

Motor Protection Features

selinc.com/products/comparisons/motor-protection

■ Standard feature + Model option

f This function may be created using settings

Features

| | SEL-700BT | SEL-710 SEL-710-5 | SEL-749M | SEL-701 | SEL-849 |
|----------------------------------------------------|-----------|----------------------|----------|----------|---------|
| Applications | | | | | |
| Induction Motor Protection | ■ | ■ | ■ | ■ | ■ |
| Synchronous Motor Protection | | + | | | |
| Motor Bus Transfer | ■ | | | | |
| Feeder Protection | ■ | ■ | | | ■ |
| Breaker Failure Protection | ■ | ■ | <i>f</i> | <i>f</i> | ■ |
| Equipment Thermal Monitoring | ■ | + | + | + | ■ |
| Synchronism Check | ■ | | | | |
| Protection | | | | | |
| 27/59 Under-/Overvoltage | ■ | ■ | + | + | + |
| 27I/59I Inverse-Time Undervoltage/Overvoltage | ■ | ■ | | | |
| 32 Directional Power | | | | | + |
| 37 Underpower | | ■ | + | + | + |
| 40 Loss-of-Field | | + | | | |
| 46 Current Unbalance | | ■ | ■ | ■ | ■ |
| 47 Phase Reversal | | ■ | ■ | ■ | ■ |
| 49 Thermal | | ■ | ■ | ■ | ■ |
| 49R Thermal Overload (RTD) | ■ | + | | | |
| 50 (P,N,G) Overcurrent (Phase, Neutral, Ground) | ■ | ■ | ■ | ■ | ■ |
| 50Q Negative-Sequence Overcurrent | ■ | ■ | | ■ | ■ |
| 51 (N,G) Time-Overcurrent (Neutral, Ground) | ■ | ■ | | | ■ |
| 51 (P,Q) Time-Overcurrent (Phase, Neg. Seq.) | ■ | ■ | | | ■ |
| 55 Power Factor | | ■ | + | ■ | + |
| 60 Loss-of-Potential | ■ | + | <i>f</i> | <i>f</i> | + |
| 67 (N,G) Directional Overcurrent (Neutral, Ground) | ■ | | | | |
| 78 Out-of-Step | | + | | | |
| 78VS Vector Shift | ■ | | | | |
| 81 Over-/Underfrequency | ■ | ■ | ■ | | |
| 87 Current Differential | | + | | | |
| Arc-Flash Detection | | + | | | ■ |
| Separate Neutral Overcurrent | ■ | ■ | ■ | ■ | ■ |
| Broken Rotor Bar Detection | | + | | | |

Motor Protection Features, Continued

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|-----------------------------------------------------------|-----------|----------------------|----------|---------|---------|
| Instrumentation and Control | | | | | |
| SELogic Control Equations/Remote Control Switches | ■ | ■ | ■ | ■ | ■ |
| Nonvolatile Latch Control Switches | ■ | ■ | ■ | ■ | ■ |
| Multiple Settings Groups | ■ | ■ | | | |
| Breaker Wear Monitor | ■ | ■ | | | |
| Event Report (Multicycle Data)/Sequential Events Recorder | ■ | ■ | ■ | ■ | ■ |
| Demand Meter | ■ | ■ | | ■ | ■ |
| Load Profile Report | ■ | ■ | | ■ | ■ |
| RTD (Resistance Temperature Detector) Inputs | + | + | + | + | |
| Ethernet | + | + | | | ■ |
| Built-In Web Server | ■ | ■ | | | ■ |
| EtherNet/IP | + | + | | | + |
| IEEE 1588 Precision Time Protocol (PTP) | + | + | | | |
| IEC 61850 | + | + | | | + |
| IEC 61850 Edition 2 | + | + | | | + |
| IEC 60870-5-103 | + | + | | | |
| Parallel Redundancy Protocol (PRP) | + | + | | | ■ |
| DNP3 Serial | + | + | | | + |
| DNP3 LAN/WAN | + | + | | | + |
| Simple Network Time Protocol (SNTP) | + | ■ | | | ■ |
| Modbus TCP | + | ■ | | | ■ |
| Modbus RTU Outstation | ■ | ■ | ■ | ■ | ■ |
| Mirrored Bits Communications | ■ | ■ | | | |
| Miscellaneous Features | | | | | |
| Accepts Wye or Open-Delta Voltage Transformers | ■ | + | + | | + |