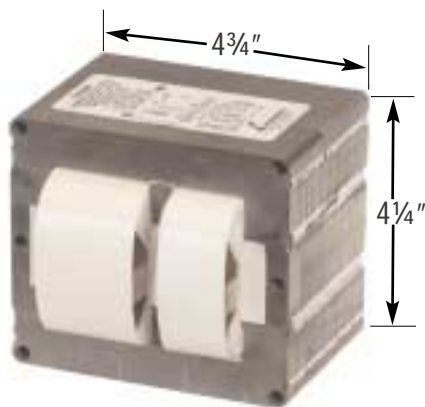


High Wattage, Compact Core HID Ballasts

for 1000W probe-start metal halide

and 750, 875 and 1000w pulse-start metal halide lamps



Advance's new 4 1/4" x 4 3/4" core reduces high-wattage ballast length by 1 1/4"



Compact 1000W Core fits in 400W fixtures

Product Profile

Advance Transformer, recognizing the HID fixture manufacturers' need for size-efficient products, is introducing a line of new compact ballasts for high wattage metal halide applications. Utilizing the industry-standard 4 1/4" x 4 3/4" core (4x4) normally used for 400 watt ballasts, these compact ballasts allow the fixture manufacturer the opportunity to use the smaller, 400 watt ballast housings in a place of the larger housings normally associated with these higher wattage lamps.

The first ballasts available are:

1000 watt probe-start metal halide, ANSI code M47/H36

1000 watt pulse-start metal halide, ANSI code M141

875 watt pulse-start metal halide, (Venture lamp)

750 watt pulse-start metal halide, ANSI code M149

These 4x4 ballasts are full-rated designs, equal or better in all aspects of performance to their 4 1/4" x 6" (4x6) counterparts. They comply with ANSI, UL and CSA standards.

As with the 4x6 core designs, the ballasts carry both UL Class H, 180°C and ADVANCE Class N, 200°C* ratings and temperature codes. Important to note is that the bench-top operating temperatures of the new ballasts are the same as their 4x6 counterparts. For 1000w metal halide, the UL Class H code is "D"; the Advance Class N code is "A". This is possible, because the compact core ballasts losses are only 70 watts vs. 80 watts for the larger ballasts.

The compact core ballasts are available for all US and Canadian voltages in two multi-tap formats:

120/208/240/277 quadri-volt*

347/480 dual-volt with 120V-output tap.

Finally, because the ballasts are more compact there is a nominal 2-3 lb. weight savings. For 1000 watt metal halide the new, 4x4 compact core weighs 19 lbs. vs. 21 lbs. for the 4x6 core.

* See form no. HI-4030-R01, "ADVANCE Class N 200°C Insulation"

Design Highlights

○ ANSI compliant, full-light output

○ CWA circuits

Compared to 4x6 core designs:

○ UL bench-top temperature codes same

▫ UL Class H, temp code D

▫ ADVANCE Class N, temp code A

○ Losses typically 10 watts less

○ Capacitor for 1000w same: 24mfd-480v

○ Lower lamp current crest factor: 1.5 vs 1.6

○ Power factor >95% vs 90%

○ 2-3 lbs. lighter (~19 lbs. vs. 21-22 lbs.)

○ Available in two multi-tap configurations:

▫ 120/208/240/277 quadri-volt

▫ 347/480/120-out dual-volt with 120v output tap for quartz emergency lamp (250w maximum)

Applications

○ Highbay industrial lighting fixtures

○ Outdoor flood and area lighting

▫ Airport tarmacs

▫ Shopping center parking lots

○ Roadway highmast lighting

○ Indoor sports arenas



Input Volts	Catalog [†] Number	Circuit Type	Watts Input	Max [*] Input Current	Nom Open Circuit Voltage	Fuse Rating (Amps)	Wiring Dia.	Dimensions			Non-PCB Capacitor				Total Weight (lbs)	Ignitor ††		UL Bench-Top-Rise Code 1029	
											Mfd.	Min Volt	Catalog No.	Dry / Oil		Part Number	Max Dist To Lamp (ft.)	UL Class H (180°C)	ADVANCE Class N (200°C)
								Fig	A	B									
750 Watt Lamp, ANSI Code M149 (Pulse-Start)																			
120/208/240/277	71A6490	Super CWA	820	7.0/4.0/3.5/3.0	340	20/10/10/10	M	2	3.0	4.9	28	400	7C280S40	D	17.5	LI 573-H5	10	D/D/D/D	A/A/A/A
347/480/120T	71A64F0-T	Super CWA	820	2.5/1.7	340	7/5	M	2	3.0	4.9	28	400	7C280S40	D	17.5	LI 573-H5	10	E/E	A/A
875 Watt Lamp, ANSI Code unassigned (Venture Lighting pulse-start lamp)																			
120/208/240/277	71A6498	Super CWA	940	7.8/4.3/3.9/3.4	415	20/10/10/8	M	2	3.0	5.0	21	480	MD2100-030	O	17.5	LI 572-H5	5	E/E/E/E	A/A/A/A
347/480/120T	71A64F8-T	Super CWA	945	2.8/2.0	415	7/5	M	2	3.0	5.0	21	480	MD2100-030	O	17.5	LI 572-H5	5	E/E	A/A
1000 Watt Lamp, ANSI Code M141 (Pulse-Start)																			
120/208/240/277	71A6591	Super CWA	1070	9.0/5.2/4.5/3.9	415	20/15/10/10	M	2	3.4	5.3	24	480	MD2409-000	O	19	LI 572-H5	5	D/D/D/D	A/A/A/A
347/480/120T	71A65F1-T	Super CWA	1070	3.1/2.2	415	8/6	M	2	3.4	5.3	24	480	MD2409-000	O	19	LI 572-H5	5	D/D	A/A
1000 Watt Lamp, ANSI Code M47 or H36 (Probe-Start)																			
120/208/240/277	71A6590	CWA	1070	9.0/5.2/4.5/3.9	415	20/15/10/10	A	2	3.4	5.3	24	480	MD2409-100	O	19	N/A	—	D/D/D/D	A/A/A/A
347/480/120T	71A65F0-T	CWA	1070	3.1/2.2	415	8/6	A	2	3.4	5.3	24	480	MD2409-100	O	19	N/A	—	D/D	A/A

† Ordering information:

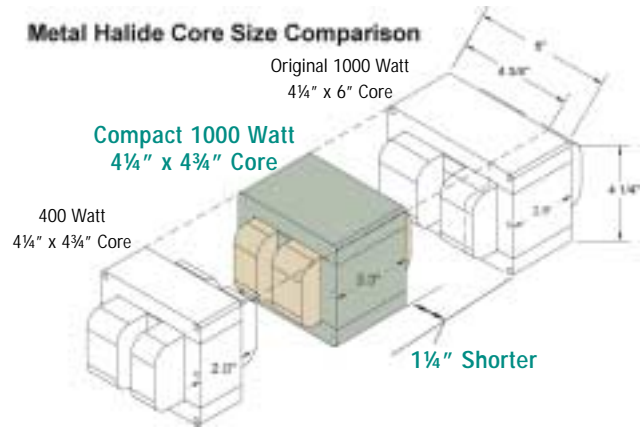
Original equipment ballasts - add proper suffix to catalog number:

- 500D includes core & coil with dry-film capacitor
- 510D includes core & coil with welded bracket and dry-film capacitor
- 500 includes core & coil with oil-filled capacitor
- 510 includes core & coil with welded bracket and oil-filled capacitor
- 600 core & coil only (no capacitor)
- 610 core & coil with welded bracket (no capacitor)

• For CWA and SCWA circuits, figure is operating current.

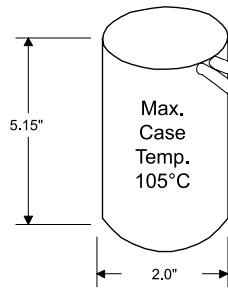
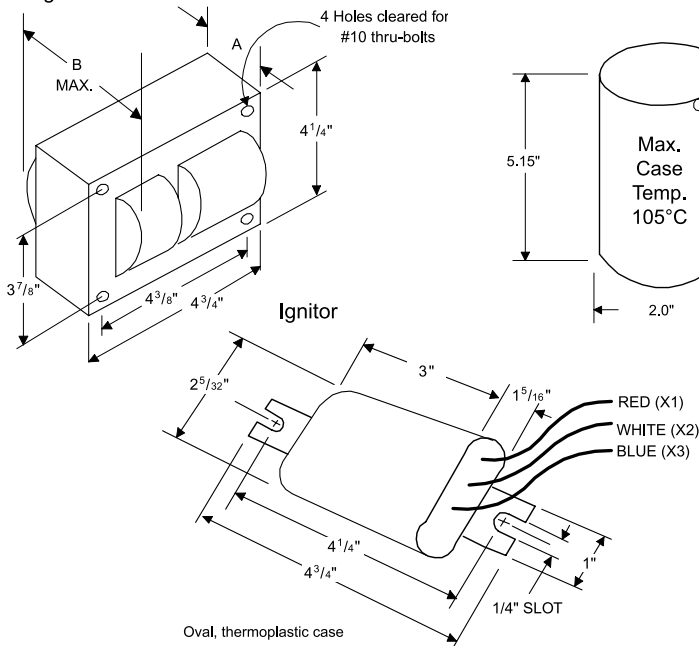
†† Each ballast requiring an ignitor is furnished standard with the **Short Range** ignitor model shown for use within fixtures. If a **Long Range** ignitor is required for remote mounting, consult factory.

Metal Halide Core Size Comparison

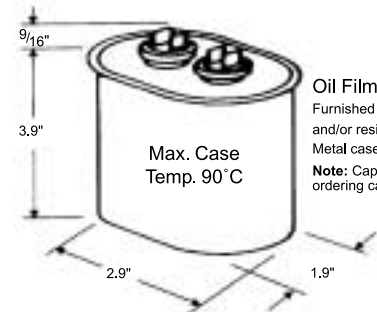


Specifications

Fig. 2 Core & Coil



Dry Film Capacitor
Thermoplastic Case
Dry-Film capacitors contain no oil, are furnished with 9" leads, and include integral resistor where required.



Oil Film Capacitor
Furnished with appropriate leads and/or resistors, where required. Metal case must be grounded. Note: Capacitor boots available ordering catalog number CB-100

Wiring Diagrams

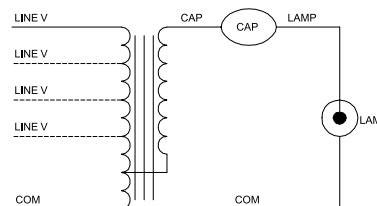


Fig. A

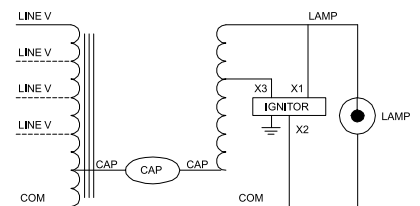


Fig. M



Specifications subject to change without notice.
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