EAGLE SIGNAL brand
Electronic Timers

B866 Multi-Function Timer

POWER EAGLE SIGNAL OUT
► RUN

MODE

*Simple dial set timer
…Multiple time ranges
and versatile functions*

File No.: E96337

® RECOGNIZED   c ® RECOGNIZED

CE

A unique combination of versatility and simplicity make the Eagle Signal brand B866 the premiere low cost timing solution. Housed in a compact 1/16 DIN package, changing the set time is as simple as turning a dial.

Selectable time ranges provide preset times ranging from 0.06 seconds to 10 hours. The B866 is also field configurable to operate in On-Delay, Off-Delay, Interval, or Repeat Cycle timing modes.

A unique On-Delay/Interval model lets the B866 perform two timing functions in one compact unit. In addition to working as an On-Delay timer, an independent output interval time is provided. The output interval can be set to one of eight time values through DIP switches located on the side of the unit.

An industry standard 11 pin socket connection simplifies wiring and makes replacing existing units quick and easy. The unit can be DIN rail mounted, or with optional hardware, panel mounted. Multiple time ranges allow settings from 0.06 seconds to 10 hours

■ Field selectable for operation in On-Delay, Off-Delay*, Interval, or Repeat Cycle modes
■ Universal power supply accepts 24 - 240 VAC or 24 VDC
■ Meets IEC 801 level 4 noise immunity standards
■ Unique On-Delay/Interval model lets one unit do the work of two in many applications
■ Industry standard socket connection
■ Front panel or DIN rail mounting
■ Flexible start and reset input signals
■ UL, CUL recognized, CE compliant
■ IP54 rated front panel

Harsh industrial environments are no problem for the B866… its IP54 front panel and IEC 801 level 4 noise immunity rating give this unit the strength to survive in the toughest conditions. A universal power supply meets global requirements for 24 - 240 VAC or 24 VDC operation.

  *Off-Delay function not provided on B866-511

SPECIFICATIONS

Inputs:
  Start (B866-500/100): NPN or Dry Contact
  Reset (B866-500/100): NPN or Dry Contact

Outputs:
  Timed (B866-500/100): DPDT - 5 amp
  Timed (B866-511): SPDT - 5 amp
  Instantaneous (B866-511): SPDT - 5 amp

Physical:
  Dimensions: 48mm x 48mm, 85mm deep
  Mount: Panel Mounting in 45 x 45 cutout (requires optional mounting bracket), or DIN rail
  Wiring Connection: Via 11 pin (B866-500/100) or 8 pin (B866-511) plug-in socket

Operation:
  Supply Voltage: 100 - 240 VAC 50/60Hz, and 24 VDC

  Power Consumption: < 10 VA

  Time Ranges: Field Selectable 1, 10 Seconds; 1, 10 Minutes; 1, 10 Hours

  Operating Modes: On-Delay, Off-Delay, Interval, Repeat Cycle, On-Delay Interval

  Setting Accuracy: $\pm$ 5%

  Repeat Accuracy: $\pm$ 0.5%

  Electrical Service Life: 100,000 cycles at full load

  Mechanical Service Life: 10 million cycles at min. load

Environmental:
  Front Panel Rating: IP54

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

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

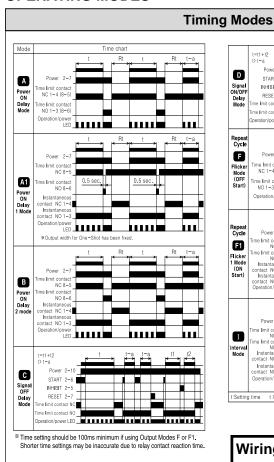 **Humidity:** 35% to 85% RH non-condensing

  Weight: 100 grams (3.5 ounces)

Approvals:
  B866-100, -500: UL, CUL recognized, CE compliant
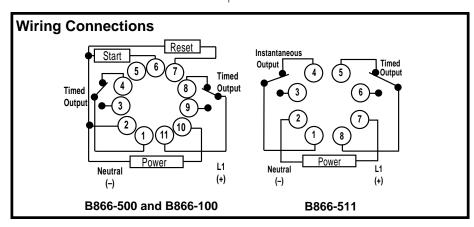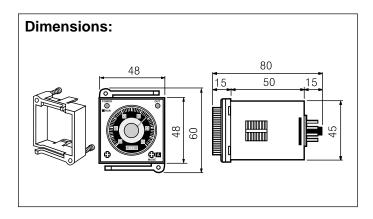 **B866-511:** UL, CUL recognized

OPERATING MODES

Timing Modes		Modes Available for Model

Mode / Time chart

A Power ON Delay Mode
- Power 2−7
- Time limit contact NC 1−4 (8−5)
- Time limit contact NO 1−3 (8−6)
- Operation/power LED

A1 Power ON Delay 1 Mode
- Power 2−7
- Time limit contact NC 8−5
- Time limit contact NO 8−6
- Instantaneous contact NC 1−4
- Instantaneous contact NO 1−3
- Operation/power LED

※Output width for One−Shot has been fixed.

B Power ON Delay 2 mode
- Power 2−7
- Time limit contact NC 8−5
- Time limit contact NO 8−6
- Instantaneous contact NC 1−4
- Instantaneous contact NO 1−3
- Operation/power LED

C Signal OFF Delay Mode
- t=t1+t2 t⟩ t−a
- Power 2−10
- START 2−6
- INHIBIT 2−5
- RESET 2−7
- Time limit contact NC
- Time limit contact NO
- Operation/power LED

D Signal ON/OFF Delay Mode
- t=t1+t2 t⟩ t−a
- Power 2−10
- START 2−6
- INHIBIT 2−5
- RESET 2−7
- Time limit contact NC
- Time limit contact NO
- Operation/power LED

F Repeat Cycle Flicker Mode (OFF Start)
- Power 2−7
- Time limit contact NC 1−4 8−5
- Time limit contact NO 1−3 8−6
- Operation/power LED

F1 Repeat Cycle Flicker 1 Mode (ON Start)
- Power 2−7
- Time limit contact NC 8−5
- Time limit contact NO 8−6
- Instantaneous contact NC 1−4
- Instantaneous contact NO 1−3
- Operation/power LED

I Interval Mode
- Power 2−7
- Time limit contact NC 8−5
- Time limit contact NO 8−6
- Instantaneous contact NC 1−4
- Instantaneous contact NO 1−3
- Operation/power LED

t:Setting time t ⟩ t−a Rt:Return time(Keep 0.1sec or more for the return time)

※ Time setting should be 100ms minimum if using Output Modes F or F1.
Shorter time settings may be inaccurate due to relay contact reaction time.

Modes Available for Model

Model	-500	-100	-511
Timing Mode			
A	X	X	X
A1	N/A	N/A	X
B	N/A	N/A	X
C	X	X	N/A
D	X	X	N/A
F	X	X	X
F1	X	X	X
I	X	X	X

X= Available on Model

N/A= Not Available on Model

Wiring Connections

B866-500 and B866-100

B866-511

Dimensions:

ORDERING INFORMATION

Description	Model
Multi-Function Dial Set Timer (11-pin)	B866-500
As Above w/Instant Contacts	B866-100
Multi-Function Dial Set Timer (8-pin)	B866-511

Optional Accessories

Mounting Bracket & Locking Ring	B846-A30
8 Pin Socket	60SR2P06
11 Pin Socket	60SR3P06