

Saves Up To **75%**
In Energy Costs



APPLICATIONS

- Loading Docks
- Manufacturing Plants
- Auto Dealerships
- Airplane Hangars
- Firehouses
- Car Washes
- Vestibules
- Golf Driving Ranges
- Auto Body Shops
- Gymnasiums
- Tennis Courts
- Ice & Roller Rinks
- Warehouses
- Zoos

Synergy®

HIGH INTENSITY INFRARED HEATERS Single Stage and 2-Stage Models



FEATURES

- Instant heat on demand. Reaches maximum operating temperature in less than 30 seconds
- 24 volt input available for lower installation costs
- No direct venting required: Less roof penetrations
- Operates on Natural Gas or LP/Propane Gas
- Direct spark ignition with 100% safety shut-off of all burners
- Factory wired, piped and tested
- Highly polished Mirror Brite aluminum reflectors for maximum efficiency
- Corrosion-free aluminized steel main frame
- CSA International Design Certified to ANSI/CGA Standards
- Limited one-year warranty

New! Synergy 2-Stage Heaters

- 2-Stage operation based on ambient temperature variations. Eliminate excess heat when not needed. Capable of fast recovery when temperatures fall.
- "Optimal Combustion" in both operating stages - Air & Gas Ratios precisely matched for efficient, fuel saving operation
- "Event Controlled Operation" - Can be activated by thermostat (temperature) but also by other sensors for sound, motion and light,
- Digital 2-stage, 24 volt thermostat results in fewer on-off cycles for improved comfort and longer heater life



**Combustion
Research
Corporation**

SYNERGY HIGH INTENSITY INFRARED HEATERS Specifications

Single Stage and 2-Stage Models



30,000 – 60,000 BTUH

70,000 – 100,000 BTUH

110,000 – 150,000 BTUH

160,000 – 200,000 BTUH

Model	MBTUH NAT	MBTUH LP
OSY030.	30	
OSY035.	35	
OSY040.	40	
OSY045.	45	
OSY050.	50	50
OSY055.	55	
OSY060.	60	

Model	MBTUH NAT	MBTUH LP
OSY070.	70	70
OSY075.	75	75
OSY080.	80	80
OSY085.	85	85
OSY090.	90	90
2-STAGE OSY090HL.		90/45
OSY095.	95	
OSY100.	100	
2-STAGE OSY100HL.	100/50	

Model	MBTUH NAT	MBTUH LP
OSY110.	110	
OSY120.	120	120
2-STAGE OSY120HL.		120/80
OSY125.	125	
OSY130.	130	
OSY135.	135	
OSY150.	150	
2-STAGE OSY150HL.	150/100	

Model	MBTUH NAT	MBTUH LP
OSY160.	160	160
2-STAGE OSY160HL.		160/80
OSY175.	175	
OSY200.	200	
2-STAGE OSY200HL.	200/100	

Note: Width or Length of K-30 through K-60 models can be parallel to floor.

Clearances to Combustibles:

Side of Heater	30"
Back of Heater	30"
Top of Heater:	
Mounted 0° - 29°	60"
Mounted 30° only	48"
w/Heat Shield 0° - 30°	34"
Below Heater:	
Standard Reflector	80"
Parabolic Reflector	110"

Overall Dimensions:

Length	16 3/4"
Width (w/controls)	28 5/8"
Depth	8 3/4"
Radiating Surface	173 sq."
Shipping Weight	30 lbs.

Clearances to Combustibles:

Side of Heater	36"
Back of Heater	30"
Top of Heater:	
Mounted 0° - 29°	62"
Mounted 30° only	50"
w/Heat Shield 0° - 30°	38"
Below Heater:	
Standard Reflector	105"
Parabolic Reflector	135"

Overall Dimensions:

Length	25 1/4"
Width (w/controls)	28 5/8"
Depth	8 3/4"
Radiating Surface	346 sq."
Shipping Weight	36 lbs.
2-STAGE	41 lbs.

Clearances to Combustibles:

Side of Heater	46"
Back of Heater	33"
Top of Heater:	
Mounted 0° - 29°	64"
Mounted 30° only	58"
w/Heat Shield 0° - 30°	N.A.
Below Heater:	
Standard Reflector	125"
Parabolic Reflector	165"

Overall Dimensions:

Length	33 7/8"
Width (w/controls)	28 5/8"
Depth	8 3/4"
Radiating Surface	519 sq."
Shipping Weight	49 lbs.
2-STAGE	54 lbs.

Clearances to Combustibles:

Side of Heater	48"
Back of Heater	33"
Top of Heater:	
Mounted 0° - 29°	68"
Mounted 30° only	68"
w/Heat Shield 0° - 30°	N.A.
Below Heater:	
Standard Reflector	140"
Parabolic Reflector	180"

Overall Dimensions:

Length	42 1/2"
Width (w/controls)	28 5/8"
Depth	8 3/4"
Radiating Surface	692 sq."
Shipping Weight	62 lbs.
2-STAGE	67 lbs.

Control Options

Control Suffix	Gas	Ignition	Shut-off	Voltage *	Max. Power Consumption	Pilot
2-STAGE N2	Natural	Direct Spark	100%	24 Volt	6 Volt Amps	None
2-STAGE P2	LP	Direct Spark	100%	24 Volt	6 Volt Amps	None
NMV	Natural	Manual	100%	Millivolt	None	Constant
PMV	LP	Manual	100%	Millivolt	None	Constant
N1	Natural	Direct Spark	100%	115 Volt	6 Volt Amps	None
P1	LP	Direct Spark	100%	115 Volt	6 Volt Amps	None
N2	Natural	Direct Spark	100%	24 Volt	5 Volt Amps	None
P2	LP	Direct Spark	100%	24 Volt	5 Volt Amps	None

* Must use 2-stage thermostat for 2-stage operation. Single stage thermostat will activate the first stage only.

System Information

Manifold Operating Pressure
 Nat. Gas 6" WC LP Gas 10" WC

Minimum Inlet Pressure
 Nat. Gas 7" WC LP Gas 11" WC

Maximum Inlet Pressure
 Nat. Gas 14" WC LP Gas 14" WC

Gas Inlet Connection 1/2" FPT



Combustion Research Corporation

2516 Leach Road
 Rochester Hills, MI 48309-3555
 Toll Free: 1-888-852-3611 • Phone: 248-852-3611
 Fax: 248-852-9165
 E-mail: info@combustionresearch.com
 Web: combustionresearch.com