

## INSTALLATION & SUBMITTAL DATA

### 7-day programmable time clock gas-fired duct furnace/make-up air units models series: "D", "H", "I", & "O"

#### **! WARNING**

1. Disconnect power supply before making wiring connections to prevent electrical shock and equipment damage.
2. All units must be wired strictly in accordance with wiring diagram furnished with the unit. Any wiring different from the wiring diagram could result in a hazard to persons and property.
3. All wiring must be done with a wiring material having a temperature rating of at least 105°C.

#### **IMPORTANT**

The use of this manual is specifically intended for a qualified installation and service agency. All installation and service of these units must be performed by a qualified installation and service agency. Modine manuals may contain excerpts from component supplier literature adapted for Modine products. Any accompanying component supplier literature is for general information.

#### Application

The 7 day time clock allows for simple and inexpensive control of functions such as automatic temperature setback (requires setback thermostat purchased separately), reduction of outside air during periods when the building is not occupied, and switching main supply fans from continuous to intermittent operation.

#### Component

2A518

Operating Temperature Range: +15° to +185°F

Operating Voltage: 120V/60Hz/1Ph

Power consumption: 1.15VA

Wiring Terminals: 1/4" quick disconnect terminals

NEMA 1 switch that is to be mounted indoors in/on an enclosure in an environment free of excessive contaminants such as oil, moisture, and dirt.

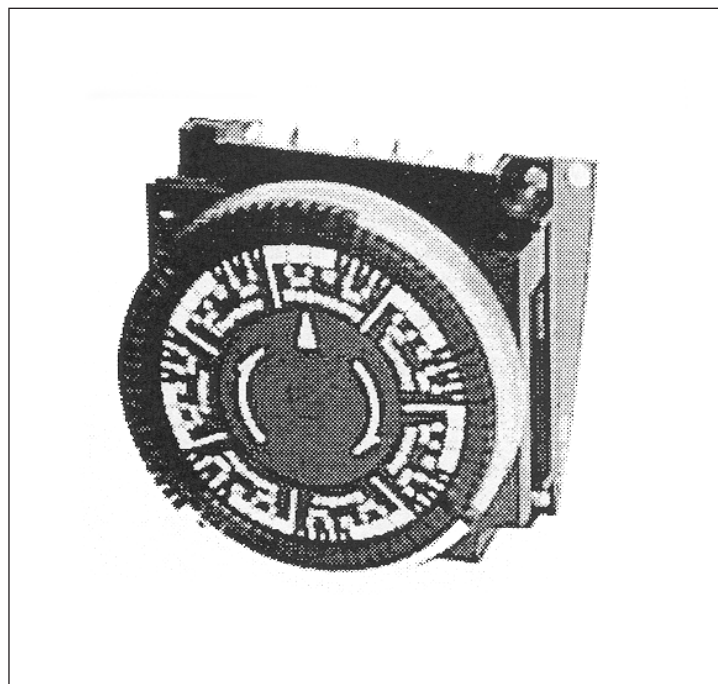
Output Switch Ratings (SPST relay contacts):

Normally Open Contact: 1/2Hp @ 120 AC, 1000 Watts

#### Features

- Program disc with non-detached switch actuators.
- Easy and fast program setting.
- Display of switch-on time period by orange time section
- 84 switch actuators which give switching intervals of 2 hours per day.

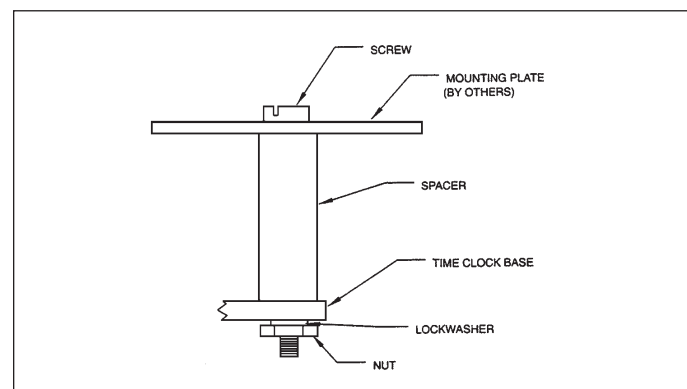
Figure 1.1  
7 Day Programmable Time Clock



#### Installation

The 7 day time clock shall be mounted in a suitable enclosure complying with the requirements of all local codes and the NEC. The terminals of the time clock are line voltage so the base must be located in a NEMA 1 enclosure. The suitability of the dial as part of the enclosure should be determined in the application. The unit is to be mounted indoors in an environment free of excessive contaminants such as oil, moisture, and dirt. When mounting the unit onto an enclosure, the spacers must be used between the timer and the mounting plate to prevent the timer housing from cracking.

Figure 1.2  
Mounting Detail  
(Kit includes 3 each screws, spacers, lockwashers, and nuts)



## Wiring

# IMPORTANT

All line and low voltage wiring to time clock must be suitable for line voltage in compliance with NEC requirements for separation of circuits.

Installation of wiring must conform with local building codes, or in the absence of local codes, of the National Electric Code ANSI/NFPA 70 - Latest Edition. Unit must be electrically grounded in conformance to this code. In Canada, wiring must comply with CSA C22.1, Part 1, Electrical Code.

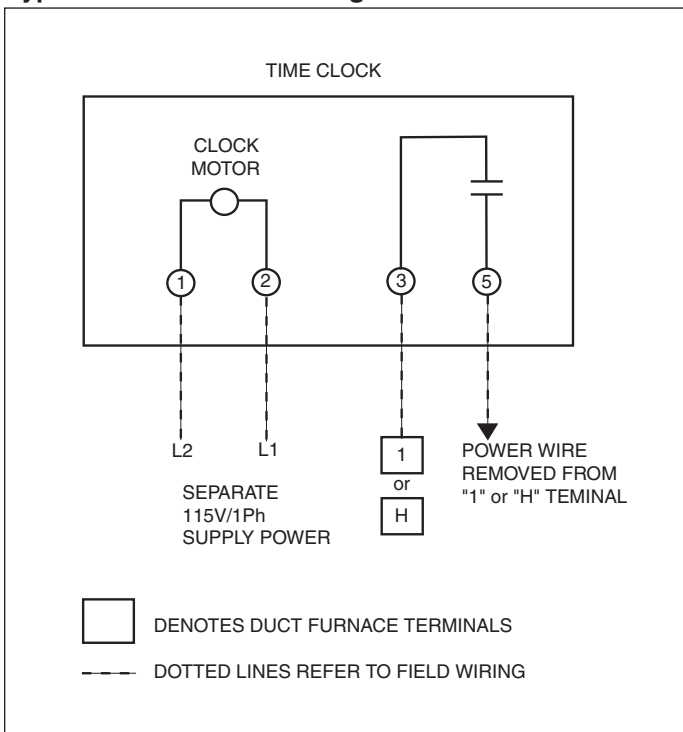
The terminals for supply power and relay contacts will accommodate 1/4" quick disconnect terminals.

The relay contacts on the controller do not power the load. Input power supplied to the controller enables the time and program information to be kept and program operations to be executed. However, the contacts act as switches only, power must be supplied to operate the load.

## Wiring Diagram Selection

- For duct furnaces (non-factory supplied blower): refer to the following figures for wiring.
- For systems units (factory supplied blower): refer to the job specific unit wiring diagram provided with the unit.
- For deviations to these wiring diagrams or the job specific wiring diagrams: consult the factory.

**Figure 2.1**  
Typical Duct Furnace Wiring



## Programming

1. Rotate the program disc in the direction of the arrows to align the correct time of day and week with the time mark.
2. Set the desired switching program by pushing the switch actuators toward the center of the time switch. Each actuator provides a 2 hour ON time. The now visible orange area(s) indicate the switch ON period.

**Figure 2.2**  
Dimensions of 7 day time clock  
(All dimensions in inches)

