

CONTROLLER START-UP

| PROJECT: | MOTOR: |
|------------|---------|
| REFERENCE: | FLA: |
| | SUPPLY: |

- 1. Ensure proper supply voltage (noted above) present on circuit breaker terminals L1, L2 and L3.
- 2. Motor leads connect to T1, T2 and T3. The seal fail probe leads to be wired to W1 and W2 (red).
- 3. The yellow terminals 1 and 2 (dry contacts) are for remote alarm monitoring.
- 4. Thermal protection leads P1 and P2 connect to terminals so marked, allowing the thermostat to open the circuit before dangerous motor temperatures are reached. Reset occurs automatically when temperature is reduced.
- 5. Rotation: To test for proper direction, turn the H-O-A selector switch (S1) to the "HAND" position, and the Rotation Selector Switch (S2) to the "FWD" position. If rotation is backwards, turn off power and reverse leads T1 and T2.
- 6. In the "HAND" position both forward and reverse rotations are available according to switch position selected. Door mounted indicator light shows rotation selected.
- 7. Switch S2 in OFF position control inoperative.
- 8. In AUTO position rotation to be forward. If a "jam" occurs, the controller will reverse the motor as described and return to forward motion. The "TEST" button mounted in the Controller will simulate a stall condition. Press and release when unit reverses will simulate a jam condition. Press and hold will simulate over current condition, indicating unit has reached the set count of stalled conditions. A selector switch on the Model 412 Current Sensor has a range of 0-5, allowing for choice in the number of attempts the grinder makes prior to tripping and activating alarm. A potentiometer, located on the right-hand side of the Model 412 Current Sensor, senses the amperage and is to be set at the full load amperage (FLA) of the motor (FLA is located on the motor nameplate).
- 9. To test the seal failure alarm, place a jumper across terminals W1 and W2 (red), energizing the alarm light.



CONTROLLER START-UP cont'd...

TESTING

Time Mark 412 - RED TEST BUTTON

"Stall" Simulation

Press and release while in AUTO mode on H-O-A Selector Switch - motor will reverse (2 seconds) and return to forward rotation.

Overload "Attempts" Simulation

Press and hold while in AUTO mode on H-O-A Selection Switch - motor will trip out on over current, indicating the unit has reached the set count of stalled conditions.

ALARMS

Two alarms are built into the control panel - each will activate the alarm light on top of the enclosure.

"Overload Attempts"

When set limit reached and obstruction cleared, push "CYCLE RESET" on enclosure to restore operation.

"Over current"

Overload relay will sense a high current condition activating the alarm light. Allow motor to cool and restore operation using "OVERLOAD RESET" button.

CURRENT SENSOR (MODEL 412) SETTINGS

Cycle Selector: (0-5) Counts jam frequency prior to alarm

activation

Current Adjust Pot: 0 - 5 amps @480 Volt

0 - 10 amps @ 240 Volt Set at FLA rating of motor

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