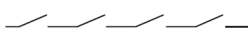


LOGO! functions

With the eight basic functions and 30 special functions, simple switching programs can be created quickly – either directly on the device or via PC. You can find a large selection of example applications under www.siemens.com/logo

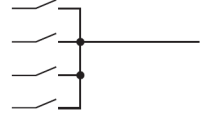
The eight basic functions



AND (and) series connection NO contact

```

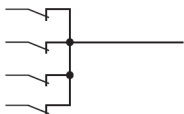
In1 ┌───┐ B1
    │   │
In2 └─&┘
In3 ┌───┘ H01
In4 └───┘
    
```



OR (or) parallel connection NO contact

```

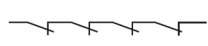
In1 ┌───┐ B1
    │   │
In2 └─>┘
In3 ┌───┘ H01
In4 └───┘
    
```



NAND (and not) parallel connection NC contact

```

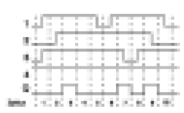
In1 ┌───┐ B1
    │   │
In2 └─&┘
In3 ┌───┘ H01
In4 └───┘
    
```



NOR (or not) series connection NC contact

```

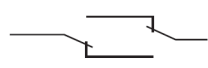
In1 ┌───┐ B1
    │   │
In2 └─>┘
In3 ┌───┘ H01
In4 └───┘
    
```



AND with edge evaluation (pos. edge)

```

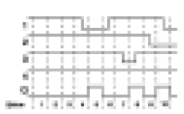
In1 ┌───┐ B1
    │   │
In2 └─&┘
In3 ┌───┘ H01
In4 └───┘
    
```



XOR (exclusive or) 2-way changeover

```

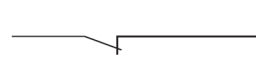
In1 ┌───┐ B1
    │   │
In2 └─>┘ H01
    
```



NAND (and not) with edge evaluation (neg. edge)

```

In1 ┌───┐ B1
    │   │
In2 └─&┘
In3 ┌───┘ H01
In4 └───┘
    
```

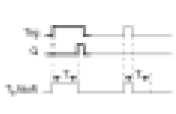








NOT (not) inverter








```

In ┌───┐ B1
    │   │
    └─>┘ H01
    
```

The special functions

ON delay	OFF delay	ON/OFF delay	Latching ON delay	Interval relay/ Pulse output	Interval relay, edge-triggered	Pulse generator
						
<pre>Trs ┌───┐ B1 │ │ Par └─┘ H01</pre>	<pre>Trs ┌───┐ B1 │ │ R ┌───┘ H01 Par └───┘</pre>	<pre>Trs ┌───┐ B1 │ │ Par ┌───┘ H01</pre>	<pre>Trs ┌───┐ B1 │ │ R ┌───┘ H01 Par └───┘</pre>	<pre>Trs ┌───┐ B1 │ │ Par ┌───┘ H01</pre>	<pre>Trs ┌───┐ B1 │ │ R ┌───┘ H01 Par └───┘</pre>	<pre>En ┌───┐ B1 In ┌───┘ H01 Par └───┘</pre>

*Binary inputs of function blocks can be negated directly

Random	Staircase lighting timer	Convenience switch	Week time switch	Year time switch	Up/down counter	Operating hours counter
						
<pre>En ┌───┐ B1 In ┌───┘ H01 Par └───┘</pre>	<pre>Trs ┌───┐ B1 │ │ Par ┌───┘ H01</pre>	<pre>Trs ┌───┐ B1 │ │ R ┌───┘ H01 Par └───┘</pre>	<pre>No1 ┌───┐ B1 │ │ No2 └─┘ H01 No3 └───┘</pre>	<pre>INH ┌───┐ B1 No ┌───┘ H01</pre>	<pre>R ┌───┐ B1 On ┌───┘ H01 Dir ┌───┘ H01 Par └───┘</pre>	<pre>R ┌───┐ B1 En ┌───┘ H01 Rall ┌───┘ H01 Par └───┘</pre>

LOGO! functions

The special functions

Analog comparator



Analog threshold switch



Analog amplifier



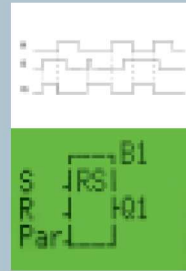
Analog monitoring



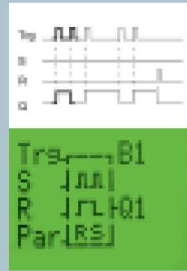
Analog difference threshold switch



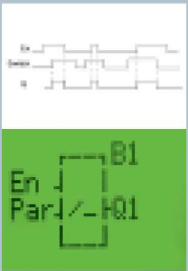
Latching relay



Current impulse relay



Software switch



Threshold switch



NEW for OBA7

Astronomical time switch



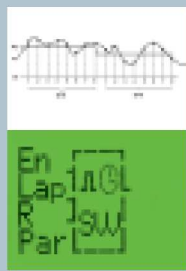
Min./Max. function



Mean value generation



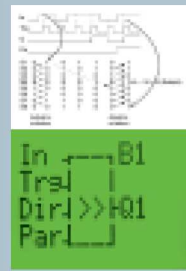
Analog filter



Stopwatch



Shift register



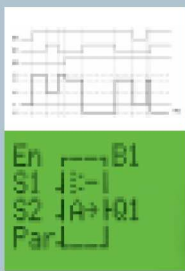
PI controller



Ramp function



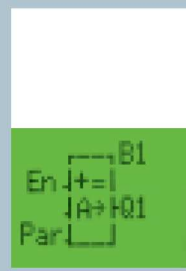
Analog multiplexer



Message text expanded



Arithmetic function



Pulse width modulation

