

# IEEE Device Numbers & Functions



The devices in switching equipment are referred to by numbers, according to the functions they perform. These numbers are based on a system which has been adopted as standard for automatic switchgear by IEEE. This system is used on connection diagrams, in instruction books and in specifications.

## Device

### No.   Function

|    |                                          |
|----|------------------------------------------|
| 1  | Master Element                           |
| 2  | Time-Delay Starting Or Closing Relay     |
| 3  | Checking Or Interlocking Relay           |
| 4  | Master Contactor                         |
| 5  | Stopping Device                          |
| 6  | Starting Circuit Breaker                 |
| 7  | Anode Circuit Breaker                    |
| 8  | Control Power Disconnecting Device       |
| 9  | Reversing Device                         |
| 10 | Unit Sequence Switch                     |
| 11 | (Reserved For Future Application)        |
| 12 | Overspeed Device                         |
| 13 | Synchronous-Speed Device                 |
| 14 | Underspeed Device                        |
| 15 | Speed, Or Frequency Matching Device      |
| 16 | (Reserved For Future Application)        |
| 17 | Shunting Or Discharge-Switch             |
| 18 | Accelerating Or                          |
| 19 | Starting To Running Transition Contactor |
| 20 | Electrically Operated Valve              |
| 21 | Distance Relay                           |
| 22 | Equalizer Circuit Breaker                |
| 23 | Temperature Control Device               |
| 24 | (Reserved For Future Application)        |
| 25 | Synchronizing Or Synchronism Check       |
| 26 | Apparatus Thermal Device                 |
| 27 | Undervoltage Relay                       |
| 28 | (Reserved For Future Application)        |
| 29 | Isolating Contactor                      |
| 30 | Annunciator Relay                        |
| 31 | Separate Excitation Device               |

## Device

### No.   Function

|    |                                                       |
|----|-------------------------------------------------------|
| 49 | Machine Or Transformer Thermal Relay                  |
| 50 | Instantaneous Overcurrent Or Rate-Of-Rise Relay       |
| 51 | AC Time Overcurrent Relay                             |
| 52 | AC Circuit Breaker                                    |
| 53 | Exciter Or DC Generator Relay                         |
| 54 | High-Speed DC Circuit Breaker                         |
| 55 | Power-Factor Relay                                    |
| 56 | Field Application Relay                               |
| 57 | Short-Circuiting Or Grounding Device                  |
| 58 | Power Rectifier Misfire Relay                         |
| 59 | Overvoltage Relay                                     |
| 60 | Voltage Balance Relay                                 |
| 61 | Current Balance Relay                                 |
| 62 | Time Delay Stopping or Opening Relay                  |
| 63 | Liquid Or Gas Pressure Level Or Flow Relay            |
| 64 | Ground Protective Relay                               |
| 65 | Governor                                              |
| 66 | Notching Or Jogging Device                            |
| 67 | AC Directional Overcurrent Relay                      |
| 68 | Blocking Relay                                        |
| 69 | Permissive Control Device                             |
| 70 | Electrically Operated Rheostat                        |
| 71 | (Reserved For Future Application)                     |
| 72 | DC Circuit Breaker                                    |
| 73 | Load Resistor Contactor                               |
| 74 | Alarm Relay                                           |
| 75 | Position-Changing Mechanism                           |
| 76 | DC Overcurrent Relay                                  |
| 77 | Pulse Transmitter                                     |
| 78 | Phase-Angle Measuring Or Out-Of-Step Protective Relay |
| 79 | AC Reclosing Relay                                    |

|    |                                                      |    |                                               |
|----|------------------------------------------------------|----|-----------------------------------------------|
| 32 | Directional Power Relay                              | 80 | (Reserved For Future Application)             |
| 33 | Position Switch                                      | 81 | Frequency Relay                               |
| 34 | Motor-Operated Sequence Switch                       | 82 | DC Reclosing Relay                            |
| 35 | Brush-Operating or Slip-Ring Short-Circuiting Device | 83 | Automatic Selective Control Or Transfer Relay |
| 36 | Polarity Device                                      | 84 | Operating Mechanism                           |
| 37 | Undercurrent Or Underpower Relay                     | 85 | Carrier Or Pilot-Wire Receiver Relay          |
| 38 | Bearing Protective Device                            | 86 | Locking-Out Relay                             |
| 39 | (Reserved For Future Application)                    | 87 | Differential Protective Relay                 |
| 40 | Field Relay                                          | 88 | Auxiliary Motor Or Motor Generator            |
| 41 | Field Circuit Breaker                                | 89 | Line Switch                                   |
| 42 | Running Circuit Breaker                              | 90 | Regulating Device                             |
| 43 | Manual Transfer Or Selector Device                   | 91 | Voltage Directional Relay                     |
| 44 | Unit Sequence Starting Relay                         | 92 | Voltage And Power Directional Relay           |
| 45 | (Reserved For Future Application)                    | 93 | Field-Changing Contactor                      |
| 46 | Reverse-Phase-Balance Current Relay                  | 94 | Tripping Or Trip-Free Relay                   |
| 47 | Phase-Sequence Voltage Relay                         | 95 |                                               |
| 48 | Incomplete Sequence Relay                            | 96 |                                               |
|    |                                                      | 97 | (Reserved For Special Application)            |
|    |                                                      | 98 |                                               |
|    |                                                      | 99 |                                               |

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[Home](#) | [Index](#) | [FAQs](#) | [Appendix](#)

