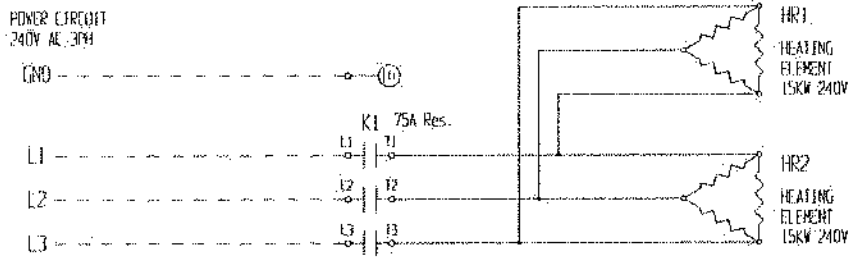


SCHEMATIC DIAGRAM

Boiler Controller (M316-ERC-LED-STM Parameter Settings
(See also Instruction Manual))

PARAMETER #	PARAMETER VALUE	DESCRIPTION
0	1	Boiler Functions: Automatic Refill, Automatic Flush & Drain
12	1	Boiler Monitors: Automatic Refill, High Water Level, Auto. Flush & Drain
20	6 (seconds)	Automatic Refill: Delay-On time
21	3 (seconds)	Automatic Refill: Delay-Off time
22	10 (minutes)	Automatic Refill Monitor: First Refill-timeout After POWER-ON
23	1 (minutes)	Automatic Refill Monitor: Refill-timeout During Boiler Operation
30		No change
31	10 (minutes)	Automatic Flush and Drain: Valve Open Time
32	20 (seconds)	Automatic Flush and Drain Monitor: Min. expected Refill Time After POWER-ON



FIELD WIRING

BOILER CONTROLLER
MODEL M316-ERC-LED-STM

CONTROLLER DISPLAY MUST SHOW

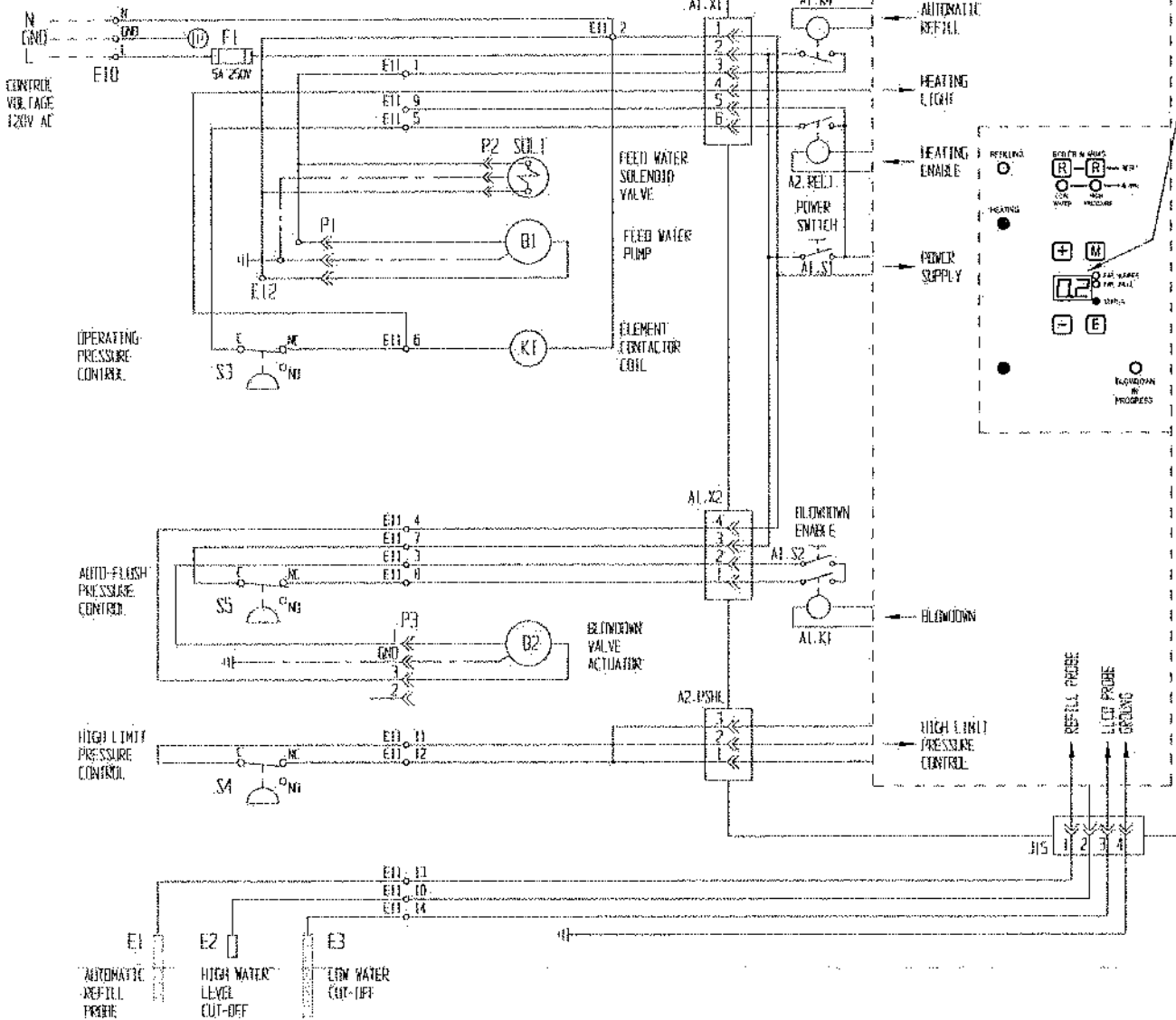
SEQUENCE OF EVENTS BASIC FUNCTIONS

LOW WATER-CUT-OFF FUNCTION:
- If the probe E3 makes no contact with boiler water for more than 3 seconds, relay EDC.REL1 de-energizes and the "LOW WATER" alarm light lifts.
- As soon as the water level in the boiler is restored so that the probe E3 makes contact with water, press the "LOW WATER"-RESET-key and the relay EDC.REL1 energizes.

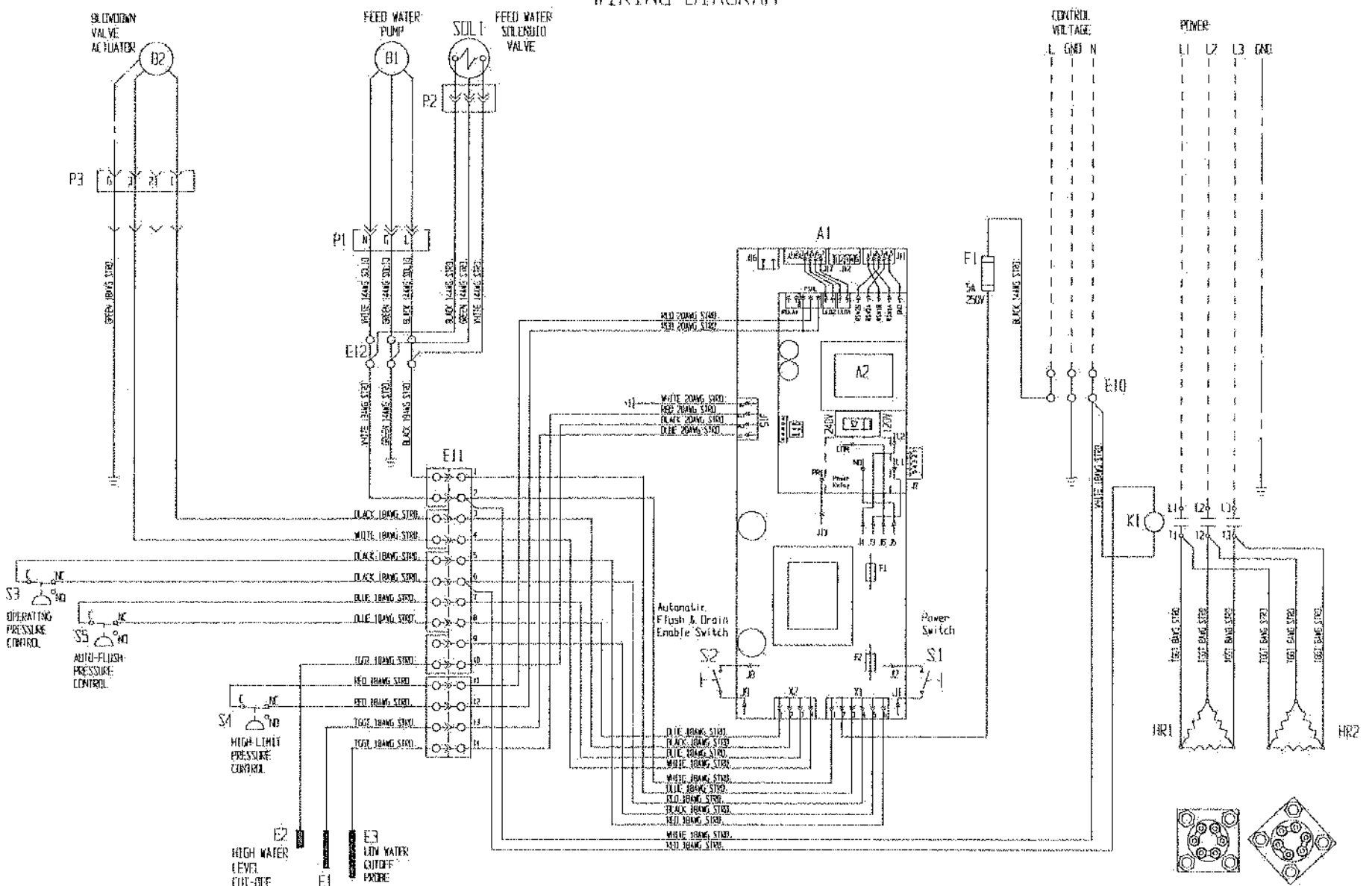
PRESSURE HIGH LIMIT FUNCTION:
- If the steam pressure in the boiler shell rises above the setting of the "HIGH LIMIT" pressure control S4, the relay EDC.REL1 de-energizes and the "HIGH PRESSURE" alarm light lifts.
- As soon as the drops below the setting of the "HIGH LIMIT"-pressure control S4, press the "HIGH PRESSURE"-reset switch and the relay EDC.REL1 energizes.

AUTOMATIC REFILL FUNCTION:
- As soon as the probe E1 makes no contact with boiler water, after the elapse of the "refill-on" delay time (PARAMETER #20), relay EDC.K4 energizes.
- As soon as the probe E1 makes contact with boiler water, after elapse of the "refill-off" delay time (PARAMETER #21), relay EDC.K4 de-energizes.

AUTOMATIC FLUSH & DRAIN FUNCTION:
- As soon as the power switch S1 is turned to the "OFF"-position and after the elapse of 6 seconds, relay EDC.K1 energizes.
- As soon as the steam pressure in the boiler shell drops below the setting of the pressure control S5 "AUTO-FLUSH" and if the blowdown enable switch S2 is in the "ENABLE"-position, the valve actuator B2 energizes for a duration set with PARAMETER #31.
- As soon as the power switch S1 is turned to the "ON" position, relay EDC.K1 de-energizes immediately.



WIRING DIAGRAM



		DRN. END CHKD. TD	TITLE RBH30E3F S/N 68383	REV. 5
Electra Steam, Inc. 4407 Martinsburg Pike P.O. Box 37 Clear Brook, VA 22624 Phone 540-682-3811 Fax 540-685-8101		DATE 6/05/2007	LINE VOLTAGE: 240V CTRL. VOLTAGE: 120V FREQUENCY: 60HZ DOCUMENT NO. 18.91.101.110.122.130.140.X	PAGE 1 OF 1