



*A compact 1/16 DIN size timer... combines the visibility of LED display with advanced functionality*

Designed for you to best fit the correct timer to your application, the B506 family is divided into 3 separate base models. The standard unit offers a wide range of field selectable operating modes and time ranges as well as a host of other convenient features. When advanced functions such as dual setpoints and 1 ms resolution are required, the high performance model is the right call. The repeat cycle model provides a variety of benefits specifically tailored for cyclical operations.

- Three different base models: standard, high performance, and repeat cycle
- Four digit dual line LED display indicates set value and time value
- All models offer multiple field programmable modes of operation and time ranges
- Multiple levels of security prevent unauthorized set value or parameter changes
- IP65 rated for use in washdown conditions
- Universal AC supply voltage (90-240 VAC) or 24 VAC/VDC models
- Front panel programming with an intuitive button-per-digit interface
- 5 amp relay output or NPN transistor
- Industry standard 11 pin socket connection
- Wide range of unique features for each model

With ultimate simplicity in mind, the B506 utilizes an intuitive button-per-digit method for setpoint input and easy to follow scroll through menus for programming. The dual line display optimizes the interface by indicating both the present time value and the setpoint, while up to 8 annunciator lights provide information on process status. Multi-level security enables shop floor access to be tailored to your needs.

Intended for tough industrial conditions, the B506 offers an IP65 rated front panel and a high degree of noise immunity. Choose from models with a 5 amp relay, which can directly drive a load, or solid state outputs for high speed applications.

## COMMON SPECIFICATIONS

### Inputs:

**Start & Reset:** NPN or Dry Contact

**Activation Time:** 4ms (B506-XXX2), 21 ms (B506-XXX1)

**Impedance:** 10 K $\Omega$

### Operation:

**Time Ranges:** Hrs., Mins., Secs., Hrs.: Mins., Mins.: Secs.

**Repeat Accuracy:**  $\pm 0.01\%$

### Physical:

**Dimensions:** 48mm x 48mm, 85mm deep

**Display:** Dual line, 4 digit, 7 segment LED- 8mm high

**Mounting:** Panel mounting 45mm x 45mm cutout or DIN rail

**Wiring Connection:** Via 11 pin plug in socket

**Weight:** 100 grams (3.5 ounces)

### General:

**Front Panel Rating:** IEC IP65

**Operating Temperature:** 0 °C to 55 °C (32 °F to 131 °F)

**Storage Temperature:** -40 °C to 90 °C (-40 °F to 194 °F)

**Humidity:** 5% to 95% RH non-condensing

**Memory:** Nonvolatile

**Approvals:** UL, CUL, CE

## UNIQUE SPECIFICATIONS

### STANDARD MODEL

**Output:** Timed DPDT (5 amps)

**Supply Voltage:** 90-240 VAC 50/60 Hz or 24 VAC/VDC

**Power Consumption:** < 10 VA

**Resolution:** Settable for XXXX or XX.XX for hrs., mins., and secs. ranges

**Operating Modes:** On Delay, Off Delay, Interval, Repeat, Delay/ Interval

### REPEAT CYCLE MODEL

**Inhibit:** NPN or Dry Contact

**Outputs:** Relay (B506-700X) - 2 SPDT (5 amp) - 15 ms latency;  
Transistor (B506-705X) - NPN Open Collector - 30 VDC, 30 mA max.

**Supply Voltage:** 85 - 264 VAC 50/60 Hz or 24 VAC/VDC

**Power Consumption:** <10 VA max @ 240 VAC, 200 mA @ 24 VDC

**Resolution:** Settable for XXXX or X.XXX for hrs., mins., and secs. ranges

**Operating Mode:** Repeat Cycle

### HIGH PERFORMANCE MODEL

**Inhibit:** NPN or Dry Contact

**Outputs:** Relay (B506-200X) - 2 SPDT (5 amp) - 15 ms max latency;  
Transistor (B506-205X) - NPN Open Collector - 30 VDC, 30 mA max. opto isolated

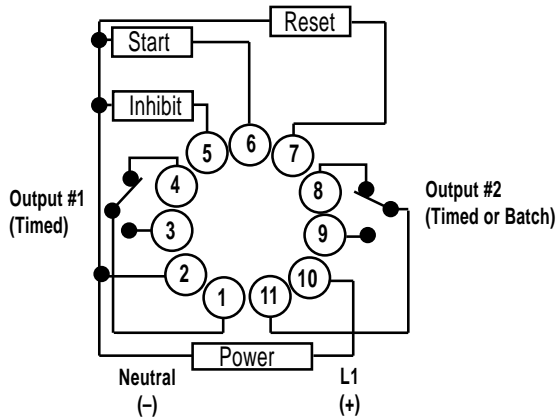
**Supply Voltage:** 85 - 264 VAC 50/60 Hz or 24 VAC/VDC

**Power Consumption:** <10 VA max @ 240 VAC, 200 mA @ 24 VDC

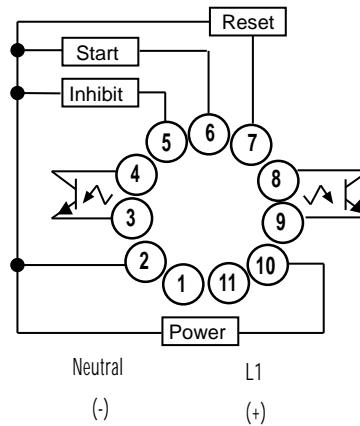
**Resolution:** Settable for XXXX or X.XXX for hrs., mins., and secs. ranges

## WIRING REFERENCE

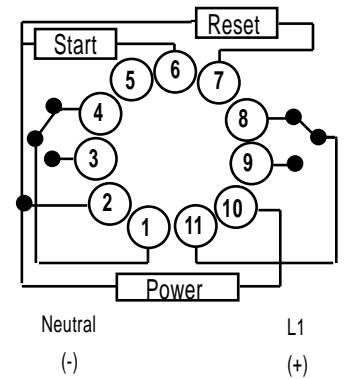
B506-2001/2, B506-7001/2



B506-2051/2, B506-7051/2



B506-5001/2



**Available in three basic configurations to accommodate every industrial timing application**

### Standard Model

- Multiple Operating Modes: on delay, off-delay, interval, and repeat
- Front Panel Programming
- Large Buttons
- Power Reset Programming
- Multiple Levels of Security

### Repeat Cycle Model

- Completely Independent Setting of On and Off Times
- Programmable to Start with an On or Off Cycle
- Ability to Input Cycle as a Time Base and a %
- Batch Count Function

### High Performance Model

- 17 Different Programmable Modes of Operation
- Dual Preset Capability
- Batch Function with Timed or Latched Output
- 1 ms Resolution

## ORDERING INFORMATION

Description	Standard	Repeat Cycle	High Performance
90-240 VAC	B506-5001		
24 VAC/VDC	B506-5002		
Relay Out, 90-240 VAC		B506-7001	B506-2001
Relay Out, 24 VAC/VDC		B506-7002	B506-2002
NPN Trans Out, 90-240 VAC		B506-7051	B506-2051
NPN Trans Out, 24 VAC/VDC		B506-7052	B506-2052
11 Pin Sockets - Din Rail Mount	60SR3P06	60SR2P06	60SR2P06
11 Pin Sockets - Outward Facing Terminals	PBT-03172	PBT-03172	PBT-03172

### Dimensions:

