



Combined Counters and Hour Meters

Stock No.	Description	Supply
183-363	Counter/Counter	100-250V ~
183-379	Hour meter/Counter	100-250V ~
183-385	Hour meter/Hour meter	100-250V ~

General

Counters and hour meters with 6-digit, 7 segment, 5mm high LCD displays, combined in DIN 43 700 - 48 x 48 panel mounting case.

The LCD of the hour meter module features a flashing hourglass icon which indicates hour meter activity. The icon flashes at a rate of 3 seconds on followed by 1 second off. During periods of inactivity, the icon remains steady. A decimal point before the last digit separates the hours from 1/10 hours.

Installation

The case is panel mounted through a 45 x 45 cut-out. A mounting U clamp is supplied.

Connections to the rear are via standard 0.25 inch shrouded receptacles provided.

The power supply must be isolated before accessing the rear terminals.

The combined units must be wired in accordance with the wiring diagrams as shown in figure 2 overleaf.

Note: The display is not normally visible when the power supply is not connected. Readings can be displayed by applying a 9V supply, e.g. a battery, between terminal 2 (+ve) and common (terminals 4 or 6).

This supply must not remain connected when the unit is normally powered.

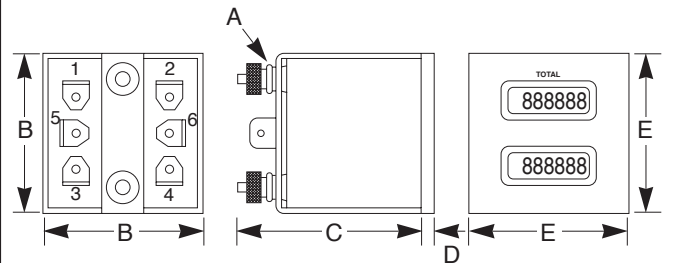
Function

Counter/counter: The displays are illuminated and the module powered up by applying the supply between terminal 5 and common (terminals 4 or 6). Input pulses ($\geq 70\text{ms}$) at terminal 1, are simultaneously recorded by the upper and lower counters. Momentary connection ($\leq 10\text{s}$) of the supply to terminal 3 causes the lower unit to reset.

Hour meter/counter: The displays are illuminated and the module powered up by applying the supply between terminal 5 and common (terminals 4 or 6). The number of inputs ($\geq 70\text{ms}$) and their duration, as seen at terminal 1, are recorded by the counter (lower display) and the hour meter (upper display) respectively. Momentary connection ($\leq 10\text{s}$) of the supply to terminal 3 causes both displays to reset.

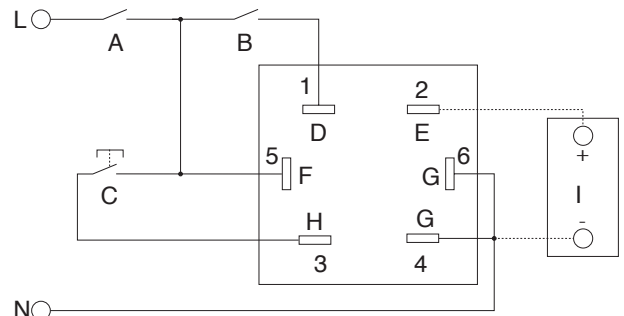
Hour meter/hour meter: The displays are illuminated and the module powered up by applying the supply between terminal 5 and common (terminals 4 or 6). The total duration of the input, as seen at terminal 1, is simultaneously recorded by the upper and lower hour meters. Momentary connection ($\leq 10\text{s}$) of the supply to terminal 3 causes the lower hour meter to reset.

Figure 1. Case dimensions



- A. 'U' clamp for panel thickness 0.76 to 6.35
- B. 44.5
- C. 55.4
- D. 4
- E. 48

Figure 2. Electrical connections



- A. Keyswitch - illuminates display
 - B. Switch - starts timing/counting
 - C. Pushbutton - push to reset (10s max.)
 - D. Terminal 1 - Input
 - E. Terminal 2 - Power down read
 - F. Terminal 5 - Power
 - G. Terminals 4 & 6 - Common (int. linked)
 - H. Terminal 3 - Reset
 - I. 9 volt battery
- Note:** Battery used to illuminate the displays when the normal power supply is **OFF** only.

Technical Specification

Supply voltage	100-250V ~ nominal 80-275V min./max.
Supply frequency range	48-440Hz.
Operating current	4mA r.m.s. max. @ 120V ~
Pulse count limits	70ms on, 140ms off
Accuracy (full scale)	hour meters $\pm 0.01\%$ hours. counters ± 1 count.
Temperature limits:	
operating	-40 to C to +85 to C
storage	-50°C to +90°C
Relative humidity	95% (non condensing at 38°C)
Shock resistance	50g at 11ms
Vibration resistance	20g at 10-80Hz