

# RANKIN™

LEADERS IN TEMPORARY CLIMATE SOLUTIONS™

1051 N. MAIN ST. SUITE D • LOMBARD, IL 60148 • (630)620-1300 • (800)966-7100 • FAX (630)620-7810

## ROT-1500/MNRC SERIES



Propane & Natural Gas  
Single, Dual & Triple Stage  
CONSTRUCTION HEATERS



ROT-1500/MNRCS(W) ROT-1500/MNRCD(W)

### ROT-1500/MNRCS(W)

PROPANE	NATURAL GAS
N/A	N/A
1,100,000 BTUH	1,100,000 BTUH

### ROT-1500/MNRCD(W)

PROPANE	NATURAL GAS
540,000 BTUH	385,000 BTUH
1,100,000 BTUH	1,100,000 BTUH

LOW HEAT \*\*MINIMUM  
HIGH HEAT\*\*MAXIMUM

UNATTENDED OPERATION PROVIDED BY ELECTRONIC FLAME SAFEGUARD CONTROLS AND SAFETY LIMIT SWITCHES.

# CHECK THESE IMPORTANT FEATURES

## DUAL FUEL \*PROPANE OR NATURAL GAS\*

The ROT-1500/MNRC series REXO-THERM construction heaters are designed to operate using HD5 quality propane gas or natural gas fuel. The fuel changeover is accomplished by easily positioning the selector valve for the fuel to be used on the job site.

## SINGLE, DUAL AND TRIPLE STAGE MODELS

All sizes of REXO-THERM construction heaters are available in three models. The "MNRC" (SINGLE STAGE) model operates at maximum input while the thermostat is calling for heat. When the thermostat reaches the preset temperature, the burner stops and the fan and motor assembly remain on to circulate air. The burner will restart on thermostat demand. The "MNRC" (SINGLE STAGE) heater and the "MNRC" model will operate on high fire when the thermostat is calling for heat. When the thermostat reaches the preset temperature, the high fire stage will cycle to the low fire stage. The heater will operate on low fire until the thermostat cycles requiring high fire again. This model supplies the low fire heat level and the fan and motor continues to circulate air. This heater in a model number "MNRCDL" which incorporates a "LOW TEMPERATURE CUT-OFF DEVICE" is recommended for applications where FRESH AIR is desired. This "MNRCDL" model will completely shut down the heater in the event total heat is unavailable from the heater. This eliminates cold air from outside the building from being forced inside by the fan assembly. The "MNRC" (TRIPLE STAGE) heater is a combination of the "MNRC" and "MNRC" models explained above. This model heater is equipped with two thermostats for better heat control. The "MNRC" model heater will start and run on high fire while both thermostats are calling for heat. The high fire to low fire thermostat will cycle the burner to low fire when the preset temperature is reached. The heater will remain operating at this stage until the low fire to fan only thermostat reaches its preset temperature, then the burner will stop and the heater will circulate air until the low fire to fan only thermostat calls for heat. The thermostats have to be adjusted to suit your requirement for heat. In reality, the "MNRC" model heater replaces the "MNRC" and "MNRC" models and gives total versatility for most applications.

## ELECTRONIC FLAME SUPERVISION

An electronic flame safeguard control is used to monitor the flame on the ROT-1500/MNRC series construction heater. In an event the gas supply is interrupted or the ignition fails, the flame safeguard control will lock out and de-energize the solenoid valves. The flame safeguard control allows 5 seconds trial for ignition period and will lock out on reset if ignition fails and de-energize the solenoid valves. The flame failure response timing allows 4 seconds to lock out on reset and de-energize the solenoid valves. This is the requirement of the design standard of the approval agencies. A flame rod sensor is used to monitor the flame. The components in the "SAFETY LIMIT TRAIN" have to prove their safety function before the flame safeguard can start. The flame safeguard control is electrically switched off until the motor reaches its full speed. This ensures the flame safeguard control and related components are not required to start under unnecessary low voltage conditions during start-up.

## COMPLETE COMBUSTION

The "PRO-RING" burner is unique to the REXO-THERM heaters. This burner assures emissions of carbon monoxide and carbon dioxide within acceptable levels to meet the amounts allowed by the construction heater standards.

## SAFETY CONTROLS AND LIMIT SWITCHES

The ROT-1500/MNRC series heaters are equipped with electronic flame supervision, flame rod sensor, automatic electric ignition, dual solenoid lock-off valves, differential air proving switch, temperature high limit, thermostat control with lock box, gas strainer and appliance regulator. A lock out switch is provided to eliminate the flame safeguard control from being energized before the motor reaches its full speed.

## ROT-1500/MNRC SERIES CONSTRUCTION HEATER SPECIFICATIONS

SPECIFICATION	PROPANE GAS	NATURAL GAS
AIR DISPLACEMENT	3,800CFM	3,800CFM
MOTOR SIZE	1 HORSE POWER	1 HORSE POWER
HIGH HEAT INPUT	1,100,000 BTUH. @ .65" wc	1,100,000 BTUH. @ 2" wc
LOW HEAT INPUT	540,000 BTUH. @ .03" wc	385,000 BTUH. @ .10" wc
PIPE INLET SIZE	1-1/4 INCH N.P.T.	1-1/4 INCH N.P.T.
INLET SUPPLY PRESSURE	11" wc	7" wc
GAS CONSUMPTION *HIGH HEAT*	437 CFH	1100 CFH
GAS CONSUMPTION *LOW HEAT*	214 CFH	385 CFH
GAS CONSUMPTION *HIGH HEAT*	51 LB./HR	N/A
GAS CONSUMPTION *LOW HEAT*	25 LB./HR	N/A
GAS CONSUMPTION *HIGH HEAT*	10 GALLONS PER HOUR	N/A
GAS CONSUMPTION *LOW HEAT*	5 GALLONS PER HOUR	N/A
WEIGHT **LESS WHEELS**	290 POUNDS	290 POUNDS
WHEELS FOR PORTABILITY	OPTIONAL	OPTIONAL
WEIGHT **WITH WHEELS**	300 POUNDS	300 POUNDS
OVERALL LENGTH	49 INCHES	49 INCHES
OVERALL WIDTH	29-1/4 INCHES	29-1/4 INCHES
OVERALL HEIGHT	40-1/2 INCHES	40-1/2 INCHES
THERMOSTAT LOCK BOX	INCLUDED	INCLUDED
FAN INLET SIZE(AROUND SCREEN MOUNT)	24 INCHES	24 INCHES
CANADIAN APPROVAL STANDARD	CGA 2.14 - 1972	CGA 2.14 - 1972
AMERICAN APPROVAL STANDARD	ANSI Z83.7 - 1990	ANSI Z83.7 - 1990
ELECTRICAL POWER REQUIREMENTS	115 VOLTS, 60 CYCLES	115 VOLTS, 60 HZ
AMPERAGE DRAW (RUNNING)	8 AMPS	8 AMPS
OPTIONAL "LOW TEMP. CUT-OFF DEVICE"	ROT-1500/MNRCDL	ROT-1500/MNRCDL
CLEARANCES TO COMBUSTIBLES	FAN OUTLET*** 15 FEET FAN INLET**** 3 FEET	SIDES*** 2 FEET TOP **** 4 FEET