

ELECTRICAL POWER SYSTEM DEVICE NUMBERS & FUNCTIONS

DEVICE NUMBER	DEFINITION & FUNCTION
1	Master Element is the initiating device, such as a control switch, voltage relay, float switch, etc.
2	Time-delay starting, or closing relay.
3	Checking or interlocking relay is a device which operates in response to the position of a number of other devices.
4	Master contactor is a device, generally controlled by Device #1 or equivalent, and the required permissive and protective devices.
5	Stopping device is a control device used primarily to shut down an equipment and hold it out of operation.
6	Starting circuit breaker is a device whose principal function is to connect a machine to its source of starting voltage.
7	Anode circuit breaker is one used in the anode circuits of a power rectifier.
8	Control power disconnecting device.
9	Reversing device is used for the purpose of reversing a machine field.
10	Unit sequence switch is used to change the sequence.
11	Reserved.
12	Over-speed device is usually a direct-connected speed switch which functions on machine over-speed.
13	Synchronous-speed device, operates at approximately synchronous speed of a machine.
14	Under-speed device functions when the speed of a machine falls below a predetermined value.
15	Speed or frequency, matching device functions to match and hold the speed of a machine to that of another machine.
16	Reserved.
17	Shunting or discharge switch serves to open or to close a shunting circuit around any piece of apparatus.
18	Accelerating or decelerating device is used to increase or to decrease the speed of a machine.
19	Starting-to-running transition contactor causes the automatic transfer of a machine from the starting to the running power connection.
20	Electrically operated valve is an electrically operated, controlled or monitored valve in a fluid line.
21	Distance relay is a device which functions when the circuit admittance, impedance or reactance increases or decreases beyond predetermined limits.
22	Equalizer circuit breaker is a breaker which serves to control the current-balancing connections for a machine field.
23	Temperature control device.
24	Reserved.
25	Synchronizing or synchronism-check device operates when two AC circuits are within the desired limits of frequency, phase angle or voltage.

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26	Apparatus thermal device functions when the temperature exceeds a predetermined value.
27	Undervoltage relay is a device which functions on a given value of undervoltage.
28	Flame detector is a device that monitors the presence of a flame.
29	Isolating contactor is used expressly for disconnecting one circuit from another.
30	Annunciator relay is a nonautomatically reset device that gives a visual indication.
31	Separate excitation device connects a circuit to a source of separate excitation during the starting sequence.
32	Directional power relay is one which functions on a desired power flow in a given direction.
33	Position switch makes or breaks contact when the device reaches a given position.
34	Master sequence device is a device that establishes the operating sequence during sequential switching operations.
35	Brush-operating, or slip-ring-short-circuiting, device.
36	Polarity or polarizing voltage device verifies the presence of a polarizing voltage in an equipment.
37	Undercurrent or underpower relay functions when the current or power flow decreases below a predetermined value.
38	Bearing protective device functions on excessive bearing temperature.
39	Mechanical condition monitor is a device that functions upon the occurrence of an abnormal mechanical condition.
40	Field relay functions on a given low value of field current.
41	Field circuit breaker is a device which functions to apply, or to remove, the field excitation of a machine.
42	Running circuit breaker is a device whose principal function is to connect a machine to its source.
43	Manual transfer or selector device.
44	Unit sequence starting relay is a device which functions to start the next available unit.
45	Atmospheric condition monitor is a device that functions upon the occurrence of an abnormal atmospheric condition.
46	Reverse-phase, or phase-balance, current relay is relay which functions when the polyphase currents are of reverse-phase sequence.
47	Phase-sequence voltage relay functions upon a predetermined value of polyphase voltage in the desired phase sequence.
48	Incomplete sequence relay is a relay that returns the equipment to the normal, if the normal starting sequence is not completed within a predetermined time.
49	Machine, or transformer, thermal relay is a relay that functions when the temperature of a machine exceeds a predetermined value.
50	Instantaneous overcurrent, or rate-of-rise relay is a relay that functions instantaneously on an excessive value of current.

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51	AC time overcurrent relay is a relay with either a definite or inverse time characteristic that functions when the current in an AC circuit exceeds a predetermined value.
52	AC circuit breaker is a device that is used to close and interrupt an AC power circuit.
53	Exciter or DC generator relay is a relay that forces the DC machine field excitation to build up during starting.
54	Reserved for future application.
55	Power factor relay is a relay that operates when the power factor in an AC circuit rises above or below a predetermined value.
56	Field application relay is a relay that automatically controls the application of the field excitation.
57	Short-circuiting or grounding device is a primary circuit switching device that functions to short-circuit or to ground a circuit.
58	Rectification failure relay is a device that functions if one or more anodes of a power rectifier fail to fire.
59	Overvoltage relay is a relay that functions on a given value of overvoltage.
60	Voltage or Current balance relay is a relay that operates on a given difference in voltage, or current input or output of two circuits.
61	Reserved for future application.
62	Time-delay stopping or opening relay is a time-delay relay that initiates the shutdown.
63	Pressure switch is a switch which operates on given change of pressure.
64	Ground protective relay is a relay that functions on failure of the insulation of a machine to ground.
65	Governor is the control equipment used for starting and holding speed.
66	Notching or jogging device functions to allow only a specified number of operations of a given device, or equipment, or a specified number of successive operations within a given time of each other.
67	AC directional overcurrent relay is a relay that functions on a desired value of AC overcurrent flowing in a predetermined direction.
68	Blocking relay is a relay that initiates a signal for blocking of tripping on external faults in a transmission line under predetermined conditions.
69	Permissive control device is generally a two-position, manually operated switch that in one position permits the closing of a circuit breaker.
70	Rheostat is a variable resistance device used in an electric circuit.
71	Level switch is a switch which operates on given level.
72	DC circuit breaker is used to close and interrupt a DC power circuit.
73	Load-resister contactor is used to insert a resistance in a power circuit.
74	Alarm relay is a device other than an annunciator, as covered under device #30, which is used to operate a visual or audible alarm.

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- 75 Position changing mechanism is a mechanism that is used for moving a main device from one position to another.
- 76 DC overcurrent relay functions when the current in a DC circuit exceeds a given value.
- 78 Phase angle measuring, or out-of-step protective relay is a relay that functions at a predetermined phase angle between two voltages.
- 79 AC reclosing relay is a relay that controls the automatic reclosing and locking out of an AC circuit interrupter.
- 80 Flow Switch is a switch which operates on a given rate of flow.
- 81 Frequency relay is a relay that functions on a predetermined value of frequency.
- 82 DC reclosing relay is a relay that controls the automatic closing and reclosing of a DC circuit interrupter.
- 83 Automatic selective control or transfer relay is a relay that operates to select automatically between certain sources.
- 84 Operating mechanism is a mechanism which has no other device function number.
- 85 Carrier or pilot-wire receiver relay is a relay that is operated or restrained with carrier current or DC pilot-wire fault directional relaying.
- 86 Locking-out relay is an electrically operated, hand or electrically reset, relay that functions to shut down and hold an equipment out of service.
- 87 Differential protective relay is a protective relay that functions on a difference of two currents.
- 88 Auxiliary motor or motor generator is one used for operating auxiliary equipment.
- 89 Line switch is used as a disconnecting load-interrupter, or isolating switch in an AC or DC power circuit.
- 90 Regulating device functions to regulate a quantity
- 91 Voltage directional relay is a relay that operates when the voltage across an open circuit breaker or contactor exceeds a given value.
- 92 Voltage and power directional relay is a relay that permits or causes the connection of two circuits when the voltage difference between them exceeds a given value in a predetermined direction and causes these two circuits to be disconnected from each other when the power flowing between them exceeds a given value in the opposite direction.
- 93 Field changing contactor functions to increase or decrease in one step the value of field excitation on a machine.
- 94 Tripping or trip-free relay functions to trip a circuit breaker even though its closing circuit is maintained closed.