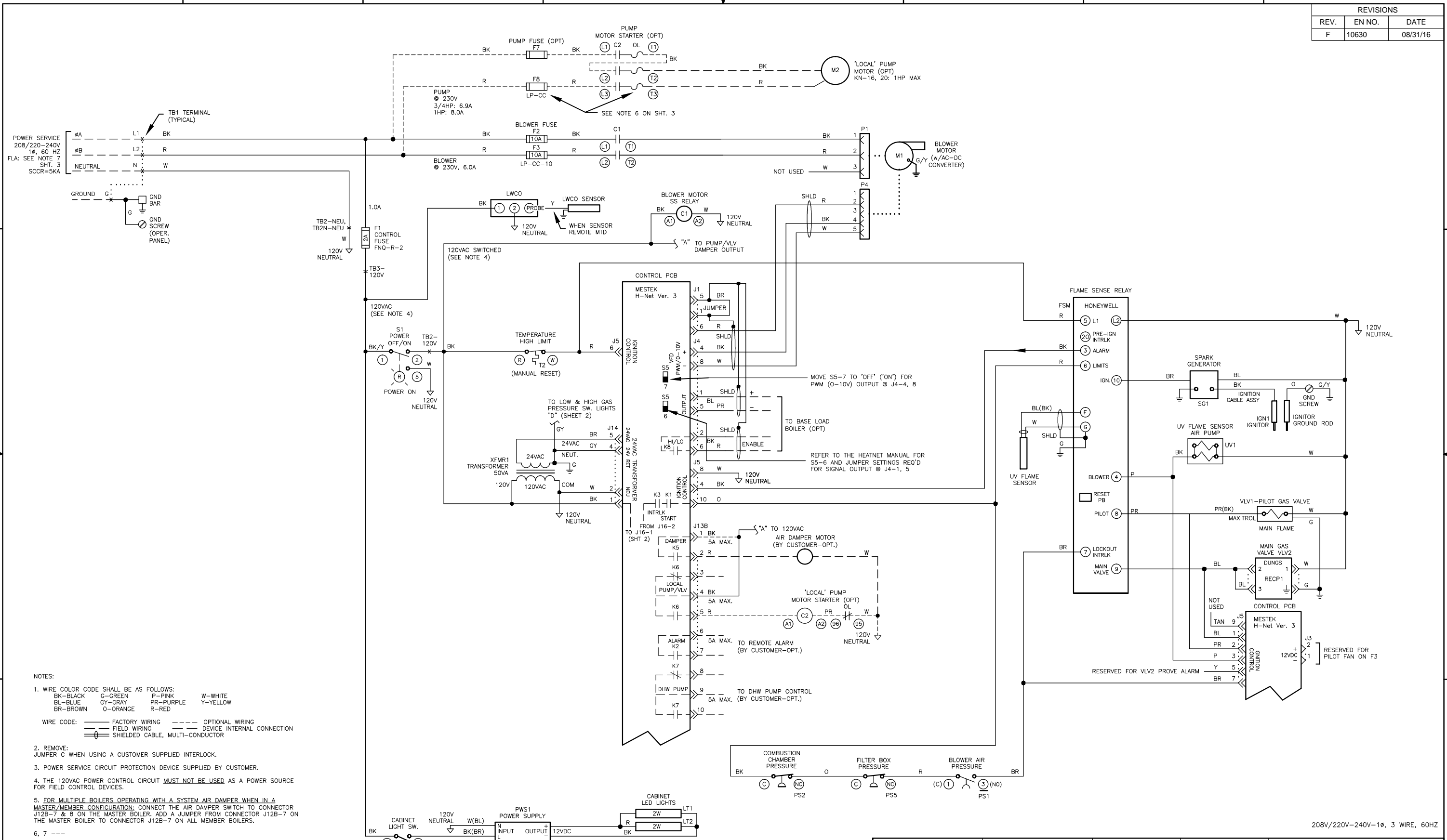


REVISIONS		
REV.	EN NO.	DATE
F	10630	08/31/16

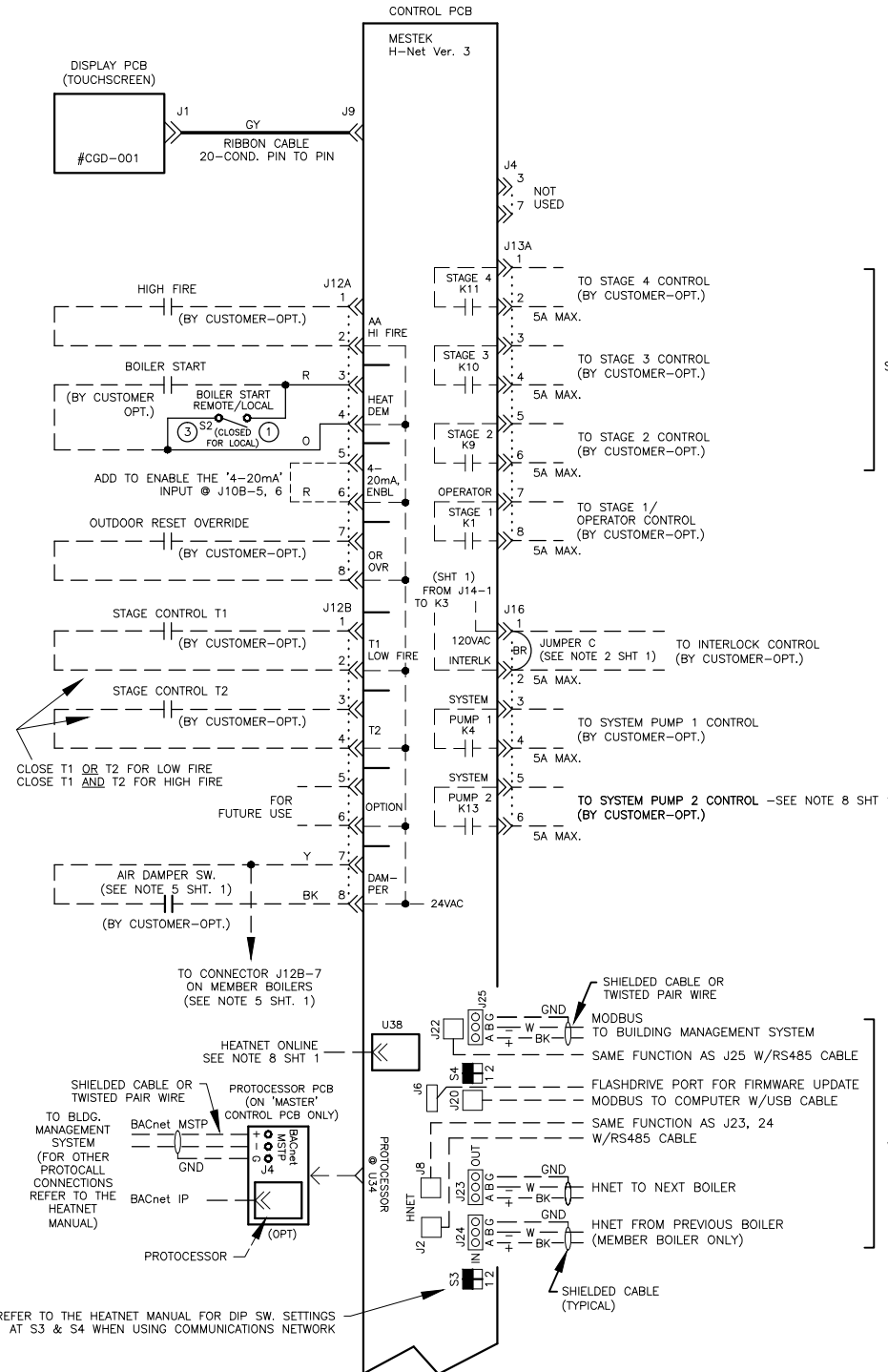
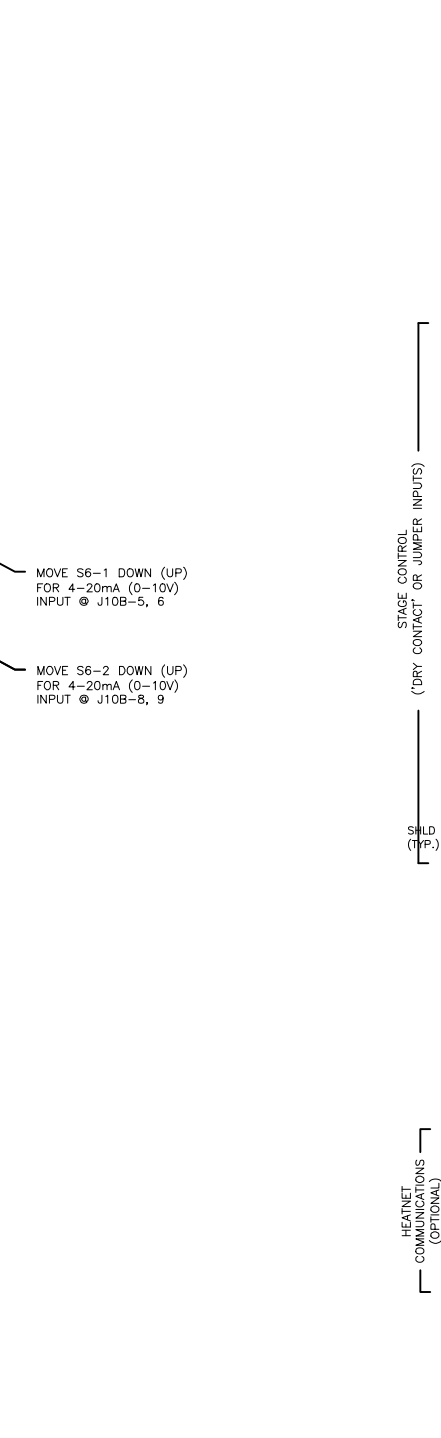
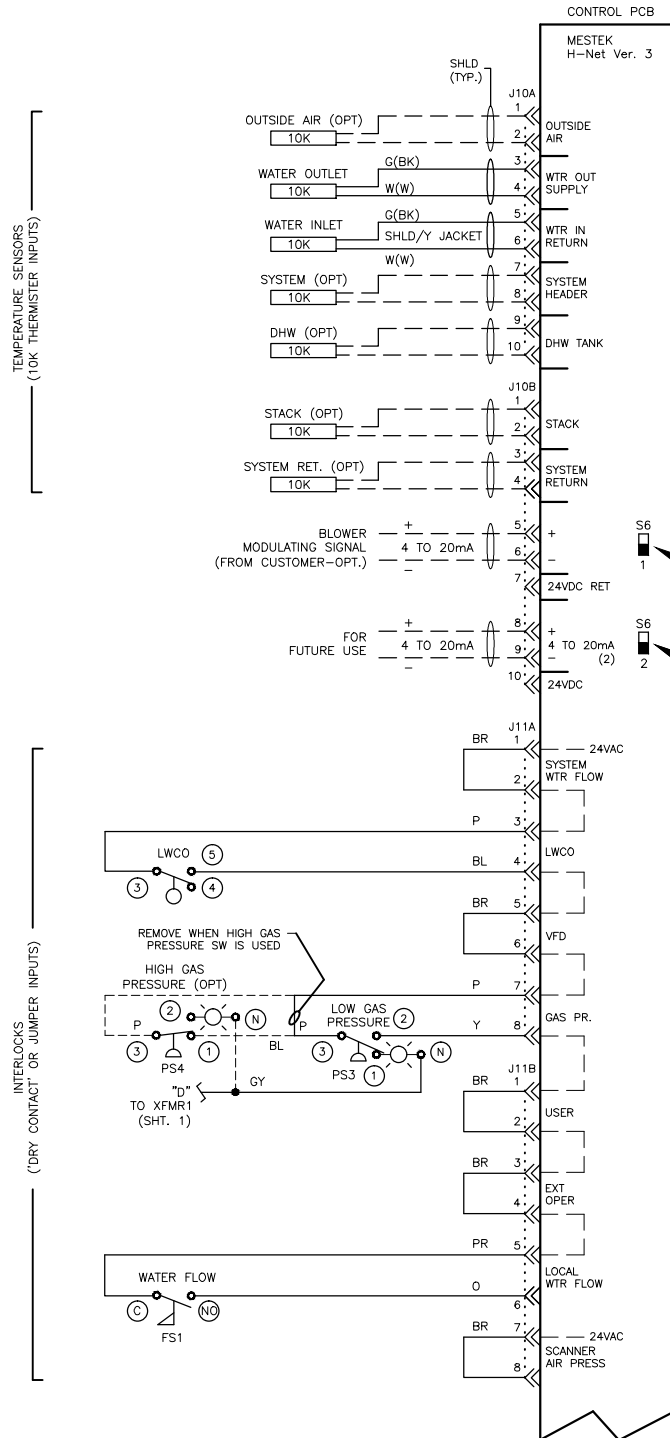


- NOTES:
- WIRE COLOR CODE SHALL BE AS FOLLOWS:  
 BK-BLACK G-GREEN P-PINK W-WHITE  
 BL-BLUE GY-GRAY PR-PURPLE Y-YELLOW  
 BR-BROWN O-ORANGE R-RED
  - REMOVE:  
 JUMPER C WHEN USING A CUSTOMER SUPPLIED INTERLOCK.
  - POWER SERVICE CIRCUIT PROTECTION DEVICE SUPPLIED BY CUSTOMER.
  - THE 120VAC POWER CONTROL CIRCUIT **MUST NOT BE USED** AS A POWER SOURCE FOR FIELD CONTROL DEVICES.
  - FOR MULTIPLE BOILERS OPERATING WITH A SYSTEM AIR DAMPER WHEN IN A MASTER/MEMBER CONFIGURATION: CONNECT THE AIR DAMPER SWITCH TO CONNECTOR J12B-7 & 8 ON THE MASTER BOILER, ADD A JUMPER FROM CONNECTOR J12B-7 ON THE MASTER BOILER TO CONNECTOR J12B-7 ON ALL MEMBER BOILERS.
  - 7 ---
  - HEATNET ONLINE, STAGE 2, 3, 4 AND SYSTEM PUMP 2 OUTPUTS ARE NOT AVAILABLE WITH THE H-NET 'LITE' CONTROL PCB.

DIVISION	PRODUCT	DRAWN BY	DATE	DRAWING DESCRIPTION		
ATH	KN-16 TO 20	RT	09/26/12	LADDER DIAGRAM		
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			RT	09/26/12	42-00002	
APPROVED BY	DATE	SHEET	SHEET SIZE	SCALE	REVISION	
JPC	10/15/12	1 of 4	B	N/A	F	

D  
C  
B  
A

D  
C  
B  
A



MOVE S6-1 DOWN (UP) FOR 4-20mA (0-10V) INPUT @ J10B-5, 6

MOVE S6-2 DOWN (UP) FOR 4-20mA (0-10V) INPUT @ J10B-8, 9

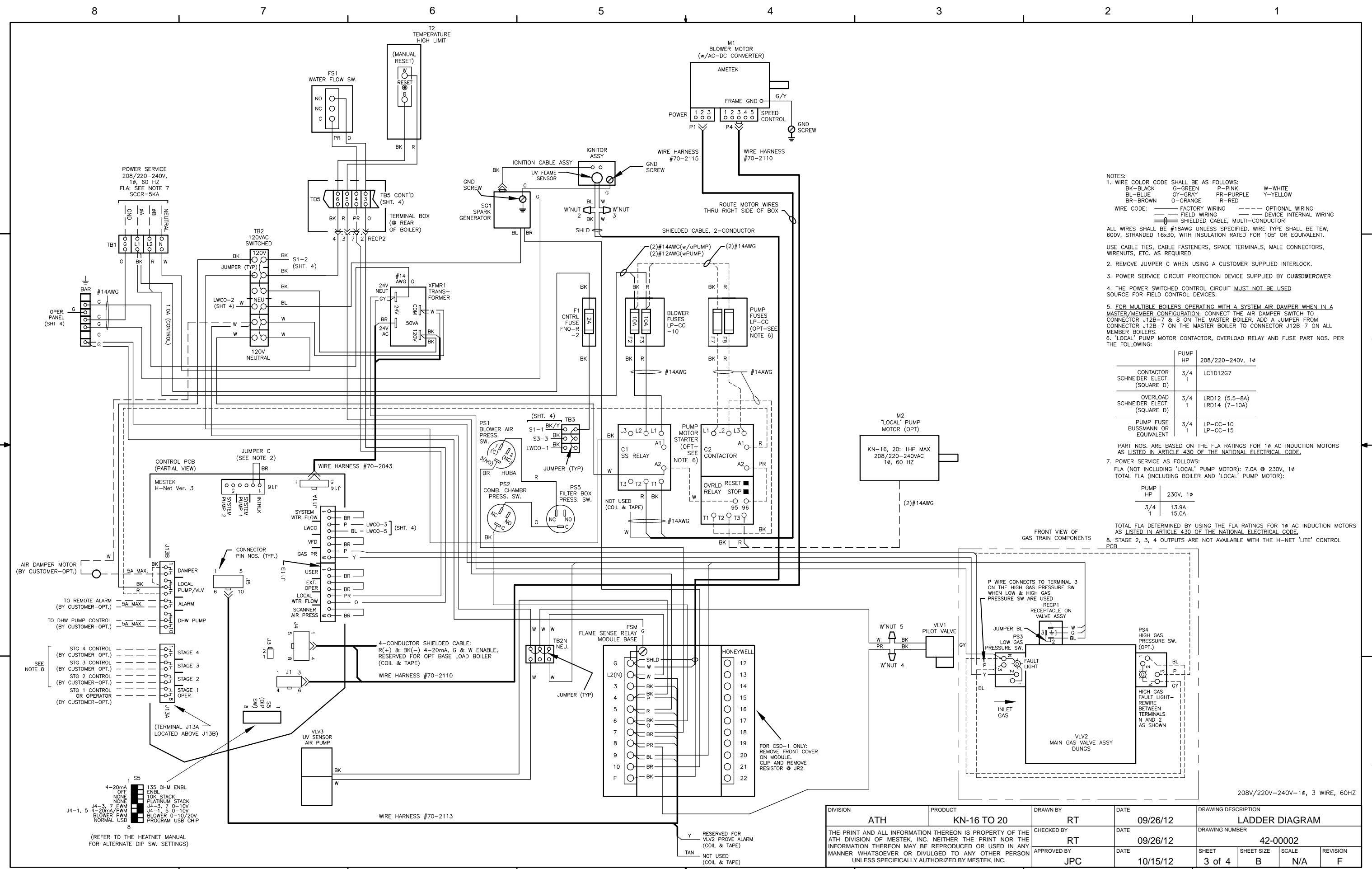
SEE NOTE 8 SHT 1

REFERENCE THE HEATNET MANUAL & W/D 42-5819 (OPTIONAL)

REFER TO THE HEATNET MANUAL FOR DIP SW. SETTINGS AT S3 & S4 WHEN USING COMMUNICATIONS NETWORK

208V/220V-240V-1Ø, 3 WIRE, 60HZ

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ATH	KN-16 TO 20	RT	09/26/12	LADDER DIAGRAM			
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			RT	09/26/12	42-00002		
APPROVED BY	DATE	SHEET	SHEET SIZE	SCALE	REVISION		
JPC	10/15/12	2 of 4	B	N/A	F		



NOTES:

- WIRE COLOR CODE SHALL BE AS FOLLOWS:  
 BK-BLACK G-GREEN P-PINK W-WHITE  
 BL-BLUE GY-GRAY PR-PURPLE Y-YELLOW  
 BR-BROWN O-ORANGE R-RED
- WIRE CODE: ———— FACTORY WIRING ———— OPTIONAL WIRING  
 ———— FIELD WIRING ———— DEVICE INTERNAL WIRING  
 ———— SHIELDED CABLE, MULTI-CONDUCTOR
- ALL WIRES SHALL BE #18AWG UNLESS SPECIFIED. WIRE TYPE SHALL BE TEW, 600V, STRANDED 16x30, WITH INSULATION RATED FOR 105° OR EQUIVALENT.
- USE CABLE TIES, CABLE FASTENERS, SPADE TERMINALS, MALE CONNECTORS, WIRENUTS, ETC. AS REQUIRED.
- REMOVE JUMPER C WHEN USING A CUSTOMER SUPPLIED INTERLOCK.
- POWER SERVICE CIRCUIT PROTECTION DEVICE SUPPLIED BY CUSTOMER POWER SOURCE FOR FIELD CONTROL DEVICES.
- THE POWER SWITCHED CONTROL CIRCUIT MUST NOT BE USED FOR FIELD CONTROL DEVICES.
- FOR MULTIPLE BOILERS OPERATING WITH A SYSTEM AIR DAMPER WHEN IN A MASTER/MEMBER CONFIGURATION: CONNECT THE AIR DAMPER SWITCH TO CONNECTOR J12B-7 & 8 ON THE MASTER BOILER. ADD A JUMPER FROM CONNECTOR J12B-7 ON THE MASTER BOILER TO CONNECTOR J12B-7 ON ALL MEMBER BOILERS.
- "LOCAL" PUMP MOTOR CONTACTOR, OVERLOAD RELAY AND FUSE PART NOS. PER THE FOLLOWING:

	PUMP HP	208/220-240V, 1φ
CONTACTOR SCHNEIDER ELECT. (SQUARE D)	3/4 1	LC1D12G7
OVERLOAD SCHNEIDER ELECT. (SQUARE D)	3/4 1	LRD12 (5.5-8A) LRD14 (7-10A)
PUMP FUSE BUSSMANN OR EQUIVALENT	3/4 1	LP-CC-10 LP-CC-15

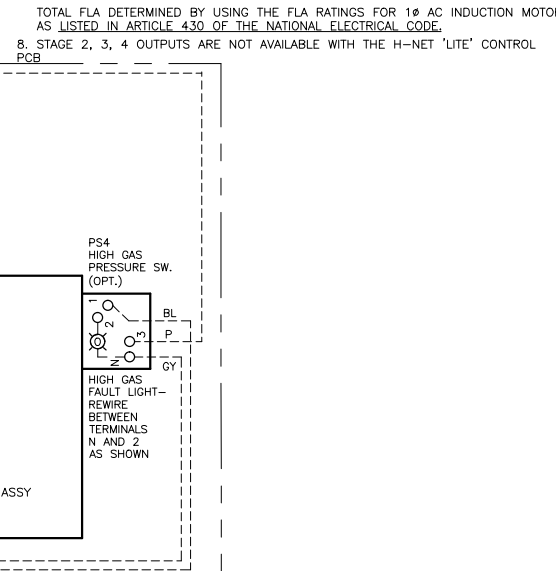
PART NOS. ARE BASED ON THE FLA RATINGS FOR 1φ AC INDUCTION MOTORS AS LISTED IN ARTICLE 430 OF THE NATIONAL ELECTRICAL CODE.

7. POWER SERVICE AS FOLLOWS:  
 FLA (NOT INCLUDING "LOCAL" PUMP MOTOR): 7.0A @ 230V, 1φ  
 TOTAL FLA (INCLUDING BOILER AND "LOCAL" PUMP MOTOR):

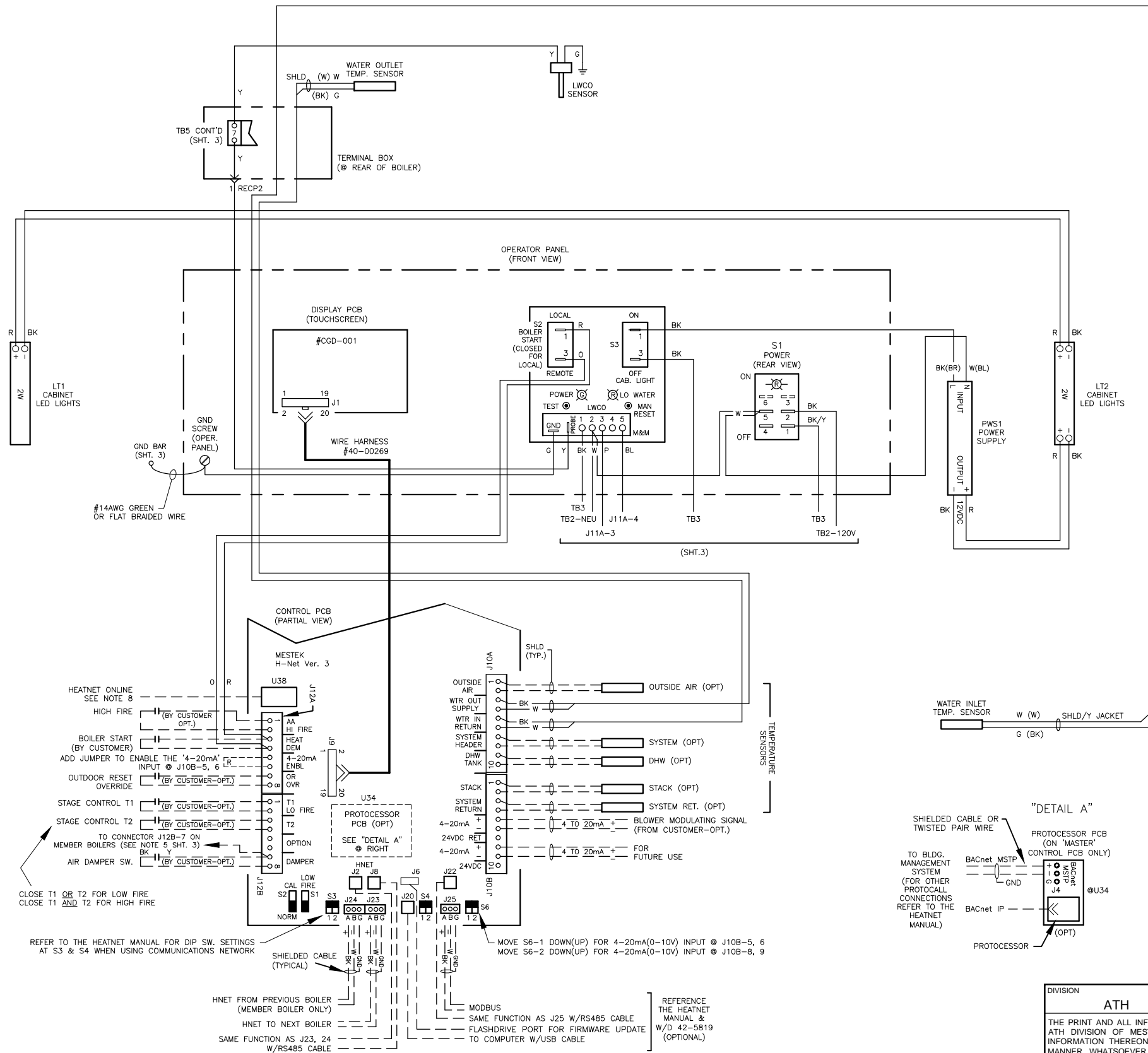
PUMP HP	230V, 1φ
3/4 1	13.9A 15.0A

TOTAL FLA DETERMINED BY USING THE FLA RATINGS FOR 1φ AC INDUCTION MOTORS AS LISTED IN ARTICLE 430 OF THE NATIONAL ELECTRICAL CODE.

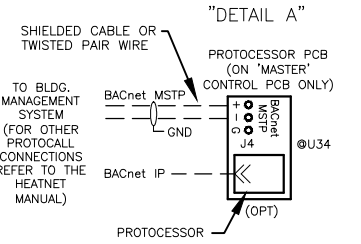
8. STAGE 2, 3, 4 OUTPUTS ARE NOT AVAILABLE WITH THE H-NET "LITE" CONTROL PCB



DIVISION	ATH	PRODUCT	KN-16 TO 20	DRAWN BY	RT	DATE	09/26/12	DRAWING DESCRIPTION	LADDER DIAGRAM		
CHECKED BY	RT	DATE	09/26/12	DRAWING NUMBER	42-00002						
APPROVED BY	JPC	DATE	10/15/12	SHEET	3 of 4	SHEET SIZE	B	SCALE	N/A	REVISION	F



- NOTES:
1. WIRE COLOR CODE SHALL BE AS FOLLOWS:  
 BK-BLACK G-GREEN P-PINK W-WHITE  
 BL-BLUE GY-GRAY PR-PURPLE Y-YELLOW  
 BR-BROWN O-ORANGE R-RED
  2. 3 ---  
 WIRE CODE: --- FACTORY WIRING - - - - - OPTIONAL WIRING  
 --- FIELD WIRING  
 --- SHIELDED CABLE, MULTI-CONDUCTOR
  4. THE 120V POWER CONTROL CIRCUIT **MUST NOT BE USED** AS A POWER SOURCE FOR FIELD CONTROL DEVICES.
  - 5, 6, 7 ---
  8. HEATNET ONLINE NOT AVAILABLE WITH THE H-NET 'LITE' CONTROL PCB.



208V/220V-240V-1Ø, 3 WIRE, 60HZ

DIVISION	PRODUCT	DRAWN BY	DATE	DRAWING DESCRIPTION		
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			RT	09/26/12	42-00002	
APPROVED BY	DATE	SHEET	SHEET SIZE	SCALE	REVISION	
JPC	10/15/12	4 of 4	B	N/A	F	