 6-51
    - Related Windows, 6-52
    - View, 6-50
  - Review Spectrum, 6-53
  - Test History
    - Analysis, 6-58
  - Test Result Values, 6-57
  - Time Domain, 6-55
- Setup Options
  - Asset Test Location, 6-13
  - Button
    - Cancel, 6-17
    - Reset, 6-17
    - Save, 6-17
    - Test, 6-17
  - Capture Length, 6-16
  - Carrier Frequency, 6-14
  - Channel, 6-16
  - Current Transformer Scale, 6-14
  - Missing Currents, 6-15
  - Phase Angle, 6-15
  - Phase Configuration, 6-15
  - Phase Sequence, 6-15
  - Potential Transformer Scale, 6-14
  - Pre-Trigger Length, 6-15
  - Probe Settings, 6-14
  - Starts With
    - EMAX Auto, 6-16
  - Trigger
    - Factor, 6-15
    - Type, 6-15
- Test Result Values, 6-62, 6-74
- Test Selection Window, 6-3
  - Asset Information, 6-5
  - Test
    - List, 6-4
    - Setup, 6-5
- Test Setup
  - DC Current Analysis, 6-11
  - DC EMAX Auto, 6-10
  - DC In-Rush/Start-Up, 6-12
  - Demod, 6-9
  - Drive Input, 6-13
  - Eccentricity, 6-7
  - EMAX Auto, 6-5
  - In-Rush/Start-Up, 6-8
  - Rotor Evaluation, 6-6
- Test Window, 6-17
  - AC Induction Assets, 6-18
    - Demod, 6-28
    - Eccentricity, 6-23
    - EMAX Auto, 6-18
    - In-Rush/Start-Up, 6-25
    - Rotor Evaluation, 6-20
    - Step-by-Step
      - Demod, 6-28
      - Eccentricity, 6-23
      - EMAX Auto, 6-18
      - In-Rush/Start-Up, 6-25
      - Rotor Evaluation, 6-20
  - AC Synchronous Assets, 6-31
    - Demod, 6-31
    - Eccentricity, 6-31
    - EMAX Auto, 6-31
    - In-Rush/Start-Up, 6-31
    - Rotor Evaluation, 6-31
  - AC Wound Rotor Assets, 6-32
    - Demod, 6-32
    - Eccentricity, 6-32
    - EMAX Auto, 6-32
    - In-Rush/Start-Up, 6-32
    - Rotor Evaluation, 6-32
  - DC Assets, 6-75
    - DC EMAX Auto, 6-32
    - Field Section Tests, 6-45
    - Step-by-Step
      - DC EMAX Auto, 6-32
      - Drive Input, 6-43
      - In-Rush/Start-Up, 6-45
    - Test Window, 6-32
  - DC Current Analysis, 6-76
  - DC EMAX Auto, 6-76
  - DC In-Rush/Start-Up, 6-80, 6-89
  - Drive Input, 6-85

- View Data, 6-1
  - Warning Settings, 6-89
    - Change, 6-91
  - Current Crest Factor, 1-33
  - Current Imbalance, 1-33
  - Current Probes, 6-2, 1-2
  - Current RMS, 1-33
  - Current Spikes, 1-2
  - Current THD, 1-34, 1-38
  - Current Transformer, 6-74
  - Current Transformer Scale, 1-6
    - DC Power Test
      - Test Setup, 1-10
  - Customer Service
    - Dell Computer, 1-8
- D**
- DAQ Cable, 1-5
  - Data
    - Analysis Assistance, 1-6
    - Export, 3-14, 3-15
    - Import, 3-15
    - Menu, 1-7
  - Data Interpretation
    - Bar-to-Bar, 5-74
    - Capacitance-to-Ground, 5-58
    - Phase-to-Phase Inductance, 5-62
    - Phase-to-Phase Resistance, 5-60
    - Polarization Index, 5-65
    - Rotor Influence Check, 5-69
  - DataSync
    - Field Tester, 1-19
  - DC
    - EMAX Auto
      - Test Window
        - Current Analysis, 6-32
    - Power Analysis
      - PowerTime Domain, 1-34
    - Power Test
      - Test Setup, 1-8
    - Test Results Window
      - Current Analysis
        - DC Current Analysis, 6-76
        - DC EMAX Auto, 6-76
        - DC In-Rush/Start-Up, 6-80, 6-89
  - DC Assets, 5-40
    - Bar-to-Bar Test
      - Raise/Lower Leads, 5-49
    - Menu
      - File, 5-48
      - Options, 5-48
      - View, 5-48
    - Test Window
      - MCE, 5-40
  - DC Bar-to-Bar
    - See Bar-to-Bar
  - DC Standard Test, 5-40, 5-41, 5-52
    - Analysis, 5-79
  - DC Assets
    - MCE, 5-40
  - Menu
    - File, 5-41
    - Options, 5-41
    - View, 5-41
  - Step-By-Step Testing, 5-42
  - Deck
    - Connections, 1-2
  - Deenergized, 1-1, 1-4
    - Multimeter, 1-5
    - Verifying, 1-5
  - Deleted Assets Folders, 1-26
  - Dell Computer
    - Customer Service, 1-8
  - Demod, 6-68
    - Current Transformer, 6-74
    - Test Window
      - Current Analysis
        - AC Induction Assets, 6-28
        - AC Synchronous Assets, 6-31
        - AC Wound Rotor Assets, 6-32
  - Demodulation
    - See Demod
  - Detailed
    - Report, 3-52
      - Create, 3-52
      - File Menu, 3-57
      - Multiple Asset, 3-59
      - Saved Reports List, 3-57
      - Single Asset, 3-52
  - Dielectric Absorption, 5-45, 5-53
    - Analysis, 5-75
  - Differential Current, 1-38
  - Dimensions
    - Shipping Case, 1-16
    - Tester Case, 1-16
  - Display Options
    - Current Analysis
      - DC Current Analysis, 6-78
      - DC In-Rush/Start-Up, 6-82
      - Demod, 6-71
      - Drive Input, 6-88
      - In-Rush/Start-Up, 6-65
    - Power Analysis
      - AC Assets
        - Power FFT, 1-25
        - Power Harmonics, 1-27
        - Power Instantaneous, 1-24
        - Power Phasor, 1-16
        - Power Voltage and Current FFT, 1-20

- Power Voltage and Current Harmonics, 1-22
  - PowerTime Domain, 1-18
  - DC Assets
    - PowerTime Domain, 1-36
  - Rotor Evaluation
    - Current Analysis, 6-52
  - DownSync
    - Field Tester, 1-19
  - Drive Input
    - Test Window
      - Current Analysis, 6-85
- E**
- EASA, 5-60
  - Eccentricity, 1-3, 6-2, 6-58, 1-2
    - Current Analysis
      - Calculating Frequency, 6-60
      - Test Window
        - AC Induction Assets, 6-23
        - AC Synchronous Assets, 6-31
        - AC Wound Rotor Assets, 6-32
    - Frequency, 6-62
    - MCE, 5-71
    - Power Analysis, 1-2, 1-22
  - Edit
    - Account, 1-14
    - Group, 1-17
    - Site, 1-18
  - Edit Menu
    - Current Analysis
      - DC Current Analysis, 6-77
      - DC In-Rush/Start-Up, 6-81
      - Demod, 6-70
      - Drive Input, 6-87
      - In-Rush/Start-Up, 6-64
      - Rotor Evaluation, 6-50
    - Power Analysis
      - DC PowerTime Domain, 1-35
      - Power Phasor, 1-15
      - PowerResults, 1-29
    - Site Navigator, 3-19
    - Test History, 3-29
    - WatchList, 3-36
  - Efficiency, 1-32
  - Electrical Safety, 1-3
    - EMAX, 1-5
    - MCE, 1-4
  - Electrical Symbols, 1-4
  - EMAX
    - Auto, 3-18, 3-40, 1-1
      - Current Analysis, 6-49
    - Icon, 6-1
  - Power Analysis, 1-3
    - Test
      - Current Analysis
        - AC Induction Assets, 6-18
        - AC Synchronous Assets, 6-31
        - AC Wound Rotor Assets, 6-32
    - Electrical Safety, 1-5
    - Philosophy, 1-2
    - Power Analysis, 1-1
    - Quick Start, Procedure, 1-1
    - Specifications, 1-15
    - Test Leads
      - Current, 1-12
      - Voltage, 1-12
    - Test Selection, 1-1
    - Testing, 1-2, 1-1
  - EMAX Power Analysis
    - EMAX Auto, 1-3
    - Getting Started, 1-2
    - Introduction, 1-2
    - Test Selection Window, 1-3
      - Asset Information, 1-4
      - Test List, 1-4
      - Test Setup, 1-5
    - Test Setup
      - DC Power Test, 1-8
        - Asset Test Location, 1-8
        - Carrier/LineFrequency, 1-9
        - Current Transformer Scale, 1-10
        - Potential Transformer Scale, 1-10
        - Probe Settings, 1-9
        - Starts With, 1-10
      - Power Test, 1-5
  - Energized, 1-2
  - Energy Cost Analysis, C-1
    - Perform, C-1
    - Report, C-5
    - Search, C-3
  - Tab
    - Asset Information, C-2
    - Energy Cost Analysis, C-5
    - Energy/Operating Hours, C-4
    - Replacement Asset, C-2
  - Environmental Conditions
    - Tester, 1-9
  - EPRI, 5-60
  - Exit MCEGold, 3-59
    - Shuttle Parking, 3-60
  - Export File, 3-18, 3-44
- F**
- Fast Fourier Transform (FFT), 6-53
  - Fault Zone Report, 5-10

- Menu
  - Edit, 5-11
  - File, 5-10
  - Options, 5-11
- Fault Zones, 3-18, 3-40
  - Export, 3-15
- Field Section Tests
  - DC Assets
    - Current Analysis, 6-45
    - MCE, 5-52
- Field Tester
  - DataSync, 1-19
  - DownSync, 1-19
  - Local, 1-18, 1-24
- File Menu, 5-12, 5-25, 5-30, 5-36
  - AC Standard Test, 5-12
  - Bar-to-Bar Test, 5-48
  - Current Analysis
    - DC Current Analysis, 6-76
    - DC In-Rush/Start-Up, 6-80
    - Demod, 6-69
    - Drive Input, 6-86
    - In-Rush/Start-Up, 6-63
    - Rotor Evaluation, 6-49
  - DC Standard Test, 5-41
  - Polarization Index, 5-17
  - Power Analysis
    - DC PowerTime Domain, 1-34
    - Power Phasor, 1-14
    - PowerResults, 1-29
  - Resistor Bank, 5-36
  - RIC, 5-20
  - Step Voltage, 5-25
  - Synchronous, 5-30
  - Test History, 3-29
  - WatchList, 3-36
- Find Peak
  - Current Spectrum, 6-54
  - In-Rush/Start-Up, 6-66, 6-83
- FLA, 6-58, 6-62, 6-74
- Folder
  - Add, 3-11
  - Deleted Assets, 1-26
  - Edit, 3-13
  - Move, 3-12
  - Remove, 3-13
- Fp Amplitude, 6-58
- Fp Frequency, 6-58
- From Last Baseline, 3-30

**G**

- Getting Started
  - Current Analysis, 6-2
  - EMAX Power Analysis, 1-2

- Graph
  - Current Analysis
    - Display Methods, 6-54
    - In-Rush/Start-Up, 6-66, 6-83
    - Spectrum, 6-53
  - MCE
    - Eccentricity, 5-71
    - Rotor Bars, 5-71
  - Power Analysis
    - Voltage and Current Time Domain, 1-19
- Graph Option Menu
  - Step Voltage, 5-25
- Group Assignments, 1-13

**H**

- harmonic, 1-30
- Harmonic Factor, 1-33
- Harmonics
  - Current Analysis
    - Eccentricity, 6-60
  - Power Analysis, 1-2
    - Current, THD, 1-31
    - Distortion, 1-33, 1-34
    - Voltage
      - Distortion, 1-31
      - Voltage and Current FFT, 1-22
- Help Menu
  - Network, 1-7
- High Resistance Connections, 1-2
- Home Screen, 3-1
  - Asset
    - Add, 3-27
    - Summary, 3-21
  - EMAX Auto, 3-40
  - Exit MCEGold, 3-59
  - Shuttle Parking, 3-60
- Export File, 3-44
- Fault Zones, 3-40
- Manage Templates, 3-4
- MCE Auto, 3-40
- Menu
  - Asset Manager
    - Asset
      - Add, 3-8
      - Copy, 3-9
      - Edit, 3-10
      - Move, 3-10
      - Remove, 3-10
    - Folder
      - Add, 3-11
      - Edit, 3-13
      - Move, 3-12
      - Remove, 3-13
    - Manage Templates, 3-3

- Warning Settings, 3-7
- Data
  - Export, 3-14
    - Fault Zones, 3-15
    - Single Asset, 3-14
  - Single Asset Import, 3-15
- File, 3-2
- Help
  - About, 3-16
  - Tutorial, 3-16
- Message, 3-14
- Options, 3-2
  - Date/Time, Time Zone, 3-3
  - Time Zone, 3-2
- Windows, 3-16
- Message Center, 3-41
- Asset
  - Condition, 3-44
  - Diagnostic, 3-44
  - Warning Levels, 3-44
- Compose, 3-43
- Menu
  - Edit, 3-42
  - File, 3-42
  - Option, 3-42
  - View, 3-42
- Trash, 3-44
- Nameplate, 3-22
- Report, 3-45
  - AC EMAX Summary, 3-46
  - Asset Condition Code, 3-47
  - Asset Inventory, 3-48
  - Detailed, 3-52
    - File Menu, 3-57
    - Multiple Asset, 3-59
    - Saved Reports List, 3-57
    - Single Asset, 3-52
  - MCE Summary, 3-49
  - Message History, 3-50
  - PI/DA Summary, 3-51
- Search, 3-32
- Site Condition, 3-27
- Site Navigator, 3-18
- Status Bar Icon, 3-18
- Test History, 3-27, 3-28
- Test Selection, 3-32
- Toolbar Icons, 3-17
  - Add Asset, 3-17, 3-27
  - Asset Summary, 3-17, 3-21
- EMAX
  - Auto, 3-18, 3-40
  - Export File, 3-18, 3-44
  - Fault Zones, 3-18, 3-40
  - MCE Auto, 3-18, 3-40

- Message, 3-18, 3-41
- Nameplate, 3-17, 3-22
- Report, 3-18
- Search, 3-17, 3-32
- Site Condition, 3-17, 3-27
- Site Navigator, 3-17
- Status Bar, 3-18
- Test History, 3-17, 3-27
- Test Selection, 3-17, 3-32
- Warning Settings, 3-17, 3-31
- WatchList, 3-18, 3-36
- Warning Settings, 3-31
- WatchList, 3-36
  - Add Asset, 3-38
  - Create, 3-37
- Menu
  - Edit, 3-36
  - File, 3-36
  - Remove
    - Asset, 3-38
    - WatchList, 3-38
  - Reorder List, 3-39
- Hot Stick, 1-5

## I

- Icon
  - Also See Home Screen, Toolbar Icons
  - Create
    - Account, 1-7
    - Group, 1-7
    - Site, 1-7
  - EMAX Auto, 6-1, 6-3, 1-1
  - Show Manager, 1-7
  - System Activity, 1-7
- Identification Tab
  - Nameplate, 3-22
- Impedance, 1-31
- Inductance Phase-to-Phase, 1-2
- Inductive Imbalance, 1-2, 5-75, 5-76
  - AC Asset
    - Standard Test, 5-53
  - AC Induction Motor
    - Standard Test, 5-75
  - AC Synchronous Motor
    - RIC, 5-74, 5-75
    - Standard Test, 5-76
  - AC Wound Rotor Motor
    - RIC, 5-77
    - Standard Test, 5-77, 5-78
  - Phase-to-Phase Inductance, 5-62, 5-63
- In-Rush/Start-Up, 1-3, 6-2, 6-63
  - Current Analysis
    - Test Window



- AC Induction Assets, 6-25
- AC Synchronous Assets, 6-31
- AC Wound Rotor Assets, 6-32
- Introduction
  - Current Analysis, 6-2
  - EMAX Power Analysis, 1-2
  - MCE, 5-2
- L**
- Label
  - Connection, 1-4
  - Identification, 1-4
- Laptop Computer
  - See Computer, Laptop
- Leakage Current, 5-64
- Line Frequency, 6-57, 6-63
  - See Also Carrier Frequency
- Load Variance
  - Maximum, 6-74
- M**
- Manage Templates, 3-4
- Manual Mode (MCE Testing)
  - AC Induction
    - Standard, 5-16, 5-40, 5-44
- Manufacturer Tab
  - Nameplate, 3-22
- MCE
  - AC Induction
    - MCE Auto Test, 5-7
      - Fault Zone Report, 5-10
    - Menu
      - File, 5-8
      - Options, 5-8
      - Test Button, 5-9
  - Analysis
    - AC Induction Motors
      - Rotor Influence Check, 5-74
    - AC Standard Test, 5-75
      - Wound Rotor, 5-77
    - AC Synchronous Motors, 5-75
    - AC Synchronous Test, 5-76
    - AC Wound Rotor Motors, 5-77
    - Average Inductance, 5-63
    - Bar-to-Bar, 5-74, 5-79
    - Capacitance-to-Ground, 5-57
    - DC Assets, 5-79
      - Dielectric Absorption, 5-79
      - Polarization Index, 5-79
    - DC Standard Test, 5-79
    - Dielectric Absorption, 5-75, 5-76, 5-78
    - Inductive Imbalance, 5-63
    - Phase-to-Phase Inductance, 5-61
    - Phase-to-Phase Resistance, 5-59
    - Polarization Index, 5-64, 5-75, 5-76, 5-77, 5-78
    - Resistance-to-Ground, 5-53
    - Resistive Imbalance, 5-63
    - Resistor Bank, 5-78
    - Rotor Influence Check, 5-67, 5-75, 5-77
    - Test Lead Resistance, 5-63
- Capacitance-to-Ground, 1-1
- Commutator Bar-to-Bar, 1-2
- DC Assets
  - Analysis
    - Dielectric Absorption, 5-79
    - Polarization Index, 5-79
  - Armature Section Tests, 5-40
  - DC Standard Test, 5-40
  - Field Section
    - DC Standard, 5-52
    - MCE Auto, 5-52
    - Polarization Index, 5-52
    - Step Voltage, 5-53
    - Tests, 5-52
  - MCE Auto Test, 5-40
- Electrical Safety, 1-4
- Inductance Phase-to-Phase, 1-2
- Inductive Imbalance, 1-2
- Introduction, 5-2
- Phase-to-Phase Resistance, 1-2
- Polarization Index, 1-2
- Quick Start
  - Procedure, 5-1, 6-1
- Resistive Imbalance, 1-2
- Rotor Influence Check, 1-2
- Specifications, 1-14
- Standard Test
  - Data Analysis, 5-53
- Test Leads, 1-10
- Test Procedure
  - AC Induction Motors
    - Rotor Influence Check (RIC), 5-21, 5-26, 5-31, 5-37
  - DC Motors
    - Armature Circuit
      - Bar-to-Bar, 5-47
      - Polarization Index, 5-45
      - Step Voltage, 5-47
    - Field Circuit
      - Polarization Index, 5-53
- Test Selection, 5-3
  - Asset
    - Information, 5-5
    - Temperature, 5-6
    - Test Location, 5-5
  - Button
    - Cancel, 5-6

- Reset, 5-6
- Save, 5-6
- Test, 5-6
- Charge Time, 5-6
- Resistance-to-Ground, 5-6
- Span, 5-6
- Test
  - Frequency, 5-6
  - List, 5-4
  - Setup, 5-5
- Voltage, 5-6
- Test Window
  - AC Induction, 5-7
  - AC Synchronous, 5-29
    - Field Section, 5-30
    - Stator Section, 5-29
  - AC Wound Rotor, 5-34
    - Resistor Bank Section, 5-35
    - Rotor Section, 5-35
    - Stator Section, 5-35
  - ACWound Rotor
    - Resistor Bank Test, 5-36
  - DC Assets, 5-40
- MCE Auto, 3-18, 3-40, 5-52
  - AC Induction
    - MCE, 5-7
  - DC Assets
    - Field Section Tests
      - MCE, 5-52
    - MCE, 5-40
- MCE Auto Test, 5-7, 5-40
  - Fault Zone Report, 5-10
- Menu
  - File, 5-8
  - Options, 5-8
  - Test Button, 5-9
- MCE Summary
  - Report, 3-49
- MCEGold
  - Home Screen, 3-1
  - Starting, 3-1
  - Tutorials, 3-1
- MCE Gold Lite, 3-78
  - Starting Lite, 3-78
  - Lite Home Screen, 3-79
  - Title Bar, 3-80
    - Asset Selected, 3-80
  - Search, 3-80
    - Left Panel, 3-80
    - Center Panel, 3-80
    - Right Panel, 3-81
  - Testing Buttons, 3-81
  - Toolbar, 3-81
- Megger Voltage, 5-56

- Menus
  - Power Analysis
    - Power FFT, 1-25
    - Power Harmonics, 1-27
    - Power Instantaneous, 1-24
    - Power Time Domain, 1-18
    - Power Voltage and Current FFT, 1-20
    - Power Voltage and Current Harmonics, 1-22
- Message Center, 3-41
  - Asset
    - Condition, 3-44
    - Diagnostic, 3-44
    - Warning Levels, 3-44
  - Compose, 3-43
  - Menu
    - Edit, 3-42
    - File, 3-42
    - Option, 3-42
    - View, 3-42
  - Trash, 3-44
- Message History
  - Report, 3-50
- Multimeter, 1-5
- Multi-site Version, 3-19

## N

- Nameplate, 3-17, 3-22
  - Armature Tab, 3-26
  - Bearing Tab, 3-24
  - Brush Assembly Tab, 3-26
  - Identification Tab, 3-22
  - Manufacturer Tab, 3-22
  - Nameplate 1 Tab, 3-23
  - Nameplate 2 Tab, 3-24
  - Resistor Bank Tab, 3-25
- Network
  - Account Manager, 1-6
    - Icon
      - Create Account, 1-7
      - Create Group, 1-7
      - Create Site, 1-7
    - Menu
      - Data, 1-7
      - Help, 1-7
      - Windows, 1-7
    - Show Manager Icon, 1-7
    - System Activity Icon, 1-7
    - Window, 1-8
  - Add Account to Group, 1-11
  - Create
    - New Account, 1-12
    - New Group, 1-10
    - Site, 1-9

- Deleted Assets Folders, 1-26
- Desktop, 1-1
- Edit
  - Account, 1-14
  - Group, 1-17
  - Site, 1-18
- Field Tester
  - Clear Local Database, 1-23
  - DataSync, 1-19
  - DownSync, 1-19
  - Two Way Sync, 1-23
  - UpSync, 1-22
- Field Tester Local, 1-1, 1-18, 1-24
- Field Tester Network, 1-1, 1-18
- Group Assignments, 1-13
- New Assets Folders, 1-27
- Tutorials, 1-27
- Utility Program, 1-2
  - Calibration, 1-6
  - Database, 1-4
  - Desktop Database, 1-4
  - License Key, 1-3
  - Network Tester Database, 1-5
  - Server, 1-5
- New Assets Folders
  - Network, 1-27
- NP Speed RPM, 6-74

## O

- One-Up/Two Down
  - Two-Up/One-Down, 5-73
- Online, 1-2
- Option Menu
  - Message Center, 3-42
- Options Menu, 5-13, 5-26, 5-31, 5-37
  - AC Standard Test, 5-13
  - Bar-to-Bar Test, 5-48
  - Current Analysis
    - DC Current Analysis, 6-77
    - DC In-Rush/Start-Up, 6-81
    - Demod, 6-70
    - Drive Input, 6-87
    - In-Rush/Start-Up, 6-64
    - Rotor Evaluation, 6-51
  - DC Standard Test, 5-41
  - Polarization Index, 5-17
  - Power Analysis
    - DC PowerTime Domain, 1-35
    - Power Phasor, 1-16
    - PowerResults, 1-29
  - Resistor Bank, 5-37
  - RIC, 5-21
  - Step Voltage, 5-26
  - Synchronous, 5-31

## P

- Parallel Port, 1-8
- PCMCIA
  - Port, 1-8
  - Slot, 1-8
- PdMA
  - Contact Information, 1-6
- Peak, 6-62
  - Speed, 6-63
- Phase Angle, 1-7
- Phase Configuration, 1-7
- Phase Sequence, 1-7
- Phase-to-Phase Inductance, 5-61, 5-71
  - Data Interpretation, 5-62
  - See Inductance Phase-to-Phase
  - Warning Levels, 5-62
- Phase-to-Phase Resistance, 5-59
  - Data Interpretation, 5-60
  - Warning Levels, 5-60
- Phase-to-Phase Shorts, 5-73
- Philosophy
  - EMAX, 1-2
- PI/DA Summary
  - Report, 3-51
- Polarization Index, 1-2, 5-17, 5-52, 5-64
  - AC Induction, 5-16
  - Analysis, 5-64, 5-75
  - Data Interpretation, 5-65
  - Field Section Tests
    - DC Assets
    - MCE, 5-52
  - Menu
    - File, 5-17
    - Options, 5-17
  - Profile, 5-65
  - Test Procedure
    - DC Motors
      - Armature Circuit, 5-45
      - Field Circuit, 5-53
    - Warning Levels, 5-65
    - Wound Rotor, 5-77
- Pole Face, 5-69, 5-71
- Pole Pass
  - Alarm Level, 6-75
  - Peak Frequency, 6-75
  - Peak Level, 6-75
- Ports
  - Parallel, 1-8
  - PCMCIA, 1-8
  - Serial, 1-8
- Potential Transformer Scale, 1-7
  - DC Power Test
    - Test Setup
      - EMAX Power, 1-10
- Power Analysis, 1-3

- AC Assets
  - Power Phasor, 1-14
- Power FFT, 1-26
  - Display Options, 1-25
  - Menus, 1-25
  - Power FFT, 1-25
- Power Harmonics, 1-28
  - Display Options, 1-27
  - Menus, 1-27
  - PowerHarmonics, 1-27
- Power Instantaneous, 1-24
  - Display Options, 1-24
  - Menus, 1-24
  - Power Instantaneous, 1-23
- Power Phasor
  - AC Assets
    - Analysis, 1-14
  - Display Options, 1-16
  - Menu
    - Edit, 1-15
    - File, 1-14
    - Options, 1-16
    - View, 1-15
  - Related Windows Menu, 1-16
  - Review Phasor Diagram, 6-88, 1-17
- Power Results, 1-30
  - Menu
    - Edit, 1-29
    - File, 1-29
    - Options, 1-29
    - Related Windows, 1-30
  - Power Results, 1-28
- Power Time Domain
  - Display Options, 1-18
  - Review Time Domain, 1-19
- Power Voltage and Current
  - Display Options, 1-20
  - Menus, 1-20
- Power Voltage and Current FFT, 1-20, 1-21
- Power Voltage and Current Harmonics, 1-22, 1-23
  - Display Options, 1-22
  - Menus, 1-22
- PowerTime Domain, 1-18
  - Display Options, 1-36
- Menu
  - Edit, 1-35
  - File, 1-34
  - Options, 1-35
  - Menus, 1-18
- Results Page
  - Review
    - Current, 1-31
    - Efficiency, 1-32
    - Impedance, 1-31
    - Power, 1-31
    - Sequence, 1-32
    - Voltage, 1-30
- Setup Options
  - Asset Test Location, 1-5
  - Button
    - Cancel, 1-8, 1-10
    - Reset, 1-10
    - Save, 1-7, 1-10
    - Test, 1-7, 1-10
  - Carrier/Line Frequency, 1-6
  - Current Transformer Scale, 1-6
  - Phase
    - Angle, 1-7
    - Configuration, 1-7
    - Sequence, 1-7
  - Potential Transformer Scale, 1-7
  - Probe Settings, 1-6
  - Starts With, 1-7
- Setup Options Button
  - Reset, 1-7
- Test Window, 1-10
  - Step-by-Step Power
    - AC Induction Assets, 1-10
    - AC Synchronous Assets, 1-12
    - AC Wound Rotor Assets, 1-12
    - DC Assets
      - Armature, 1-12
      - Field Section, 1-14
- View Data, 1-1
- Warning Settings, 1-38
  - Change, 1-39
- Power and Current FFT, 1-20
- Power FFT
  - Power Analysis, 1-25
- Power Harmonics
  - Power Analysis, 1-27
- Power Instantaneous
  - Power Analysis, 1-23
- Power Results
  - Power Analysis, 1-28
- Power Test, 1-5
  - EMAX Power Analysis
    - Test Setup
      - Power Test, 1-5
- Power Time Domain, 1-18, 1-34
  - DC Power Analysis, 1-34
  - Power Analysis, 1-18
- Power Voltage and Current FFT, 1-21
  - Power Analysis, 1-20
- Power Voltage and Current Harmonics
  - Power Analysis, 1-22
- Probe Settings, 1-6
  - DC Power Test

- Test Setup
      - EMAX Power, 1-9
  - Probes
    - Current, 6-2
    - Voltage, 1-2
  - Procedure
    - MCE Testing
      - AC Induction Motors
        - Rotor Influence Check, 5-21, 5-26, 5-31, 5-37
      - DC Motors
        - Field Circuit
          - Polarization Index, 5-53
      - Quick Start, 5-1, 6-1
    - Quick Start
      - Current Analysis Testing, 6-1
      - EMAX Testing, 1-1
- Q**
- Quality Assurance, 1-1
  - Quick Start
    - Current Analysis, 6-1
    - EMAX, 1-1
    - MCE, 5-1, 6-1
- R**
- Raise/Lower Leads
    - Bar-to-Bar Test, 5-49
  - Raw Data
    - Test History, 3-29
  - Recommended Actions
    - MCE Analysis
      - AC Induction Motors, 5-75
      - AC Wound Rotor Motor, 5-77, 5-78
      - DC Motors, 5-79
      - Synchronous Motors, 5-75, 5-76
  - Related Windows Menu
    - Current Analysis
      - DC Current Analysis, 6-78
      - Demod, 6-71
      - Drive Input, 6-88
      - Rotor Evaluation, 6-52
    - Power Analysis
      - Power Phasor, 1-16
      - Power Results, 1-30
  - Remove
    - WatchList, 3-38
    - WatchList Asset, 3-38
  - Reorder
    - WatchList, 3-39
  - Report, 3-45
    - AC EMAX Summary, 3-46
    - Asset Condition Code, 3-47
    - Asset Inventory, 3-48
      - Detailed, 3-52
        - Create, 3-52
        - File Menu, 3-57
      - MCE Summary, 3-49
      - Message History, 3-50
      - PI/DA Summary, 3-51
      - Toolbar Icon, 3-18
    - Reset Button
      - Test Selection
        - MCE, 5-6
    - Resistance Phase-to-Phase, 1-2
    - Resistance-to-Ground, 1-1
      - Test Selection
        - MCE, 5-6
      - Warning Levels, 5-53
    - Resistive Imbalance, 1-2, 5-59, 5-63
    - Resistor Bank, 5-78
      - Step-By-Step Testing, 5-37
      - Test, 5-36
      - View Menu, 5-36
    - Resistor Bank Tab
      - Nameplate, 3-25
    - Returning
      - Tester, 1-6
    - Review
      - Power Analysis
        - Phasor Diagram, 1-17
          - Power Phasor, 6-88
        - Power FFT, 1-26
        - Power Harmonics, 1-28
        - Power Instantaneous, 1-24
        - Power Results, 1-30
        - Power Time Domain, 1-36
        - Power Voltage and Current FFT, 1-21
        - Power Voltage and Current Harmonics, 1-23
        - Test History, 1-32, 1-37
        - Time Domain, 1-19
      - Review Spectrum
        - Current Analysis
          - DC Current Analysis, 6-80
          - DC In-Rush/Start-Up, 6-83
          - Demod, 6-73
          - Eccentricity, 6-59
          - In-Rush/Start-Up, 6-66
          - Rotor Evaluation, 6-53
      - Review Test History
        - Current Analysis
          - DC In-Rush/Start-Up, 6-84
          - Demod, 6-73
          - Eccentricity, 6-61
          - In-Rush/Start-Up, 6-67
          - Rotor Evaluation, 6-57
      - Review Time Domain
        - Current Analysis

- DC Current Analysis, 6-80
  - Eccentricity, 6-60
  - RIC
    - AC Induction
      - RIC, 5-20
    - Menu
      - File, 5-20
      - Options, 5-21
      - View, 5-20
    - Step-By-Step Testing, 5-21
  - RJ45 Cable, 1-5
  - RMS Amps, 6-58, 6-63
  - RMS Amps 1, 6-75
  - Rotor
    - Position, 5-68
  - Rotor Bar
    - Defects, 5-68, 5-71, 6-2
    - Graph, 5-71
  - Rotor Evaluation, 1-3
    - Analysis, 6-49
    - Test Window
      - Current Analysis
        - AC induction Assets, 6-20
        - AC Synchronous Assets, 6-31
        - AC Wound Rotor Assets, 6-32
  - Rotor Influence Check, 1-2
    - AC Induction Motors
      - Test Procedure, 5-21, 5-26, 5-31, 5-37
    - Aliasing, 5-68, 5-69
    - Analysis, 5-67
      - AC Synchronous Motors, 5-75
      - AC Wound Rotor Motors, 5-77
      - Average Inductance, 5-63
      - Inductive Imbalance, 5-63
      - Phase-to-Phase Inductance, 5-61
    - Data Interpretation, 5-69
  - MCE
    - Analysis, 5-74
- S**
- Safety
    - Electrical, 1-3
      - EMAX, 1-5, 6-2, 1-2
      - MCE, 1-4
      - Precautions, 5-3
    - Equipment
      - Tagouts, 5-21, 5-26, 5-31, 5-37
    - Personnel, 1-5
  - Save As Excel
    - Test History, 3-29
  - Save Button
    - Test Selection
      - MCE, 5-6
  - Search, 3-32
    - Advanced, 3-33
      - Search Buttons, 3-35
      - Search Criteria, 3-34
      - Toolbar Icon, 3-17
  - Self Impedance Imbalance, 1-34
  - Sequence, 1-32
  - Serial
    - Number (of tester), 1-4
    - Port, 1-8
  - Set as Baseline
    - Test History, 3-30
  - Set Condition Code
    - Test History, 3-31
  - Shipping
    - Case, 1-1
      - Specifications, 1-16
    - Tester, 1-9
  - Shorts
    - Phase-to-Phase, 5-73
    - Turn-to-Turn, 5-73
  - Show All Tests
    - Test History, 3-29
  - Show Manager
    - Network, 1-7
  - Show/Hide
    - Test History, 3-30
  - Shuttle Parking, 3-60
  - Single Asset
    - Export, 3-14
    - Import, 3-15
  - Site Condition, 3-27
    - Icon, 3-17
  - Site Navigator, 3-18
    - Icon, 3-17
    - Menu
      - Edit, 3-19
      - View, 3-19
    - Multi-site Version, 3-19
  - Span
    - Test Selection
      - MCE, 5-6
  - Specifications
    - EMAX, 1-15
    - MCE, 1-14
    - Shipping Case, 1-16
    - Tester Case, 1-16
  - Spectrum
    - Eccentricity, 6-59
  - Speed
    - Alarm Level, 6-75
    - Peak Level, 6-75
    - PeakFrequency, 6-75
    - RPM, 6-57, 6-74

- Select, 6-54
- Standard Test
  - Data Analysis, 5-53
- Starts With
  - Test Selection
    - AC Power Test, 1-7
  - Test Setup
    - DC Power Test, 1-10
- Stator Winding Defects, 6-2, 1-2
- Status Bar Icon, 3-18
- Step Voltage, 1-2, 5-25, 5-26, 5-53
  - AC Induction
    - Step Voltage, 5-24
  - Field Section Tests
    - DC Assets
      - MCE, 5-53
  - Test Procedure
    - DC Motors
      - Armature Circuit, 5-47
- View Menu, 5-25
- Step-by-Step
  - Current Analysis
    - AC Induction Assets
      - Demod, 6-28
      - Eccentricity, 6-23
      - EMAX Auto, 6-18
      - In-Rush/Start-Up, 6-25
      - Rotor Evaluation, 6-20
    - DC Assets
      - DC EMAX Auto, 6-32
      - Drive Input, 6-43
      - In-Rush/Start-Up, 6-45
  - Power Analysis
    - Test Window
      - A C Wound Rotor Assets, 1-12
      - AC Induction Assets, 1-10
      - AC Synchronous Assets, 1-12
      - DC Assets
        - Armature Section, 1-12
        - Field Section, 1-14
- Step-By-Step Testing
  - AC Standard Test, 5-13
  - Bar-to-Bar, 5-49
  - DC Standard Test, 5-42
  - Polarization Index, 5-17
  - Resistor Bank, 5-37
  - RIC, 5-21
  - Step Voltage, 5-26
  - Synchronous, 5-31
- Surge
  - Capacitors, 5-3, 5-58
- Symbols
  - Electrical, 1-4
- Synchronous, 5-30, 5-31
  - Step-By-Step Testing, 5-31

- View Menu, 5-31
- Synchronous Test
  - Recommended Actions, 5-76
- System Activity Icon
  - Network, 1-7

## T

- Tab, Nameplate. See Nameplate
- Technical Support, 1-6
- Temperature Correction, 5-55
- Templates
  - Add New, 3-4
  - Change Name, 3-5
  - Change Values, 3-6
  - Copy, 3-5
  - Remove, 3-5
- Test
  - Leads
    - Current, 6-2
    - Voltage, 1-2
  - Procedure. See Procedure
- Test History, 3-27, 3-28
  - Icon, 3-17
- Menu
  - Edit, 3-29
    - Copy, 3-29
    - Create Message, 3-29
  - File, 3-29
    - Save As Excel, 3-29
  - Options
    - Set Condition Code, 3-31
  - Show/Hide, 3-30
  - View
    - Raw Data, 3-29
    - Warning Settings, 3-30
- Test Menu
  - Show Tests
    - All Tests, 3-29
    - From Last Baseline, 3-30
    - Set as Baseline, 3-30
  - Warning Settings Menu, 3-30
- Test Leads
  - Bar-to-Bar, 1-11
  - EMAX Current, 1-12
  - EMAX Voltage, 1-12
  - MCE, 1-10
- Test List
  - Test Selection Window
    - EMAX Power Analysis, 1-4
- Test Results
  - % Current Imbalance, 6-58
  - % Full Load Amps, 6-58
  - % Slip, 6-57
  - Current Analysis

- Demod, 6-74
- Eccentricity, 6-62
- Rotor Evaluation, 6-57
- FLA, 6-58
- Fp Amplitude, 6-58
- Fp Frequency, 6-58
- Line Frequency, 6-57
- RMS Amps, 6-58
- Speed RPM, 6-57
- Test Selection, 3-32
  - EMAX, 1-1
  - Icon, 3-17
  - MCE, 5-3
  - Test
    - Button, 5-6
    - Frequency, 5-6
    - List, 5-4
    - Setup, 5-5
- Test Selection Window
  - Asset Information, 6-5
  - Current Analysis, 6-3
  - EMAX Power Analysis, 1-3
  - Setup Options
    - Asset Test Location, 6-13, 1-5
    - Button
      - Cancel, 6-17, 1-8, 1-10
      - Reset, 6-17, 1-7, 1-10
      - Save, 6-17, 1-7, 1-10
    - Capture Length, 6-16
    - Carrier Frequency, 6-14
    - Carrier/Line Frequency, 1-6
    - Channel, 6-16
    - Current Transformer Scale, 6-14, 1-6
    - Missing Currents, 6-15
    - Phase Angle, 6-15, 1-7
    - Phase Configuration, 6-15, 1-7
    - Phase Sequence, 6-15, 1-7
    - Potential Transformer Scale, 6-14, 1-7
    - Pre-Trigger Length, 6-15
    - Probe Settings, 6-14, 1-6
    - Starts With, 1-7
      - EMAX Auto, 6-16
    - Test Button, 6-17, 1-7, 1-10
    - Trigger
      - Factor, 6-15
      - Type, 6-15
- Test List, 6-4
- Test Setup
  - Current Analysis, 6-5
  - DC Current Analysis, 6-11
  - DC EMAX Auto, 6-10
  - DC In-Rush/Start-Up, 6-12
  - Demod, 6-9
  - Drive Input, 6-13
  - Eccentricity, 6-7
  - EMAX Auto, 6-5
  - In-Rush/Start-Up, 6-8
  - Rotor Evaluation, 6-6
- Test Setup
  - Test Selection Window
    - EMAX Power Analysis
      - Test Setup, 1-5
- Test Voltage
  - Resistance-to-Ground, 5-56
- Test Window
  - Current Analysis, 6-17
  - MCE, 5-7
  - Power Analysis, 1-10
- Tester
  - Accessory Bag, 1-9
  - Battery, 1-6
    - Care, 1-8
    - Charger, 1-8
    - Indicator, 1-5
  - Calibration, 1-6, 1-1, 1-9
  - Care and Handling, 1-8
  - Case, 1-2
    - Care, 1-8
    - Specifications, 1-16
  - Components, 1-4
  - DAQ Cable, 1-5
  - Deck, 1-2
    - Connections, 1-2
  - Environmental Conditions, 1-9
  - Identification Label, 1-4
  - Laptop Computer, 1-2
  - Returning, 1-6
  - RJ45 Cable, 1-5
  - Serial Number, 1-4
  - Shipping, 1-9
- Testing
  - EMAX, 1-2
  - EMAX Auto, 3-40
  - MCE Auto, 3-40
- Time Domain, 6-60
- Trash
  - Message Center, 3-44
- Trending, 1-1, 5-3
- Turn-to-Turn Shorts, 5-73
- Tutorials, 3-16, 1-27
  - Network, 1-27
- Two Way Sync
  - Field Tester, 1-23
- Two-Up/One-Down
  - One-Up/Two Down, 5-73



**U**

## UpSync

Field Tester, 1-22

## Utility Program

Calibration, 1-6

Database, 1-4

Desktop Database, 1-4

License Key, 1-3

Network, 1-2

Network Tester Database, 1-5

Server, 1-5

**V**

## View

Current Analysis

Data, 6-1

## View Data

Power Analysis, 1-1

## View Menu

AC Standard Test, 5-13

Bar-to-Bar Test, 5-48

Current Analysis

DC Current Analysis, 6-77

Demod, 6-70

Drive Input, 6-87

Rotor Evaluation, 6-50

DC Standard Test, 5-41

Message Center, 3-42

Power Analysis

Power Phasor, 1-15

Resistor Bank, 5-36

RIC, 5-20

Site Navigator, 3-19

Step Voltage, 5-25

Synchronous, 5-31

Test History, 3-29

## Voltage, 1-30

Crest Factor, 1-33

Imbalance, 1-33

Line-to-Line, 1-33

Probes, 6-2, 1-2

Spikes, 1-2

Test Selection

MCE, 5-6

THD, 1-33, 1-38

Resistance Phase-to-Phase, 5-60

Resistance-to-Ground, 5-53

## Warning Settings, 3-31

Asset Manager, 3-7

Current Analysis, 6-89

Change, 6-91

Icon, 3-17

Power Analysis, 1-38

Change, 1-39

Test History, 3-30

## Warranty

Computer, 1-8

Data Analysis, 1-8

Extended, 1-8

Hardware, 1-7

Maintenance Contracts, 1-8

Replacement Parts, 1-8

Software, 1-8

## WatchList, 3-36

Icon, 3-18

## Windows, 3-16

Menu

Network, 1-7

## Wound Rotor

Recommended Actions, 5-77

Resistor Bank, 5-78

**W**

## Warning Levels, 5-65

Capacitance-to-Ground, 5-57

Inductance Phase-to-Phase, 5-62

Message Center, 3-44

Phase-to-Phase Resistance, 5-60

Polarization Index, 5-65

