



MF40-30



FLUORESCENT EMERGENCY BALLAST

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



PRODUCT SPECIFICATIONS

APPLICATION

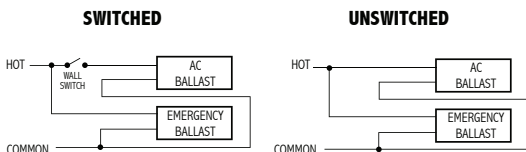
The MF40-30 fluorescent emergency ballast works in conjunction with an AC ballast to convert new or existing fluorescent fixtures into emergency lighting. The emergency ballast consists of a field-replaceable nickel-cadmium battery, charger and electronic circuitry in one red case. The MF40-30 can be used with most 17 - 215 W (2'-8") T8, T9, T10 or T12 fluorescent lamps without integral starters, including U-shaped, HO, VHO, circline, energy-saving and (4-pin) twin, quad and triple twin-tube compacts. One- or two-lamp operation may be selected. It is also compatible with most one-, two-, three-, and four-lamp electronic, standard, energy-saving and dimming AC ballasts. If used in an emergency-only fixture, no AC ballast is necessary. The MF40-30 is suitable only for indoor locations and not for wet or hazardous locations. For information about specific lamp and ballast compatibility, please call the factory. Recommended applications include: hospital surgical suites and areas along the path of egress with high ceiling heights, as well as health care, educational and commercial facilities needing higher levels of emergency illumination.

OPERATION

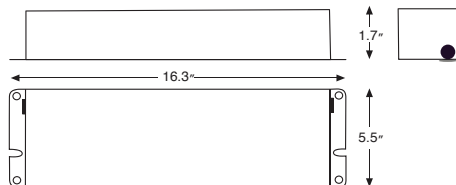
When AC power fails, the MF40-30 immediately switches to the emergency mode, operating either one or two lamps at high lumen output for a minimum of 90 minutes. When AC power is restored, the ballast automatically returns to the charging mode.

INSTALLATION

The MF40-30 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 MF40-30 may be installed on top of or remote from the fixture. The emergency ballast may be remotely 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. A charging indicator light and double-pole test switch are provided. Upon request, a single-pole test switch/monitor plate is provided for remote installation of the test switch and charging indicator light.



Primary circuit only. Lamp leads not shown.



PROJECT:
FIXTURE TYPE:
LOCATION:
CONTACT/PHONE:

UL AND CODE COMPLIANCE

The MF40-30 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

The MF40-30 uses a nickel-cadmium battery specifically designed and constructed for high-temperature applications. This battery requires no maintenance and has a life expectancy of 7 - 10 years.

EMERGENCY ILLUMINATION

Depending on the number (one or two), wattage and type of lamps selected, the MF40-30 produces 1450 to 3500 lumens initial emergency light output. 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 a MF40-30 emergency ballast. The MF40-30 shall consist of a high-temperature, maintenance-free nickel-cadmium battery, charger and electronic circuitry contained in one 16 5/16" x 5 7/16" x 1 3/4" red metal case with a 2' length of flexible conduit. A solid-state charging indicator light to monitor the charger and battery, double-pole test switch and installation hardware shall be provided. The emergency ballast shall be capable of operating One or Two 17 - 215 W (2'-8") T8, T9, T10 or T12 fluorescent lamps without integral starters, including U-shaped, HO, VHO, Circline, Energy-saving and (4-pin) twin, quad and triple twin-tube compacts in the emergency mode for a minimum of 90 minutes. The MF40-30 shall have 8 Watts of input power and a 57.6 Watt-hour battery capacity and shall exceed emergency standards set forth by the current NEC. The emergency ballast shall be UL Listed for installation on top of or remote from the fixture and shall be warranted for a full five years from date of purchase.



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WARRANTY

Model MF40-30 is warranted for five 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.

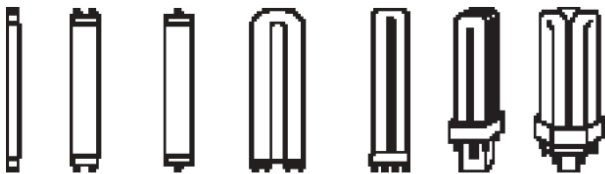
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PRODUCT SUMMARY

UL LISTED Factory or Field Installation	DUAL VOLTAGE INPUT 120/277 VAC 60 Hz	BATTERY Field-Replaceable 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	AC INPUT CURRENT 280mA	BATTERY CHARGING CURRENT 280mA	DIMENSIONS 16.3" x 5.5" x 1.7" (414mm x 138mm x 44mm) Mounting center 8.9" (226mm)
INITIAL LIGHT OUTPUT 1450-3000 Lumens	AC INPUT POWER RATING 8.0 Watts	RECHARGE TIME 24 Hours	WEIGHT 8.7 lbs (3.95 kg)
FULL WARRANTY 5 Years (NOT pro-rata)	TEST SWITCH Double Pole Single Pole (optional, used only with Test/Monitor plate)	CHARGING INDICATOR LIGHT LED	

LAMP COMPATIBILITY

- Compatible with most one-, two-, three-, and four-lamp electronic standard and dimming AC ballasts.
- Operates two 8W-54W T5/T5HO, two 17W-40W, one 17W-215W T8 through T12, two 13W-42W 4-pin compact, two 18W-50W or one 18W-55W 4-pin long compact fluorescent lamps.



Lamp	Initial Lumens	
	1-lamp	2-lamp
T5 14W	1150	1200
T5 21W	1750	1800
T5 28W	2350	2425
T5HO 39W	2700	2850
T5HO 54W	2900	3000
T8 17W	1100	1150
T8 32W	2950	3000
T12 20W	875	900
T12 40W	2250	2400
T8 59W	2800	-
T12 110W	2950	-
T12 215W	3000	-

Lamp	Initial Lumens	
	1-lamp	2-lamp
4-pin PL CF 13W	825	900
4-pin PL CF 18W	1100	1200
4-pin PL CF 26W	1500	1600
4-pin PL CF 32W	2200	2300
4-pin PL CF 42W	2450	2500
4-pin Long CF 18W	1250	1400
4-pin Long CF 24W	1750	1900
4-pin Long CF 36W	2200	2300
4-pin Long CF 40W	2350	2400
4-pin Long CF 50W	2250	2400
4-pin Long CF 55W	2500	-

NOTE: In 2-lamp operation, lumens are equally split between the two lamps.

** When battery packs are remote mounted, the remote distance cannot exceed 1/2 of the distance from ballast to lamp specified by the A.C. ballast manufacturer. The maximum allowable remote mounting distance is 50 feet.*