

## STANDARD FEATURES

- Heavy duty UL 508 listed control panel used for sewage lift station applications
- Dual-voltage transformer operates 115/230 VAC
- Exterior alarm test/silence switch
- Padlockable NEMA 4X thermoplastic enclosure
- Hand-Off-Auto (HOA) pump selector switch
- LEDs status indicators for power, pump run, float activation and seal fail (optional)
- Circuit breaker overload protection
- IEC rated magnetic motor contactors
- Beacon with vibrant multi-color LEDs, green (normal/pump run), red (alarm), and amber (error/HOA off)
- Alarm buzzer 95dB warble w/ exterior test/silence switch
- Normally Open (NO) and Normally Closed (NC) Dry Alarm Contacts
- Labeled/numbered field wiring terminals
- Laminated electrical schematic
- (3) 20' mechanical float switches
- Configure button activates alarm test, clear alarms, and enables/disabled system configuration settings



## AVAILABLE OPTIONS

- |  |  |
|--|--|
| <input type="checkbox"/> C - Control Fuse Disconnect Switch    | <input type="checkbox"/> M2 - Elapsed Time Meters                |
| <input type="checkbox"/> D2 - Main Disconnect (60A)            | <input type="checkbox"/> M4 - Combo Elapsed Time Meter/ Counters |
| <input type="checkbox"/> H1 - Anti-condensation Panel Heater   | <input type="checkbox"/> S2 - Thermal Cutout / Seal Failure      |
| <input type="checkbox"/> I - Intrinsically Safe float circuits | <input type="checkbox"/> WC - External Float Weights             |
| <input type="checkbox"/> L1 - Lightning Arrestor               | <input type="checkbox"/> _____                                   |
| <input type="checkbox"/> _____                                 | <input type="checkbox"/> _____                                   |
| <input type="checkbox"/> _____                                 | <input type="checkbox"/> _____                                   |

Contact factory for additional options

\*Options will increase size of enclosure

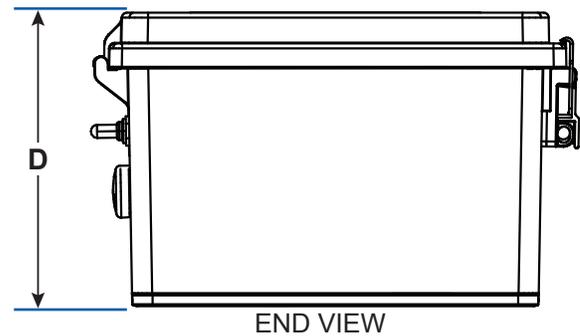
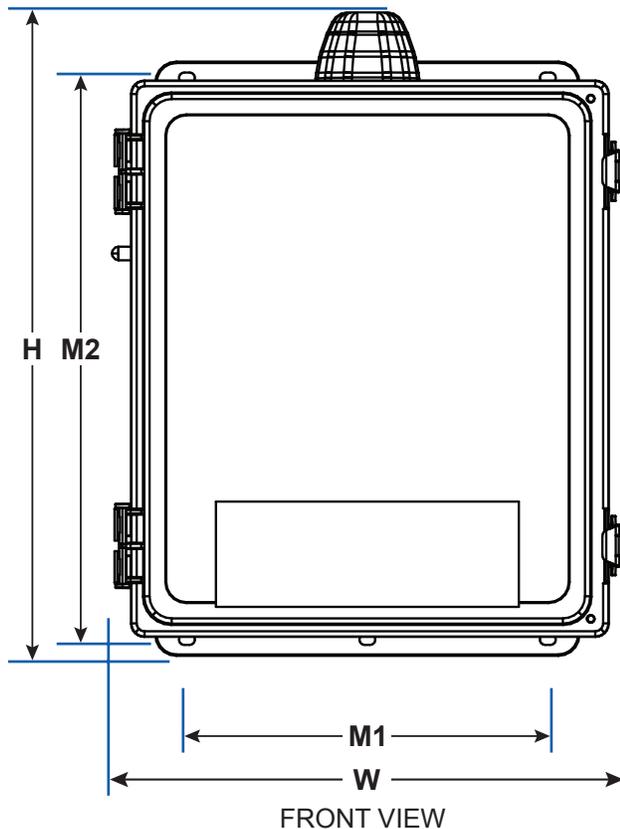


## DESCRIPTION OF OPERATION

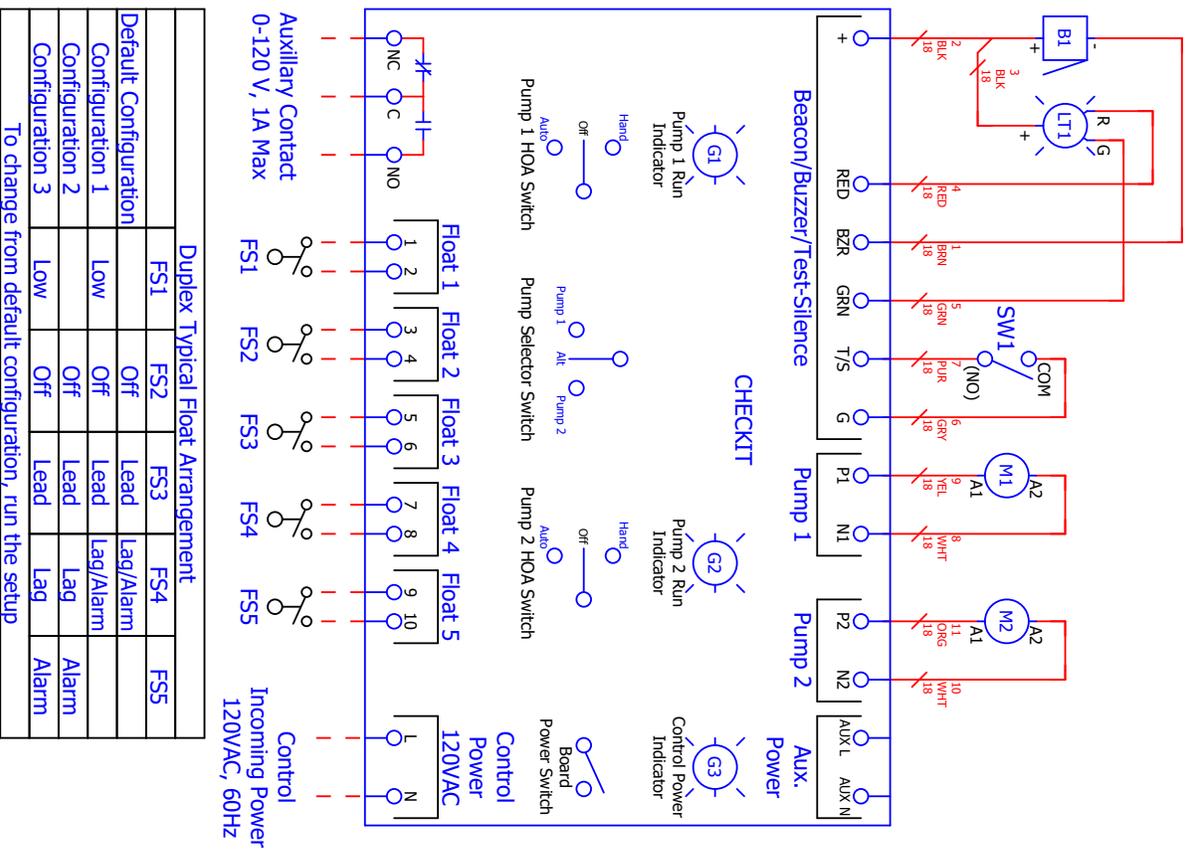
The TC-1D control panels are float switch operated and come standard with (3) 20' mechanical float switches for STOP, LEAD pump start, and LAG pump start/high liquid level alarm. As the liquid level rises, the LEAD float turns on activating the first pump until receding water level deactivates the STOP float. If the water continues to rise to the LAG/ALARM float, it will activate the second pump and alarm. Both pumps remain on until receding water level deactivates the STOP float. Lead and lag pumps will alternate on successive cycles to balance pump usage.

(Exterior Enclosure Dimension in Inches)

MODEL NUMBER	VOLTAGE	AMPERAGE	W	H	D	M1	M2
TC1D215A	120/230	0.0 - 15.0	12.17	16.08	7.28	8.56	13.34
TC1D220A	120/230	16.0 - 20.0	12.17	16.08	7.28	8.56	13.34
TC1D230A	120/230	21.0 - 30.0	12.17	16.08	7.28	8.56	13.34



Branch Circuit Protection Device/Disconnect Means Field Provided -  
Size per manufacturing specifications for Pump/Motor

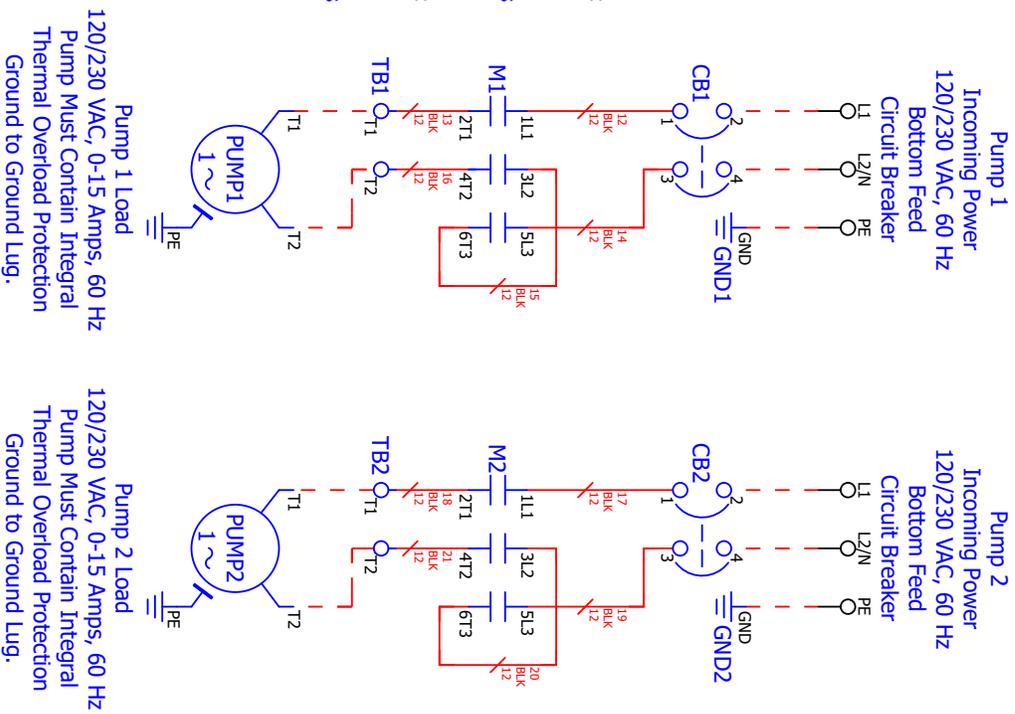


Duplex Typical Float Arrangement					
	FS1	FS2	FS3	FS4	FS5
Default Configuration	Off	Off	Lead	Lag/Alarm	
Configuration 1	Low	Off	Lead	Lag/Alarm	
Configuration 2	Off	Off	Lead	Lag	Alarm
Configuration 3	Low	Off	Lead	Lag	Alarm

To change from default configuration, run the setup



Device Tag	Description	Priority	Field Supplied
B1	Buzzer 5-30VDC	45 In-lb	
CB1;CB2	Circuit Breaker 2 Pole 20 A	45 In-lb	
CHECKIT	Check-IT Duplex	91 In-lb	3 In-lb
GND1;GND2	Ground Lug	45 In-lb	
LTI	Beacon		
M1;M2	Contactor 18 A - 120V Coil	15 In-lb	15 In-lb
SW1	Toggle Switch, (ON)-OFF		
TB1;TB2	Terminal Block, 30A		



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**Tsurumi Pump**  
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Gardendale Heights, IL 60139  
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This drawing contains proprietary information which must not be duplicated, used, or disclosed in whole or in part without prior written consent.

Model Number **TC1D215A**

Quote Number \_\_\_\_\_

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Checked By **B. Nelson**

Date **12/14/2023**

Revision **001**

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Notes:  
1. WARNING! Electrical Shock Hazard! Disconnect power before servicing this product. A qualified service person must install and service this product according to applicable electrical and plumbing codes.  
2. Install in accordance with National Electric Code, NFPA 70, Seal all boxes, fittings, and conduit with appropriate seal devices to prevent moisture and gasses from entering enclosure.  
3. Connect all grounds to a good ground. 4. Dashed lines represent field wiring - Use minimum 60 deg C Copper Wire 5. Branch Circuit Protection Device/Disconnect Means Field Provided.