



Glo-Ray® High Watt Infra-Black Strip Heaters

Models: GRAIH-18, -24, -30, -36, -42, -48, -54, -60, -66, -72
GRAIHL-18, -24, -30, -36, -42, -48, -54, -60, -66, -72

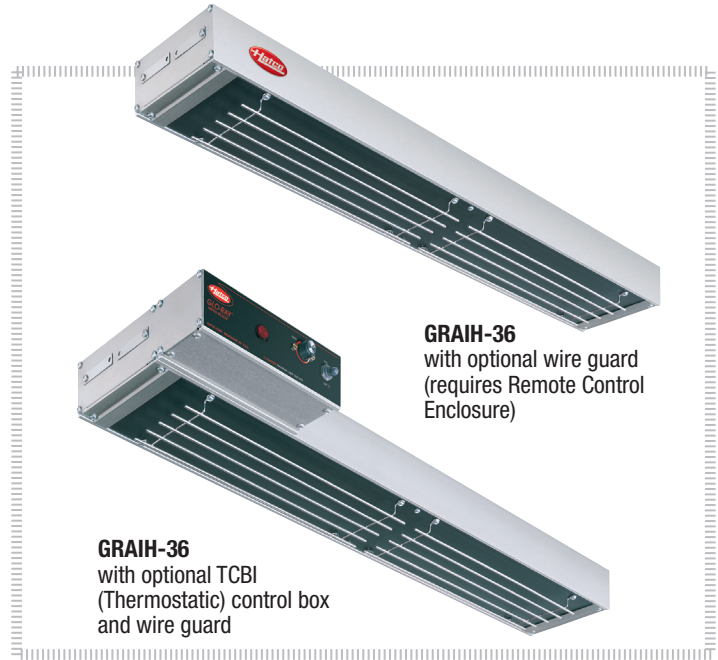
For foodwarming at a close range to food product, the Glo-Ray® Infra-Black® heat technology is ideal, emitting a solid panel of uniform heat. Sturdy continuous single extruded aluminum housings assure quality and durability. Models are available in a variety of widths, mounting arrangements and colors to fit your operation.

Standard features

- Provides ideal amount of heat for limited space operations, mounted 4" to 10" (102 to 254 mm) above target surface
- Thermostatically controlled to regulate heat and provide consistent temperature.
- Infra-Black emitter provides even, precise heat distribution, eliminating hot spots for close applications
- Requires a remote control box with toggle or infinite switches or an attached thermostatic control box.
- Sturdy aluminum housings that do not sag, from 18" to 72" (457 to 1829 mm) in 6" (152 mm) increments
- Heavy-duty insulation keeps the exterior housing cool

*Non-standard colors are non-returnable

Project _____
 Item # _____
 Quantity _____



Options (available at time of purchase only)

Housing color – 6" (152 mm) Housing for GRAIH models, 9" (229 mm) Housing for GRAIHL models

Designer Color or Gloss Finish* (clear anodized standard)

- | | | | |
|--------------------------------------|---------------------------------------|---|--|
| <input type="checkbox"/> Warm Red | <input type="checkbox"/> Black | <input type="checkbox"/> Gray Granite | <input type="checkbox"/> White Granite |
| <input type="checkbox"/> Navy Blue | <input type="checkbox"/> Hunter Green | <input type="checkbox"/> Antique Copper | <input type="checkbox"/> Gleaming Gold |
| <input type="checkbox"/> Glossy Gray | <input type="checkbox"/> Bold Black | <input type="checkbox"/> Brilliant Blue | <input type="checkbox"/> Radiant Red |

Remote Box – in Designer Color or Gloss Finish* (Clear Anodized standard)

- | | | | |
|--------------------------------------|---------------------------------------|---|--|
| <input type="checkbox"/> Warm Red | <input type="checkbox"/> Black | <input type="checkbox"/> Gray Granite | <input type="checkbox"/> White Granite |
| <input type="checkbox"/> Navy Blue | <input type="checkbox"/> Hunter Green | <input type="checkbox"/> Antique Copper | <input type="checkbox"/> Gleaming Gold |
| <input type="checkbox"/> Glossy Gray | <input type="checkbox"/> Bold Black | <input type="checkbox"/> Brilliant Blue | <input type="checkbox"/> Radiant Red |

Element Wire Guard

Thermostatic Control Box with Indicator Lights (TCBI)

Non-Adjustable Tubular Stands (NTL) – choose clearance – matches housing color†

- | | | |
|--------------------------------------|---------------------------------------|--|
| <input type="checkbox"/> 4" (102 mm) | <input type="checkbox"/> 6" (152 mm) | <input type="checkbox"/> 7.5" (191 mm) |
| <input type="checkbox"/> 8" (203 mm) | <input type="checkbox"/> 10" (254 mm) | |

Leads – extend beyond standard 3' (914 mm) – 220V, 240V Export units come with 6" (152 mm) pigtail leads – must specify lead length –

- | | |
|---|---|
| <input type="checkbox"/> 1'-5" (305-1525 mm) | <input type="checkbox"/> 6'-10" (1829-3048 mm) |
| <input type="checkbox"/> 11'-15" (3352-4572 mm) | <input type="checkbox"/> 16'-20" (4877-6096 mm) |

Accessories

Adjustable Angle Brackets for mounting Glo-Ray under a shelf –

- Space between Glo-Ray and overshelf:
- | | |
|---|--|
| <input type="checkbox"/> 1"-2" (25-51 mm) | <input type="checkbox"/> 1"-6" (25-152 mm) |
|---|--|

Chain Suspension

Chef LED adjustable bulb, GRAIHL models only, pass-through usage only
GRAIHL must be 11" (280 mm) or higher from surface

- | | | |
|------|--|---|
| 120V | <input type="checkbox"/> 2700K Warm incandescent | <input type="checkbox"/> 3000K Warm halogen |
| | <input type="checkbox"/> 4000K Cool fluorescent | |
| 230V | <input type="checkbox"/> 2700K Warm incandescent | <input type="checkbox"/> 3000K Warm halogen |
| | <input type="checkbox"/> 4000K Cool fluorescent | |

For operation, location and safety information, please refer to the Installation & Operating Manual.



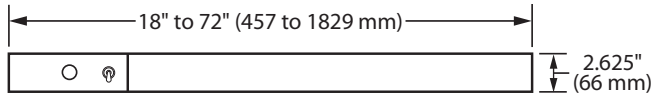


Glo-Ray® High Watt Infra-Black Strip Heaters

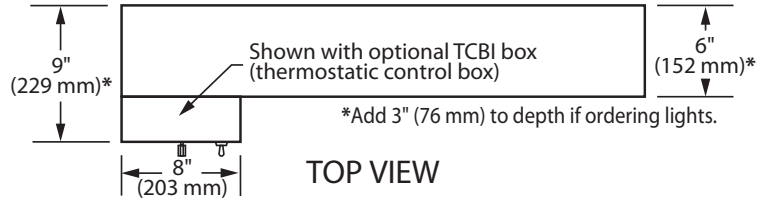
Models: GRAIH-18, -24, -30, -36, -42, -48, -54, -60, -66, -72

GRAIHL-18, -24, -30, -36, -42, -48, -54, -60, -66, -72

GRAIH, GRAIHL



FRONT VIEW



TOP VIEW

SPECIFICATIONS

Glo-Ray® High Watt Infra-Black Strip Heater

Dimensions: GRAIH: 18"-72" x 6" x 2.5" (457-1829 W x 152 D x 64 H mm)

GRAIHL: 18"-72" x 9" x 2.5" (457-1829 W x 229 D x 64 H mm)

The shaded areas contain electrical information for International models

GRAIH				GRAIHL					Both Models	
Model	Volts	Watts	Amps	Ship Weight*	Model	Volts	Watts	Amps	Ship Weight*	Width
GRAIH-18	120	350	2.9	10 lbs. (5 kg.)	GRAIHL-18	120	470	3.9	12 lbs. (6 kg.)	18" (457 mm)
	208		1.7			2.7				
	240		1.5			2.5				
	220	350-383	1.6			220-230 (CE) 450-492	2.0-2.1			
	240		1.5				2.0			
	220-230 (CE)		1.6-1.7				2.0-2.1			
	230-240 (CE)		321-350				1.4-1.5	1.9-2.0		
GRAIH-24	120	500	4.2	11 lbs. (5 kg.)	GRAIHL-24	120	620	5.2	14 lbs. (7 kg.)	24" (610 mm)
	208		2.4			3.4				
	240		2.1			3.1				
	220	500-546	2.3			220-230 (CE) 600-656	2.7-2.9			
	240		2.1				2.6			
	220-230 (CE)		500-546				2.3-2.4	2.7-2.9		
	230-240 (CE)		459-500				2.0-2.1	2.5-2.6		
GRAIH-30	120	660	5.5	12 lbs. (6 kg.)	GRAIHL-30	120	780	6.5	16 lbs. (8 kg.)	30" (762 mm)
	208		3.2			4.2				
	240		2.8			3.8				
	220	660-721	3.0			220-230 (CE) 760-831	3.5-3.6			
	240		2.8				3.3			
	220-230 (CE)		660-721				3.0-3.1	3.5-3.6		
	230-240 (CE)		606-660				2.6-2.8	3.1-3.3		
GRAIH-36	120	800	6.7	13 lbs. (6 kg.)	GRAIHL-36	120	980	8.2	18 lbs. (9 kg.)	36" (914 mm)
	208		3.8			5.3				
	240		3.3			4.8				
	220	800-874	3.6			220-230 (CE) 950-1038	4.3-4.5			
	240		3.3				4.1			
	220-230 (CE)		800-874				3.6-3.8	4.3-4.5		
	230-240 (CE)		734-800				3.2-3.3	3.9-4.1		
GRAIH-42	120	950	7.9	16 lbs. (8 kg.)	GRAIHL-42	120	1130	9.4	20 lbs. (10 kg.)	42" (1067 mm)
	208		4.6			6.1				
	240		4.0			5.5				
	220	950-1038	4.3			220-230 (CE) 1100-1202	5.0-5.2			
	240		4.0				4.7			
	220-230 (CE)		950-1038				4.3-4.5	5.0-5.2		
	230-240 (CE)		872-950				3.8-4.0	4.5-4.7		
GRAIH-48	120	1100	9.2	16 lbs. (8 kg.)	GRAIHL-48	120	1340	11.2	22 lbs. (10 kg.)	48" (1219 mm)
	208		5.3			7.3				
	240		4.6			6.6				
	220	1100-1202	5.0			220-230 (CE) 1300-1421	5.9-6.2			
	240		4.6				5.6			
	220-230 (CE)		1100-1202				5.0-5.2	5.9-6.2		
	230-240 (CE)		1010-1100				4.4-4.6	5.4-5.6		
GRAIH-54	120	1250	10.4	18 lbs. (9 kg.)	GRAIHL-54	120	1490	12.4	24 lbs. (11 kg.)	54" (1372 mm)
	208		6.0			8.0				
	240		5.2			7.2				
	220	1250-1366	5.7			220-230 (CE) 1450-1585	6.6-6.9			
	240		5.2				6.2			
	220-230 (CE)		1250-1366				5.7-5.9	6.6-6.9		
	230-240 (CE)		1148-1250				5.0-5.2	5.9-6.2		

* Shipping weight does not include remote control enclosure. Add 2-8 lbs. (1-3 kg) to shipping weight depending on size of remote control enclosure



Glo-Ray® High Watt Infra-Black Strip Heaters

Models: GRAIH-18, -24, -30, -36, -42, -48, -54, -60, -66, -72

GRAIHL-18, -24, -30, -36, -42, -48, -54, -60, -66, -72

SPECIFICATIONS

Glo-Ray® High Watt Infra-Black Strip Heater

Dimensions: GRAIH: 18"-72" x 6" x 2.5" (457-1829 W x 152 D x 64 H mm)
 GRAIHL: 18"-72" x 9" x 2.5" (457-1829 W x 229 D x 64 H mm)

The shaded areas contain electrical information for International models

GRAIH					GRAIHL					Both Models					
Model	Volts	Watts	Amps	Ship Weight*	Model	Volts	Watts	Amps	Ship Weight*	Width					
GRAIH-60	120	1400	11.7	19 lbs. (9 kg.)	GRAIHL-60	120	1700	14.2	26 lbs. (12 kg.)	60" (1524 mm)					
	208		6.7			9.2									
	240		5.8			8.3									
	220	1400	6.4			220-230 (CE)	220	1650			7.5	220-230 (CE)	1650-1803	7.5-7.8	
	240		5.8				240				1700				7.1
	230-240 (CE)		1400-1530				6.4-6.7								230-240 (CE)
	230-240 (CE)	1286-1400	5.6-5.8												
GRAIH-66	120	1560	13.0	23 lbs. (11 kg.)	GRAIHL-66	120	1860	15.5	28 lbs. (13 kg.)	66" (1676 mm)					
	208		7.5			10.0									
	240		6.5			9.0									
	220	1560	7.1			220-230 (CE)	220	1810			8.2	220-230 (CE)	1810-1978	8.2-8.6	
	240		6.5				240				1860				7.8
	230-240 (CE)		1560-1705				7.1-7.4								230-240 (CE)
	230-240 (CE)	1433-1560	6.2-6.5												
GRAIH-72	120	1725	14.4	25 lbs. (12 kg.)	GRAIHL-72	120	2085	17.4	30 lbs. (14 kg.)	72" (1829 mm)					
	208		8.3			11.3									
	240		7.2			10.2									
	220	1725	7.8			220-230	220	2025			9.2	220-230	2025-2213	9.2-9.6	
	240		7.2				240				2085				8.7
	230-240		1725-1885				7.8-8.2								230-240
	230-240	1584-1725	6.9-7.2												

- * Shipping weight does not include remote control enclosure. Add 2-8 lbs. (1-3 kg) to shipping weight depending on size of remote control enclosure
- Infinite Control not available
- Available with remote control only

NOTE: GRAIHL-xx models that have multiple voltages listed, such as 120/208 or 120/240, have multiple internal circuits. For example a 120/208 volt unit utilizes 120 volts for light circuit and 208 volts for the heat circuit(s).
 NOTE: Light-equipped strip heaters that require a circuit breaker 20 amps or larger must be installed with a remote control enclosure containing a fuse rated at 20 amps or less for the light circuit. RMB Series remote control enclosures require one remote control enclosure per strip heater.

CONDUIT

3" (914 mm) conduit standard on 120V, 208V, 240V, 120/208V, 120/240V, Domestic models only – server's right (standard).

TCBI Control Enclosure Dimensions

(not including switches):
 8" x 3" x 2.5" (203 W x 76 D x 64 H mm)

CONTROL ENCLOSURE LOCATION:

Chef's left side (Unless otherwise specified).

REMOTE CONTROL ENCLOSURES

Must order one RMB control box per Strip Heater - If RMB2 is used, multiple warmers can be controlled from one box. The total amp draw of all connected strip heaters cannot exceed the rating of the remote control enclosure. For more information, refer to the *Installation and Operating Manual on the Hatco website.*

Model	Width	Toggle Switches
RMB-3	5.5" (140 mm)	2 maximum
RMB-7	9" (229 mm)	4 maximum
RMB-14	14" (356 mm)	6 maximum
RMB-16	16" (406 mm)	3 maximum
RMB-20	20" (508 mm)	4 maximum
RMB2-1R	11" (279 mm)	1 toggle, 1 infinite, 1 relay, 1 indicator light
RMB2-2R	14" (356 mm)	1 toggle, 1 infinite, 2 relays, 1 indicator light

MINIMUM CLEARANCE REQUIREMENTS

Do not install unit above or around combustible surfaces. Must be a pass-through application Not allowed with back wall installation unless controls are mounted in a remote control enclosure. (For diagrams, refer to the *Installation and Operating Manual on the Hatco website.*)

GRAIH, GRAIHL WITH TCBI:

- Unit to surface below: 4" (102 mm)
- Unit to back wall: Not allowed, must be pass-through application
- Below oversheaf: 1" (25 mm) clearance

GRAIH, GRAIHL WITH RMB:

- Unit to surface below: 4" (102 mm)
- Unit to back wall: 3" (76 mm)
- Below oversheaf: 0" (0 mm) clearance required

MAXIMUM OVERSHELF CLEARANCE REQUIREMENTS

Do not install unit above or around combustible surfaces. Units should be mounted at a maximum distance of 10" (254 mm) from the front of an oversheaf.

RECOMMENDED MOUNTING PARAMETERS

Recommended Element Height: 4" - 10" (102-254 mm)
 Recommended Target Width: 9.5" (241 mm)

PRODUCT SPECS - High Watt Infra-Black Strip Heaters

The High Watt Infra-Black Strip Heater shall be Glo-Ray®, manufactured by the Hatco Corporation, Milwaukee, WI 53234 U.S.A.

The foodwarmer shall be an Infra-Black® Model ... , rated at ... watts, ... volts, single phase and be ... inches (millimeters) in overall width.

The Glo-Ray shall consist of an aluminum housing and require either a thermostatic control box or remote control enclosure.

The infrared heating element shall be tubular metal sheathed. The foodwarmer shall be factory assembled ready for electrical installation. Accessories shall include adjustable angle brackets, suspension chain and Chef LED Bulb.

Warranty consists of 24/7 parts and service assistance (U.S. and Canada only).