FUEL	MODEL SIZE	GAS VALVE			
		GV1	GV2	GV3	GV4
NAT & PRO	302	A	C (2 STG ONLY)		
	402	A	C (2 STG ONLY)		
	502	A	A		
	652	A	A		
	752	A	A		
	902	A	A	A	
NAT	992	B	B	C	
	1262	B	A	B	C
PRO	992	A	A	C	
	1262	A	A	A	C

A
HONEYWELL GAS VALVE

B
ROBERTSHAW GAS VALVE

C
SOLENOID VALVE LOCATED BELOW IN AIR CHAMBER

SAMPLE 1262 NAT GAS (SEE TABULATION)

INSERT –A–
ON/OFF CONTROL
POOL HEATERS

SEE INSTALLATION & OPERATION MANUAL FOR ALTERNATE STAGING OPTIONS

PUMP
WHEN PROVIDED WITH PUMP RATED OVER 3/4 HP

PUMP DATA

FACTORY	FIELD
MODEL :	
H.P. :	
AMPS. :	

PUMP CONTACTOR SEE NOTE 2

SOLID STATE PUMP DELAY

PUMP POWER THROUGH SEPARATE CIRCUIT BREAKER FROM APPLIANCE POWER (SIZE BREAKER AND WIRE ACCORDING TO PUMP REQUIREMENTS)

CONTROLLER (2 STAGE OR 4 STAGE) OPTIONAL

TO CPW J10

OUTLET SENSOR

INLET SENSOR

RAYPAK MODULATING CONTROL

INSERT –B–

SENSORS

0–10 VDC INPUT

E–5 ALARM W/SILENCER

RESET SWITCH

SILENCING SWITCH

RELAY

BELL

TO UDB P6 (NO)

TO CPW J5 24VR

1262 TIME DELAY 3

902–1262 TIME DELAY 2

502–1262 TIME DELAY 1

TD3 TD2 TD1 TIME DELAY

SOLID STATE PUMP DELAY

AIR PRESSURE SWITCH 1

AIR PRESSURE SWITCH 2

992–1262

JUMPER 302–902

JUMPER 302–402

TO BUILDING MANAGEMENT SYSTEM (NORMALLY JUMPERED)

SEE TABULATION

GAS VALVES J19

J1 ENABLE/DISABLE J20

J2 AIR PRESSURE 1, 2, 3

J3 STAGE 1, STAGE 2, STAGE SELECTOR, STAGE 3, STAGE 4

J4 PANEL SWITCH

J5 SAFETY BOARD INTERFACE

J6 LWCO

J7 CONTROL POWER

TB1 POWER INPUT

J10 TRANSFORMER

J8 BLOWER

J9 INTERLOCK

SEE NOTE 6

K1 LY2 K2 LY2 K3 LY3

ECONOMASTER J17

FLOW SWITCH J16

OHX FLOW SWITCH

OPTIONAL FIELD INSTALLED

DIAGNOSTICS CABLE

UNIVERSAL DIAGNOSTICS CENTER PCB

PANEL LIGHTS J15

PILOT DUTY J14

120 VAC PILOT DUTY RELAY (BY OTHERS)

RELAY CONTACT WILL CLOSE TO ENERGIZE FAN/DAMPER.

DO NOT POWER FAN MOTOR DIRECTLY! CONNECT FAN/DAMPER PROVE SWITCHES AT J9 INTERLOCK.

FAN AND DAMPER CONNECTIONS IF NECESSARY

SAFETY VALVE J13

SEE INSERT –L– THRU –N– IF PROVIDED

IGNITION MODULE 1

HOT SURFACE ELEMENT

REMOTE SENSOR

IGNITION 1

UDB

LCD DISPLAY

KEYPAD

WATER FLOW SW BLOWER AIR SW FACTORY OPTION EXT INTERLOCK CWS/CWR ALARM IGNITION LOCKOUT

REMOTE STATUS

IGN CTRL STATUS

ALARM RELAY

TO CWS/CWR BOARD (1 NO) WHEN APPLICABLE

FROM ALARM

(NC) MANUAL HI LIMIT

(NC) BLOCKED VENT

(NO) LO GAS PRESSURE

OPTIONAL (302–902) (STANDARD) (992–1262)

(NC) HI GAS PRESSURE

OPTIONAL

200° OR 240°F AUTO HI LIMIT

OPTIONAL

JUMPERED EXCEPT WHEN PROVIDED

LWCO (NO) OPTIONAL

WATER PROBE

RESET SWITCH (NC)

TO CPW (J5 P3–16)

TO UDB (P4 3–AUTO HI LIMIT)

140°F–180°F AUTO HI LIMIT

OPTIONAL

(CPW) CENTRAL POINT WIRING

TERMINAL BLOCK

POWER SWITCH

120V HOT (L1) BK(10 AWG)

120V COM (L2) W (10 AWG)

GROUND G (10 AWG)

INSERT –H–
TRANSFORMER
24V CONTROLLER

24V POWER TO CONTROLLER

CAUTION: CONNECT APPROPRIATE POWER SUPPLY TO DIGITAL CONTROLLER, OBSERVE PROPER VOLTAGE REQUIREMENT.
FOR 24V USE J10 TRANSFORMER PLUG. SEE INSERT –H–
FOR 120V USE J7 CONTROL POWER PLUG

INSERT –J–

BLOWER 1

BLOWER 2

992–1262

INSERT –L–

24V SAFETY VALVE OPTIONAL

INSERT –M–

M1,M10 OPTIONAL

INSERT –N–

G2 OPTIONAL 502–1262

NOTES:

7. CORRECT OPERATIONAL STATUS OF SAFETIES SHOWN AS ( )
6. ALL INTERLOCK SWITCHES MUST BE WIRED IN SERIES AT J9
5. IF ANY OF THE ORIGINAL WIRE AS SUPPLIED WITH THE HEATER MUST BE REPLACED, IT MUST BE REPLACED WITH ITS EQUIVALENT 105°C.
4. ☑ CHECK CONTROLS PROVIDED (WIRED AS SHOWN)
3. PUMP DELAY 10 MINUTES MAX.
2. PUMP CONTACTOR MUST BE RATED FOR APPROPRIATE PUMP SIZE.
1. USE GROUND CONNECTION PROVIDED. FAILURE TO PROVIDE PROPER GROUND MAY RESULT IN LOCK–OUT.

KEY

LOW VOLTAGE
FIELD INSTALL
LINE VOLTAGE
FIELD INSTALL

GROUND
CONNECTION
MALE/FEMALE TERMINAL CONN

BK – BLACK
BL – BLUE
BR – BROWN
GY – GRAY
G – GREEN
O – ORANGE
R – RED
V – VIOLET
W – WHITE
Y – YELLOW

CHECKED BY:	
APPROVED BY:	
ORIG E.O. 3893	12/7/06
CHG E.O. 5509	03/29/16

WIRING DIAGRAM–HSI CPW

Raypak

INPUTS: 300,000 THRU 1,260,000 BTUH

SIZE: 302B–1262B | TYPE: H/WH/P

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For Reference Only