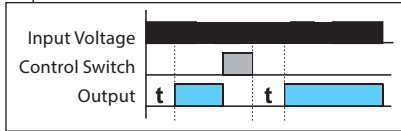


FEATURES

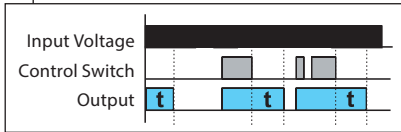
- Single Function time relay
- **Choice of three timing modes:**
 - 181 ZR** – Delay on Make
 - 181 ZN** – Delay on Break
 - 181 BL** – Repeat Cycle
- **Choice of six time ranges:**
 - 1S** – 0.1 to 1 second **10S** – 1 to 10 seconds
 - 1M** – 6 to 60 seconds **10M** – 1 to 10 minutes
 - 1H** – 6 to 60 minutes **10H** – 1 to 10 hours
- Timer controlled via input voltage or control switch
- Relay output form: SPDT – 16 Amps
- Output indicator: Red LED
- Input indicator: Green LED
- DIN rail mounting
- UL and CE approvals, RoHS compliant

TIMING MODES

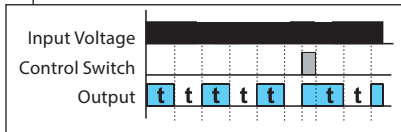
181 ZR Delay on Make Application of input voltage to the timer starts the time delay. At the end of the delay period, the load is energized. To reset, remove the input voltage to the timer or use control switch.



181 ZN Delay on Break Input voltage is applied continuously. Upon closure of the normally open live external initiate switch, the load is energized, and remains energized as long as it is closed. When the external initiate switch opens, the time delay is started. At the end of the time delay, the load is de-energized, and the timer is ready for another cycle.



181 BL Repeat Cycle Application of input voltage to the timer starts the "On" time delay, and energizes the load. At the end of the "On" time delay, the load is de-energized, and the "Off" time delay starts. At the end of the "Off" time delay, the load is again energized, the timer returns to the "On" time delay, and the cycling continues as long as input voltage is applied. Removal of the input voltage resets the timer.



TO ORDER, PLEASE SPECIFY TIMING MODE AND TIME RANGE

example: 181-ZR-1S Single function time relay mode: Delay on Make, range: 0.1 to 1 second



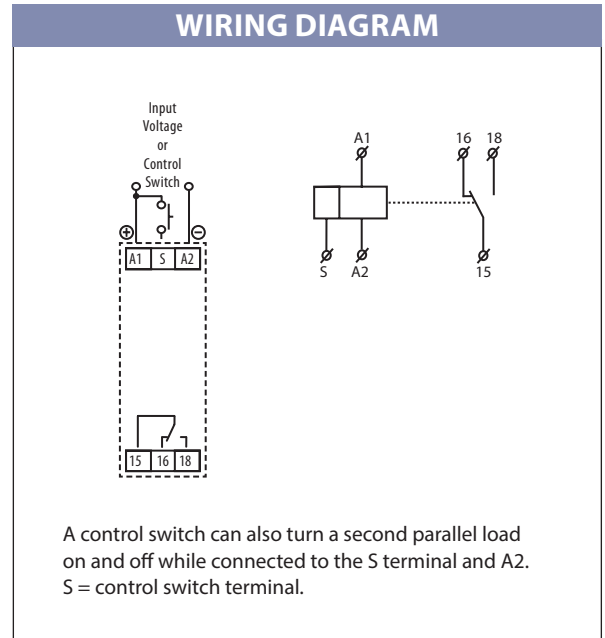
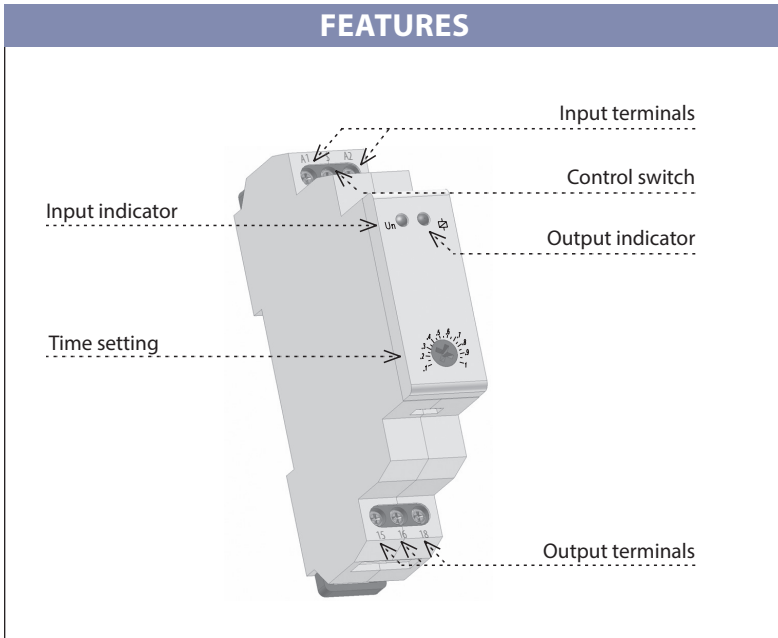
181

SINGLE FUNCTION TIME RELAY with THREE TIMING MODE OPTIONS

11/14/14

SPECIFICATIONS

- Timing mode (choose 1 of 3)** . . . Delay on Make, Delay on Break, Repeat Cycle
- Input terminals** A1-A2
- Input voltage** AC/DC 12–240V (AC 50/60Hz)
- Input voltage tolerance** . . . -15% to +10%
- Input indicator** Green LED
- Time ranges (choose 1 of 6)** . . . 0.1 second–10 minutes
- Time settings by** Potentiometer
- Setting accuracy** 5%
- Repeatability** 0.2%
- Relay output form** SPDT
- Rated current** 16Amps
- Switching capacity** 4000 VA/ AC, 384 W/ DC
- Inrush current** 30A / < 3s
- Switching voltage (max)** . . . 250VAC / 24VDC
- Switching capacity DC (min)** 500mW
- Output indicator** Red LED
- Mechanical life** 30 million operations
- Electrical life (resistive)** . . . 70,000 operations
- Power consumption** AC 0.025 to 0.2 VA
DC 0.1 to 0.7W
- Load between S-A2** Yes
- Operating temperature** . . . -20°C to +55°C
- Storage temperature** -30°C to +70°C
- Control switch** A1-S
- Impulse length** 25ms (min) / (max) unlimited
- Reset time (max)** 150ms
- Dielectric strength** 4 kV
- Operating position** any
- Mounting** DIN rail EN 60715
- Protection degree** IP 40 from front panel
- Wire size (max)** 14AWG
- Standards** EN 61812-1, EN 61010-1, UL, CE, RoHS



11/14/14

TO ORDER, PLEASE SPECIFY TIMING MODE AND TIME RANGE

example: 181-ZR-1S Single function time relay
mode: Delay on Make , range: 0.1 to 1 second