

# ARMSTRONG® SINGLE PHASE SIMPLEX GRINDER MODEL 113

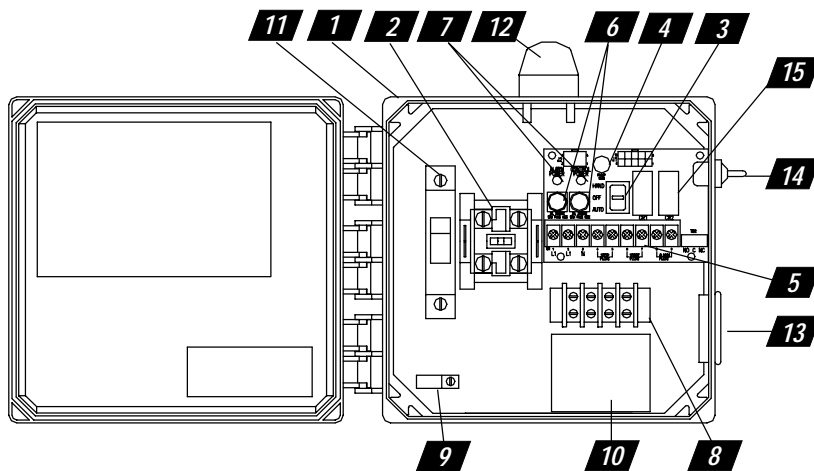
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## SUBMITTAL

Job: _____	Representative: _____
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_____	Order By: _____ Date: _____
Engineer: _____	Submitted By: _____ Date: _____
Contractor: _____	Approved By: _____ Date: _____

### Single phase, simplex grinder capacitor start / run pump control.

The Model 113 control panels provide a reliable means of controlling one 120, or 240 VAC single-phase pump in water and sewage installations. Two control switches activate an IEC motor contactor to turn the pump on and off. If an alarm condition occurs, an additional alarm switch activates the audio/visual alarm system. Common appliances include pump chambers and lift stations.



1. **Enclosure** measures 14 x 12 x 6 inches (35.56 X 30.48 X 15.24 cm). NEMA 4X (ultraviolet stabilized thermoplastic with removable flanges for outdoor or indoor use).  
★ Options selected may increase enclosure size and change component layout.
2. **IEC Motor Contactor** controls pump by switching electrical lines.
3. **HOA Switch** for manual pump control (mounted on circuit board).
4. **Green Pump Run Indicator Light** (mounted on circuit board).
5. **Float Switch Terminal Block** (mounted on circuit board).
6. **Alarm and Control Fuses** (mounted on circuit board).
7. **Alarm and Control Power Indicators** (mounted on circuit board).
8. **Pump Input Power and Pump Connection Terminal Block**
9. **Ground Lugs**
10. **Circuit Breaker** provides pump disconnect and branch circuit protection.
11. **Capacitor Start Module** - start/run capacitor kit included.

#### STANDARD ALARM PACKAGE

12. **Red Alarm Beacon** provides 360° visual check of alarm condition.
13. **Alarm Horn** provides audio warning of alarm condition (83 to 85 decibel rating).
14. **Exterior Alarm Test/Normal/Silence Switch** allows alarm horn to be silenced and testing of horn and light to ensure proper operation of alarm system.
15. **Horn Silence Relay** automatically resets alarm after alarm condition has been resolved (mounted on circuit board).

#### FEATURES

- Entire control system (panel and switches) is UL Listed to meet and/or exceed industry safety standards
- Dual safety certification for the United States and Canada
- Complete with step-by-step installation instructions.
- Three-year limited warranty
- Thermal cutout
- Auxiliary alarm contact, form C type
- Door mounted pump run indicator



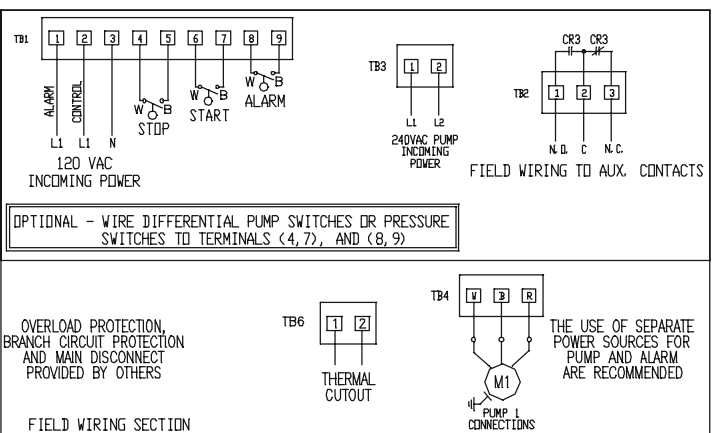
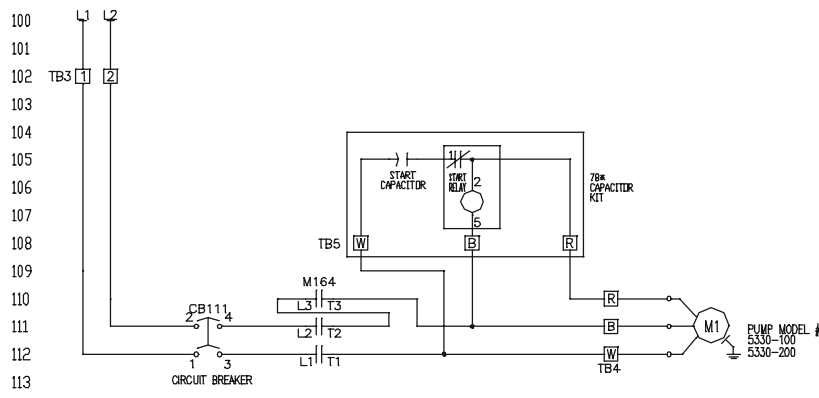
#### OPTIONS

- 3A Alarm flasher
- ★ 4A Low level cutout - requires float
- ★ 4B Red low-level indicator & alarm  
*must select 4A*
- ★ 8A Elapsed time meter
- ★ 8C Event (cycle) counter
- 9A Pump overload
- 10E Lockable latch
- ★ 10F Lightning arrester
- ★ 10K Anti-condensation heater

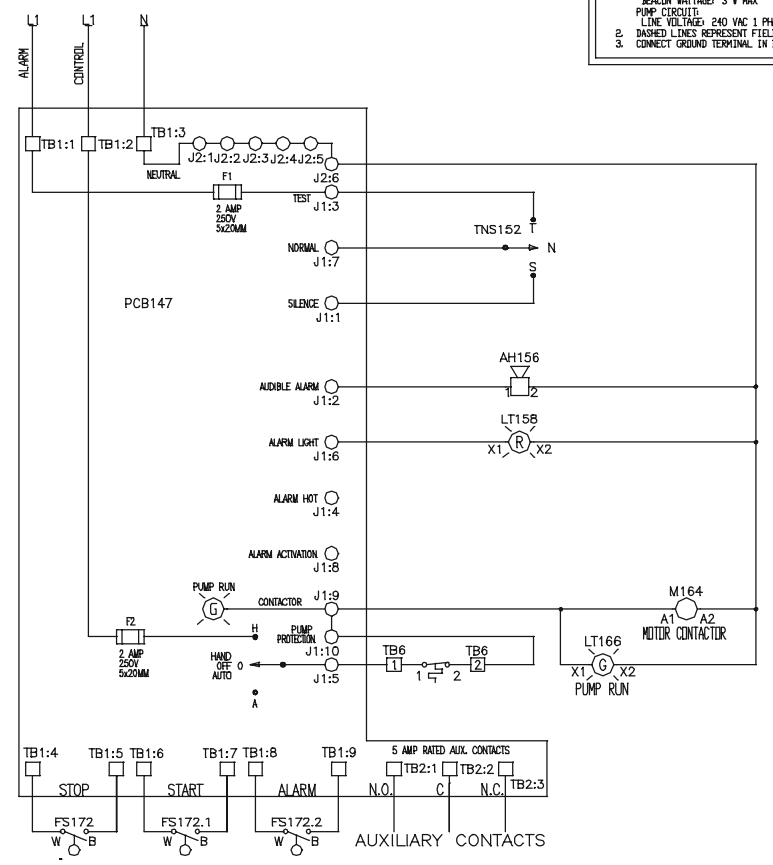
# SINGLE PHASE - SIMPLEX MODEL 113

**NOTES**

1. PANEL SPECIFICATIONS:  
CONTROL/ALARM SECTION  
VOLTAGE: 120 VAC  
BEACON MESSAGES: 3 V MAX  
PUMP CIRCUIT  
LINE VOLTAGE: 240 VAC 1 PHASE
2. DASHED LINES REPRESENT FIELD WIRING REQUIRED.
3. CONNECT GROUND TERMINAL IN BOX TO A GOOD GROUND.



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**S.A. Armstrong Limited**  
23 Bertrand Avenue  
Toronto, Ontario  
Canada, M1L 2P3  
Tel: (416) 755-2291  
Fax: (416) 759-9101  
Visit us at [www.armstrongpumps.com](http://www.armstrongpumps.com)

**Armstrong Pumps Limited**  
Peartree Road, Stanway  
Colchester, Essex  
United Kingdom, C03 5JX  
Tel: 01206-579491  
Fax: 01206-760532



**Armstrong Pumps Inc.**  
93 East Avenue  
Buffalo, New York  
U.S.A. 14120-6594  
Tel: (716) 693-8813  
Fax: (716) 693-8970

**Armstrong Darling Inc.**  
2200 Place Transcanadienne  
Montreal, Quebec  
Canada, H9P 2X5  
Tel: (514) 421-2424  
Fax: (514) 421-2436