

| Project: | |
|--------------------|--|
| Customer: | |
| Engineer: | |
| Pump Manufacturer: | |

Technical Data Submittal Document

GPx Series

Full Service Electric Fire Pump Controller



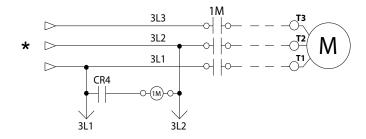
Contents: Data Sheets Dimensional Data Wiring Schematics Field Connections



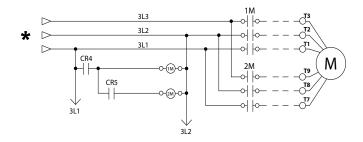


Select starting method

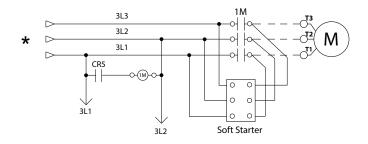
Model GPA Across the line



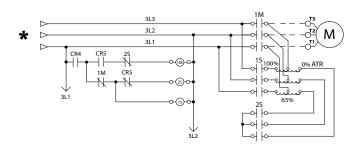
Model GPP Partwinding



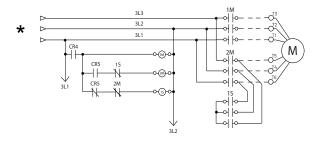
Model GPS Soft Start Soft Stop



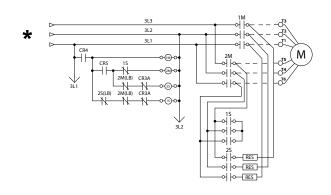
Model GPR Autotransformer



Model GPY Wye-Delta Open



Model GPW Wye-Delta Closed



^{*}From normal incoming power through Disconnecting Means (IS/CB)





| | Built to NFPA 20 (latest edition) | | | | |
|------------------------|---|---|---|----------|--|
| _ | Underwriters Laboratory (UL) | UL218 - Fire Pump Controllers | | | |
| Standard, Listings, | FM Global | Clas | Class 1321/1323 | | |
| Approvals and | New York City | Acc | Accepted for use in the City of New York by the Department of Buildings | | |
| Certifications | CE Mark | Vari | ous EN, IEC & CEE directives and sta | ndards | |
| | Built in Canada or U.A.E | <u> </u> | Built in E | urope | |
| | CE Mark Option | | Supplied as S | Standard | |
| | Protection Rating | | | | |
| | Built in Canada or U.A.E | | Built in Europe | | |
| | Standard: NEMA 2 | 2 | Standard: IP55 | | |
| | Optional | | | | |
| | NEMA 12 | | NEMA 4X-304 sst painted | IP54 | |
| Enclosure | NEMA 3 | NEMA 4X-304 sst brushed finish IP55 NEMA 4X-316 sst painted IP65 | | IP55 | |
| | NEMA 3R | | | IP65 | |
| | NEMA 4 | NEMA 4X-316 sst brushed finish | | IP66 | |
| | Accessories • Bottom entry gland plate • Lifting Lugs • Keylock handle | : | aint Specifications Red RAL3002 Powder coating Glossy textured finish | | |
| | - Reylock Harlule | | Glossy textured liftish | | |

| Shortcircuit Withstand | 200V to 208V 60Hz | 220V to 240V 60Hz | 380V to 415V 50 Hz / 60Hz | 440V to 480V 60Hz | 575V to 600V 60Hz |
|---------------------------|----------------------|----------------------|------------------------------|-----------------------|----------------------|
| Rating | | | HP (kw) | | |
| Standard 100kA | E 150 (2.7, 110) | F 200 /2 7 140) | F 200 /2.7 222\ | E 400 (2.7, 200) | N/A |
| Optional 150kA | 5 - 150 (3.7 - 110) | 5 - 200 (3.7 - 149) | 5 - 300 (3.7 - 223) | 5 - 400 (3.7 - 298) | IN/A |
| \ | 200 (149) | 250 (186) | 350 - 450 (261 - 335) | 450 - 500 (335 - 373) | 5 500 (2.7.272) |
| | N/A | N/A | 350 - 500 (261 - 373) | 450 - 500 (335 - 373) | 5 - 500 (3.7- 373) |
| Optional 200kA | 5 - 150 (3.7 - 110) | 5 - 200 (3.7 - 149) | 5 - 300 (3.7 - 223) | 5 - 400 (3.7 - 298) | N/A |

^{*}Please see Disconnecting Means details on page 4



| Ambient Temperature Rating | Standard: 4°C to 40°C / 39°F to 104°F Controllers built in Dubai, UAE (Tornatech FZE) are supplied standard with 55°C rating. | | |
|----------------------------------|---|--|--|
| Surge Suppression | Surge arrestor rated to suppress surges above line voltage | | |
| Disconnecting Means | Isolating switch and circuit breaker assembly: Door interlocked in the ON position Isolating switch rated not less than 115% of motor full load current Circuit breaker continuous rating not less than 115% of motor full load current Overcurrent sensing non-thermal type, magnetic only Instantaneous trip setting of not more than 20 times the motor full load current Common flange mounted operating handle | | |
| Service Entrance Rating | Suitable as service entrance equipment | | |
| Emergency Start Handle | Flange mounted Integrated limit switch Pull and latch activation Across the line start (direct on line) | | |
| Locked Rotor Protector | Operate shunt trip to open circuit breaker Factory set at 600% of motor full load current Trip between 8 and 20 seconds | | |
| Electrical Readings | Voltage phase to phase (normal power) Amperage of each phase when motor is running | | |
| Pressure Readings | Continuous system pressure display Cut-in and Cut-out pressure settings | | |
| Pressure and Event recorder | • Under regular maintained operation, events are stored in memory for the life of the controller | | |
| Pressure Sensing | Pressure transducer and run test solenoid valve assembly for fresh water application Pressure sensing line connection 1/2" Female NPT Drain connection 3/8" Rated for 0-500PSI working pressure (standard display at 0-300PSI) Externally mounted with protective cover | | |



| Audible Alarm | 6" alarm bell - 85 dB at 10ft. (3m) | | |
|----------------------------|---|---|--|
| Visual Indications | Motor run Periodic test | or run Remote automatic start Remote manual start Locke | |
| Visual & Audible Alarms | Visual Control voltage not healthy Invalid cut-in Lock rotor current Loss of power Low ambient temperature Low water level Motor trouble Phase reversal (normal povisual and audible | Overvoltage Phase loss L1 Phase loss L2 Phase loss L3 Phase unbalanced Pressure transducer fault determinent | Pump on demand Pump room alarm Service required Undercurrent Undervoltage Check weekly test solenoid tected Weekly test cut-in reached |
| Remote Alarm Contacts | DPDT-8A-250V.AC • Power available • Phase reversal • Motor run • Common pump room alarm (field re-assignable)** • Overvoltage • Undervoltage • Phase unbalance • Low pump room temperature • High Pump room temperature • Common motor trouble (field re-assignable)** • Overcurrent • Fail to start • Undercurrent • Ground fault • Free (field programmable)** | | |

^{**}Tornatech reserves the right to use any of these three alarm points for special specific application requirements.



| ViZiTouch V2 Operator Interface | Embedded microcomputer with software PLC logic 7.0" color touch screen (HMI technology) Upgradable software Multi-language | | | |
|---|--|---|--|--|
| Communication Protocol Capability | Protocol: Modbus Connection type: Shielded female connector RJ45 Frame Format: TCP/IP Addresses: See bulletin MOD-GPx | | | |
| | automatic device | | | |
| | Manual Start | Start pushbutton Run test pushbutton Remote start from manual device | | |
| Operation | Stopping | Manual with Stop pushbutton Automatic after expiration of minimum run timer *** | | |
| · | Timers | Field Adjustable & Visual Countdown | Minimum run timer ***(off delay) Sequential start timer (on delay) Periodic test timer | |
| | Actuation | | Pressure Non-pressure | |
| | Mode | Visual Indication | Automatic Non-automatic | |

^{***}Can only be used if approved by the AHJ



| A4 | Flow switch provision | |
|---|--|--|
| A8 | Foam pump application w/o pressure transducer and run test solenoid valve. | |
| A9 | Low zone pump control function | |
| A10 | Middle zone pump control function | |
| A11 | High zone pump control function | |
| A13 | Non-pressure actuated controller w/o pressure transducer and run test solenoid valve | |
| A16 | Lockout/interlock circuit from equipment installed inside the pump room | |
| B11 | Built in alarm panel (120V.AC supervisory power) providing indication for: • Audible alarm & silence pushbutton for motor run, phase reversal, loss of phase. • Pilot lights for loss of phase & supervisory power available | |
| B11B | Built in alarm panel same as B11 but 220- 240VAC supervisory power | |
| B19A | High motor temperature c/w thermoster relay and alarm contacts (DPDT) | |
| B19B | High motor temperature c/w PT100 relay and alarm contacts (DPDT) | |
| B21 | Ground fault alarm detection c/w visual indication and alarm contact (DPDT) | |
| C1 | Extra motor run alarm contact (DPDT) | |
| C4 | Periodic test alarm contact (DPDT) | |
| C6 | Low discharge pressure alarm contact (DPDT) | |
| C7 | Low pump room temperature alarm contact (DPDT) | |
| C10 | Low water reservoir level alarm contact (DPDT) | |
| C11 | High electric motor temperature alarm contact (DPDT) | |
| C12 | High electric motor vibration c/w visual indication and alarm contact (DPDT) | |
| C14 | Pump on demand / automatic start alarm contact (DPDT) | |
| C15 Pump fail to start alarm contact (DPDT) | | |
| C16 | Control voltage healthy alarm contact (DPDT) | |
| C17 | Flow meter valve loop open c/w visual indication and alarm contact (DPDT) | |
| C18 | High water reservoir level c/w visual indication and alarm contact (DPDT) | |

| C19 | Emergency start alarm contact (DPDT) |
|---|---|
| C20 | Manual start alarm contact (DPDT) |
| C21 | Deluge valve start alarm contact (DPDT) |
| C22 | Remote automatic start alarm contact (DPDT) |
| C23 | Remote manual start alarm contact (DPDT) |
| C24 | High pump room temperature alarm contact (DPDT) |
| C25 | Second set of standard alarm contacts (DPDT) (Typical for city of Los Angeles and Denver) |
| Сх | Additional visual and alarm contact (Specify function) (DPDT) |
| D1 | Low suction pressure transducer for fresh water rated at 0-300PSI with visual indication and alarm contact |
| D1A | Low suction pressure transducer for sea water rated at 0-300PSI with visual indication and alarm contact |
| D5 | Pressure transducer and run test solenoid valve for fresh water rated for 0-500PSI (for factory calibration purposes only) |
| D5D | Pressure transducer and run test solenoid valve for sea water rated for 0-500PSI |
| D10 | Omit mounting feet (when applicable) |
| D13 | High withstand rating for: • 200V to 208V @ 150HP max. = 150kA* • 200V to 208V @ 200HP = 100kA* • 220V to 240V @ 200HP max. = 150kA* • 220V to 240V @ 250HP = 100kA* • 380V to 415V @ 300HP max. = 150kA* • 380V to 415V @ 350HP to 450HP = 100kA* • 440V to 480V @ 400HP max. = 150kA* • 440V to 480V @ 450HP to 500HP = 100kA* • 600V @ 500HP max. = 100kA* |
| D13A | High withstand rating for: • 380V to 480V = 65kA* • 600V = 25kA* |
| D13B | High withstand rating for: • 200V to 208V @ 150HP max. = 200kA* • 220V to 240V @ 200HP max. = 200kA* • 380V to 415V @ 300HP max. = 200kA* • 440V to 480V @ 400HP max. = 200kA* |
| D14 | Anti-condensation heater & thermostat |
| D14A | Anti-condensation heater & humidistat |
| D14B Anti-condensation heater & thermostat & humidistat | |

Note: Options chosen from this page are not electrically represented on the wiring schematics in this submittal package.

^{*}For fire pump controller section only.



| | T T | |
|---|--|--|
| D15 | Tropicalization | |
| D18 | CE Mark with factory certificate | |
| D26 | Modbus with RTU frame format and RS485 connection | |
| D27 | Motor heater connection (external single phase power source and heater on/off contact) | |
| D27A | Motor heater connection (internal single phase power source and heater on/off contact) | |
| D28 | Customized drawing set | |
| D34A | Field programmable I/O board - 5 Input / 5 output | |
| D43 | Seismic Certification compliant to CBC 2019, IBC 2018 rigid base/wall mounted only | |
| D44 Special Seismic Certification compliant to OSHPD rigid base/wall mounted only | | |

| L01 | Other language and English (bilingual) | |
|-----|--|--|
| L02 | French | |
| L03 | Spanish | |
| L04 | German | |
| L05 | Italian | |
| L06 | Polish | |
| L07 | Romanian | |
| L08 | Hungarian | |
| L09 | Slovak | |
| L10 | Croatian | |
| L11 | Czech | |
| L12 | Portuguese | |
| L13 | Dutch | |
| L14 | Russian | |
| L15 | Turkish | |
| L16 | Swedish | |
| L17 | Bulgarian | |
| L18 | Thai | |
| L19 | Indonesian | |
| L20 | Slovenian | |
| L21 | Danish | |
| L22 | Greek | |
| L23 | Arabic | |
| L24 | Hebrew | |
| L25 | Chinese | |

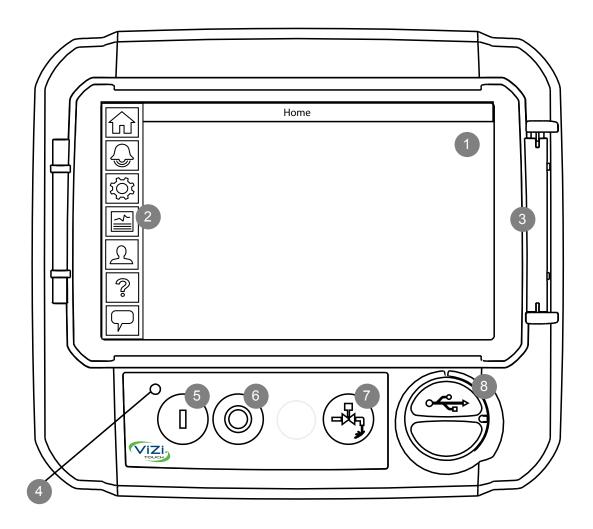
| Addit | ional Options: | | | |
|-------|----------------|--|--|--|
| _ | | | | |
| _ | | | | |
| _ | | | | |
| _ | | | | |
| | | | | |

Note: Options chosen from this page are not electrically represented on the wiring schematics in this submittal package.



ViZiTouch V2 Operator Interface





- 1 Color touch screen
- 2 Onscreen menu
 - HOME page
 - ALARM page
 - CONFIGURATION page
 - HISTORY page
 - SERVICE page
 - MANUAL page
 - LANGUAGES page

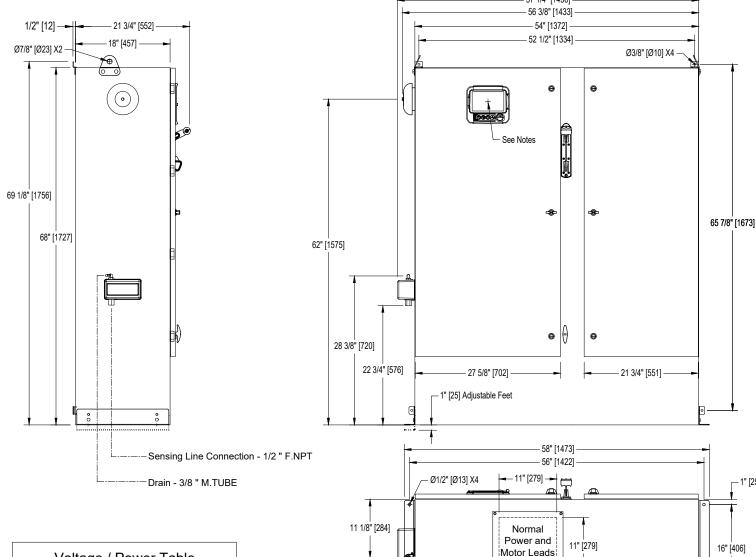
- 3 Screen protector
- 4 Power LED (3 colors)
- 5 START button
- 6 STOP button
- 7 RUN TEST button
- 8 USB port

Electric Fire Pump Controller

Dimensions

Built to the latest edition of the NFPA 20 standard

Model: GPS



| Voltage / Power Table | | | |
|-----------------------|--------|--------|--|
| Voltage | Min HP | Max HP | |
| 208 | 150 | | |
| 220 - 240 | 200 | | |
| 380 - 400 - 415 | 300 | | |
| 440 - 480 | 350 | 400 | |
| 600 | 400 | 500 | |

Notes:

- Standard NEMA: NEMA 2
- Standard paint : textured red RAL 3002.

1 1/4" [31] - 3 1/2" [89] -

- All dimensions are in inches [millimeters].
- Center of ViZiTouch screen: 61-5/8" [1564] from Bottom.
- Bottom conduit entrance through removable gland plate recommended.

Entrance

- Use watertight conduit and connector only.
- Protect equipment against drilling chips.
- Door swing equal to door width.

Drawing for information only.

Manufacturer reserves the right to modify this drawing without notice.

Contact manufacturer for "As Built" drawing.







| REV. | DESCRIPTION | DD/MM/YY | Drawing number |
|------|------------------------------------|----------|----------------|
| 3. | Removed Seismic logo (optional) | 18/05/22 | |
| 2. | New Logo | 10/05/18 | GPX-DI381 /E |
| 1. | Box Size Revision and Valve Change | 21/11/17 | CDL |

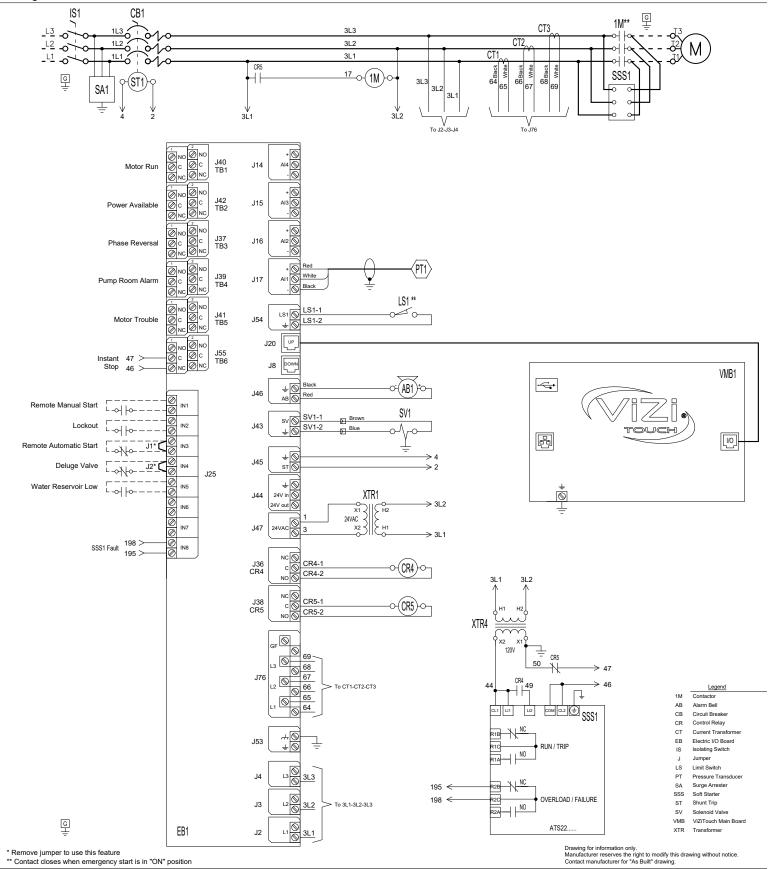
- 1" [25]

Projection

Model: GPS

Wiring schematic

Built to the latest edition of the NFPA 20 standard



MATECH



NYC Dpt of Buildir Approved
 REV.
 DESCRIPTION
 DD/MM/YY
 Drawing number

 1
 Removed Seismic logo (optional)
 18/05/22
 GPS-WS621 /E

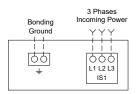
 0
 First issue
 17/12/20

Model: GPX

Terminal Diagram and Sizing for Isolating Switch

Built to the latest edition of the NFPA 20 standard

Power Terminals



Notes:

- 1 For proper wire sizing, refer to NFPA70 and NEC (USA) or CEC (Canada) or local code.
- 2 Controller suitable for service entrance in USA.
- 3 For more accurate motor connections refer to motor manufacturer or motor nameplate.
- 4 Controller is phase sensitive. Incoming lines must be connected in ABC sequence.

COPPER CONDUCTORS for Isolating Switch (IS1).

Field Wiring According to Bending Space (AWG or MCM). Terminals L1 - L2 - L3

| Bending Space | | | 8 " (203 mm) | | | | | | | |
|------------------|----------------|----------------|----------------|----------------|----------------|---------------|---------------|-----------------|-----------------|-----------------|
| HP Voltage | 5 | 7.5 | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 |
| 208 | 1x (10 to 1/0) | 1x (8 to 1/0) | 1x (8 to 1/0) | 1x (6 to 1/0) | 1x (4 to 1/0) | 1x (3 to 1/0) | 1x (2 to 1/0) | 1x (1/0 to 3/0) | 1x (3/0 to 250) | 1x (4/0 to 250) |
| 220 to 240 | 1x (10 to 1/0) | 1x (10 to 1/0) | 1x (8 to 1/0) | 1x (6 to 1/0) | 1x (4 to 1/0) | 1x (4 to 1/0) | 1x (3 to 1/0) | 1x (1 to 3/0) | 1x (2/0 to 3/0) | 1x (3/0 to 250) |
| 380 to 416 | 1x (10 to 1/0) | 1x (10 to 1/0) | 1x (10 to 1/0) | 1x (8 to 1/0) | 1x (8 to 1/0) | 1x (6 to 1/0) | 1x (6 to 1/0) | 1x (4 to 1/0) | 1x (3 to 1/0) | 1x (3 to 1/0) |
| 440 to 480 | 1x (10 to 1/0) | 1x (8 to 1/0) | 1x (8 to 1/0) | 1x (6 to 1/0) | 1x (6 to 1/0) | 1x (4 to 1/0) | 1x (3 to 1/0) |
| 600 | 1x (10 to 1/0) | 1x (8 to 1/0) | 1x (8 to 1/0) | 1x (6 to 1/0) | 1x (6 to 1/0) | 1x (4 to 1/0) |

| Bending Space | | | | | 16 " (406 mm) | | | | | | | |
|------------------|---------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--|
| HP Voltage | 75 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | |
| 208 | 2x (1/0 to 500) | 2x (2/0 to 500) | 2x (4/0 to 500) | 2x (250 to 500) | 3x (4/0 to 500) | | | | | | | |
| 220 to 240 | 1x (250) | 2x (2/0 to 500) | 2x (3/0 to 500) | 2x (4/0 to 500) | 2x (350 to 500) | 3x (250 to 500) | | | | | | |
| 380 to 416 | 1x (1/0 to 3/0) | 1x (3/0 to 250) | 1x (250) | 2x (1/0 to 500) | 2x (3/0 to 500) | 2x (4/0 to 500) | 2x (300 to 500) | 2x (400 to 500) | 3x (250 to 500) | 3x (300 to 500) | | |
| 440 to 480 | 1x (1 to 3/0) | 1x (2/0 to 3/0) | 1x (3/0 to 250) | 1x (4/0 to 250) | 2x (1/0 to 500) | 2x (3/0 to 500) | 2x (4/0 to 500) | 2x (300 to 500) | 2x (350 to 500) | 2x (400 to 500) | 3x (250 to 500) | |
| 600 | 1x (3 to 1/0) | 1x (1 to 3/0) | 1x (2/0 to 3/0) | 1x (3/0 to 250) | 1x (250) | 2x (2/0 to 500) | 2x (3/0 to 500) | 2x (4/0 to 500) | 2x (250 to 500) | 2x (300 to 500) | 2x (350 to 500) | |
| Bending Space | 5 " (127 mm) 8 " (203 mm) | | | 12 " (305 mm) | | | | | | | | |

ALUMINUM CONDUCTORS for Isolating Switch (IS1).

Field Wiring According to Bending Space (AWG or MCM). Terminals L1 - L2 - L3

| Bending Space | | | | | 8 " (2 | 10 " (254 mm) | | | | |
|------------------|-------------------|----------------|----------------|----------------|---------------|---------------|---------------|-----------------|-----------------|-----------------------------------|
| HP Voltage | 5 7.5 10 15 20 25 | | | | | 30 | 40 | 50 | 60 | |
| 208 | 1x (10 to 1/0) | 1x (6 to 1/0) | 1x (6 to 1/0) | 1x (4 to 1/0) | 1x (3 to 1/0) | 1x (1 to 1/0) | 1x (1/0) | 1x (3/0) | 1x (4/0 to 250) | 1x (300) ** or 1x (250) 90°C * |
| 220 to 240 | 1x (10 to 1/0) | 1x (8 to 1/0) | 1x (6 to 1/0) | 1x (4 to 1/0) | 1x (3 to 1/0) | 1x (2 to 1/0) | 1x (1 to 1/0) | 1x (2/0 to 3/0) | 1x (3/0) 90°C * | 1x (250) |
| 380 to 416 | 1x (10 to 1/0) | 1x (10 to 1/0) | 1x (10 to 1/0) | 1x (6 to 1/0) | 1x (6 to 1/0) | 1x (4 to 1/0) | 1x (4 to 1/0) | 1x (2 to 1/0) | 1x (1 to 1/0) | 1x (1/0) |
| 440 to 480 | 1x (10 to 1/0) | 1x (10 to 1/0) | 1x (10 to 1/0) | 1x (8 to 1/0) | 1x (6 to 1/0) | 1x (6 to 1/0) | 1x (6 to 1/0) | 1x (4 to 1/0) | 1x (2 to 1/0) | 1x (1 to 1/0) |
| 600 | 1x (10 to 1/0) | 1x (10 to 1/0) | 1x (10 to 1/0) | 1x (10 to 1/0) | 1x (8 to 1/0) | 1x (6 to 1/0) | 1x (6 to 1/0) | 1x (4 to 1/0) | 1x (4 to 1/0) | 1x (2 to 1/0) |

| Bending Space | | 12 " (305 mm) | | | | 16 " (406 mm) | | | | | | | |
|------------------|---|-----------------|---|--------------------------------------|-----------------|-----------------|-----------------|-----------------------------------|-----------------|-----------------|-----------------|--|--|
| HP Voltage | 75 100 125 150 | | 200 | 250 | 300 | 350 | 400 | 450 | 500 | | | | |
| 208 | 2x (2/0 to 500) | 2x (4/0 to 500) | 2x (300 to 500) | 2x (350 to 500) | 3x (300 to 500) | | | | | | | | |
| 220 to 240 | 1x (350) ** N/A | 2x (3/0 to 500) | 2x (250 to 500) | 2x (300 to 500) | 2x (500) | 3x (400 to 500) | | | | | | | |
| 380 to 416 | 1x (3/0) | 1x (250 to 350) | 1x (350) ** N/A | 2x (3/0 to 500) | 2x (4/0 to 500) | 2x (300 to 500) | 2x (500) | 3x (300 to 500)** 2x (500) 90°C * | 3x (350 to 500) | 3x (400 to 500) | | | |
| 440 to 480 | 1x (1/0 to 3/0) | 1x (3/0) | 1x (250) | 1x (300 to 350)** 1x (250) 90°C * | 2x (3/0 to 500) | 2x (250 to 500) | 2x (300 to 500) | 2x (400 to 500) | 2x (500) | 2x (500) 90°C * | 3x (350 to 500) | | |
| 600 | 0 1x (1 to 1/0) 1x (2/0 to 3/0) 1x (3/0) 90°C * 1x (4/0 to 250) | | 1x (350 to 500) 2x (3/0 to 500) 2x (4/0 to 250) 2x (300 to 500) 2x (350 to 500) 2x (400 to 500) 2x (500 | | | | | 2x (500) | | | | | |
| Bending Space | | | | 12 " (305 mm) | | | | | | | | | |

^{*}For standard enclosure, use 90°C aluminium wire. Consult Factory for Use of Conductors Rated Lower than 90°C.

Drawing for information only.

Manufacturer reserves the right to modify this drawing without notice.

Contact manufacturer for "As Built" drawing.







| REV. | DESCRIPTION | DD/MM/YY | Drawing number |
|------|---------------------------------|----------|------------------|
| | | | |
| 1 | Removed Seismic logo (optional) | 18/05/22 | GPX-TD611 1/2 /E |
| 0 | First issue | 22/12/20 | CDL |

^{**} Consult Factory

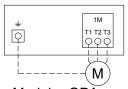
Electric Fire Pump Controller

Built to the latest edition of the NFPA 20 standard

Model: GPX

Terminal Diagram and Sizing For GPA,GPR & GPS

Motor Terminals



Models : GPA, GPR & GPS

Notes:

- 1 For proper wire sizing, refer to NFPA70 and NEC (USA) or CEC (Canada) or local code.
- 2 Controller suitable for service entrance in USA.
- 3 For more accurate motor connections refer to motor manufacturer or motor nameplate.
- 4 Controller is phase sensitive. Incoming lines must be connected in ABC sequence.

COPPER CONDUCTORS for Motor Connection (1M).

Field Wiring According to Bending Space (AWG or MCM). Terminals T1 - T2 - T3

| Total Willing / too or and group of the or in only. Formulation 11 12 10 | | | | | | | | | | |
|--|--------------|--------------|--------------|--------------|--------------|---------------|---------------|-----------------|-----------------|-----------------|
| HP Voltage | 5 | 7.5 | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 |
| 208 | 1x (10 to 2) | 1x (8 to 2) | 1x (8 to 2) | 1x (6 to 2) | 1x (4 to 2) | 1x (3 to 2/0) | 1x (2 to 2/0) | 1x (1/0 to 3/0) | 1x (3/0) | 1x (4/0 to 300) |
| 220 to 240 | 1x (10 to 2) | 1x (10 to 2) | 1x (8 to 2) | 1x (6 to 2) | 1x (4 to 2) | 1x (4 to 2/0) | 1x (3 to 2/0) | 1x (1/0 to 3/0) | 1x (2/0 to 3/0) | 1x (3/0) |
| 380 to 416 | 1x (10 to 2) | 1x (10 to 2) | 1x (10 to 2) | 1x (8 to 2) | 1x (8 to 2) | 1x (6 to 2) | 1x (6 to 1/0) | 1x (4 to 2) | 1x (3 to 2/0) | 1x (1 to 2/0) |
| 440 to 480 | 1x (10 to 2) | 1x (8 to 2) | 1x (8 to 2) | 1x (6 to 2) | 1x (6 to 2) | 1x (4 to 2/0) | 1x (3 to 2/0) |
| 600 | 1x (10 to 2) | 1x (8 to 2) | 1x (8 to 2) | 1x (6 to 2) | 1x (6 to 2) | 1x (4 to 2/0) |
| HP Voltage | 75 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 |

| HP Voltage | 75 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 |
|---------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 208 | 1x (300) | 2x (2/0 to 300) | 2x (4/0 to 300) | 2x (250 to 300) | 2x (400 to 600) | | | | | | |
| 220 to 240 | 1x (250 to 300) | 2x (2/0 to 300) | 2x (3/0 to 300) | 2x (4/0 to 300) | 2x (350 to 500) | 2x (500 to 600) | | | | | |
| 380 to 416 | 1x (1/0 to 3/0) | 1x (3/0) | 1x (250 to 300) | 1x (300) | 2x (3/0 to 300) | 2x (4/0 to 300) | 2x (300) | 2x (400 to 500) | 2x (500 to 600) | 2x (600) | |
| 440 to 480 | 1x (1 to 1/0) | 1x (2/0 to 3/0) | 1x (3/0) | 1x (4/0 to 300) | 2x (1/0 to 300) | 2x (3/0 to 300) | 2x (4/0 to 300) | 2x (300) | 2x (350 to 500) | 2x (400 to 600) | 2x (500 to 600) |
| 600 | 1x (3 to 1/0) | 1x (1 to 1/0) | 1x (2/0 to 3/0) | 1x (3/0) | 1x (250 to 300) | 2x (2/0 to 300) | 2x (3/0 to 300) | 2x (4/0 to 300) | 2x (250 to 300) | 2x (300) | 2x (350 to 500) |

ALUMINUM CONDUCTORS for Contactor (1M).

Field Wiring According to Bending Space (AWG or MCM). Terminals T1 - T2 - T3

| HP Voltage | 5 | 7.5 | 10 | 15 | 20 | 25 | 30 | 40 | 50 | 60 |
|---------------|-------------------|-------------------|-------------------|-------------------|-------------------|------------------|--------------------|------------------|------------------|-----------------|
| 208 | 1x (10 to 2/0) ** | 1x (10 to 2/0) ** | 1x (6 to 2/0) ** | 1x (4 to 2/0) ** | 1x (2 to 2/0) ** | 1x (1 to 2/0) ** | 1x (1/0 to 2/0) ** | 1x (2/0) 90°C * | Consult Factory | 1x (300) |
| 220 to 240 | 1x (10 to 2/0) ** | 1x (10 to 2/0) ** | 1x (8 to 2/0) ** | 1x (4 to 2/0) ** | 1x (3 to 2/0) ** | 1x (2 to 2/0) ** | 1x (1 to 2/0) ** | 1x (2/0) | 1x (3/0) 90°C * | Consult Factory |
| 380 to 416 | 1x (12 to 2/0) ** | 1x (12 to 2/0) ** | 1x (10 to 2/0) ** | 1x (8 to 2/0) ** | 1x (6 to 2/0) ** | 1x (6 to 2/0) ** | 1x (4 to 2/0) ** | 1x (2 to 2/0) ** | 1x (1 to1/0) | 1x (1/0) |
| 440 to 480 | 1x (12 to 2/0) ** | 1x (12 to 2/0) ** | 1x (10 to 2/0) ** | 1x (10 to 2/0) ** | 1x (8 to 2/0) ** | 1x (6 to 2/0) ** | 1x (6 to 2/0) ** | 1x (4 to 2/0) ** | 1x (2 to 1/0) | 1x (1 to 1/0) |
| 600 | 1x (12 to 2/0) ** | 1x (12 to 2/0) ** | 1x (12 to 2/0) ** | 1x (10 to 2/0) ** | 1x (10 to 2/0) ** | 1x (8 to 2/0) ** | 1x (8 to 2/0) ** | 1x (4 to 2/0) ** | 1x (4 to 2/0) ** | 1x (2 to 1/0) |

| HP Voltage | 75 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 |
|---------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| 208 | 1x (300) 90°C * | 2x (4/0 to 300) | 2x (300) | 2x (300) 90°C * | 2x (600) | | | | | | |
| 220 to 240 | 1x (300) 90°C * | 2x (3/0 to 300) | 2x (250 to 300) | 2x (300) | 2x (500) | 2x (600) | | | | | |
| 380 to 416 | 1x (3/0) | Consult Factory | 1x (300) 90°C * | Consult Factory | 2x (4/0 to 300) | 2x (300) | Consult Factory | 2x (600) | 2x (600) 90°C * | 2x (600) 90°C * | |
| 440 to 480 | 1x (1/0) | 1x (3/0) | Consult Factory | 1x (300) | 2x (3/0 to 300) | 2x (250 to 300) | 2x (300) | 2x (300) 90°C * | 2x (500) | 2x (600) | 2x (600) 90°C * |
| 600 | 1x (1 to 1/0) | Consult Factory | 1x (3/0) 90°C * | Consult Factory | 1x (300) 90°C * | 2x (3/0 to 300) | 2x (4/0 to 300) | 2x (300) | 2x (300) 90°C * | 2x (300) 90°C * | Consult Factory |

^{*}For standard enclosure, use 90°C aluminium wire. Consult Factory for Use of Conductors Rated Lower than 90°C.

Drawing for information only.

Manufacturer reserves the right to modify this drawing without notice.

Contact manufacturer for "As Built" drawing.







| REV. | DESCRIPTION | DD/MM/YY | Drawing number |
|------|---------------------------------|----------|------------------|
| | | | |
| 1 | Removed Seismic logo (optional) | 18/05/22 | GPX-TD611 2/2 /E |
| 0 | First issue | 22/12/20 | CDL |

^{**}Option V659 required.

Terminal Diagram and Sizing

Built to the latest edition of the NFPA 20 standard

Control Terminals (EB1) Remote Alarm Terminals (EB1) Terminals Wire Size: 24 - 12 AWG 0.5 Nm Terminals Wire Size: 24 - 12 AWG 0.5 Nm Normally open Normally closed Opens to alarm Closes to alarm Motor Run Remote Manual Start Normally open Closes to alarm Normally closed Opens to alarm Normally open Normally closed Closes to alarm Opens to alarm Lockout Power Available Normally open Closes to alarm Normally closed Opens to alarm Normally open Normally closed Closes to alarm Opens to alarm Ø NC Remote Automatic Start Phase Reversal Normally open Closes to alarm Normally closed Opens to alarm Normally open Closes to alarm Normally closed Opens to alarm ' J39 TB4 Deluge Valve Pump Room Alarm 3 Normally open Closes to alarm Normally closed Opens to alarm Normally open Normally closed Closes to alarm Alarm Inputs (EB1) Opens to alarm Motor Trouble ** Normally open TB5 Terminals Wire Size: 24 - 12 AWG 0.5 Nm Closes to alarm Normally closed Opens to alarm Normally open Closes to alarm Normally closed Opens to alarm (Field Programmable ***) Water Reservoir Low Close to signal alarm Normally open Closes to alarm Normally closed Opens to alarm Network Connection (VMB1) Shielded Female Connector RJ45

^{**} Re-assignable
*** Not available on GPS models







| REV. | DESCRIPTION | DD/MM/YY | Drawing number |
|------|--------------------------------------|----------|----------------|
| 3 | Removed Seismic logo (optional) | 18/05/22 | |
| 2 | Revised logo | 18/06/18 | GPX-TD603 /E |
| 1 | General Revision (added AL coverage) | 10/07/17 | CDL |

Drawing for information only.

Manufacturer reserves the right to modify this drawing without notice.

Contact manufacturer for "As Built" drawing.

Remove jumper to use this feature