



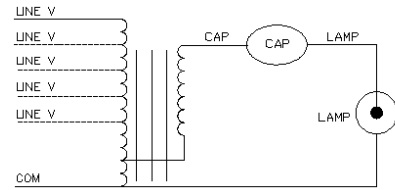
HOWARD INDUSTRIES, INC.  
Magnetic Ballast Products Division

Model: M0400-81C-211 □  
5 Tap Standard Metal Halide

400 Watts M-59  
60 Hz CWA

<b>Input Volts</b>		120	208	240	277	480
<b>Circuit Type</b>	CWA					
<b>Power Factor</b>	0.96					
<b>Regulation</b>						
Line Volts	± 10%					
Lamp Watts	-9% +7%					
<b>Line Current (Amps)</b>						
Operating		4.1	2.3	2.0	1.7	1.0
Open Circuit		2.73	1.40	1.35	1.00	0.68
Starting		3.41	1.75	1.73	1.25	0.86
Recommended Fuse		12	7	6	5	3
<b>UL Temperature Ratings</b>						
Insulation Class	H (180°C)					
Coil Temperature Code		B	B	C	C	E
Benchtop Coil Rise Primary		78	79	84	80	85
Benchtop Coil Rise Secondary		-	-	-	-	93
<b>Input Watts</b>		456	458	460	458	462
<b>NOM Open Circuit Volts</b>	305					
<b>Current Crest Factor</b>	1.64					
<b>Input Voltage at Lamp Dropout</b>		60	104	120	138.5	240
<b>Min Ambient Starting Temp.</b>	-20°F -30°C					
<b>High Potential Test (Volts)</b>						
1 Minute	2000					
1 Second	2400					
<b>Open Circuit Voltage Test (Volts)</b>						
Open Circuit Voltage	270 - 335					
Input Current	min	1.90	0.95	0.95	0.70	0.45
	max	3.55	1.85	1.80	1.35	0.90
<b>Short Circuit Current Test (Amps)</b>						
Secondary Current	3.5 - 4.3					
Input Current	min	2.20	1.25	1.10	0.95	0.55
	max	4.20	2.40	2.10	1.80	1.05
<b>Core and Coil Specifications</b>						
Dimension A"	2.30					
Dimension B"	4.23					
Weight (lbs.)	12					
Lead Lengths (in)	12					
<b>Capacitor Specifications</b>						
Microfarads	24					
Volts (min.)	400					
	<b>Oval OIL Filled</b>	<b>DRY Film</b>				
Case Size (in.)	1.75	1.8				
Height (in.)	3.87	5.2				
Temp Rating °C	90	100				
<b>Starter Specifications</b>						
Model Number	Not Used					
	BTL					
Temp Rating °C						

Wiring Diagram Number  
1091-912000-007



Outside Dimensions Drawing  
1080-046459-000  
ISO-View of Core Coil  
1091-912002-002  
1091-912002-009  
Oil Capacitor Can Drawing  
1011-007500-003  
Dry Capacitor Can Drawing  
1012-007500-001  
Starter Case Drawing  
None



Rev. Date: 8/24/01

Test Ref.: 1068

Specifications subject to change without notice.

Howard Industries, Inc. Ballast Products Division P.O. Box 1590 Laurel, MS 39441  
Phone: 1-800-956-3456 Fax: (601) 422-1652 www.howard-ballast.com