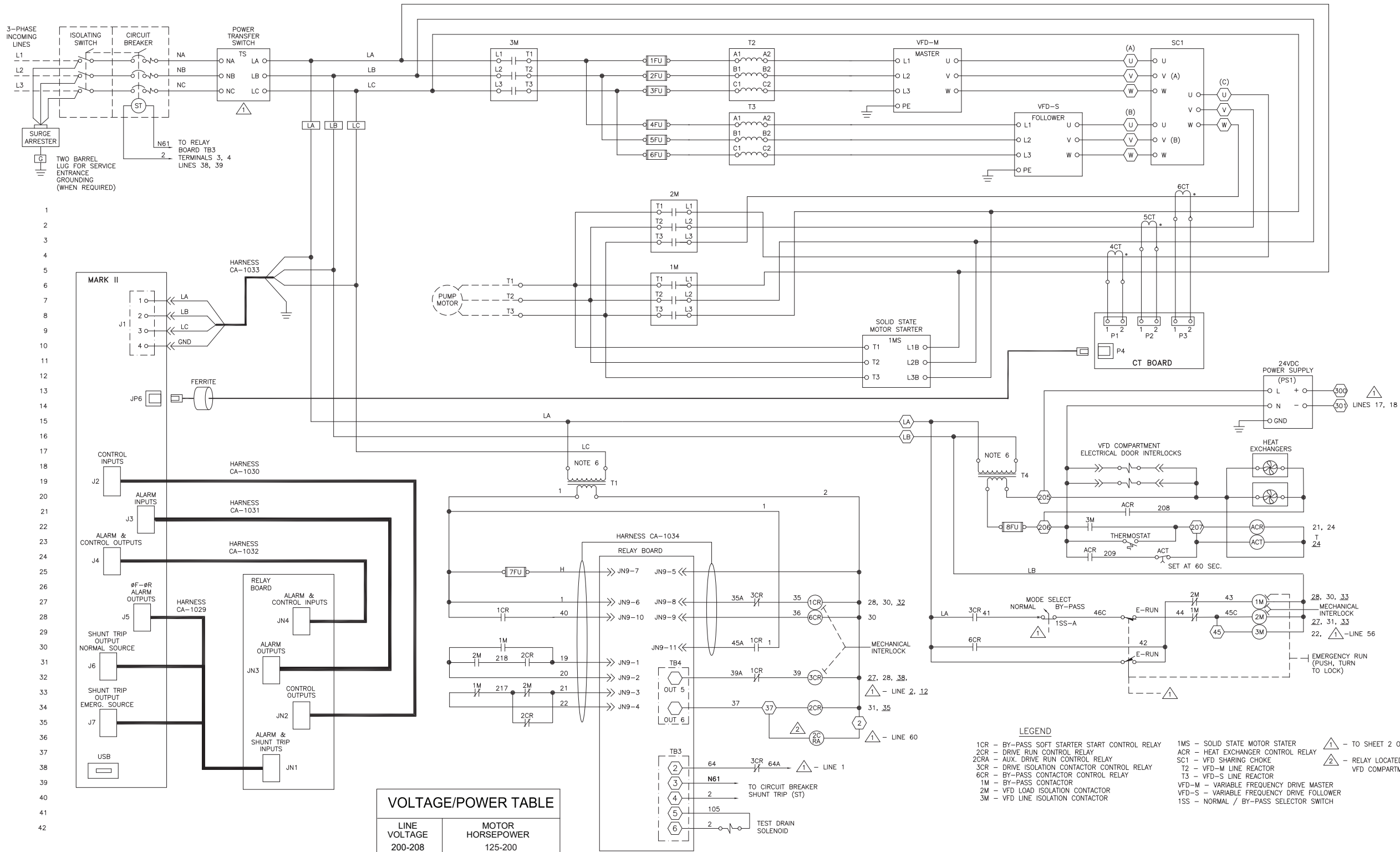




MarkIIx6 Electric Fire Pump Controllers - Variable Speed Starting with Soft Start Bypass and Power Transfer Switch



- LEGEND**
- 1CR - BY-PASS SOFT STARTER START CONTROL RELAY
  - 2CR - DRIVE RUN CONTROL RELAY
  - 2CRA - AUX. DRIVE RUN CONTROL RELAY
  - 3CR - DRIVE ISOLATION CONTACTOR CONTROL RELAY
  - 6CR - BY-PASS CONTACTOR CONTROL RELAY
  - 1M - BY-PASS CONTACTOR
  - 2M - VFD LOAD ISOLATION CONTACTOR
  - 3M - VFD LINE ISOLATION CONTACTOR
  - 1MS - SOLID STATE MOTOR STATER
  - ACR - HEAT EXCHANGER CONTROL RELAY
  - SC1 - VFD SHARING CHOKE
  - T2 - VFD-M LINE REACTOR
  - T3 - VFD-S LINE REACTOR
  - VFD-M - VARIABLE FREQUENCY DRIVE MASTER
  - VFD-S - VARIABLE FREQUENCY DRIVE FOLLOWER
  - 1SS - NORMAL / BY-PASS SELECTOR SWITCH
- 1 - TO SHEET 2 OF 2  
2 - RELAY LOCATED IN VFD COMPARTMENT

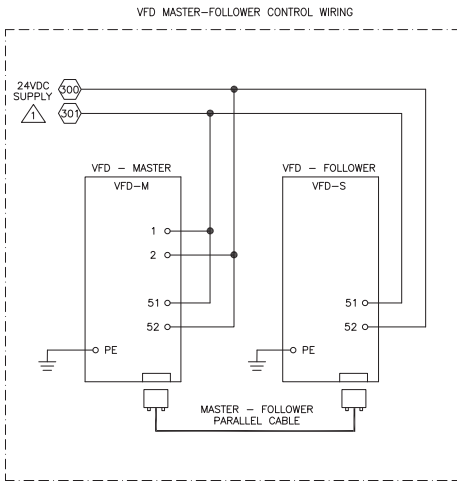
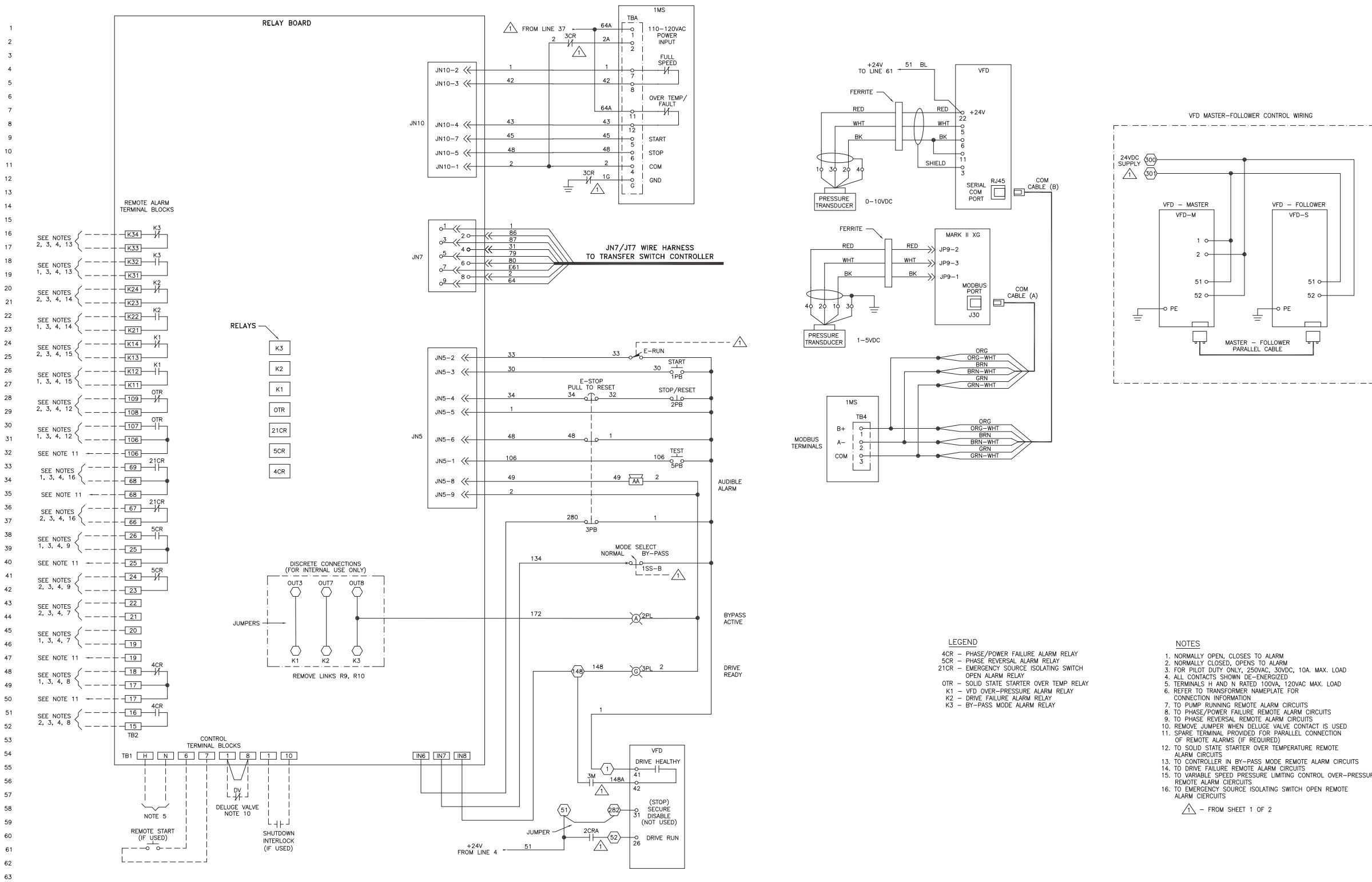
|                                                                                                                    |                |     |          |                                                                                                                                                                                                |                                                                                                              |  |                      |        |                                     |     |                 |              |
|--------------------------------------------------------------------------------------------------------------------|----------------|-----|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|--|----------------------|--------|-------------------------------------|-----|-----------------|--------------|
| <br>THIRD ANGLE<br>PROJECTION | SIZE <b>B</b>  | BY  | DATE     |  <b>Firetrol, Inc.</b><br><br>© Firetrol, Inc. Not for construction.<br>Subject to change without notice. | REVISION DESCRIPTION                                                                                         |  | REV                  | ECN NO | BY                                  | APP | DATE            |              |
|                                                                                                                    | DRAWN BY       | TEF | 05/14/21 |                                                                                                                                                                                                | WIRING SCHEMATIC                                                                                             |  | FTA3130M WITH FTA950 |        | DRAWING NUMBER<br><b>WS3130M-56</b> |     |                 |              |
|                                                                                                                    | FINAL APPROVAL | TEF | 05/14/21 |                                                                                                                                                                                                | VFD ELECTRIC FIRE PUMP CONTROLLER WITH SOFT START BYPASS<br>AND POWER TRANSFER SWITCH (M600 PARALLEL DRIVES) |  |                      |        | DWG REV <b>-</b>                    |     | ECN NO <b>-</b> | SHEET 1 OF 2 |
|                                                                                                                    |                |     |          |                                                                                                                                                                                                |                                                                                                              |  |                      |        |                                     |     |                 |              |

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MarkIIx6 Electric Fire Pump Controllers - Variable Speed Starting with Soft Start Bypass and Power Transfer Switch



- LEGEND**
- 4CR - PHASE/POWER FAILURE ALARM RELAY
  - 5CR - PHASE REVERSAL ALARM RELAY
  - 21CR - EMERGENCY SOURCE ISOLATING SWITCH OPEN ALARM RELAY
  - OTR - SOLID STATE STARTER OVER TEMP RELAY
  - K1 - VFD OVER-PRESSURE ALARM RELAY
  - K2 - DRIVE FAILURE ALARM RELAY
  - K3 - BY-PASS MODE ALARM RELAY
- NOTES**
- NORMALLY OPEN, CLOSES TO ALARM
  - NORMALLY CLOSED, OPENS TO ALARM
  - FOR PILOT DUTY ONLY, 250VAC, 30VDC, 10A. MAX. LOAD
  - ALL CONTACTS SHOWN DE-ENERGIZED
  - TERMINALS H AND N RATED 100VA, 120VAC MAX. LOAD
  - REFER TO TRANSFORMER NAMEPLATE FOR CONNECTION INFORMATION
  - TO PUMP RUNNING REMOTE ALARM CIRCUITS
  - TO PHASE/POWER FAILURE REMOTE ALARM CIRCUITS
  - TO PHASE REVERSAL REMOTE ALARM CIRCUITS
  - TO DRIVE FAILURE REMOTE ALARM CIRCUITS
  - REMOVE JUMPER WHEN DELUGE VALVE CONTACT IS USED
  - SPARE TERMINAL PROVIDED FOR PARALLEL CONNECTION OF REMOTE ALARMS (IF REQUIRED)
  - TO SOLID STATE STARTER OVER TEMPERATURE REMOTE ALARM CIRCUITS
  - TO CONTROLLER IN BY-PASS MODE REMOTE ALARM CIRCUITS
  - TO DRIVE FAILURE REMOTE ALARM CIRCUITS
  - TO VARIABLE SPEED PRESSURE LIMITING CONTROL OVER-PRESSURE REMOTE ALARM CIRCUITS
  - TO EMERGENCY SOURCE ISOLATING SWITCH OPEN REMOTE ALARM CIRCUITS
- △ - FROM SHEET 1 OF 2

|                                                                                                                                                                                                                                                                                                                                                                                                            |                |     |          |                                                                                                                                                                                                |                                                                                                           |  |                      |           |                |              |     |      |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|--|----------------------|-----------|----------------|--------------|-----|------|--|
| <br>THIRD ANGLE<br>PROJECTION                                                                                                                                                                                                                                                                                         | SIZE <b>B</b>  | BY  | DATE     |  <b>Firetrol, Inc.</b><br><br>© Firetrol, Inc. Not for construction.<br>Subject to change without notice. | REVISION DESCRIPTION                                                                                      |  |                      | REV       | ECN NO         | BY           | APP | DATE |  |
|                                                                                                                                                                                                                                                                                                                                                                                                            | DRAWN BY       | TEF | 05/14/21 |                                                                                                                                                                                                | WIRING SCHEMATIC                                                                                          |  | FTA3130M WITH FTA950 |           | DRAWING NUMBER |              |     |      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                            | FINAL APPROVAL | TEF | 05/14/21 |                                                                                                                                                                                                | VFD ELECTRIL FIRE PUMP CONTROLLER WITH SOFT START BYPASS AND POWER TRANSFER SWITCH (M600 PARALLEL DRIVES) |  |                      |           | WS3130M-56     |              |     |      |  |
|                                                                                                                                                                                                                                                                                                                                                                                                            |                |     |          |                                                                                                                                                                                                |                                                                                                           |  |                      | DWG REV - | ECN NO -       | SHEET 2 OF 2 |     |      |  |
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