BCU-370   UVM-1

BCU-370		UVM-1
①	L1 (HOT)	①
②	L2 (NEUTRAL)	②
③	BLOWER MOTOR	③
④	MAIN GAS VALVE see installation note 4	⑤
⑤	PILOT GAS VALVE	③
⑥	DELAYED MAIN GAS VALVE see installation note 4	⑦
⑬ ⑭ ⑮	FOR UV USE KROMSCHRODER UVS1 (PN 84315010), UVS6 (PN 84315100), UVS8 (PN 84333120), OR UVD1 (PN 84320100). WIRE AS SHOWN ON BCU 370 DRAWING FOR EITHER UV OR FLAME ROD.	Ⓢ1 Ⓢ2
⑯	IGNITION TRANSFORMER	④
⑳	ALARM RELAY	Ⓐ
㉑	OPERATING CONTROL	Ⓣ1 Ⓣ2
㉔	LIMITS COMPLETE	①

BCU 370 Installation Notes:

1. If burner start switch (call for heat) is to remain in limit circuit, jumper BCU terminals 21 to 24. If the burner start switch is to be commanded separately, wire the switch to BCU terminal 21.

2. External ignition transformers are to be wired to terminal 16. The transformer is pre-wired when the BCU370 is ordered with an integral ignition transformer.

3. If UV is used, a Kromschroder UV scanner must be used for proper BCU operation.

4. Use BCU 370 output pin 4 if burner is direct-spark ignited (there is no pilot). Use output 5 and 6 for piloted burners with the pilot on output 5 and the main on output 6. Adjust pilot and main burner timing via parameters 12, 13, 14 and 15.

5. Move high gas pressure switch and low gas pressure switch if desired. Refer to system schematic supplied with original equipment.

6. The BCU370 is designed for all three flame detection methods: Flame rod, UV, and UV self check. Wire The BCU according to desired detection method.

7. If blocking valve is to be wired independent of the main fuel valve and pilot valve, the valve can be wired on BCU terminal 4. If not, wire both the blocking valve and the main valve to terminal 6.

8. Set pilot flame establishing period using BCU parameters 12 and 13.

9. Adjustments can be made for the Delayed Valve using BCU parameters 14 and 15.

10. A low voltage relay is required to isolate the low voltage control unit (UVM-1 T terminals).

11. If the existing M series controller is implemented with relight, configure the BCU for relight after flame fail (after flame proving period) if relight operation is required (BCU parameter 8).

12. Follow flame detector wiring practices for the BCU.

120 VAC

BCU-370

GND.

N
L2

L1

F1

F2
F3

1
2
3   BLOWER CONTROL

S1   V1
4   MAIN GAS VALVE
     see installation note 4

V1   V2
5   PILOT GAS VALVE
C   see installation note 4

V3
6   MAIN GAS VALVE
     see installation note 4

AIR PRESS SWITCH
7
8
see installation note 5

LOW GAS PRESS SWITCH
9
10
see installation note 5

HIGH GAS PRESS SWITCH
11
12

S1
S
L
A
Z
M
V2
V3
R

μC

see installation note 3 for UV installation.

UV SCANNER
13   C
14   230V
15

BURNER

see box at bottom of drawing for flame rod installation.

Z

see installation note 2

16   C
r

90°→0°
0°→90°

17   FLAME RELAY
r1   MAX. 1A, 253V
18
19   ALARM RELAY   TO L1
S   MAX. 1A, 253V
20

25
26
27
28

29
30
31

OPERATING CONTROL (CALL FOR HEAT)
21
see installation note 1

22

REMOTE RESET
23   N   IGNITION TRANSFORMER

LIMITS COMPLETE
24
see installation note 1

32   N

FLAME ROD OPERATION
BURNER
15
13   I
     Z   TO IGNITION TRANSFORMER

NOTE: BURNER SHOULD BE GROUNDED TO GROUNDING BAR IN BCU FOR PROPER OPERATION

L1

N
GND.