# DSCS SERIES HIGH INTENSITY

# SUBMITTAL DATA GAS-FIRED INFRARED PATIO HEATERS

SUBMITTED BY:		DATE:					
JOB TITLE:		CONTRACTOR:					
CITY:		ADDRESS:					
STATE:	ZIP:	CITY:					
			ZIP:				
ENGINEER:		PHONE:					
LOCAL REPRESENTA	ATIVE:	PHONE:					
NOTES:							
<del></del>							

QTY.	MODEL NO.	TAG	HOUSING <sup>1</sup>	INDICATE GAS TYPE	BTU/H INPUT	SHIP WEIGHT	SHIP WEIGHT W/PH-BKT	TYP. OR RCMD. MOUNTING HEIGHTS <sup>2</sup>	APPROX. AREA HEATED	CONTROL VOLTAGE
	DSCS-31		STND	Nat. or Prop.	31,000	59 lbs.	65 lbs.	8.0' to 12.0'	8' x 8'	24 VAC
	DSCS-34		STND	Nat.	34,000	59 lbs.	65 lbs.	8.5' to 13.0'	9' x 9'	24 VAC
	DSCS-31-SS		430 SS	Nat. or Prop.	31,000	59 lbs.	65 lbs.	8.0' to 12.0'	8' x 8'	24 VAC
	DSCS-34-SS		430 SS	Nat.	34,000	59 lbs.	65 lbs.	8.5' to 13.0'	9' x 9'	24 VAC

<sup>&</sup>lt;sup>1</sup> STND= Black powder-coated aluminized steel; 430 SS= 430 Series brushed stainless steel.

# **DSCS** SERIES FEATURES

- ETL Design Certified to the latest edition of the ANSI Z83.26 Standard.
- Decorative stainless steel windscreen eggcrate grille.
- Wind and rain protected design.
- Reliable direct spark ignition.
- Potted (water resistant) 24V circuitry.
- Black coated aluminized steel or brushed stainless steel housing.







NOT FOR INDOOR USE.

Do not use this heater in the home, sleeping quarters, attached garages, or other non-approved applications.

#### **DETROIT RADIANT PRODUCTS CO.**



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<sup>&</sup>lt;sup>2</sup> Typical or recommended mounting heights are provided as a guideline. Actual conditions may dictate variations from this data.

# **DSCS** SPECIFICATIONS



#### NOMINAL MANIFOLD PRESSURE

- Natural Gas 6.0 in. W.C.
- Propane Gas 10.0 in. W.C.

#### MINIMUM HEATER INLET PRESSURE

- Natural Gas 7.0 in. W.C.
- Propane Gas 11.0 in. W.C.

#### MAXIMUM INLET PRESSURE

• 1/2 lb. or 14.0 in. W.C.

#### **INLET PIPE SIZE**

• 1/2" NPT.

#### **ELECTRICAL REQUIREMENT**

 24VAC with a NEC Class 2 transformer (field supplied).

#### AMP DRAW 24VAC/20VA

- 0.65 Amp starting.
- 0.48 Amp running.

#### MOUNTING

- 0° to 30° from horizontal.
- Optional Mounting Brackets (PH-BKT(-SS)) preset mounting angles and height adjustment.

#### **CONTROLS**

- Single stage (24V).
- Switching device.
- Timer device.

#### **EXTERIOR HOUSING FINISH**

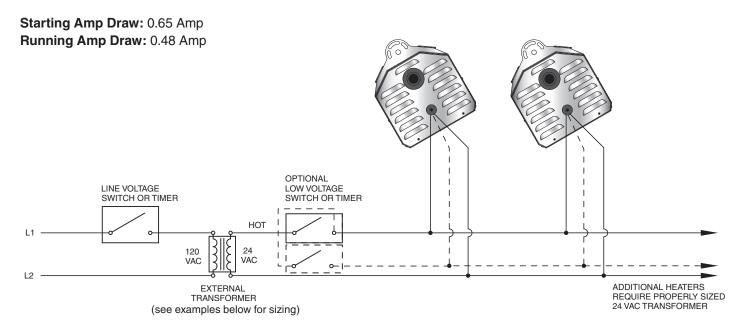
- Black coated aluminized steel.
- Brushed stainless steel.

#### **LIMITED WARRANTY**

- Ceramic burner 5 years.
- All components 1 year.

# **DSCS** SERIES FIELD WIRING DIAGRAM

#### **DSCS Series 24 VAC Transformer**



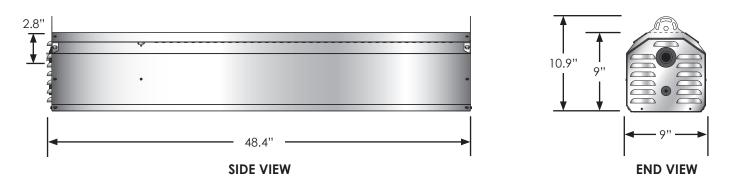
#### 24 VAC @ approximately 20VA is required per heater (supplied by installer).

Example: Two (2) DSCS Series heaters on the same circuit require the use of one (1) 40VA transformer. Example: Three (3) DSCS Series heaters on the same circuit require the use of one (1) 60VA transformer.



Read and understand the installation, operation and maintenance manual prior to installing or servicing this unit.

# **DSC** SERIES DIMENSIONAL DATA



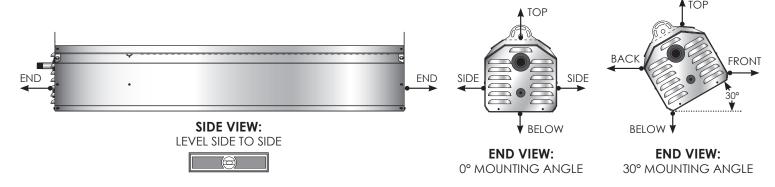
# **DSC** SERIES CLEARANCES TO COMBUSTIBLES (IN INCHES)

MODEL NO.	BTU/H	VOLTAGE	MOUNTING ANGLE <sup>3</sup>	SIDES	BACK	TOP	BELOW	END(S)	FRONT
21 000 IN DI	21,000	0°	18	N/A	13	48	12	N/A	
31,000 [N,P]	31,000	24 VAC	30°	N/A	18	18	40	12	36
24 000 [N]	24.000	34,000 24 VAC	0°	18	N/A	13	48	12	N/A
34,000 [N]	34,000		30°	N/A	18	18	40	12	36

<sup>&</sup>lt;sup>3</sup> Heaters mounted on an angle between 1° to 30° must maintain clearances posted for 0° or 30°; whichever is greater.

**Important!** If the heater is mounted beneath a non-combustible surface an 8 in. minimum top clearance must be maintained from the top of the heater to prevent overheating the controls.

Clearance to combustible distances represent a surface temperature of 90°F (32°C) above ambient temperature. Ensure that building materials with a low heat tolerance (i.e, awnings, fabrics, plastics, sprinklers, insulation) are protected against degradation. This may require the heater to be mounted at a distance in excess of the published clearances to combustibles. Contact the factory or the building material manufacturer for additional information.



## **A WARNING**



Failure to comply with the stated clearance to combustibles could result in personal injury, death and/or property damage.

# **OPTIONAL ACCESSORIES**

QTY.	PART NO.	DESCRIPTION	NOTES
	PH-BKT	Adjustable mounting bracket (black powder-coated)	Pre-set (0-30°) adjustable wall/ceiling mounting kit for ease in installation.
	PH-BKT-SS	Adjustable mounting bracket (stainless steel)	Pre-set (0-30°) adjustable wall/ceiling mounting kit for ease in installation.
	PLQ	Clearance warning plaque	Hung below heater, restates the clearance to combustible warning.
	THCS	Chain mounting set	5 ft. chain set with four (4) S-hooks used for hanging heater. Two (2) needed per heater.

### **DSCS** SERIES WRITTEN SPECIFICATIONS

#### **HEATER PARAMETER/SPECIFICATIONS**

- High Intensity Infrared Patio Heaters shall be RE-VERBER-RAY® DSCS SERIES, as manufactured by Detroit Radiant Products Company, Warren, MI 48089.
- High Intensity Infrared Patio Heaters shall be Certified to the latest edition of the ANSI Z83.26 Standard.
- The manufacturer shall provide a published limited warranty to the original owner against defects in workmanship or materials under normal use for a period of one (1) year.
- High Intensity Infrared Patio Heaters shall be designed to operate when burning natural gas having a heat value of 1025 BTU per cubic foot with a specific gravity of 0.62, or when burning propane gas having a heat value of 2500 BTU per cubic foot with a specific gravity of 1.53.
- An Installation, Operation and Maintenance manual shall be supplied with each heater.
- The manufacturer shall have a minimum of 30 years of manufacturing experience producing high intensity infrared heaters.

#### **INFRARED PATIO HEATER CONSTRUCTION**

- The heater's housing shall be constructed of aluminized steel with a corrosion resistant powdercoated finish or 430 Series stainless steel. The emitter shall be composed of a perforated ceramic tile on which combustion takes place on the surface.
- The heater shall be fitted with a stainless steel windscreen eggcrate grille.
- The heater shall be of a low profile 'designer series' design and be capable of mounting the unit with .070 gauge hanging brackets which shall be attached directly to the heater's chassis and be capable of mounting the heater at a 0 to 30 degree angle from horizontal.
- The heater shall be manufactured with air louvers and vents to allow sufficient air movement for efficient heater operation.
- An optional pre-set adjustable mounting kit shall be made available for ease of installation.
- The heater shall be manufactured with an internal stainless steel liner and rain barrier.
- The heater's design shall not require a power assisted fan to aid in the combustion process.

#### **INFRARED PATIO HEATER BURNER CONTROLS**

- Heaters shall be equipped with a direct spark ignition of the main burner. Loss of power causes 100% safety shut-off of main burner(s).
- 24V circuit control shall incorporate a potting compound for product application in high humidity areas.
- The heater's control system shall be designed to shut off the gas flow to the main burner in the event either a gas supply or power supply interruption occurs. In the event of circuit control lock-out, an interruption of power source will restart the firing sequence.