



**MF40-50**



**FLUORESCENT EMERGENCY BALLAST**

*Time delay enhancement to overcome end-of-life circuit protection.*



PROJECT:
FIXTURE TYPE:
LOCATION:
CONTACT/PHONE:

## PRODUCT SPECIFICATIONS

### APPLICATION

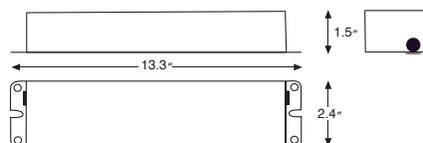
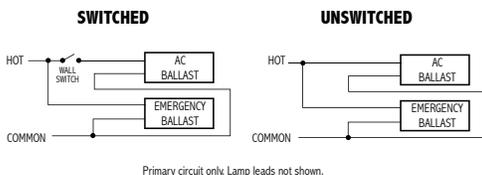
The MF40-50 fluorescent emergency ballast works in conjunction with the AC ballast to convert new or existing fluorescent fixtures into emergency lighting. The emergency ballast consists of a high-temperature nickel-cadmium battery, charger and electronic circuitry in one compact red case. This ballast can be used with most 17 W through 215 W (2' -8') T5, T8, T9, T10, or T12 fluorescent lamps without integral starters, including U-shaped, HO, VHO, circline, energy saving, and (4-pin) long compacts. One or two lamp operation may be selected. It is also compatible with most 1, 2, 3, and 4-lamp electronic, standard, energy saving, and dimming AC ballasts. If used in an emergency-only fixture, no AC ballast is necessary. The MF40-50 is suitable for use in indoor fixtures EXCEPT air handling heated air outlets, and wet or hazardous location fixtures. For information about specific lamp and ballast compatibility, please call the factory.

### OPERATION

When AC power fails, the MF40-50 immediately switches to the emergency mode, keeping one or two lamps illuminated at a reduced lumen output for a minimum of 90 minutes. When AC power is restored, the ballast automatically returns to the charging mode.

### INSTALLATION

The MF40-50 does not affect normal fixture operation and may be used with either a switched or unswitched fixture. If a switched fixture is used, an unswitched hot lead must be connected to the emergency ballast. The emergency ballast must be fed from the same branch circuit as the AC ballast. The MF40-50 may be installed inside, on top of, or remote from the fixture. The emergency ballast may be remote-installed up to half the distance the AC ballast manufacturer recommends removing the AC ballast from the lamp, or up to 50 feet, whichever is less. Installation is not recommended with fixtures where the ambient temperature may fall below 0°C for extended periods.



### UL AND CODE COMPLIANCE

The MF40-50 has been tested by Underwriters Laboratories in accordance with the standards set forth in UL 924, "Emergency Lighting and Power Equipment," and is UL Listed for factory or field installation. Emergency illumination time exceeds the National Electrical Code (NEC), Life Safety Code (NFPA-LSC) and UL 90-minute requirements.

### BATTERY

Since high temperatures exist in fluorescent fixtures, the MF40-50 uses a specially constructed, high-temperature nickel cadmium battery. This battery requires no maintenance, and has a life expectancy of 7 to 10 years.

### EMERGENCY ILLUMINATION

Depending on the number (1 or 2), wattage, and type of lamps selected, the MF40-50 produces 1100 to 1400 lumens initial emergency light output (contact factory for specific information on the lumen output for different lamps). If two-lamp operation is selected, light output is evenly divided between the lamps for better distribution of emergency illumination.

### SPECIFICATION

Emergency lighting shall be provided by using a standard fluorescent fixture equipped with MF40-50 emergency ballast. This emergency ballast shall consist of a high-temperature, maintenance-free nickel-cadmium battery, charger and electronic circuitry contained in one 13 3/8" x 2 3/8" x 1 1/2" white metal case. A solid-state charging indicator light to monitor the charger and battery, a single-pole test switch, and installation hardware shall be provided. The emergency ballast shall be capable of operating One or Two 17W – 215W Single Pin or Bi-Pin fluorescent lamps including Standard, Energy Saving, HO, VHO, Circline, U-Shaped and 4-pin rapid-start long compacts in the emergency mode for a minimum of 90 minutes. The MF40-50 shall have 4.0 Watts of input power, a 24.0 Watt-hour battery capacity, and exceed emergency standards set forth by the current NEC. The emergency ballast shall be UL Listed for installation inside, on top of, or remote from the fixture, warranted for a full five years from date of purchase.



# MF40-50



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### WARRANTY

Model MF40-50 is warranted for five (5) full years from date of purchase. This warranty covers only properly installed emergency ballasts used under normal conditions. For the warranty period Mule will, at its option, repair or replace without charge a defective emergency ballast, provided it is returned to the factory transportation prepaid, and our inspection determines it to be defective under terms of the warranty. Repair or replacement, as stated above, shall constitute the purchaser's exclusive warranty, which does not extend to transportation, installation, labor or any other charges; nor does it apply to any equipment of another manufacturer used in conjunction with the emergency ballast.

### LAMP COMPATIBILITY

Operates two 14W-28W T5, one 39W-54W T5HO, two 17W-40W T8, one 34W-215W T12, two 13W-26W 4-pin compact, two 18W- 36W or one 18W-50W 4-pin long compact fluorescent lamps. Refer to lamp compatibility chart for a complete list of lamps.

LAMP	INITIAL LUMENS	
	1-LAMP	2-LAMP
T5 14W	1100	1200
T5 21W	1150	1250
T5 28W	1250	1300
T5HO 39W	1300	-
T5HO 54W	1350	-
T8 17W	1050	1200
T8 32W	1350	1400

LAMP	INITIAL LUMENS	
	1-LAMP	2-LAMP
T12 20W	700	800
T12 40W	850	900
T12 110W	1350	-
T12 215W	1400	-
4-Pin PL CF 13W	825	900
4-Pin PL CF 18W	975	1100

LAMP	INITIAL LUMENS	
	1-LAMP	2-LAMP
4-Pin PL CF 26W	1000	1100
4-Pin PL CF 32W	1050	1150
4-Pin Long CF 18W	900	1050
4-Pin Long CF 24W	1100	1150
4-Pin Long CF 36W	1200	1250
4-Pin Long CF 40W	1250	-
4-Pin Long CF 50W	1250	-

### PRODUCT SUMMARY

#### UL LISTED

Factory or Field  
Installation

DUAL VOLTAGE INPUT  
120/277 VAC

#### BATTERY

High-Temperature  
Maintenance-Free  
Nickel-Cadmium Battery  
7-10 Year Life Expectancy

#### TEMPERATURE RATING (AMBIENT)

0°C TO +55°C  
(32°F TO 131°F)

#### ILLUMINATION

90 Minutes

60 Hz  
AC INPUT CURRENT  
280mA

#### BATTERY CHARGING CURRENT

280mA

#### DIMENSIONS

13.3" x 2.4" x 1.5"  
(339mm x 60mm x 38mm)  
Mounting center 12.8" (325mm)

#### INITIAL LIGHT OUTPUT

1100-1400 Lumens

AC INPUT POWER RATING  
4.0 Watts

#### RECHARGE TIME

24 Hours

#### WEIGHT

3.4 lbs (1.5 kg)

#### FULL WARRANTY

5 Years (NOT pro-rata)

TEST SWITCH  
Single pole

#### CHARGING INDICATOR LIGHT

LED