

DETROIT RADIANT

**RE-VERBER-RAY**

RADIANT GAS HEATERS®

PRODUCTS COMPANY

COMMERCIAL & INDUSTRIAL

SERIES

○ HL3

○ DX3

○ XTS3

○ DET3

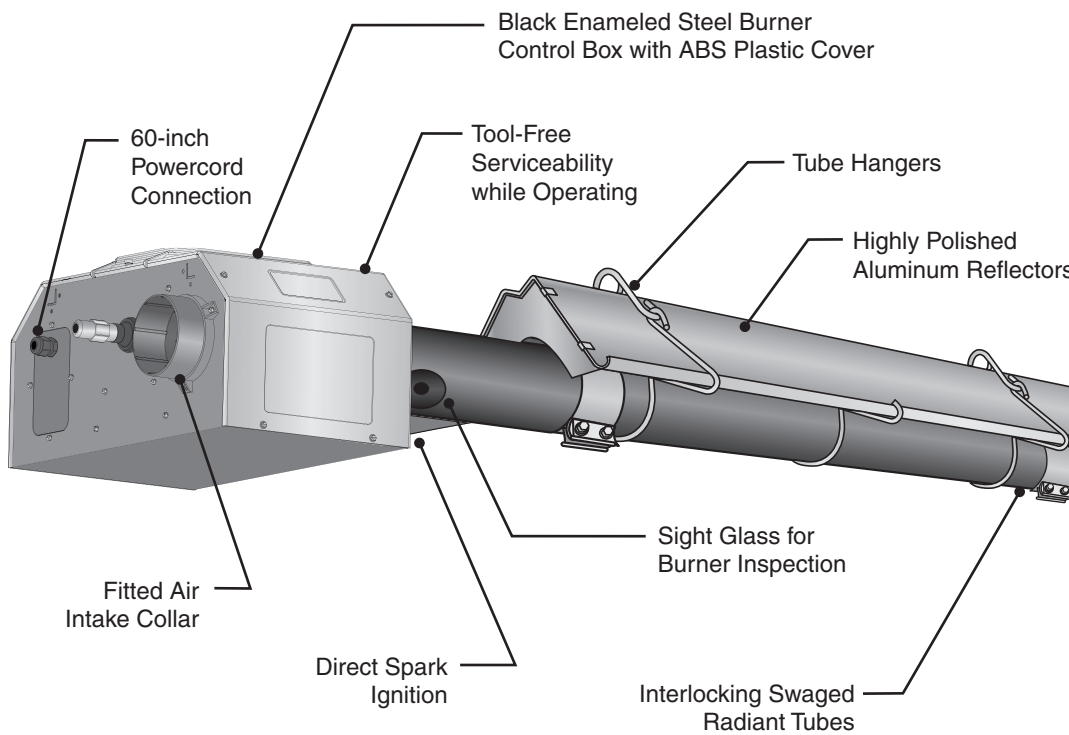
● DES3

# DES3 SERIES

**GAS-FIRED, SINGLE STAGE, ECONOMY INFRARED HEATERS**

Streamlined for economy and designed without sacrificing performance, the DES3 Series represents quality at an economical price. Utilizing a direct spark ignition system and hot-rolled steel emitter tubes, this series is the best in this class of equipment.

## PRODUCT FEATURES



## SPECIFIC FEATURES



- Tool-free access to controls.
- Serviceability while unit is operating.
- Separated air and gas burner chamber.
- Symmetrical placement of ignition tube.
- Hinged control compartment provides ease in servicing.
- 3-piece independent compartment cover.
- ABS plastic air intake collar for connection to 4" PVC/DWV pipe.

## PRODUCT FEATURES COMPARISON CHART

	HL3	DX3	XTS3	DET3	DES3
Highly Polished Aluminum Reflectors	•	•	•	•	●
Coated Titanium or Aluminized Combustion Chamber	•	•	•	•	●
Coated Aluminized Radiant Tubes	•	•			
Hot Surface Ignition	•	•	•		
Stainless Steel Flexible Gas Connector	•	•	•	•	●
Ball Valve (1/2" Brass) with Pressure Tap	•	•			
Two-stage Technology	•			•	
Interlocking Swaged Tubes	•	•	•	•	●
Stainless Steel Models Available*	•	•			
Reflector End Caps	•	•	•		
Optional 'U' or 'L' Configurations Available	•	•	•	•	●

\* Select upgrades available; full stainless models are available in the HL2 and DX2 Series offering.

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## VISIT OUR WEBSITE FOR:

- Product Specs
- Parts Support
- Dealer Locator
- Applications
- C.A.D. Library
- Design Guidelines
- Theory of Infrared
- and More!

# DES3 SERIES

## SPECIFICATIONS



### PRODUCT SPECIFICATIONS

<b>Input Range:</b>	50,000 to 200,000 BTU/h
<b>Lengths:</b>	20-60 Ft.
<b>Gas Type:</b>	Natural or Propane
<b>Combustion Chamber:</b>	Titanium Stabilized or Aluminized Steel
<b>Radiant Tubes:</b>	Hot-Rolled Steel
<b>Certification:</b>	CSA, IAS
<b>Limited Warranty:</b>	1-2-3 (Components-Tubes-Burner)

### OPTIONAL EQUIPMENT

<b>U or L Configurations:</b>	Available (RUP, REP)
<b>Stainless Steel Upgrades:</b>	Available (SSRAO, SSC, SSB)
<b>24V Controls:</b>	Available (use with R8285B)
<b>Indicator Lights:</b>	Available (IND-LT)
<b>Protective Guards:</b>	Available (PG)
<b>Side Shield Extensions:</b>	Available (SSE)
<b>Outdoor Approval:</b>	Not Available

### ELECTRICAL

- 120V, 60Hz, 3-wire.
- 1.7A starting, 1.1A running.

### CONTROLS

- Potted circuitry.
- 120V thermostat control.
- ABS plastic cover.

### TUBE CONSTRUCTION

- As shown to left.
- 4" x 10' 16 ga. construction.
- Labor saving, interlocking swaged tube design.

### REFLECTORS

- Highly polished aluminum.
- 0° – 45° rotatable angle

### IGNITION/SENSE

- Direct spark ignition.
- Flame rod sense.

### VENTING

- 4" single vent.
- 6" common vent (with single thermostat).

### GAS CONNECTION

- 1/2" NPT ball valve/inlet tap included.
- 24" stainless steel flexible connector included.

### GAS PRESSURES

- MAN: 3.5" NAT or 10.0" LP
- MIN: 5.0" NAT or 11.0" LP
- MAX: 14.0" NAT or 14.0" LP

### COMBUSTION AIR

- Equipped for ducted air intake from roof or sidewall.

### KIT CONTENTS

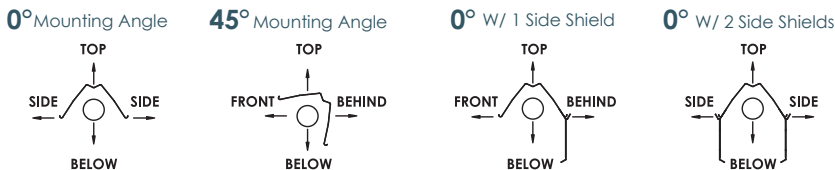
- All hangers & couplers.
- Turbulator baffles.

## AVAILABLE DES3 MODELS & CLEARANCES

MODEL #	GAS*	INPUT BTU/h	LENGTH	WEIGHT	MOUNTING HEIGHTS**
DES3-20-50	N or LP	50,000	21'-8"	120 lbs.	9' to 14'
DES3-20-60	N or LP	60,000	21'-8"	120 lbs.	10' to 15'
DES3-20-75	N or LP	75,000	21'-8"	120 lbs.	11' to 18'
DES3-30-50	N or LP	50,000	31'-4"	160 lbs.	10' to 15'
DES3-30-60	N or LP	60,000	31'-4"	160 lbs.	11' to 18'
DES3-30-75	N or LP	75,000	31'-4"	160 lbs.	12' to 20'
DES3-30-100	N or LP	100,000	31'-4"	160 lbs.	13' to 23'
DES3-40-50	N or LP	50,000	41'-0"	190 lbs.	11' to 18'
DES3-40-60	N or LP	60,000	41'-0"	190 lbs.	11' to 18'
DES3-40-75	N or LP	75,000	41'-0"	190 lbs.	12' to 20'
DES3-40-100	N or LP	100,000	41'-0"	190 lbs.	13' to 23'
DES3-40-125	N or LP	125,000	41'-0"	190 lbs.	14' to 25'
DES3-40-150	N or LP	150,000	41'-0"	190 lbs.	15' to 27'
DES3-50-100	N or LP	100,000	50'-8"	235 lbs.	15' to 27'
DES3-50-125	N or LP	125,000	50'-8"	235 lbs.	15' to 27'
DES3-50-150	N or LP	150,000	50'-8"	235 lbs.	16' to 30'
DES3-50-175	N or LP	175,000	50'-8"	235 lbs.	17' to 35'
DES3-50-200	N or LP	200,000	50'-8"	235 lbs.	18' to 40'
DES3-60-125	N or LP	125,000	60'-4"	265 lbs.	16' to 30'
DES3-60-150	N or LP	150,000	60'-4"	265 lbs.	17' to 35'
DES3-60-175	N or LP	175,000	60'-4"	265 lbs.	17' to 35'
DES3-60-200	N or LP	200,000	60'-4"	265 lbs.	18' to 40'

\* Specify natural (N) or propane (LP) gas.

\*\* Factory recommended mounting heights are provided as a guideline. Actual conditions may dictate variations from the above data.



DISTRIBUTED BY:



### DES3 CLEARANCES TO COMBUSTIBLES (IN.)

MODEL NO.	MOUNTING ANGLE	SIDE		TOP	BELOW
		FRONT	BEHIND		
DES3-(20,30,40)-(50,60)	0°	9	9	6	47
	45°	39	8	10	47
W/1 side shield	0°	29	8	6	47
W/2 side shields	0°	9	9	6	47
20 ft. from burner	0°	7	7	6	30
DES3-(20,30,40)-75	0°	9	9	6	60
	45°	39	8	10	60
W/1 side shield	0°	29	8	6	60
W/2 side shields	0°	9	9	6	60
20 ft. from burner	0°	7	7	6	30
DES3-(30,40,50)-100	0°	14	14	6	66
	45°	39	8	10	66
W/1 side shield	0°	29	8	6	66
W/2 side shields	0°	16	16	6	66
20 ft. from burner	0°	7	7	6	30
DES3-(40,50,60)-125	0°	20	20	6	76
	45°	58	8	10	76
W/1 side shield	0°	42	8	6	76
W/2 side shields	0°	20	20	6	76
20 ft. from burner	0°	7	7	6	30
DES3-(40,50,60)-150	0°	24	24	6	81
	45°	58	8	10	81
W/1 side shield	0°	42	8	6	81
W/2 side shields	0°	23	23	6	81
20 ft. from burner	0°	11	11	6	44
DES3-(50,60)-175	0°	34	34	6	92
	45°	63	8	10	92
W/1 side shield	0°	50	8	6	92
W/2 side shields	0°	30	30	6	92
20 ft. from burner	0°	11	11	6	44
DES3-(50,60)-200	0°	41	41	6	94
	45°	63	8	10	94
W/1 side shield	0°	54	8	6	94
W/2 side shields	0°	30	30	6	94
20 ft. from burner	0°	11	11	6	44

Always maintain the published clearances to combustibles.

Clearances published in DES3 Series manual and on warning label supersede data shown on this brochure.