

Installation Instructions



FM1D Series

One Circuit Electronic 24 Hour or 7 Day Time Switches



FM1D20A
(surface mounting)



FM1D20E
(flush mounting)

APPLICATION

Time based control of lighting, ventilating, heating, cooling or other electrical loads in commercial and industrial applications. The FM1D Series time switches are programmable for 24-hour or 7-day schedules.

The FM1D20A and FM1D50A Series Time Switches are intended for either surface or Din Rail mounting. The control is completely enclosed in a plastic housing and includes a terminal cover and sub-base for installation and hard wiring.

The FM1D20E Series and FM1D50E Series Time Switches are intended for flush (panel) mounting.

Both models are supplied with a clear plastic dust cover.

TECHNICAL DATA

Output—1 SPDT relay with dry contacts

Switch Rating:

N.O. Contact:

- 1/2hp, 120 V ac
- 1hp, 240 V ac
- 8 A, 24 V dc resistive
- 16 A, 277 V ac resistive
- 12 A Ballast, 120 V ac
- 8 A Ballast, 240 V ac
- 720 VA 240 V ac Pilot Duty
- 360 VA 120 V ac Pilot Duty
- 1000W Tungsten, 240 V ac
- 600W Tungsten, 120 V ac

N.C. Contact

- 16 A, 277 V ac resistive
- 8 A, 24 V dc Pilot Duty
- 360 VA, 120 V ac Pilot Duty

3 year Reserve (Non-Replaceable Battery)

Supply voltages: Separate Models –

FM1D20Series:	FM1D50 Series:
24VAC/DC,	12 VAC/DC,
120VAC,	24 VAC/DC,
240VAC,	120 VAC,
	240 VAC.

All Models 60Hz (refer to product label)

Shortest switch time—1 minute

Ambient Temperature Range –14°F to 131°F (–10°C to 55°C)

VA required: 120V & 240V models: 4VA

24V model: 2VA @ 24VAC, 1VA @ 24VDC

Screw terminal connections (FM1D20A and FM1D50A)

1/4" quick connects (FM1D20E and FM1D50E)

Accuracy ± 4 minutes per year

Agency Approvals: UL Recognized

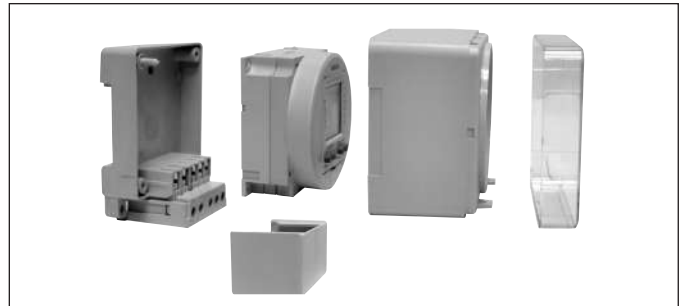
INSTALLATION

To the installer:

1. Read operating instructions carefully.
2. Check the input and output ratings marked on the unit to make sure this product is suitable for your power supply and application.
3. Disconnect power supply prior to installation to prevent electrical shock.
4. Wire in accordance with National and Local electrical code requirements.

SURFACE MOUNTING—FM1D20A and FM1D50A

Remove dust cover, loosen two screws on opposite corners. Remove the housing that surrounds the time switch and the terminal cover away from the base. Remove timer module by pulling straight out.



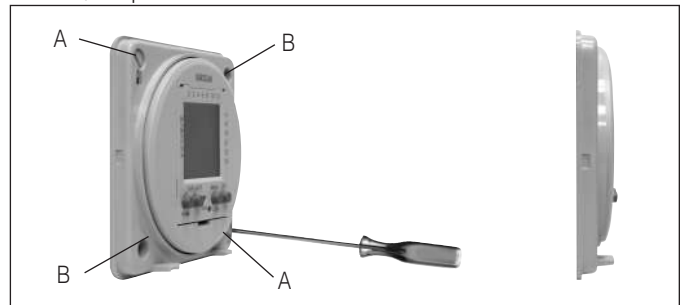
Place screws through 3 mounting holes in base and screw to back panel or wall.

Wire in accordance with instructions. Replace terminal cover and push timer firmly onto base. Now replace housing and secure with screws.

PANEL MOUNTING—FM1D20E and FM1D50E

Cut a square hole 2-5/8" x 2-5/8" (66mm x 66mm) in the front of the panel. Insert the time switch through the opening. With a screwdriver, press down and turn outer screws (A) until flanges are in position to fasten the unit in front panel, then release. Insert plugs into holes (B).

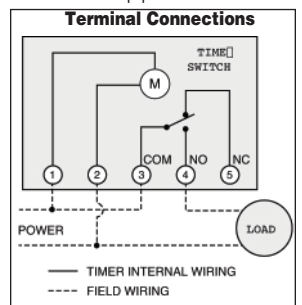
Use 1/4" quick connects and make connections in accordance with the wiring diagram shown and applicable code requirements.



dance with the wiring diagram shown and applicable code requirements.

WIRING

1. Disconnect the power.
2. Wire input to timer, (M), with the proper voltage marked on the unit. Wiring to incorrect voltage will void the warranty.
3. Connect wiring according to the wiring diagram. The terminals on the Digi 20A sub-base will accommodate 10 to 24 AWG wire.



FM1D Series Program Schedules

Prog	ON/OFF	h	m	Day(s)
Ex	On	7 am	30	Mon., Tue., Wed., Thurs, Fri.
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				
32				
33				
34				
35				
36				
37				
38				
39				
40				
41				
42				
43				
44				
45				
46				
47				
48				
49				
50				