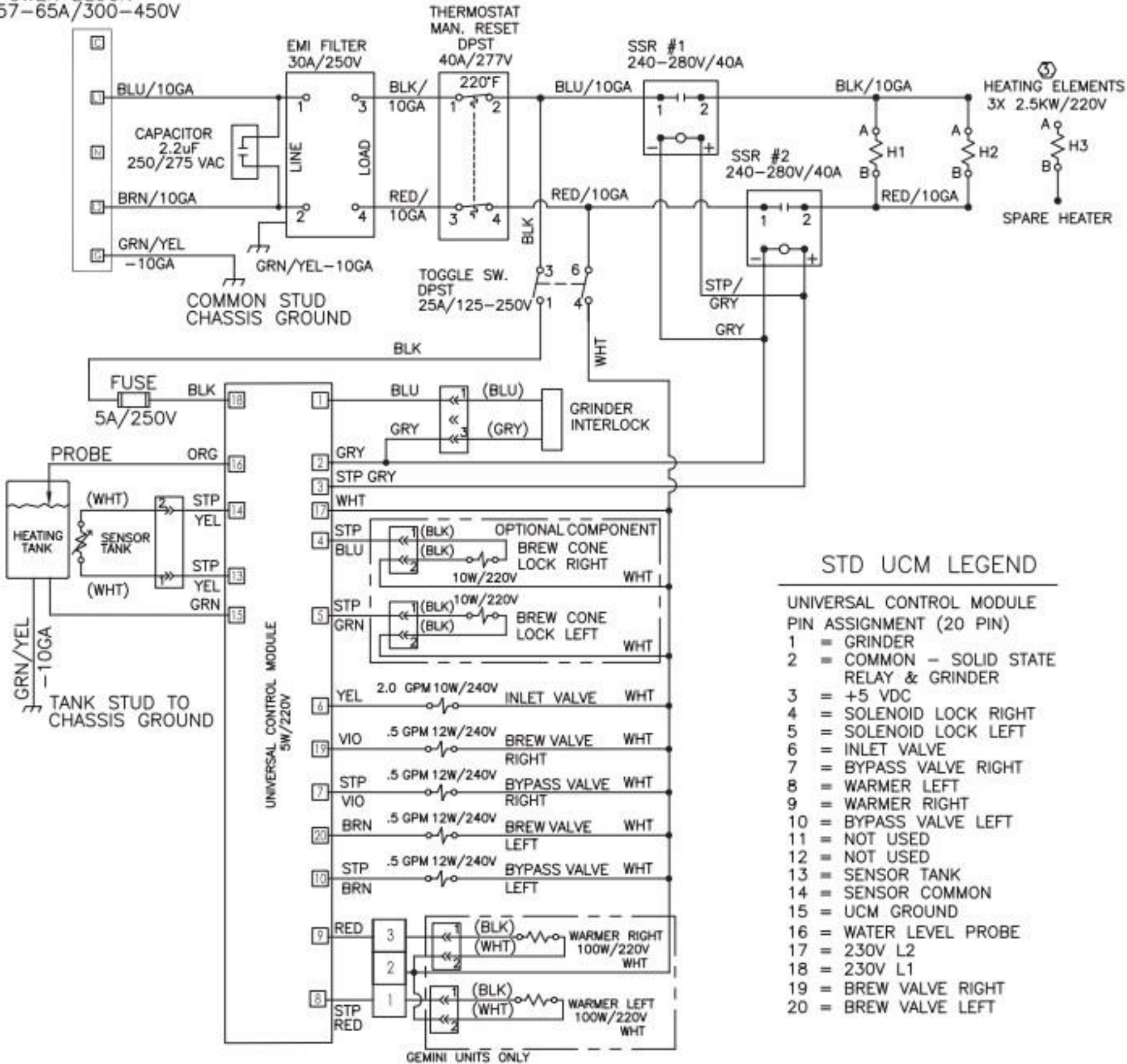


INCOMING POWER
230Vac 1PH
2W+G 50/60 Hz

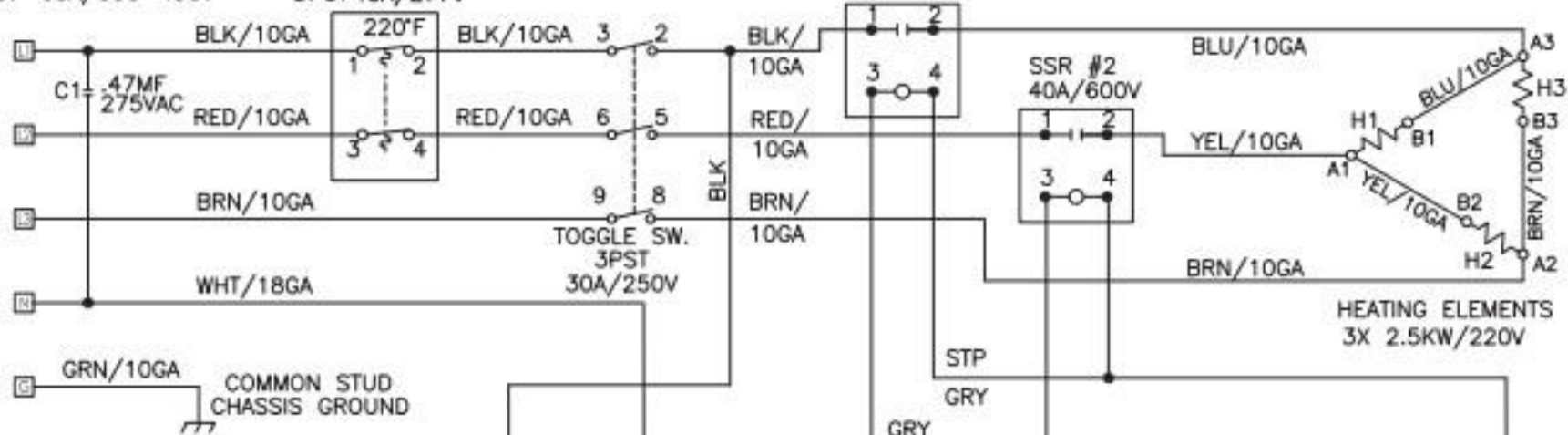
POWER BLOCK
57-65A/300-450V



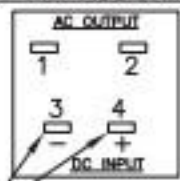
POWER BLOCK
57-65A/300-450V

THERMOSTAT
MAN. RESET
DPST 40A/277V

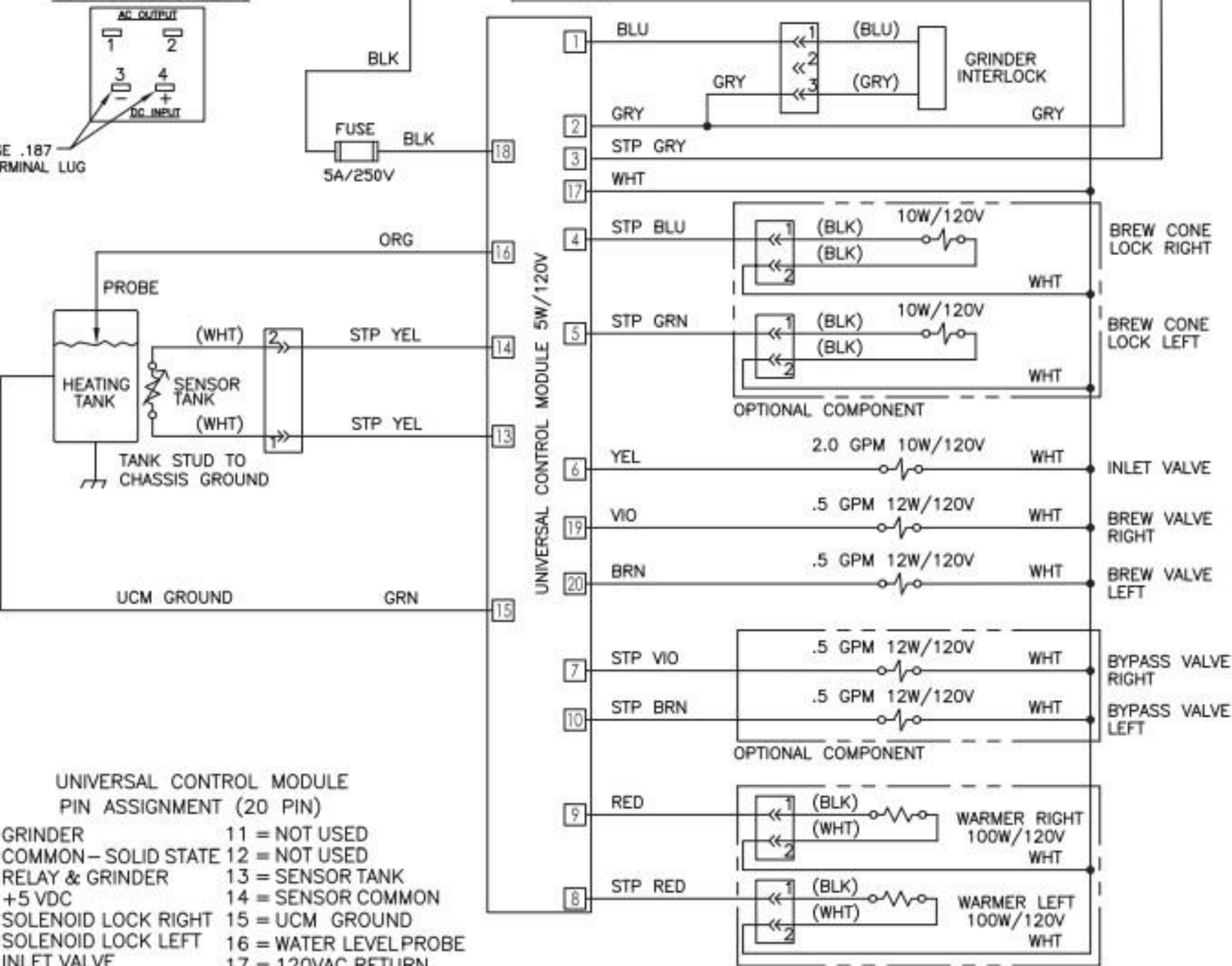
SSR #1
40A/600V



SSR PIN ASSIGNMENTS



USE .187
TERMINAL LUG



UNIVERSAL CONTROL MODULE
PIN ASSIGNMENT (20 PIN)

- | | |
|--|------------------------|
| 1 = GRINDER | 11 = NOT USED |
| 2 = COMMON - SOLID STATE RELAY & GRINDER | 12 = NOT USED |
| 3 = +5 VDC | 13 = SENSOR TANK |
| 4 = SOLENOID LOCK RIGHT | 14 = SENSOR COMMON |
| 5 = SOLENOID LOCK LEFT | 15 = UCM GROUND |
| 6 = INLET VALVE | 16 = WATER LEVEL PROBE |
| 7 = BYPASS VALVE RIGHT | 17 = 120VAC RETURN |
| | 18 = 120VAC HOT |

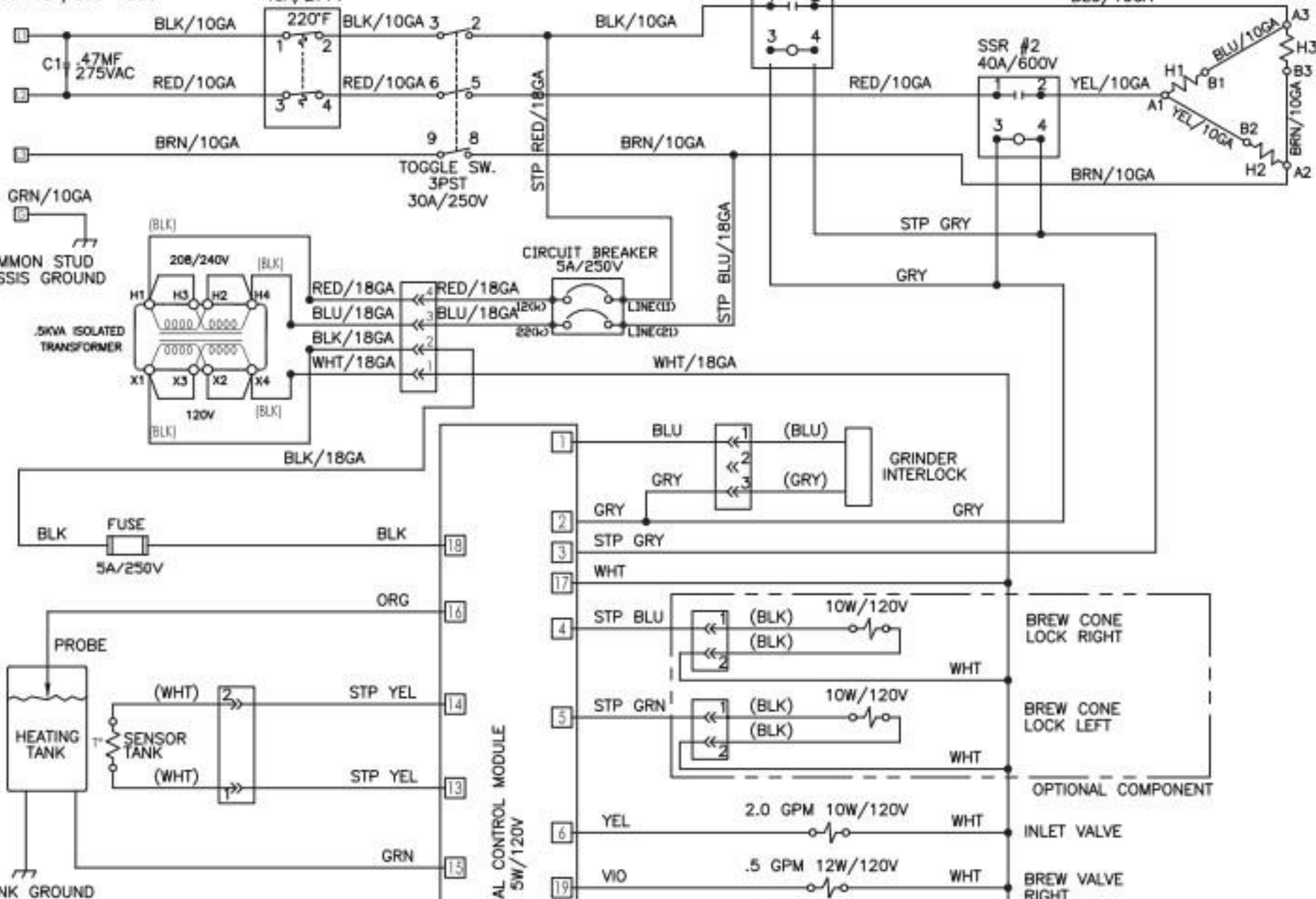
GEMINI UNITS ONLY

POWER BLOCK
57-65A/300-450V

THERMOSTAT
MAN. RESET
DPST
40A/277V

SSR #1
40A/600V

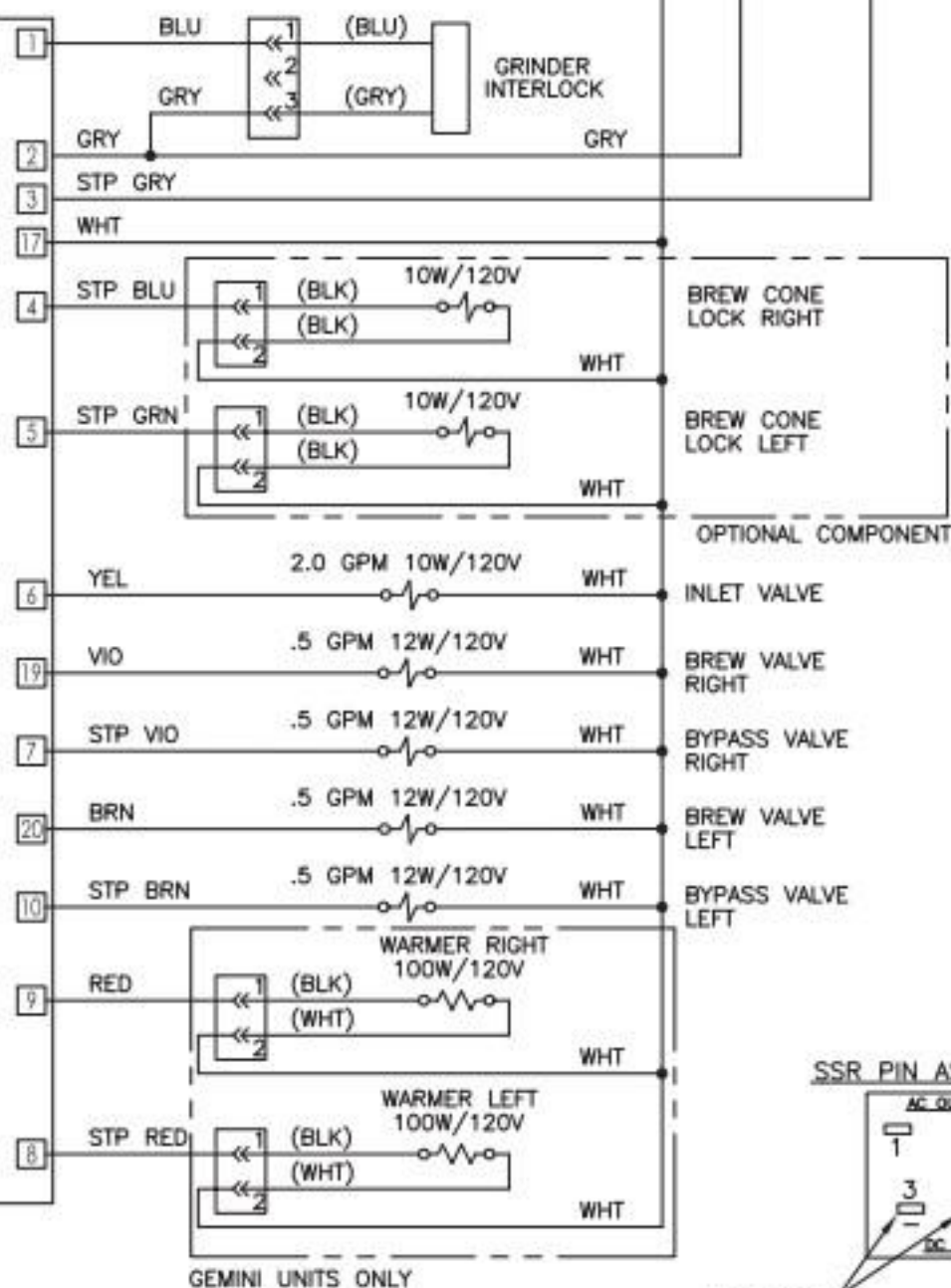
BLU/10GA



UNIVERSAL CONTROL MODULE
PIN ASSIGNMENT (20 PIN)

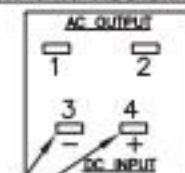
- 1 = GRINDER
- 2 = COMMON - SOLID STATE RELAY & GRINDER
- 3 = +5 VDC
- 4 = SOLENOID LOCK RIGHT
- 5 = SOLENOID LOCK LEFT
- 6 = INLET VALVE
- 7 = BYPASS VALVE RIGHT
- 8 = WARMER LEFT
- 9 = WARMER RIGHT
- 10 = BYPASS VALVE LEFT
- 11 = NOT USED
- 12 = NOT USED
- 13 = SENSOR TANK
- 14 = SENSOR COMMON
- 15 = GROUND CHASSIS
- 16 = WATER LEVEL PROBE

UNIVERSAL CONTROL MODULE
5W/120V

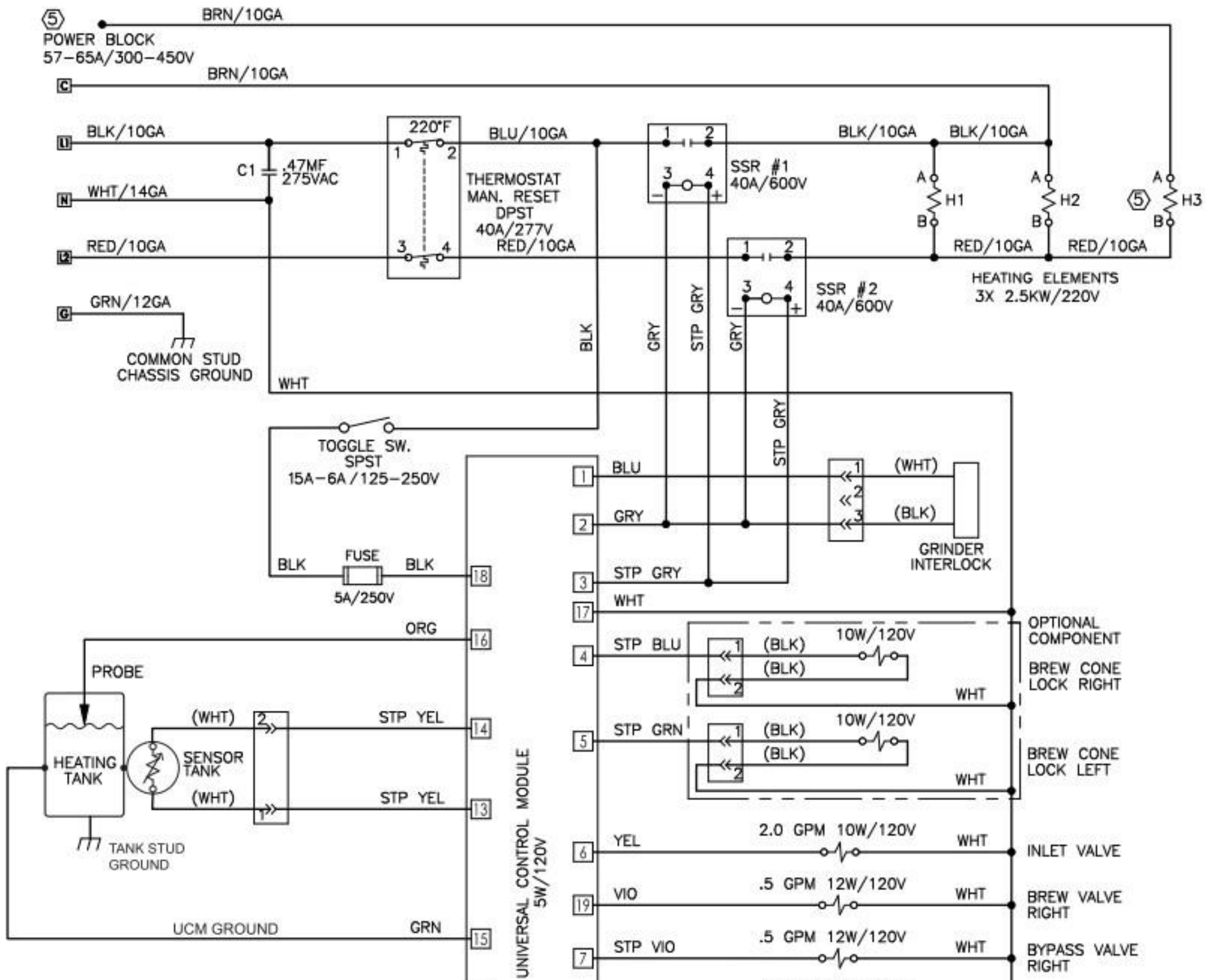


GEMINI UNITS ONLY

SSR PIN ASSIGNMENTS

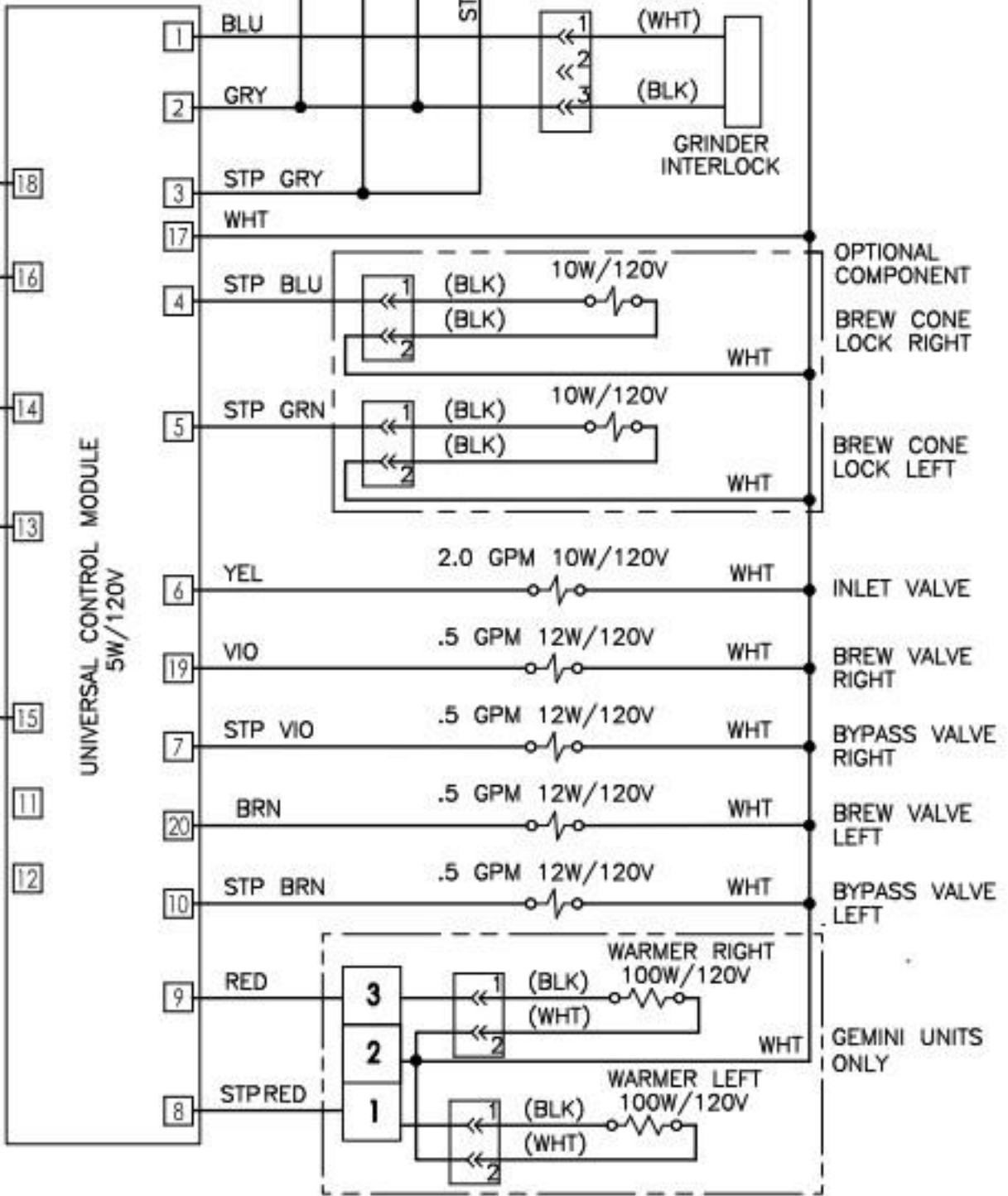


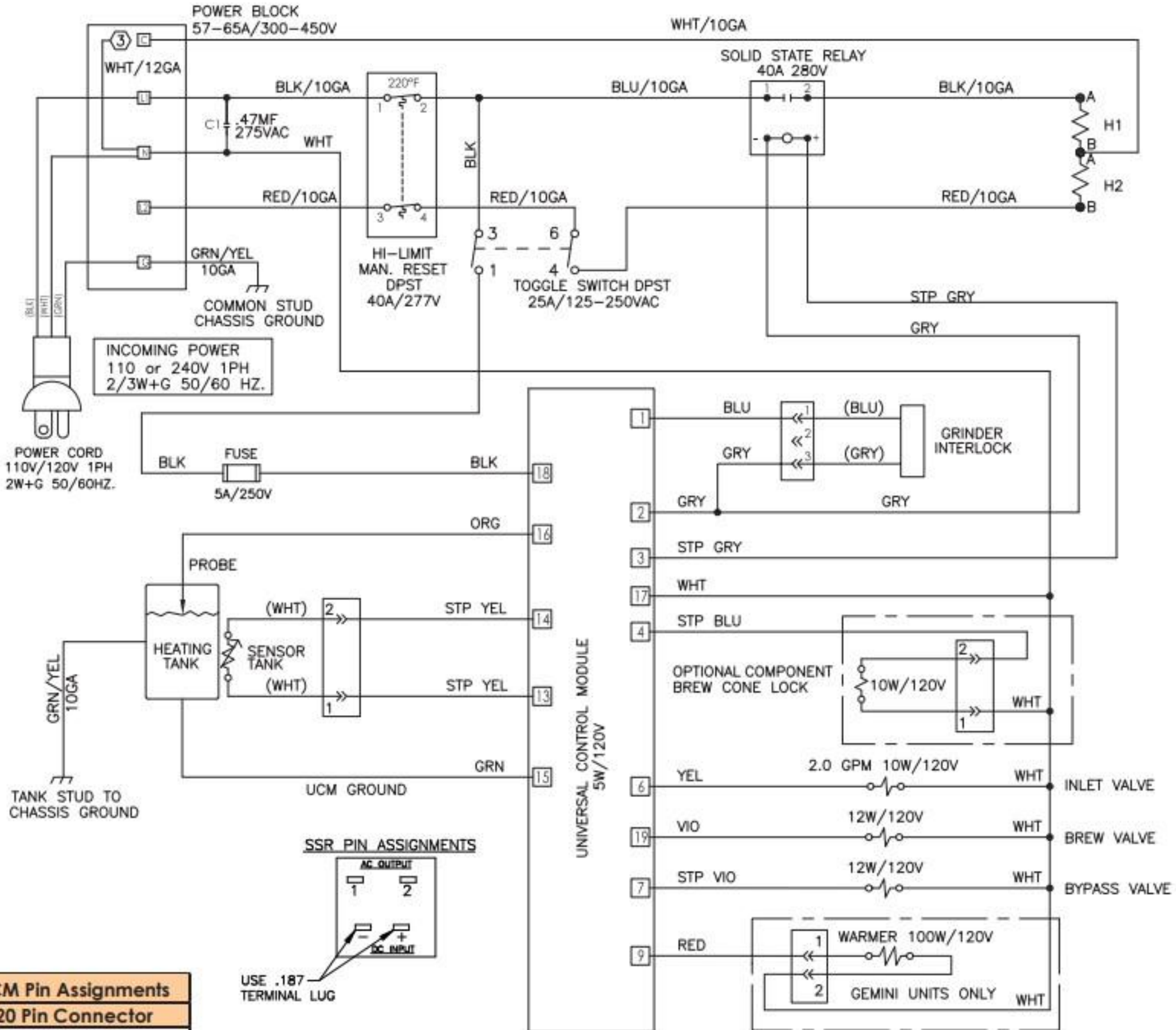
USE .187
TERMINAL LUG



LEGEND

- UNIVERSAL CONTROL MODULE**
PIN ASSIGNMENT (20 PIN)
- 1 = GRINDER (NOT USED ON TP1T/TP1TT)
 - 2 = COMMON - SOLID STATE RELAY & GRINDER
 - 3 = +5 VDC
 - 4 = SOLENOID LOCK RIGHT (NOT USED ON TP1T/TP1TT)
 - 5 = SOLENOID LOCK LEFT (NOT USED ON TP1T/TP1TT)
 - 6 = INLET VALVE
 - 7 = BYPASS VALVE RIGHT
 - 8 = WARMER LEFT
 - 9 = WARMER RIGHT
 - 10 = BYPASS VALVE LEFT
 - 11 = SENSOR WARMER RIGHT (NOT USED ON TP1T/TP1TT)
 - 12 = SENSOR WARMER LEFT (NOT USED ON TP1T/TP1TT)
 - 13 = SENSOR TANK
 - 14 = SENSOR COMMON
 - 15 = GROUND CHASSIS





UCM Pin Assignments
20 Pin Connector
GRINDER INTERLOCK

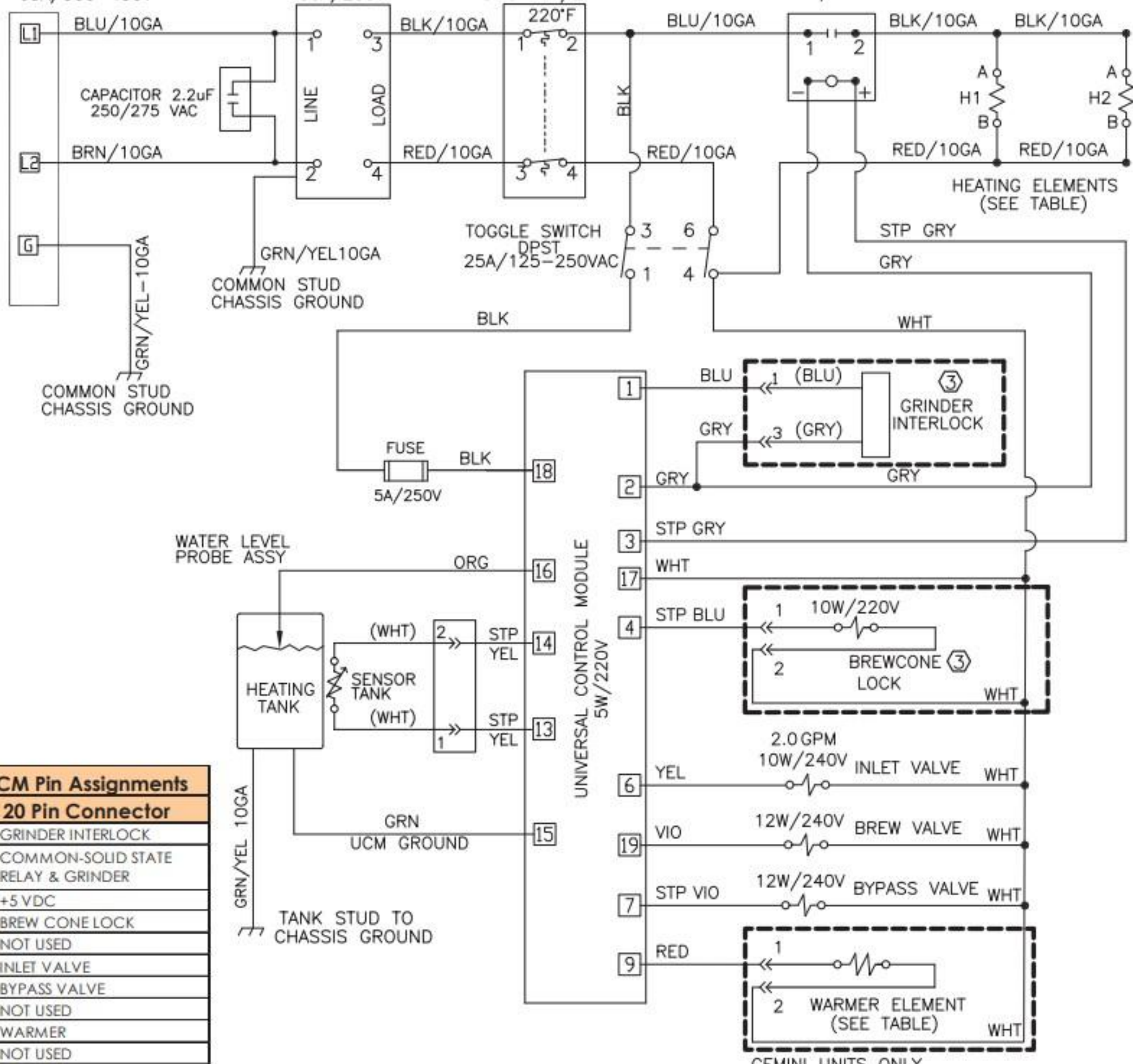
INCOMING POWER
220-240VAC 1PH
2W+G 50/60 Hz

POWER BLOCK
57-65A/300-450V

EMI FILTER
30A/250V

HI-LIMIT MAN. RESET
DPST40A/277V

SOLID STATE RELAY
40A/280V



UCM Pin Assignments
20 Pin Connector

1	GRINDER INTERLOCK
2	COMMON-SOLID STATE RELAY & GRINDER
3	+5 VDC
4	BREW CONE LOCK
5	NOT USED
6	INLET VALVE
7	BYPASS VALVE
8	NOT USED
9	WARMER
10	NOT USED
11	NOT USED

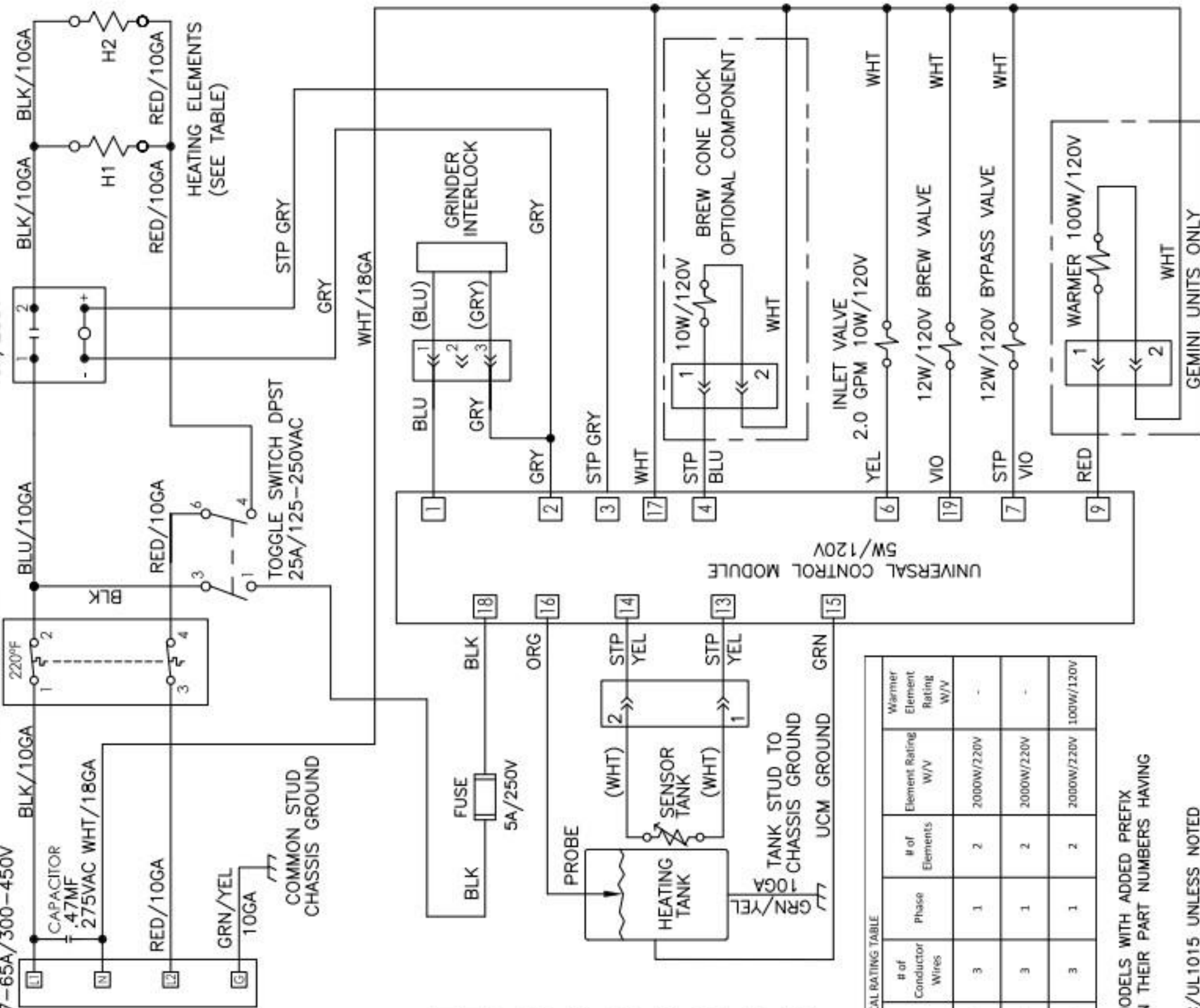
GEMINI UNITS ONLY

INCOMING POWER
208-240VAC 1PH
3W+G 50/60 HZ.

HI-LIMIT MAN. RESET
DPST 40A/277V

SOLID STATE RELAY
40A/280V

POWER BLOCK
57-65A/300-450V



1 Pin Assignments

Pin	Assignment
1	GRINDER INTERLOCK
2	COMMON-SOLID STATE RELAY & GRINDER
3	DC
4	BREW CONE LOCK
5	USED
6	VALVE
7	SS VALVE
8	USED
9	WARMER
10	USED
11	USED
12	USED
13	TEMPERATURE SENSOR
14	TEMPERATURE SENSOR
15	GROUND
16	PROBE LEVEL PROBE
17	NEUTRAL
18	LI HOT
19	Y VALVE
20	USED

ELECTRICAL RATING TABLE

Model	Watts W	Hertz Hz	# of Conductor Wires	Phase	# of Elements	Element Rating W/V	Warmer Element Rating W/V
38	18.3	3800	3	1	2	2000W/220V	-
40	19.5	4300	3	1	2	2000W/220V	-
48	18.5	3800	3	1	2	2000W/220V	-
50	19.5	4300	3	1	2	2000W/220V	100W/120V
60	21.3	5000	3	1	2	2000W/220V	100W/120V
68	18.5	3850	3	1	2	2000W/220V	100W/120V
70	19.5	4300	3	1	2	2000W/220V	100W/120V
80	21.5	5150	3	1	2	2000W/220V	100W/120V

DIAGRAM FOR ALL OTHER MODELS WITH ADDED PREFIX
//OR SUFFIX NUMBERS ON THEIR PART NUMBERS HAVING
ELECTRICAL RATINGS.

WALL SHALL BE MIN. 18AWG PVC/UL1015 UNLESS NOTED
OTHERWISE SPECIFIED