The Phantom 50 Series DE Lighting System delivers unsurpassed performance and reliability. Phantom is trusted by professional growers worldwide.

The medium spread of the enclosed reflector is designed to uniformly deliver higher average light levels to the plant canopy. Proprietary ridge vent design maintains ideal lamp operational temperature which maximizes lamp output and lifetime.

Phantom 50 Series 1000W System Features – Enclosed Reflector

Lamp Compatibility	1000W HPS or MH DE* lamps
Reflector	Enclosed DE
Reflector Material	European 99.85% pure, 95% reflectivity
Ballast	Phantom "Smart" 1000 W, 50 series
Ballast and Armature Material	Aluminum
Socket	K12 x 30 lampholders
Fixture Weight	12.1 lbs

Ballast Features – All Ballasts

- Microprocessor Control
- LED Status Indicator
- Open Circuit Protection
- Open Circuit Indicator
- Short Circuit Protection
- Short Circuit Indicator
- Overtemperature Protection
- Overtemperature Indicator
- End-of-Lamp-Life Sensor
- End-of-Lamp-Life Indicator
- Over/Undervoltage Protection
- Over/Undervoltage Indicator
- Patented Ignition Control
- USB Port to Integrate with Climate Controls
- Auto-restrike Protection
- Internal EMI Suppression
- Gore-Tex® Vent Plug

Ballast Electrical Specifications

All Ballasts

Output Power Settings	600W-750W-825W-1000W-1150W
Frequency	50/60Hz
Igniter Voltage	3–5 kV
THD	< 8%
CF	1.414–1.6
ta	40°C/104°F
tc	70°C/158°F

Phantom 50 Series Safety Certifications

	PHDESK11	PHDESK12	PHDESK13	PHDESK14	PHDESK15
CSA/UL	Yes	Yes	Yes	Yes	Yes
FCC Commercial	Yes	Yes	Yes	Yes	Yes
FCC Residential	Yes	Yes	No	No	No
IC Certification (Canada)	No	No	No	Yes	No

Phantom 50 Series Operation Notes

*Metal Halide Double Ended (MH DE) lamps must be open rated and run at 100% power only. For use with a generator, line conditioning equipment to control input voltage must be used in order to avoid damage to the ballasts. Contact us for more information.

Phantom 50 Series Optional Accessories

PHDETH1 Truss Hangers – Designed to easily mount your Phantom fixture from Unistrut® or greenhouse C-channel strut for secure, level suspension. Additional hanging options available; ask your representative.

PHDETH1 (Sold separately)

Lighting Fixture Code	PHDESK11	PHDESK12	PHDESK13	PHDESK14	PHDESK15
Ballast Model	PHB5015	PHB5010	PHB5020	PHB5025	PHB5030
Lamp Power	1000W	1000W	1000W	1000W	1000W
Main Voltage	208–240V	120–240V	277V	347V	480V
Operating Voltage Range	185–265V	110–265V	255–300V	310–380V	450–510V
Max Input Power	1236W	1246W	1236W	1236W	1215W
8' Power Cord	240V 16/3 IEC	120V 16/3 IEC	277V 16/3 AWG	347V 16/3 AWG	600V 16/3 AWG
NEMA Plug	6-15	5-15	L7-15P Twist Lock	L24-20P Twist Lock	L8-20P Twist Lock

Ballast Input Amperage Reference

Voltage	208V	240V	120V	240V	277V	347V	480V
Imax	6.0A	5.3A	10.5A	5.3A	4.6A	3.6A	2.6A
1150W	5.8A	5.1A	10.2A	5.1A	4.4A	3.4A	2.5A
1000W	5.1A	4.4A	8.9A	4.5A	3.8A	3.0A	2.2A
825W	4.2A	3.7A	7.4A	3.7A	3.2A	2.5A	1.8A
750W	3.9A	3.3A	6.7A	3.3A	2.8A	2.2A	1.6A
600W	3.1A	2.7A	5.4A	2.7A	2.3A	1.8A	1.3A

Warehouse-Lighting.com
2750 South 163rd St
New Berlin, WI 53151

Warehouse-Lighting.com
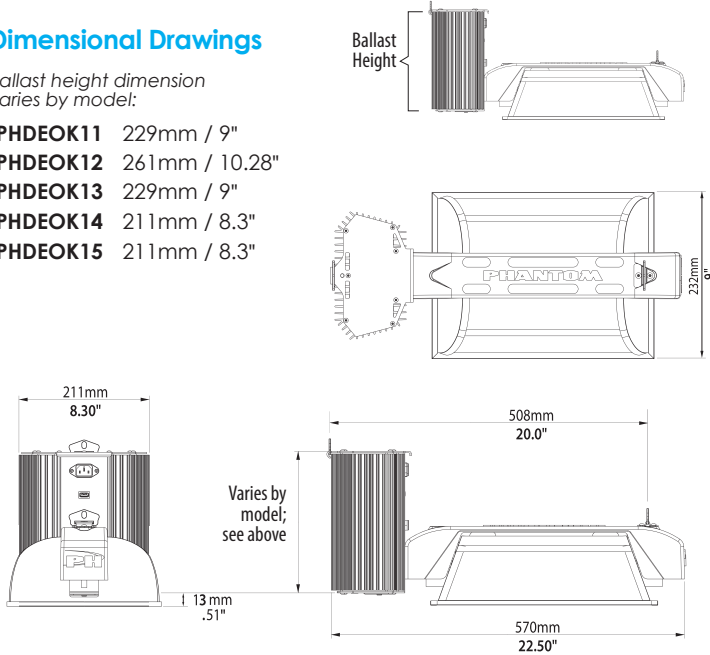Phone: 888-454-4480
info@warehouse-lighting.com

Phantom 50 Series 1000W Lighting System
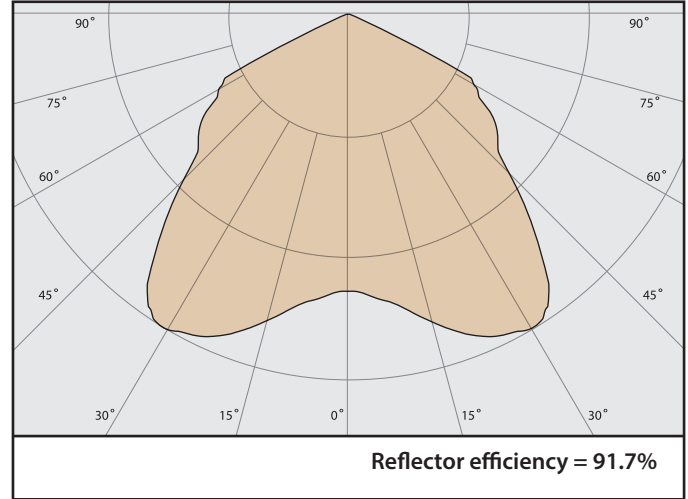
Enclosed Reflector

PHDESK – ALL MODELS

Dimensional Drawings

Ballast height dimension varies by model:

PHDEOK11 229mm / 9"
PHDEOK12 261mm / 10.28"
PHDEOK13 229mm / 9"
PHDEOK14 211mm / 8.3"
PHDEOK15 211mm / 8.3"

Ballast Height

211mm / 8.30"

232mm / 9"

211mm 8.30"

Varies by model; see above

13 mm .51"

508mm 20.0"

570mm 22.50"

Polar Diagram

Reflector efficiency = 91.7%

⚠ **WARNING: POSSIBLE RISK OF INJURY TO EYES AND SKIN.**

Hazardous optical UV, HEV, and IR radiation may be emitted from the light source. Always wear personal protective equipment ensuring complete shielding of skin and eyes. Avoid prolonged exposure and looking directly at light source.

⚠ **WARNING: FAILURE TO FOLLOW GUIDELINES COULD RESULT IN ELECTRICAL SHOCK.**

Do not touch, move, spray, or clean your light fixture when it is plugged in. Allow it to cool down before handling. Recommended mounting clearance for your fixture is 8"-12" on all sides. Do not mount directly to any surface. Make sure to disconnect the power when changing the lamp. This tech sheet is not in any way a replacement for a technical installation manual. Consult technical installation manual prior to installation.

Wiring Diagrams

Each ballast **MUST** be wired to the main's neutral line back to the circuit. **DO NOT** "daisy-chain" a neutral line with any other ballast.
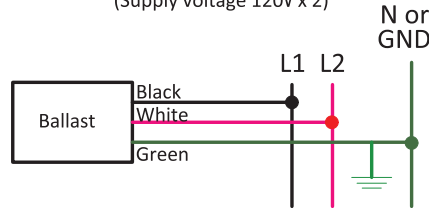
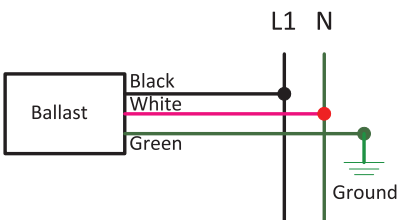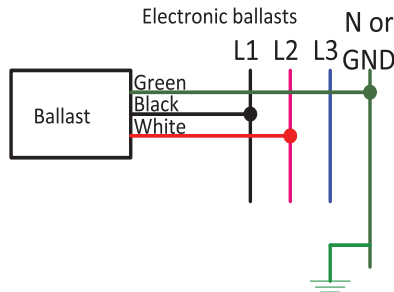### 208V
(Supply voltage 208V)

Ballast — Green, Black, White — L1 L2 L3 GND

240V
(Supply voltage 120V x 2)

Ballast — Black, White, Green — L1 L2 — N or GND

120/208V
(Supply voltage 120V/208V)

Ballast — Black, White, Green — L1 N — Ground

480V
(Supply voltage 480V)
Electronic ballasts

Ballast — Green, Black, White — L1 L2 L3 — N or GND

277V / 347V
(Supply voltage 480V/600V)

Ballast — Green, Black, White — L1 L2 L3 N
Ballast — Green, Black, White
Ballast — Green, Black, White
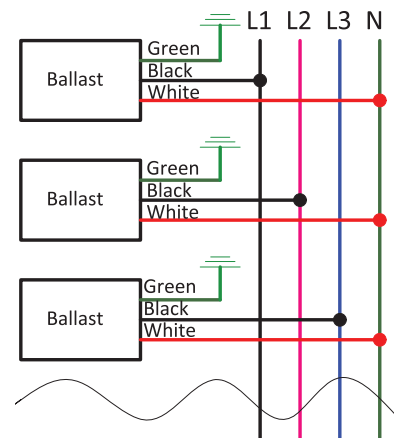
REPEAT FOR ENTIRE CIRCUIT
BALANCING OUT THE NEUTRAL
FOR EACH PHASE

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