

ALL NAMEPLATE AND TAGS SHALL BE ENGRAVED

CONTROL PANEL

| MASTER NAMEPLATE | | | | |
|--|-------|------|-----|-----|
| VOLTS | PHASE | FREQ | FLA | |
| xxx | 3 | 60 | - | |
| LARGEST MOTOR | | | | |
| VOLTS | PHASE | FREQ | FLA | HP |
| xxx | 3 | 60 | --- | --- |
| SHORT CIRCUIT CURRENT: 5kA RMS SYMETRICAL xxxVAC MAXIMUM | | | | |
| REFERENCE DRAWINGS -- SHEET 0 - 13 | | | | |
| SERIAL NO. xx | | | | |
| MANUFACTURER JOB NUMBER -- | | | | |
| U.L. ENCLOSURE TYPE 4X | | | | |

SEE TABLES BELOW USED TO CALCULATE THE REQUIRED FIELDS ON THE MASTER NAMEPLATE

| WARNING | |
|---|--|
| PUMP SEAL FAILURE WILL DISABLE PUMP IN AUTO | |
| PUMP MOTOR THERMAL FAILURE WILL DISABLE PUMP IN AUTO AND HAND | |
| PUMP FAULT MUST BE RESET TO ENABLE PUMPS | |
| PRESS HMI RESET OR CONTROL PANEL RESET BUTTON TO CLEAR PUMP FAULT | |
| VFD FAULTS MUST BE RESET BY VFD KEYPAD | |
| PRESS VFD KEYPAD RESET TO CLEAR VFD FAULT | |

| Circuit Breaker Schedule | | |
|--------------------------|----------|---------------------------|
| Breaker | Amperage | Description |
| CB1 | 10A | POWER SUPPLY 1 SECONDARY |
| CB2 | 10A | POWER SUPPLY 2 SECONDARY |
| CB3 | 10A | CONTROL POWER |
| CB4 | 10A | BATTERIES |
| CB5 | 2A | POWER SUPPLY3 |
| CB6 | 2A | RADIO POWER |
| CB7 | 2A | PANEL LIGHT - P1 PANEL |
| CB8 | 2A | PANEL LIGHT - P2 PANEL |
| CB9 | 2A | PANEL LIGHT - PLC PANEL |
| CB10 | 2A | SPARE |
| CB11 | 1A | HMI |
| CB12 | 10A | PLC POWER SUPPLY |
| CB13 | 1A | ENET |
| CB14 | 2A | COM MOXA |
| CB15 | 1A | PUMP 1 MOTOR THERMAL |
| CB16 | 1A | PUMP 2 MOTOR THERMAL |
| CB17 | 1A | DI1-DIGITAL INPUTS 0 - 15 |
| CB18 | 1A | DI2-DIGITAL INPUTS 0 - 15 |
| CB19 | 1A | DI3-DIGITAL INPUTS 0 - 15 |
| CB20 | 2A | DO-DIGITAL OUTPUTS 0 -7 |
| CB21 | 2A | DO-DIGITAL OUTPUTS 8 -15 |
| CB22 | 2A | LEVEL TRANSMITTER CIRCUIT |
| CB23 | 1/4A | ANALOG INPUT CH0 |
| CB24 | 1/4A | ANALOG INPUT CH1 |
| CB25 | 1/2A | ANALOG INPUT CH2 |
| CB26 | 1/2A | ANALOG INPUT CH3 |
| CB27 | 1/2A | SPARE |
| CB28 | 1A | ANALOG OUT CARD |
| CB29 | 1A | P1 CURRENT DISPLAY |
| CB30 | 1A | P2 CURRENT DISPLAY |

| DEVICE | IP ADDRESS |
|--------|-------------|
| PLC | 10.10.10.50 |
| HMI | 10.10.10.55 |
| MOXA | 10.10.10.52 |
| RADIO | 192.168.1.1 |

CONTROL PANEL ISR INFORMATION TAGS

WARNING
TO PREVENT IGNITION OF FLAMMABLE OR COMBUSTIBLE ATMOSPHERES DISCONNECT POWER BEFORE SERVICING

PROVIDES INTRINSICALLY SAFE CIRCUIT EXTENSIONS FOR USE IN CLASS 1, GROUPS A, B, C, AND D WHEN CONNECTED PER REFERENCE DRAWINGS ON MAIN NAMEPLATE LABEL

THIS AREA IN BLUE IS FOR INTRINSICALLY SAFE CIRCUITS AND DEVICES ONLY. THIS AREA INCLUDES THE AIR SPACE DIRECTLY IN FRONT OF THE BLUE AREA BETWEEN THE BACKPANEL AND THE ENCLOSURE WALLS AND DOOR INCLUDING THE BOTTOM OF THE ENCLOSURE. ONLY INTRINSICALLY SAFE DEVICES AND WIRING ARE ALLOWED IN THIS AREA. DO NOT ROUTE NON-INTRINSICALLY SAFE WIRING THROUGH THIS AREA OF ENCLOSURE.

WARNING
SUBSTITUTION OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY

CONTROL PANEL DEADFRONT TAG

| ECUA Lift Station | |
|-----------------------------------|--|
| LS ID # | |
| Pump Manufacturer: | |
| Horse Power: | |
| FLA: | |
| High Float Level (ft): | |
| Low Float Level (ft): | |
| Offset Level (ft): | |
| Level, Speed, & Delay Setpoints | |
| Lag On (ft): | |
| Lead On (ft): | |
| Lag Off (ft): | |
| Lead Off (ft): | |
| Max Speed Level (ft): | |
| Min Speed Level (ft): | |
| Max Speed (%): | |
| Min Speed (%): | |
| Start Delay (Sec): | |
| Stop Delay (Sec): | |
| Lead Alternation Time (Hr): | |
| Max Level Scale (ft): | |
| Max Flow Scale (GPM): | |
| Max Pressure Scale (PSI): | |
| Alarm Setpoints | |
| Thermal Delay (Sec): | |
| Seal Fail Delay (Sec): | |
| No Flow Delay (Sec): | |
| Intrusion Enter Delay (Sec): | |
| Intrusion Exit Delay (Sec): | |
| Intrusion Auto Reset Delay (Min): | |

POWER & PUMP PANEL

RISK OF ELECTRIC SHOCK
MORE THAN ONE DISCONNECT SWITCH MAY BE REQUIRED TO DE-ENERGIZE THE EQUIPMENT BEFORE SERVICING.

POWER PANEL

| Power Panel Fuse Schedule | | | | |
|---------------------------|------|-------|------|-------------------------|
| Fuse | Type | Volts | Amps | Description |
| F1 | CC | 600 | 1 | Power Monitor 1 |
| F2 | CC | 600 | 1 | Power Monitor 2 |
| F3 | AGC | 250 | 3 | Power Supply 1 |
| F4 | AGC | 250 | 3 | Power Supply 2 |
| F5 | CC | 600 | 6/10 | Power Monitor 1 Control |

| Circuit Breaker Schedule | | |
|--------------------------|--------------|-----------------------|
| Breaker | Amperage | Description |
| MCB | SEE HP TABLE | Main Service |
| ECB | SEE HP TABLE | Emergency Service |
| CB-SA | 3P - 30A | Surge Aresstor |
| CB-P1 | SEE HP TABLE | Pump1 Panel Feeder |
| CB-P2 | SEE HP TABLE | Pump2 Panel Feeder |
| CB-XF-PRI | 3P - 50A | Transformer Primary |
| CB-XF-SEC | 2P - 60A | Transformer Secondary |
| CB1 | 2P - 20A | 240V Receptacle |
| CB2 | 1P - 20A | 120V Receptacle |
| CB3 | 1P - 20A | Area Light |
| CB4 | 1P - 10A | Heater P1 Panel |
| CB5 | 1P - 10A | Heater P2 Panel |
| CB6 | 1P - 20A | Spare |
| CB7 | 1P - 10A | Controls Feeder |
| CB8 | 2P - 10A | HVAC1 P1 Panel |
| CB9 | 2P - 10A | HVAC2 P2 Panel |
| CB10 | 2P - 20A | Gen. Heater |
| CB11 | 1P - 20A | Gen. Charger |

POWER AND CONTROL PANEL

CONTROL PANEL DEADFRONT TAG INFORMATION
SECURELY FASTEN ALL INNER DOOR LATCHES BEFORE CLOSING OUTER DOOR. FAILURE TO FOLLOW THESE INSTRUCTIONS COULD CAUSE THE OUTER DOOR TO JAM WHEN RE-OPENED

PUMP PANELS

| Pump Panel Fuse Schedule | | | | |
|--------------------------|------|-------|------|----------------|
| Fuse | Type | Volts | Amps | Description |
| F-PX | FWH | 500 | XX | VFD Protection |
| F-H1, F-H2 | FNQR | 600 | 5 | XF1 Primary |
| F-X1 | FNQ | 600 | 7 | XF1 Secondary |

EMERGENCY USE ONLY

| VFD Nameplate Data | | | | | | | | | | |
|---------------------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Motor FLA per NEC Table 430.250 | | | | | | | | | | |
| Motor Hp | 5 | 7.5 | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 |
| Total Load (208/240V FLA) | 71.3 | 108.3 | 138.3 | 170.3 | 170.3 | N/A | N/A | N/A | N/A | N/A |
| Total Load (480V FLA) | 36.5 | 45.7 | 57.7 | 65.7 | 93.7 | 105.7 | 121.7 | 133.7 | 159.7 | 189.7 |
| Motor FLA (208V) | 16.7 | 24.2 | 30.8 | 46.2 | N/A | N/A | N/A | N/A | N/A | N/A |
| Motor FLA (240V) | 15.2 | 22.0 | 28.0 | 42.0 | 54.0 | 68.0 | N/A | N/A | N/A | N/A |
| Motor FLA (480V) | 7.6 | 11.0 | 14.0 | 21.0 | 27.0 | 34.0 | 40.0 | 52.0 | 65.0 | 77.0 |
| FVNR/ RVSS Nameplate Data | | | | | | | | | | |
| Motor FLA per NEC Table 430.250 | | | | | | | | | | |
| Motor Hp | 5 | 7.5 | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 |
| Total Load (208/240V FLA) | 66.7 | 81.7 | 94.9 | 125.7 | 152.1 | 182.9 | 209.3 | N/A | N/A | N/A |
| Total Load (480V FLA) | 31.9 | 38.7 | 44.7 | 58.7 | 70.7 | 84.7 | 96.7 | 120.7 | 146.7 | 170.7 |
| Motor FLA (208V) | 16.7 | 24.2 | 30.8 | 46.2 | 59.4 | 74.8 | 88.0 | N/A | N/A | N/A |
| Motor FLA (240V) | 15.2 | 22.0 | 28.0 | 42.0 | 54.0 | 68.0 | 80.0 | N/A | N/A | N/A |
| Motor FLA (480V) | 7.6 | 11.0 | 14.0 | 21.0 | 27.0 | 34.0 | 40.0 | 52.0 | 65.0 | 77.0 |

Instructions:
Select appropriate table based on Starter Type.

Legends and Tags.dwg

