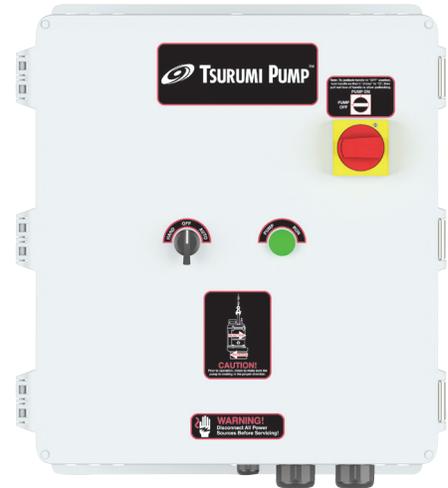


## DESCRIPTION OF OPERATION

The 52-GEN Series control panels are designed for automatic, float switch operation of a pump in dewatering applications, that are powered by a generator. Upon water level rise, when the top float is above horizontal, the generator will start. This will start the generator warmup time delay. After the delay, the pump will start and pump until the bottom float drops below horizontal. The generator will remain on until the generator shutdown timer times out. This indicates that the level never reached the start float and that no more pumping is required. Therefore, the generator will turn off. This completes the cycle. When the level reaches the top float again, the process will repeat.

## STANDARD FEATURES

- UL listed control panels used for manual dewatering applications powered by a generator
- Multi-voltage, 208/230/460 VAC (operates all pump voltages)
- Heavy duty and padlockable NEMA 4X thermoplastic enclosure
- Green pump run indicator light, rated heavy duty and watertight
- Motor Protective Switch (MPS) - provides disconnect, short circuit, and adjustable overload protection
- Heavy duty IEC rated magnetic motor contactor
- Heavy duty watertight cable connectors for pump and power - quick installation
- Labeled/numbered field wiring terminals
- Thermal label schematic affixed to inner door
- Includes (2) 50 foot mechanical float switches
- UL 508 listed for USA and Canada

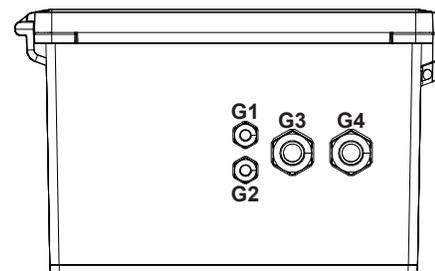
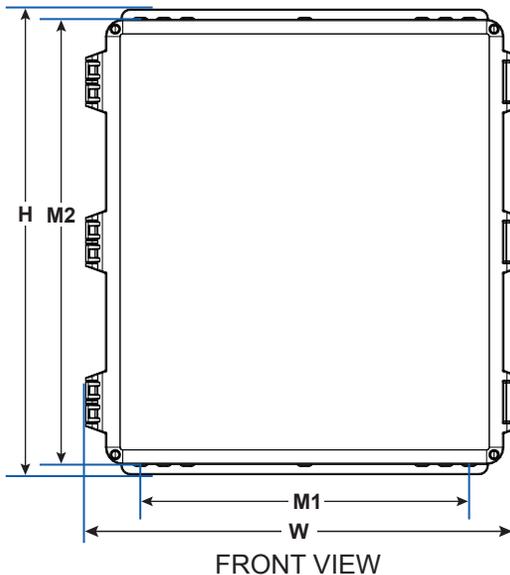


## SPECIFICATIONS

(Exterior Enclosure Dimension in Inches)

(Cable Grip Diameter Range in Inches)

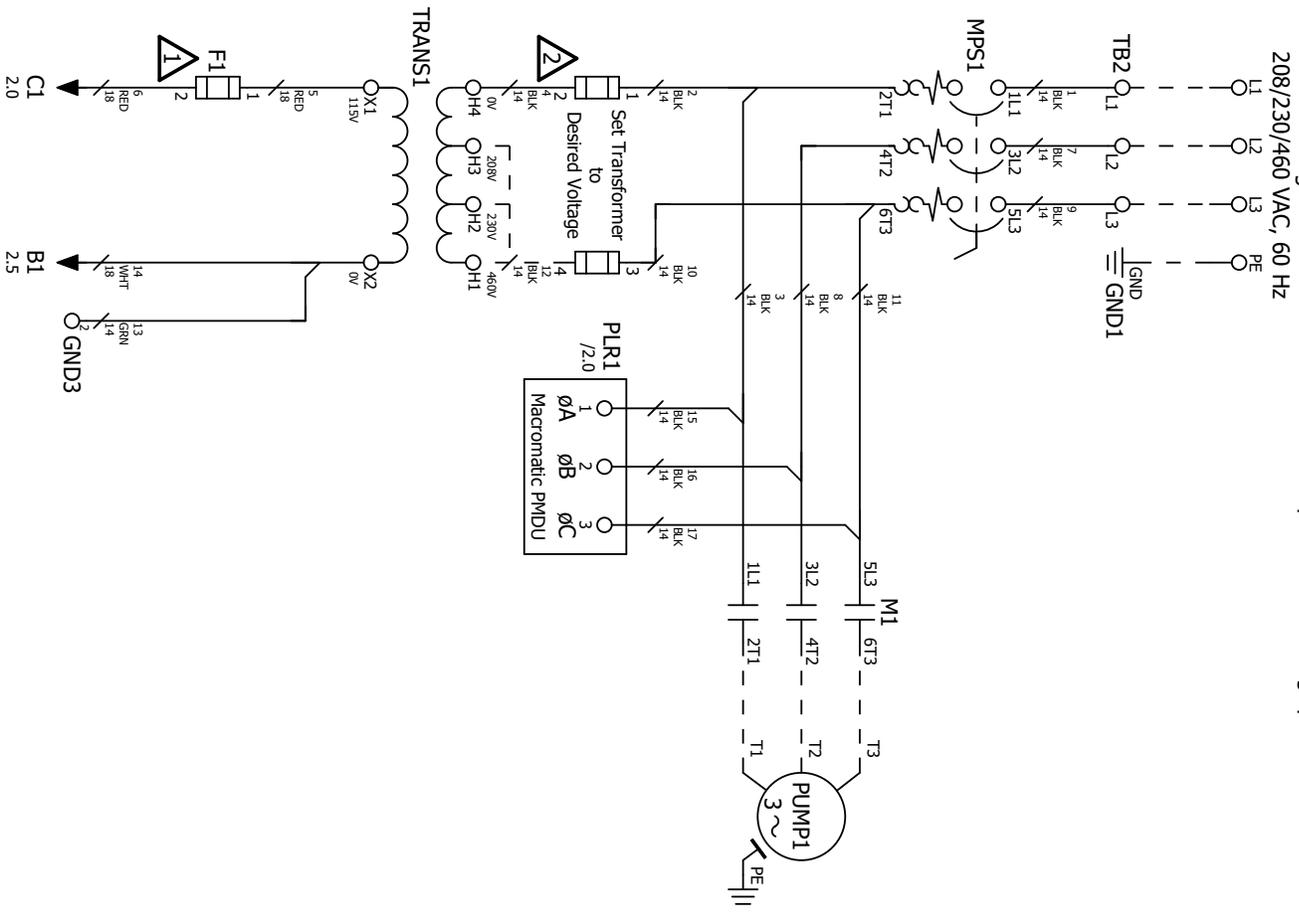
MODEL	VOLTAGE	AMPERAGE	W	H	D	M1	M2	G1 & G2	G3 & G4
5200-GEN	208/230/460	2.5 - 4.0	18.16	19.85	11.27	14.00	18.75	0.12 - 0.35	0.43 - 0.83
5201-GEN	208/230/460	4.0 - 6.3	18.16	19.85	11.27	14.00	18.75	0.12 - 0.35	0.43 - 0.83
5202-GEN	208/230/460	6.0 - 10.0	18.16	19.85	11.27	14.00	18.75	0.12 - 0.35	0.43 - 0.83
5203-GEN	208/230/460	9.0 - 14.0	18.16	19.85	11.27	14.00	18.75	0.12 - 0.35	0.43 - 0.83
5204-GEN	208/230/460	17.0 - 23.0	18.16	19.85	11.27	14.00	18.75	0.12 - 0.35	0.51 - 1.02
5205-GEN	208/230/460	24.0 - 32.0	18.16	19.85	11.27	14.00	18.75	0.12 - 0.35	0.71 - 1.26
5206-GEN	208/230/460	30.0 - 40.0	18.16	19.85	11.27	14.00	18.75	0.12 - 0.35	0.71 - 1.26
5207-GEN	208/230/460	37.0 - 50.0	18.16	19.85	11.27	14.00	18.75	0.12 - 0.35	0.71 - 1.26
5208-GEN	208/230/460	48.0 - 65.0	18.16	19.85	11.27	14.00	18.75	0.12 - 0.35	0.71 - 1.26
5209-GEN	208/230/460	1.6 - 2.5	18.16	19.85	11.27	14.00	18.75	0.12 - 0.35	0.43 - 0.83
5210-GEN	208/230/460	0.63 - 1.0	18.16	19.85	11.27	14.00	18.75	0.12 - 0.35	0.43 - 0.83
5212-GEN	208/230/460	13.0 - 18.0	18.16	19.85	11.27	14.00	18.75	0.12 - 0.35	0.43 - 0.83
5213-GEN	208/230/460	20.0 - 50.0	18.16	19.85	11.27	14.00	18.75	0.12 - 0.35	0.71 - 1.26
5214-GEN	208/230/460	40.0 - 80.0	18.16	19.85	11.27	14.00	18.75	0.12 - 0.35	0.71 - 1.26



Generator  
 Incoming Power  
 208/230/460 VAC, 60 Hz  
 Branch Circuit Protection Device/Disconnect Means Field Provided -  
 Size per manufacturing specifications for Pump/Motor

Legend

Device Tag	Description	Primary Terminal	Secondary Terminal
F1	1A Control Fuse	7 In-lb	
GND1	Ground Lug	45 In-lb	
GND3	Ground Modular Terminal Block	15 In-lb	
MPS1	Motor Protection Switch XX-XX A		
PLR1	Phase Loss Relay		
TB2	Terminal Block XXX		
TRANS1	Transformer w/0.5A Fuse, 50VA	20 In-lb	20 In-lb



Pump 1 Load  
 208/230/460 VAC, XX-XX Amps, 60 Hz  
 Adjust Motor Protective Switch to  
 Actual Full Load Amps of the Pump.  
 Ground to Ground Lug.

- 1 F1 FUSE MUST BE REPLACED WITH 1 AMP TYPE 5mmX20mm FAST ACTING 250V MAX
- 2 TRANS1 FUSES MUST BE REPLACED WITH 0.5 AMP TYPE FNQR SLOWBLOW 600V MAX

**CAUTION:** Nonmetallic enclosure does not provide grounding between conduit connections. Use grounding bushings and jumper wires.  
**ATTENTION:** Les boîtiers non-métalliques ne permettent pas de mise à la terre entre les connexions de conduits.  
 Utilisez des manchons de mise à la terre et des fils de liaison.

←INTRODUCTION/1

Schematic

2→

This drawing contains proprietary information which must not be duplicated, used, or disclosed in whole or in part without prior written consent.

Model Number **DWG** Tsurumi 52-GEN Series Schematic

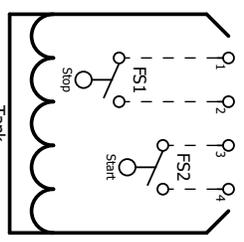
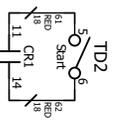
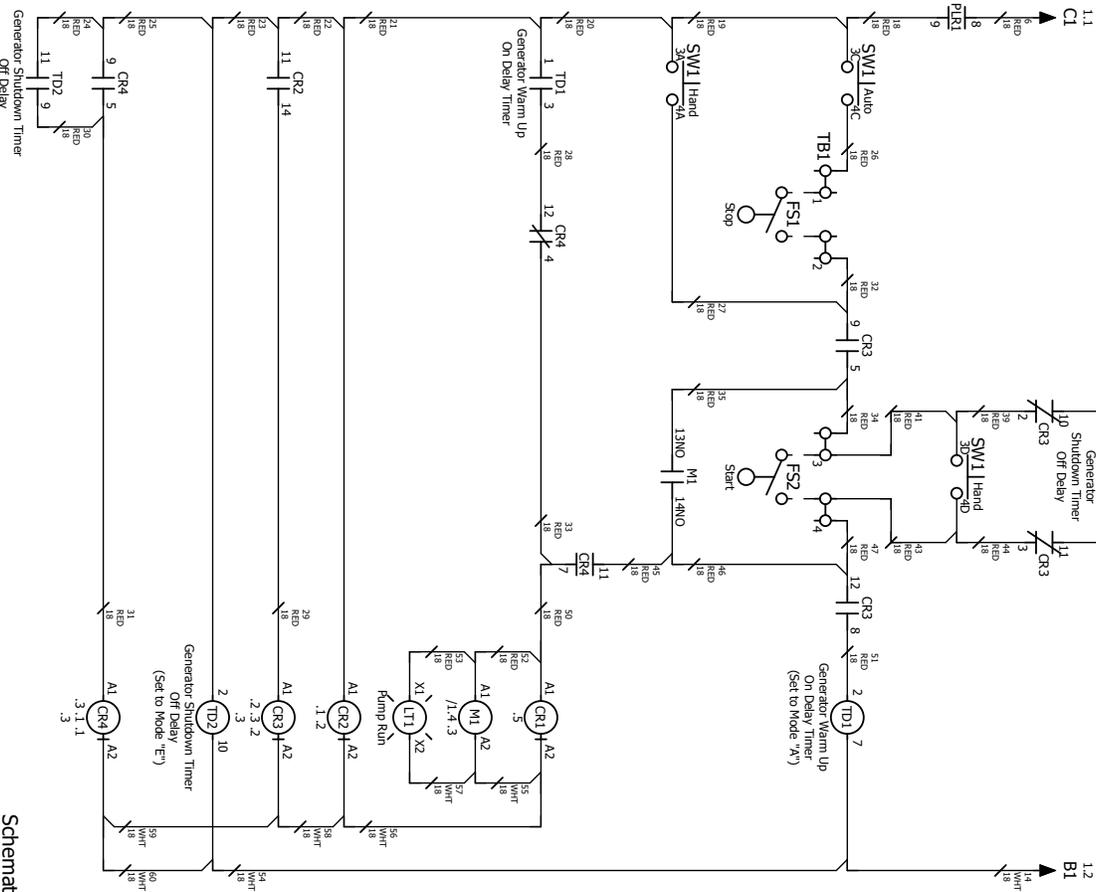
Quote Number

Drawn By: B. Nelson  
 Checked By: \_\_\_\_\_  
 Date: \_\_\_\_\_

Revision

Page Number  
**1 of 2**

Legend		Field Wiring
-----		Field Supplied
Device Tag	Description	Primary / Auxiliary Terminals
CR1	Relay, 120VAC, SPDT	
CR2	Relay, 120VAC, DPDT	
CR3/CR4	Relay, 120VAC, 4PDT	
FS1,FS2	Float Switch	
L11	Green Light 120V	
M1	Contactor XX A - 120V Coil	15 In-1b / 15 In-1b
SW1	3 Position Switch	
TB1	Terminal Block 20A	
TD1	On Delay Timer 120V	9 In-1b
TD2	Off Delay Timer 120V	11 In-1b



**Operation:**

**IMPORTANT!** The Generator must have a terminal block connection for a 2 wire - dry contact remote start/stop.

When both the Stop Float and Start Float are up, a closed contact exists between Terminals 5 and 6, which starts the Generator. When the Phase Loss Relay picks up, indicating good voltage from the generator, the control circuit is active and the generator warmup time delay begins. After the delay, the pump will start and pump down to the stop level. The generator remains on until the Time Delay from Timer TD2 times out. This indicates that the level never reached the start float and that no more pumping is required. Therefore, the generator will turn off. This completes the cycle. When the level reaches the start float again, the process will repeat.

Schematic

1625 Fullerton Court  
Glendale Heights, IL 60139  
TSURUMIPUMP.COM

Model Number **DWG** Tsurumi 52-GEN Series Schematic

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

Drawn By: B. Nelson

Checked By: \_\_\_\_\_

Date: \_\_\_\_\_

Revision: \_\_\_\_\_

Page Number **2 of 2**

STANDARD REPORT/11

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. In whole or in part without prior written consent.  
 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.