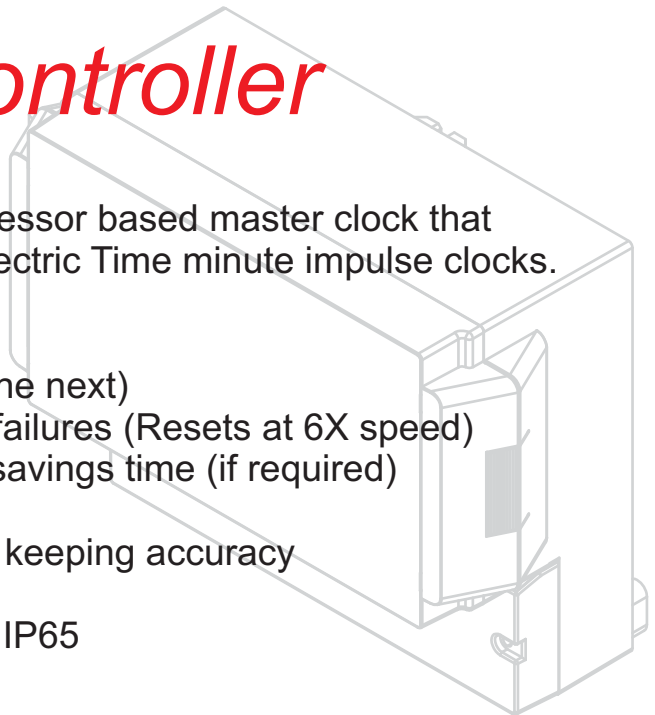
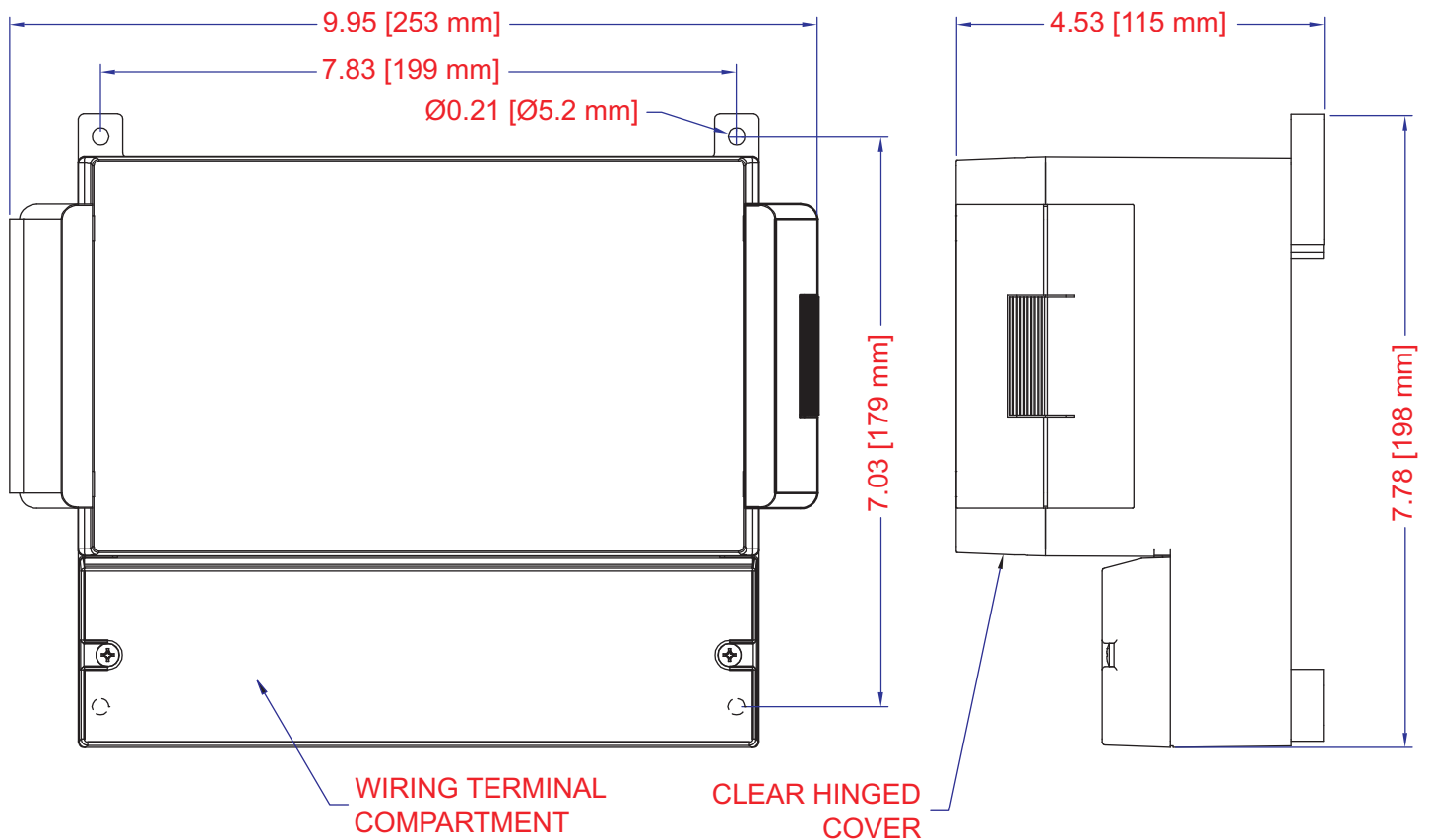


99B-MI Clock Controller

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 savings 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



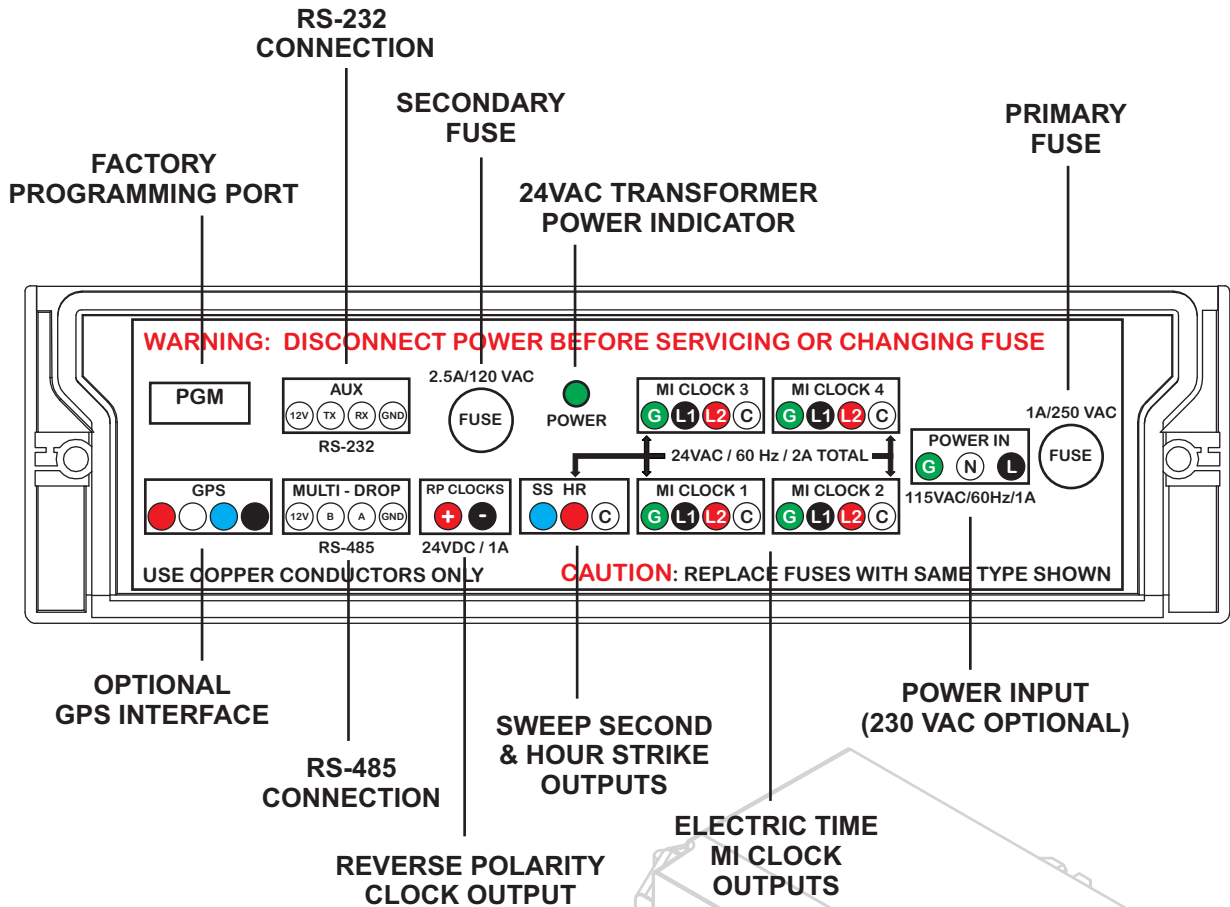


99B-MI Specifications

DIMENSIONS IN INCHES [MILLIMETERS]

Input Power	115VAC/50 or 60Hz/1A or 230VAC/50 or 60Hz/0.5A (Factory Preset)
Drift	+/- 4 min / year (standard), NONE (GPS)
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
	**For multiple clock arrays, contact Electric Time to verify maximum electrical loads on 99B-MI
Event Outputs	24VAC Hour Strike (configurable pulse output)
Communication	RS-232 port, RS-485 port

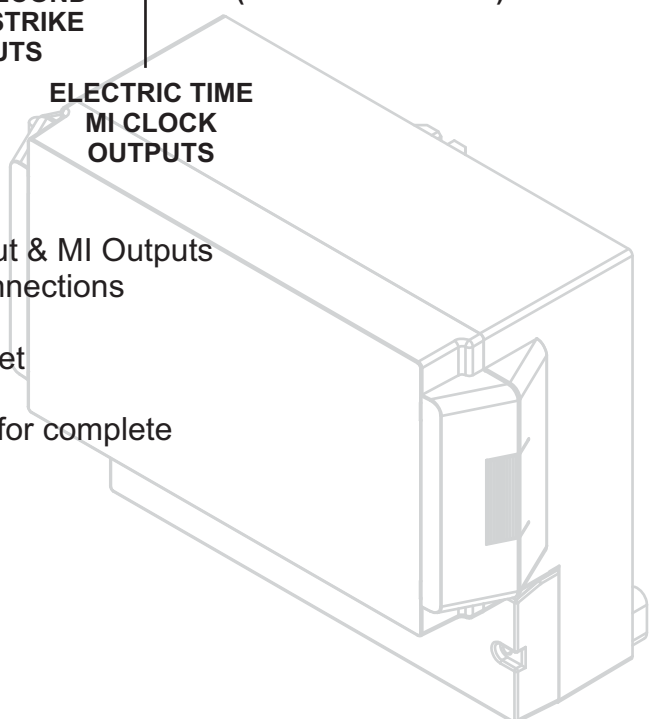
Terminal Compartment Layout

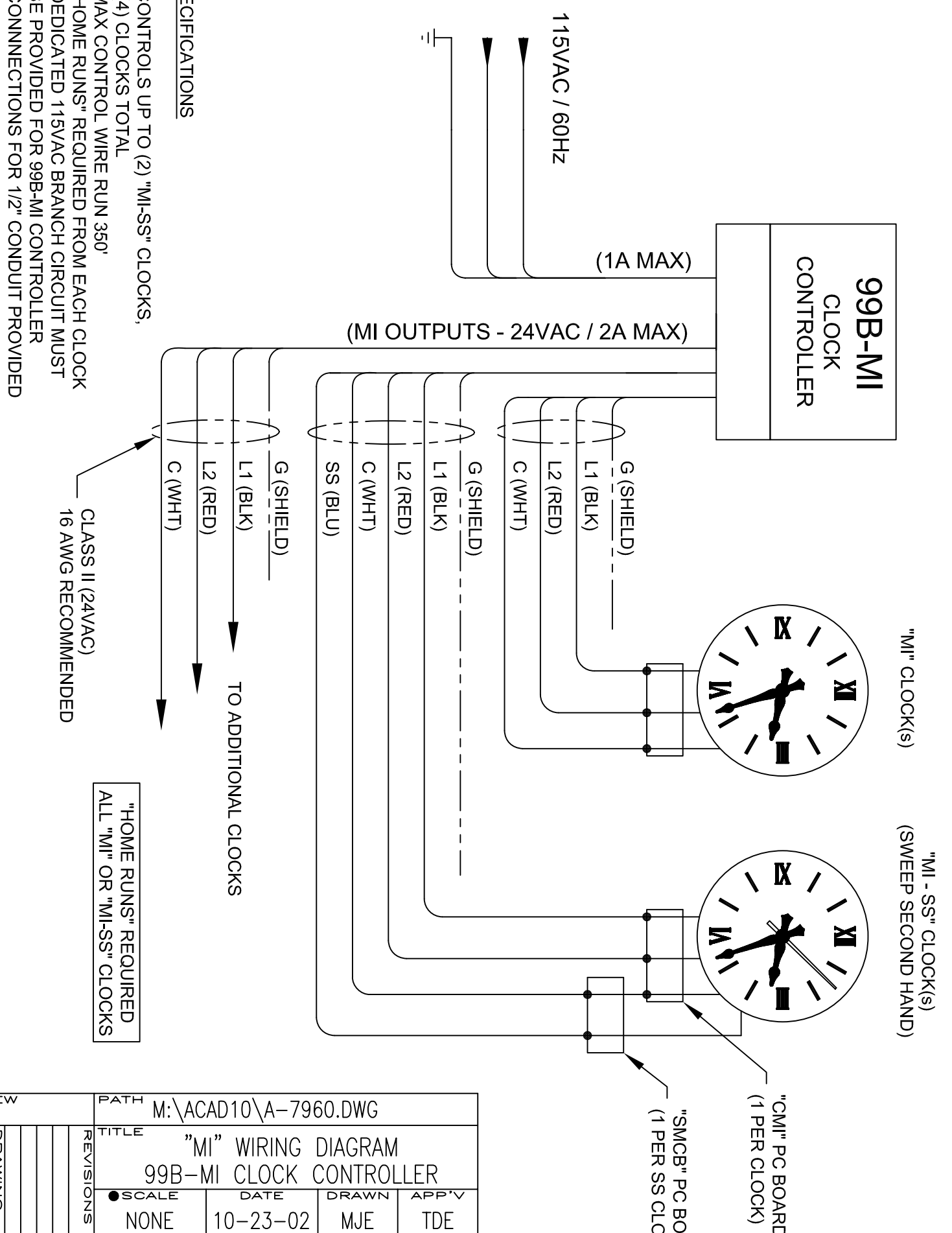


Connection for 1/2" conduit provided for power input & MI Outputs
Cable gland strain relief provided for all other connections

Maximum Minute Impulse control wire run 350 feet

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





SPECIFICATIONS

- 1) CONTROLS UP TO (2) "MI-SS" CLOCKS, (4) CLOCKS TOTAL
- 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) CONNNECTIONS FOR 1/2" CONDUIT PROVIDED

CLASS II (24VAC)
16 AWG RECOMMENDED

"HOME RUNS" REQUIRED
ALL "MI" OR "MI-SS" CLOCKS

VIEW	PATH M:\ACAD10\A-7960.DWG			
	TITLE "MI" WIRING DIAGRAM 99B-MI CLOCK CONTROLLER			
REVISIONS	● SCALE	DATE	DRAWN	APP'V
	NONE	10-23-02	MJE	TDE
 electric time company, inc medfield, ma				
DRAWING	A-7960-1			