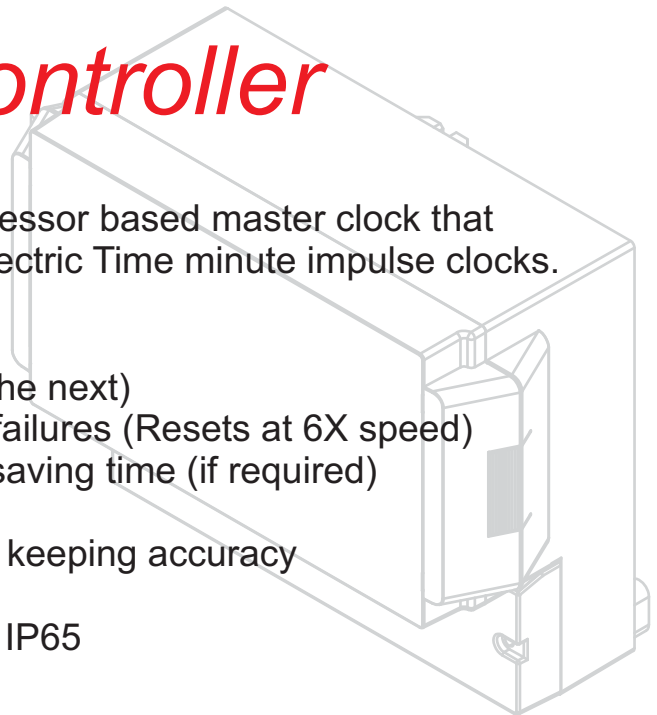
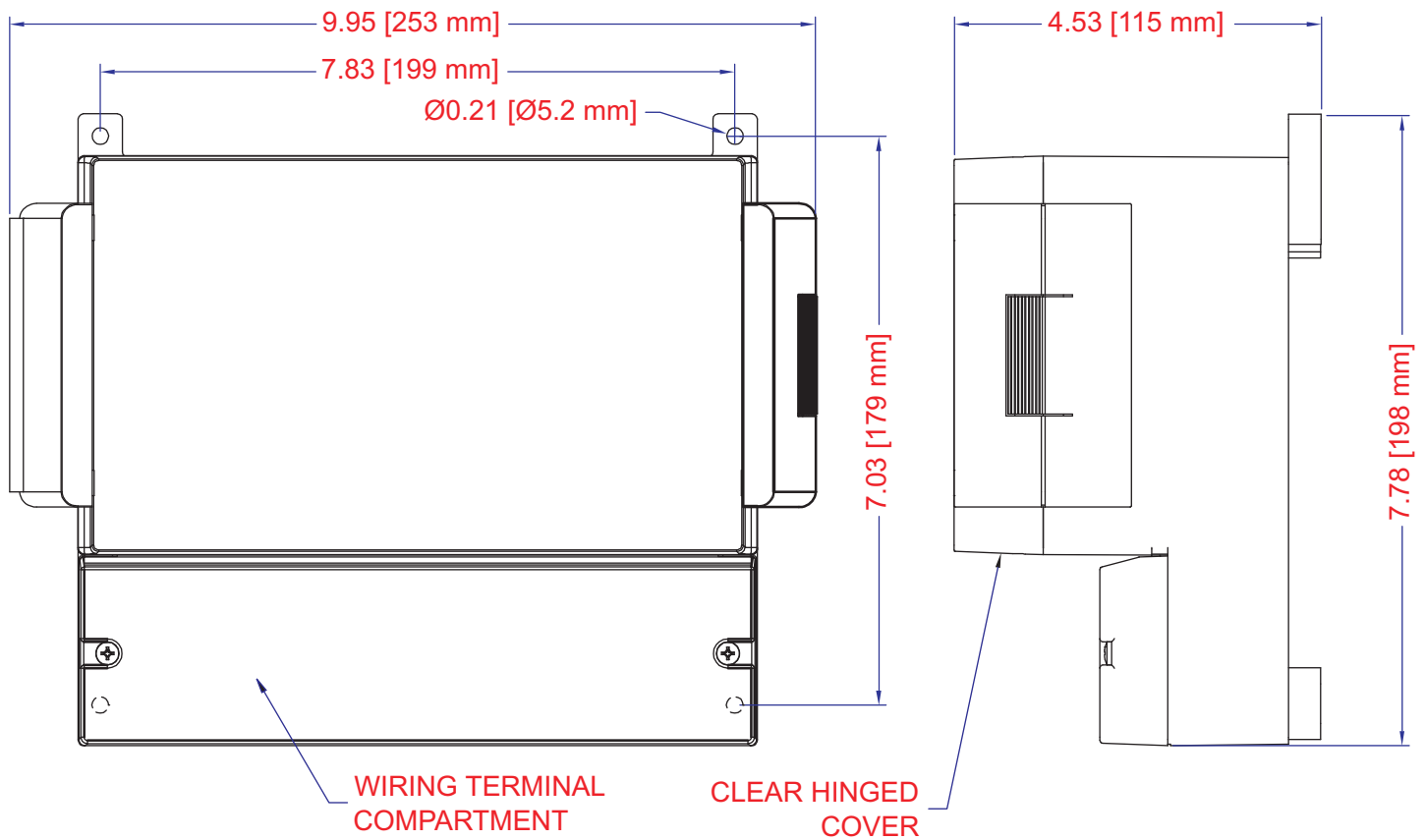


99B-MI Clock Controller

The 99B-MI Clock Controller is a microprocessor based master clock that provides completely automatic control of Electric Time minute impulse clocks.

- Provides “Minute Impulse” (MI) Control (Clock hands index from one minute to the next)
- Automatically resets clocks after power failures (Resets at 6X speed)
- Automatically resets clocks for daylight saving time (if required)
- Precision Quartz Time Base
- Optional GPS interface for ultimate time keeping accuracy
- 10 Year Battery Backup for time base
- For indoor or outdoor use - Protected to IP65
- ETL listed to UL 863



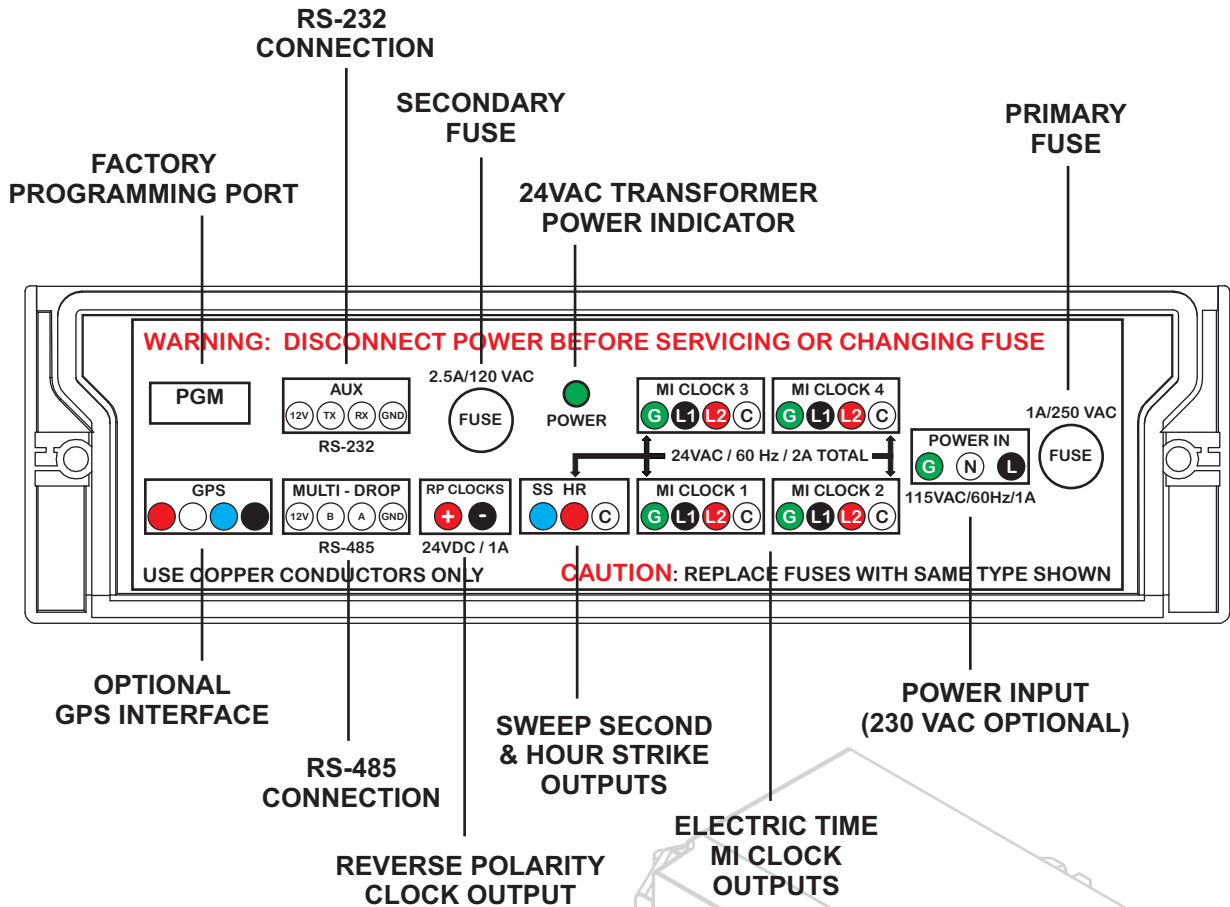


99B-MI Specifications

DIMENSIONS IN INCHES [MILLIMETERS]

Input Power	115VAC/50 or 60Hz/1A or 230VAC/50 or 60Hz/0.5A (Factory Preset)
Clock Outputs	<p>24VAC Minute Impulse</p> <ul style="list-style-type: none"> • Controls up to (4) Minute Impulse (MI) Clocks <p>24VDC Reverse Polarity</p> <ul style="list-style-type: none"> • Controls up to (20) Reverse Polarity (RP) Clocks <p>24VAC Sweep Second line (continuous power)</p> <ul style="list-style-type: none"> • Controls up to (2) MI Clocks with Sweep Second Hands <p>**For multiple clock arrays, contact Electric Time to verify maximum electrical loads on 99B-MI</p>
Event Outputs	24VAC Hour Strike (configurable pulse output)
Communication	RS-232 port, RS-485 port

Terminal Compartment Layout

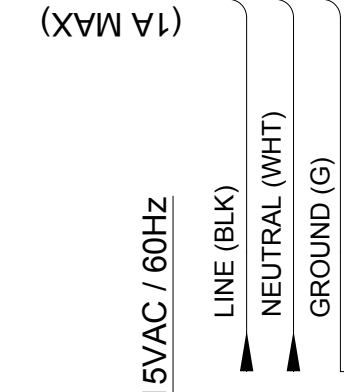
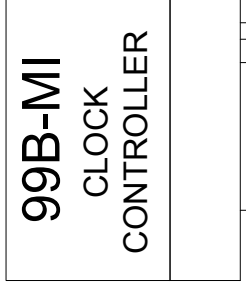


Connection for ½" conduit provided for power input & MI Outputs
Cable gland strain relief provided for all other connections

Maximum Minute Impulse control wire run 350 feet

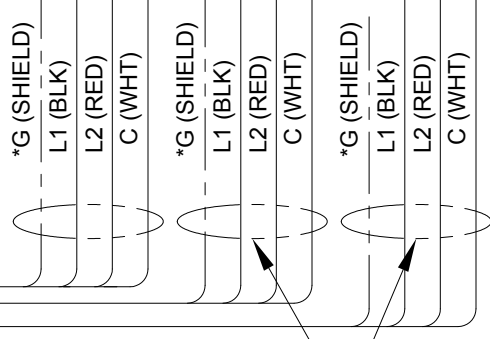
Reference Electric Time Company Manual #274 for complete operation and installation instructions

CONTROL WIRING



115VAC / 60HZ

*Shield Connects ONLY at 99B-MI

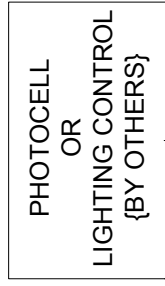
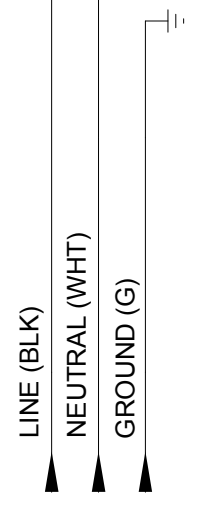


CLASS II (24VAC)
16 AWG WIRE
RECOMMENDED

CONTROL SPECIFICATIONS

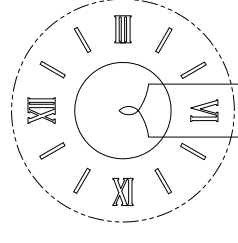
- 1) CONTROLS UP TO (4) "MI" CLOCKS
- 2) MAX CONTROL WIRE RUN 350'
- 3) "HOME RUNS" REQUIRED FROM EACH CLOCK
- 4) DEDICATED 115VAC BRANCH CIRCUIT MUST BE PROVIDED FOR 99B-MI CONTROLLER
- 5) CONNECTIONS FOR 1/2" CONDUIT PROVIDED

ILLUMINATION WIRING
(IF APPLICABLE)

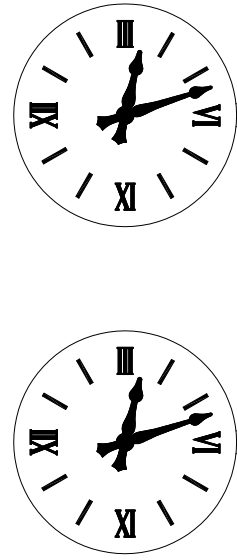


LOCAL
DISCONNECT
{BY OTHERS}

CLOCK ILLUMINATION



SYSTEM CLOCKS : "MI" OPERATION



"CM" BOARD
(1 PER CLOCK)

"CM" BOARD
(1 PER CLOCK)

"HOME RUNS" REQUIRED
ALL "MI" CLOCKS

VIEW LASER		M:\ACAD10\A-14425.DWG		TITLE Clock Installation Wiring Detail		SCALE NONE		DATE 06-24-15		DRAWN DMC		APP'V TDE	
REVISIONS													
DRAWING A-14425													

electric time
company, inc.
medfield, ma