

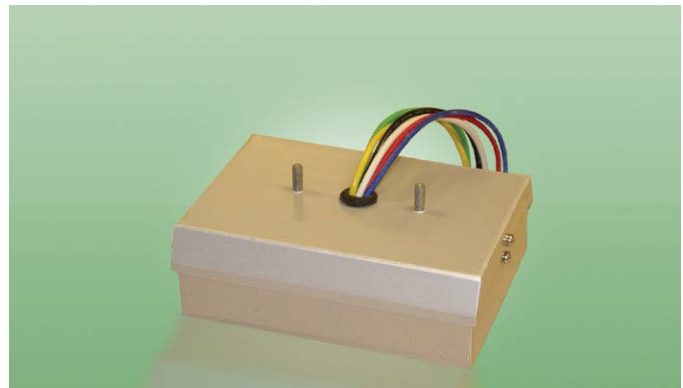
# Dual-Voltage "JT2" Ballasts with "Tap" for Insulation Detection Thermal Protectors

## Electronic Metal Halide Ballast for 39, 70 & 100 Watt Lamps

**DRIVING** the Future of Luminaires!

### NEW! The Ideal ballasts for Recessed Fixtures

- Dual-Voltage Input (120V & 277V)
- Stud Mounting
- Thermally Protected
- Insulation Detector "Tap" Power Source
- Allows Dual-Voltage Rated Luminarie; Same Wiring for 120V or 277V input



### Features & Benefits:

- 120V Power source for 120V Thermal Protector (TP) Heater when ballast is operated with 120V or 277V supply voltage.
- Use "JT2" ballasts with (4) wire 120V 7.2Kohm heater TPs such as "First Technology" RP-5A or "Leviton" 9454 type "W" or "Z".
- Excellent line regulation;  $\pm 0.5\%$  output variation with  $\pm 10\%$  change in line voltage.
- Reduction in visual flicker & increased lamp life.
- Light weight (1.4 lbs.)
- Energy Savings: Up to 15% vs. magnetic.
- Sound Rated "A" / Thermally protected/ Transient protected.
- Ballast has a lamp end-of-life detection feature to enhance safety and reliability.

### Lamp Maintenance Notice:

- To start new lamps or replaced lamps, turn off the ballast input voltage for 10 seconds then back on.
- If lamp or wiring is defective the ballast will "shut down" in 1.5 to 30 minutes depending on the fault condition.


### Specifications:

Lamps <sup>1</sup>	39W	70W	100W
Input Voltage	Automatic Dual Voltage:120 or 277V 50/60 hertz		
Power Factor	High		
Input Power (120V-277V)	44W	78W	110W
Input Current (Maximum)	120V: 0.37A 277V: 0.17A	120V: 0.67A 277V: 0.29A	120V: 0.94A 277V: 0.42A
Harmonic Distortion	<15%		
Lamp Frequency	170 Hertz Square-Wave		
EMI/ RFI	Complies with FCC 18C, non consumer limits		
Lamp Current Crest Factor	1.4 Typical		
Safety	UL Outdoor Type 1, Suitable for Recessed Use		
Thermal Protection	Functions at approximately 100°C hot spot		
Warranty <sup>2</sup>	5 years-max. case temperature <75°C; 3 years-max. case temperature <80°C		
Minimum Ballast Temp.	-15° C/ +5° F		
Maximum Mounting Distance	See Remote Wiring Section on Page 2		

**Note 1:** Consult lamp manufacturers for lamp compatibility approval.

**Note 2:** Warranty is based on maximum operating time of 4000 hours per year. For additional operating hours consult with Aromat Application Engineering.

### Product Summary

LAMPS*	39W Metal Halide M130 Ceramic	70W Metal Halide M143, M139 or M98 Ceramic	100W Metal Halide M164, M140 or M90 Ceramic
Input Volts	120V or 277V 50/60Hz		
Model Number	M3912/27CK-5EU-JT2	M7012/27CK-5EU-JT2	M10012/27CK-5EU-JT2
Mounting/ Lead Exit	Studs with Bottom Lead Exits		
Safety	Listed; 		
Lamp Holder	Minimum 4KV Pulse Rated		

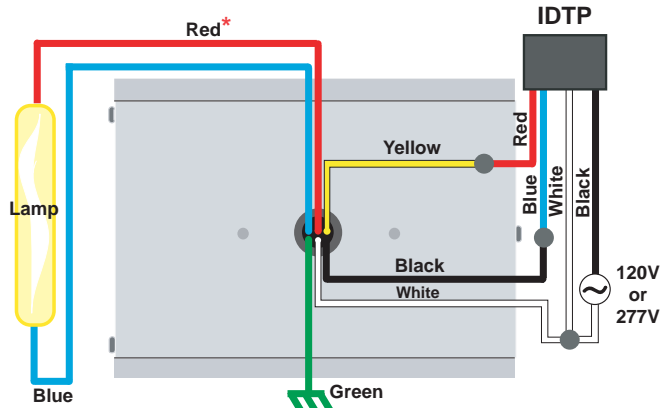
\*Please check with Aromat for compatibility with non-ceramic M.H. lamps.

Aromat reserves the right to change any of the above performance characteristics without notice.

For More information, call: 1-888-4-AROMAT  
Visit our Web Site: [www.aromat.com](http://www.aromat.com)

**Aromat Corporation**  
(Matsushita Electric Works, America)

## Wiring Diagram: (120V or 277V Input)



\*To Center Contact on Edison Base Lampholder

## Comments:

- The IDTP (insulation detector thermal protector) lead wire colors are shown for a (4) wire First Technology device. If other devices are used; please confirm proper wiring with IDTP manufacturer or Aromat.
- If discrete voltage (3) wire thermal protectors are used with "JT2" ballasts; the yellow ballast lead wire shall not be used and should be capped off.
- If no IDTP is required, connect power to black ballast lead and the yellow ballast lead should not be used and capped off.

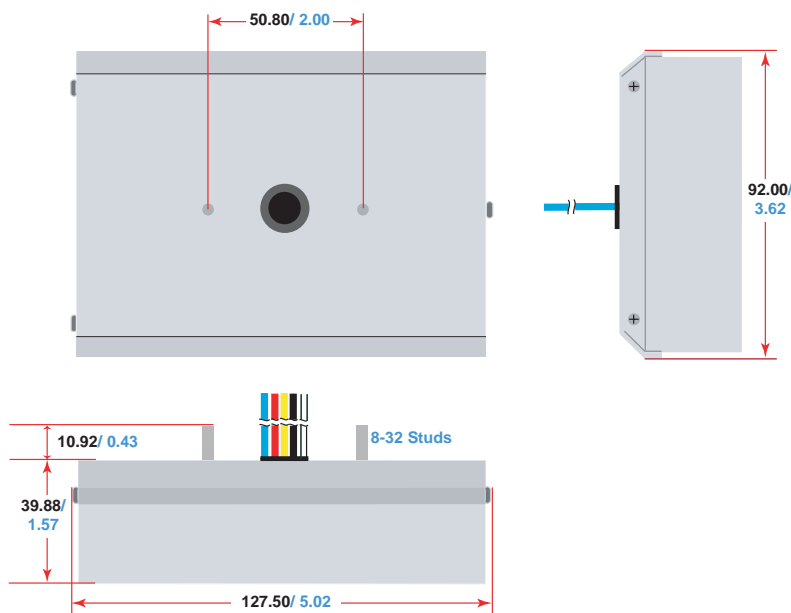
## Safety Instructions:

- Always disconnect power to the entire fixture before installation and/or removal of ballasts or controls.
- Install per national and local electrical codes.
- Dispose of any replaced ballasts and lamps properly.
- **DO NOT** connect lamp leads to ground or neutral. Ballast is not warranted for any lamp lead short-to-ground.
- Ballast case must be grounded.
- When using JT2 ballast on multiple lamp fixtures only one JT2 yellow lead should be connected to TP heater. Use the special "JT2" Ballast "tap" with "First Technology" RP-5A or Leviton 9454 type "W" or type "Z" TPs. Other compatible TPs can be verified by the OEM utilizing the UL abnormal temperature fixture test procedures.

**NOTE: Operation on 208V or 240V supplies is not recommended as TP may not function properly**

## Dimensions: - Millimeters / Inches

M3912/27CK-5EU-JT2, M7012/27CK-5EU-JT2  
and for M10012/27CK-5EU-JT2



## NOTES

1. For additional installation and operational information, please refer to: Aromat Application Guidelines.
2. **Dimensional Tolerances:**
  - Case:  $\pm 1.0\text{mm} / \pm 0.039"$
  - Lead Wires:  $+50\text{mm} / +2"$   
 $-30\text{mm} / -1"$
  - Lead Length: Nominal 7": "J" Model
3. **Remote Wiring Guidelines:**
  - Each lamp's lead wires must be run in a separate conduit from the input power leads to achieve good EMI performance and maximum remote capabilities.
  - Individual lamp lead wires must be used for external fixture extensions using wire types SF-2 (Equivalent to SEW-2 or 3071) or SFF-2 (Equivalent to SEWF-2 or 3070) or alternately, if approved by Aromat, high voltage fixture wire with a 18 AWG conductor and a 1000VAC minimum voltage rating. Temperature rating is especially critical if the lamp lead extension wires are directly connected to lamp-holder terminals.
  - Maximum Remote Distances: 15 feet in a minimum  $\frac{1}{2}$ " internal diameter conduit, pipe or flexible conduit. For longer remote mounting distances, consult with Aromat.
  - Using Service Power cords (types SJ, SV, SO, etc.) or metal clad cable assemblies for lamp lead extension wire are not recommended as they are **NOT** compatible with the above characteristics, can cause starting problems and shall not be used unless Aromat gives written approval.