

Project:	
Customer:	
Engineer:	
Pump Manufacturer:	

Technical Data Submittal Document

Model GPR Full Service Reduced Voltage Autotransformer Electric Fire Pump Controller



Contents:

- Data Sheets
- Dimensional Data
- Wiring Schematics
- Field Connections

Note: The drawings included in this package are for controllers covered under our standard offering.

Actual AS BUILT drawings may differ from what is shown in this package.



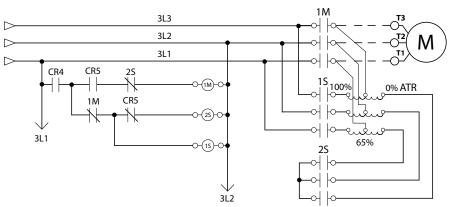








From normal incoming power through Disconnecting Means (IS/CB)*







N.Y.C.



Starting Method: Reduced Voltage

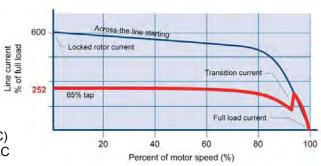
Autotransformer

Typical Voltage Applied at Start: 65% Inrush Current: 42% of normal load current

Starting Torque: 42%

Motor Type: Across the line (direct on line)

No. of Contactors: 2 at 42%, 1 at 33% of full load current (FLC) Min. ampacity of motor conductors: 3 at 125% x 100% of FLC



	Built to NFPA 20 (latest edition)					
Standard,	Underwriters Laboratory (UL)	UL218 - Fire Pump ControllersCSA C22.2 No. 14 Industrial Control Equipment				
Listings,	FM Global	Class 1321/1323	Class 1321/1323 Accepted for use in the City of New York by the Department of Buildin			
Approvals and Certifications	New York City	Accepted for use i				
	Optional					
	□ CE Mark	Various EN, IEC 8	CEE directives and standa	ards		
Enclosure	□ NEMA 3 □ NEMA 3R	□ NEMA 4X-304 sst □ NEMA 4X-304 sst □ NEMA 4X-316 sst □ NEMA 4X-316 sst	brushed finish painted	□ IP54 □ IP55 □ IP65 □ IP66		
	Accessories		Paint Specifications Red RAL3002 Powder coating Glossy textured finish			

^{*}Please see Disconnecting Means details on page 3.

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Shortcircuit Withstand	200V to 208V 60Hz	220V to 240V 60Hz	380V to 416V 50 Hz / 60Hz	440V to 480V 60Hz	575V to 600V 60Hz	
Rating						
☐ Standard 100kA	F 150 (2.7, 110)	5 000 (0.7, 447)	F 000 (0 7 000)	5 450 (0 7 005)	70/0	
☐ Optional 150kA	5-150 (3.7 - 110)	5-200 (3.7 - 147)	5-300 (3.7 - 220)	5-450 (3.7 - 335)	n/a	
☐ Standard 50kA 200 (147)		250 (184)	250 (184) 350 - 450 (257 - 335)		5-500	
☐ Optional 100kA	n/a	n/a n/a n/a		n/a	(3.7- 373)	
Ambient	Standard:		Optional:			

<u> </u>							
Ambient Temperature Rating	Standard: □ 5°C to 40°C / 41°F to 104°F	Optional : □ 5°C to 50°C / 41°F to 122°F □ 5°C to 55°C / 41°F to 131°F					
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 Pull and latch activation Integrated limit switch 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	 Pressure readings with date stamp Event recording with date stamp Under regular maintained operation, events can be stored in memory for up to 5 years. Data viewable on operator interface display screen Downloadable by USB port to external memory device 						
Pressure Sensing	 Pressure transducer and run test solenoi Pressure sensing line connection 1/2" Fe Drain connection 3/8" Rated for 0-500PSI working pressure (ca Externally mounted with protective cover 	librated at 0-300psi)					

Audible Alarm	4" alarm bell - 85 dB at 10ft. (3m)					
Visual Indications & Alarms	 Phase reversal Motor run Pump room alarm Motor trouble Phase loss Phase unbalance 	Periodic test Fail to start Low discharge pressure Low pump room temperature Pump room temperature (°F or °C) Pump on demand/Automatic start Deluge valve start Remote automatic start				
Remote Alarm Contacts	SPDT-8A-250V.AC Power available Phase reversal Motor run Common pump room alarm (field re-assignable)** Overvoltage Low pump room temperature High Pump room temperature High Pump room temperature Common motor trouble (field re-assignable)** Overcurrent Fail to start Undercurrent Ground fault Free (field programmable)**					
ViZiTouch Operator Interface	 Embedded microcomputer with software PLC logic 4.2" color touch screen (HMI technology) Upgradable software Expandable storage Multi-language 					
	Automatic Start	Start on pressure drop Remote start signal from automatic device				
	Manual Start	Start pushbutton Run test pushbutton Deluge valve start Remote start from manual device				
Operation	Stopping	Manual with Stop pushbu Automatic after expiration				
	Timers	Field Adjustable & Visual Countdown	 Minimum run timer ***(off delay) Sequential start timer (on delay) Periodic test timer 			
	Actuation	Visual Indication	Pressure Non-pressure			
	Mode	visual illulcation	Automatic Non-automatic			

^{**}Tornatech reserves the right to use any of these three alarm points for special specific application requirements.
***Can only be used if approved by the AHJ

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□ A4	Flow switch provision
□ A8	Foam pump application w/o pressure transducer and run test solenoid valve
□ A9	Low zone pump control function
□ A10	Medium 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
□ B19	High motor temperature thermistor relay c/w visual indication and alarm contact (Form C-SPDT)
□ B21	Ground fault alarm detection c/w visual indication and alarm contact (Form C-SPDT)
□ C1	Extra motor run alarm contact (Form C-SPDT)
□ C4	Periodic test alarm contact (Form C-SPDT)
□ C6	Low discharge pressure alarm contact (Form C-SPDT)
□ C7	Low pump room temperature alarm contact (Form C-SPDT)
□ C10	Low water reservoir level alarm contact (Form C-SPDT)
□ C11	High electric motor temperature alarm contact (Form C-SPDT)
□ C12	High electric motor vibration c/w visual indication and alarm contact (Form C-SPDT)
□ C14	Pump on demand/automatic start alarm contact (Form C-SPDT)
□ C15	Pump fail to start alarm contact (Form C-SPDT)
□ C16	Control voltage healthy alarm contact (Form C-SPDT)
□ C17	Flow meter valve loop open c/w visual indication and alarm contact (Form C-SPDT)
□ C18	High water reservoir level c/w visual indication and alarm contact (Form C-SPDT)
□ C19	Emergency start alarm contact (Form C-SPDT)

□ C20	Manual start alarm contact (Form C-SPDT)
□C21	Deluge valve start alarm contact (Form C-SPDT)
□C22	Remote automatic start alarm contact (Form C-SPDT)
□C23	Remote manual start alarm contact (Form C-SPDT)
□ C24	High pump room temperature alarm contact (Form C-SPDT)
□Cx	Additional visual and alarm contact (specify function) (Form C-SPDT)
□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 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: • 208V to 480V = 150kA • 600V = 100kA
□D14	Anti-condensation heater & thermostat
□ D14A	Anti-condensation heater & humidistat
□ D14B	Anti-condensation heater & thermostat & humidistat
□D15	Tropicalization
□D18	CE Mark with factory certificate
□D26	Modbus RTU provision
□ D26A	Modbus TCP/IP provision
□ 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
□ D34	Field programmable I/O board - 8 Input / 5 output
□ D35	Field programmable I/O board - 8 Input / 10 output
□D36	Redundant pressure transducer for fresh water rated for 0-500PSI (calibrated at 0-300PSI)
□ D36A	Redundant pressure transducer for sea water rated for 0-500PSI (calibrated at 0-300PSI)
□ D37	Window kit for operator interface

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



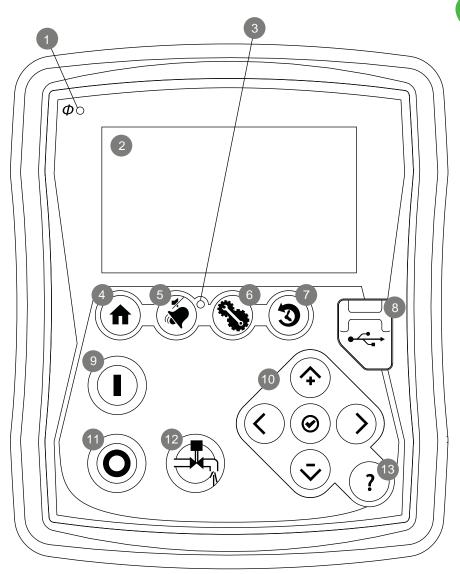
□ L01	Other language and English (bilingual)
□ L02	French
□ L03	Spanish
□ L04	German
□ L05	Italian
□ L06	Polish
□ L07	Romanian
□ L08	Hungarian
□ L09	Slovak
□ L10	Croatian

□ L11	Czech
□ L12	Portuguese
□ L13	Dutch
□ L14	Russian
□ L15	Turkish
□ L16	Swedish
□ L17	Bulgarian
□ L18	Thai
□ L19	Indonesian
□ L20	Slovenian

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



ViZiTouch Operator Interface



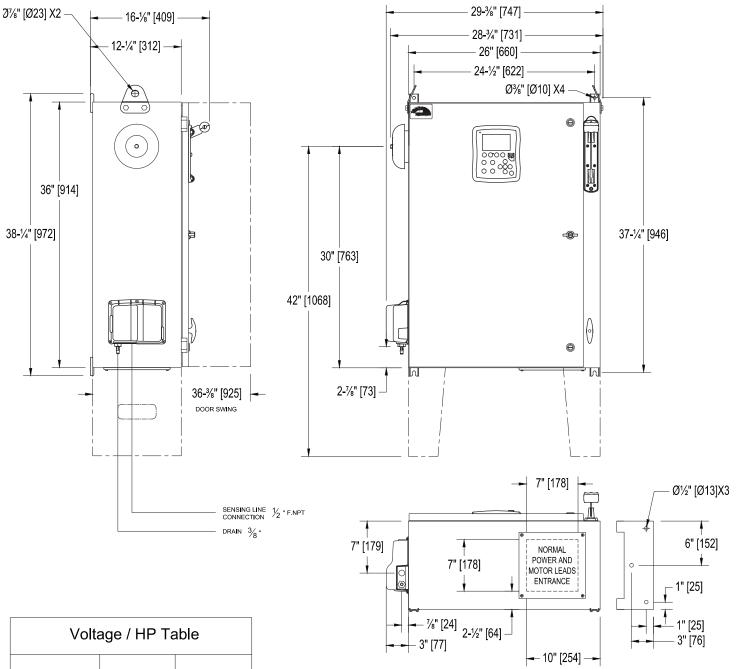
- 1 Power on LED
- 2 Color touch screen
- 3 Alarm LED
- 4 HOME page button
- 5 ALARM page button
- 6 CONFIGURATION page button
- 7 HISTORY page button

- 8 USB port
- 9 START button
- 10 Contextual navigation pad
- 11 STOP button
- 12 RUN TEST button
- 13 HELP button

MODEL: GPR/GPS/GPW

Dimensions

BUILT TO THE LATEST EDITION OF THE NFPA20 STANDARD



Voltage / HP Table						
Voltage	Min HP	Max HP				
208	5	30				
220 - 240	5	30				
380 - 400 - 415	5	60				
440 - 480	5	60				
600	5	75				

NOTES:

- ALL DIMENSIONS ARE IN INCHES (MILLIMETERS). PAINT : TEXTURED RED RAL 3002. BOTTOM CONDUIT ENTRANCE THROUGH REMOVABLE GLAND PLATE RECOMMENDED

- USE WATERTIGHT CONDUIT CONNECTOR ONLY. PROTECT EQUIPMENT AGAINST DRILLING CHIPS. AMBIENT TEMPERATURE: BETWEEN 41°F (5°C) AND 104°F (40°C).

Drawing for information only.

Manufacturer reserves the right to modify this drawing without notice. Contact manufacturer for "As Built" drawing.









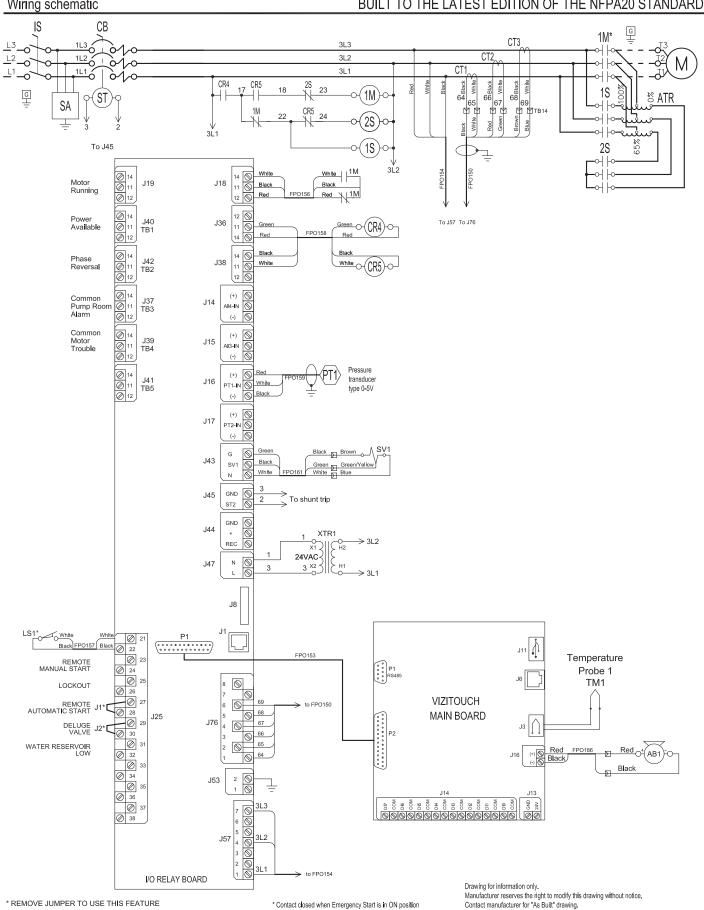
GPXDIM	8.	13/01/29	FEET		D
	7.	13/01/14	HP TABLE	DES.	_
vi >	6.	12/07/20	PLATE DIM. AND IDENTIFI.	VER.	G
DVED	REV.	DATE	DESCRIPTION	APP.	

PROJECTION

MODEL: GPR

Wiring schematic

BUILT TO THE LATEST EDITION OF THE NFPA20 STANDARD









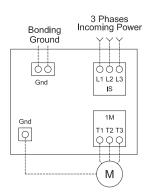
GPX-WS-ViZi DES 12/05/30 General Revision VER. 12/05/30 Correct Signal Input DESCRIPTION REV. APP. DATE

GPR-WS500 /E

MODEL: GPx

BUILT TO LATEST EDITION OF THE NFPA20 STANDARD

Power Terminals Models: GPA, GPR & GPS



- 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.
- 5 Field wiring and lug sizes base on copper conductors only.
- Do not use aluminium conductors.

		Iso	olating Switch (IS) Field Wiring acc	ording to Bendin	g Space (AWG or	MCM). TERMINA	LS L1 - L2 - L3		(Use Copper (Conductors Only
Bending Space				5 " (1	27 mm)	⁷ mm)			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 250)	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 250)	1x (2/0 to 250)	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 (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)	
600	1x (10 to 1/0)	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 (8 to 1/0)	1x (6 to 1/0)	1x (6 to 1/0)	1x (4 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	1x (300 to 500)	1x (500)	2x (4/0 to 500)	2x (250 to 500)	2x (400 to 600)						
220 to 240	1x (250 to 500)	1x (350 to 500)	2x (3/0 to 500)	2x (4/0 to 500)	2x (350 to 500)	2x (500 to 600)					
380 to 416	1x (1/0 to 250)	1x (3/0 to 250)	1x (250)	1x (300 to 500)	2x (3/0 to 250)	2x (4/0 to 500)	2x (300 to 500)	2x (400 to 500) 2x (400 to 500)	2x (500 to 600)	2x (600)	
	1x (1 to 250)	1x (2/0 to 250)	1x (3/0 to 250)	1x (4/0 to 250)	1x (350 to 500)	2x (3/0 to 250)	2x (4/0 to 500)	2x (300 to 500)	2x (350 to 500)	2x (400 to 600)	2x (500 to 600)
440 to 480							0 (0(0), 050)	0 (4(0), 500)	0 (050) 500)	0 (000 500)	0 (050) 500)
440 to 480 600	1x (3 to 1/0)	1x (1 to 250)	1x (2/0 to 250)	1x (3/0 to 250)	1x (250 to 500)	1x (350 to 500)	2x (3/0 to 250)	2x (4/0 to 500)	2x (250 to 500)	2x (300 to 500)	2x (350 to 500)

	Wiring Size for motor connection for Model GPA, GPR and GPS (AWG or MCM). TERMINALS T1 - T2 - T3 (Use Copper Conductors Only)										
HP Voltage	5	7.5	10	15	20	25	30	40	50	60	
208	1x (10)	1x (10)	1x (8 to 2)	1x (6 to 2)	1x (4 to 1/0)	1x (3 to 1/0)	1x (2 to 1/0)	1x (1/0 to 3/0)	1x (3/0)	1x (4/0 to 300)	
220 to 240	1x (12 to 10)	1x (10)	1x (8 to 2)	1x (6 to 2)	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)	
380 to 416	1x (14 to 10)	1x (12 to 10)	1x (8 to 2)	1x (8 to 2)	1x (8 to 2)	1x (6 to 2)	1x (6 to 1/0)	1x (4 to 1/0)	1x (3 to 1/0)	1x (3 to 1/0)	
440 to 480	1x (14 to 10)	1x (14 to 10)	1x (12 to 10)	1x (10)	1x (8 to 2)	1x (8 to 2)	1x (6 to 2)	1x (6 to 2)	1x (4 to 1/0)	1x (3 to 1/0)	
600	1x (14 to 10)	1x (14 to 10)	1x (14 to 10)	1x (12 to 10)	1x (10)	1x (8 to 2)	1x (8 to 2)	1x (6 to 2)	1x (6 to 2)	1x (4 to 1/0)	
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 2/0)	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 2/0)	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)

Drawing for information only.

Manufacturer reserves the right to modify this drawing without notice.

For drawing for approval or installation, please contact manufacturer.









Zi	4.	13/11/11	FIELD PROGRAMMABLE	DES.	
	3.	13/01/04	DATA ADDED TO TABLES	VER.	
	REV.	DATE	DESCRIPTION	APP.	ı

ELECTRIC FIRE PUMP CONTROLLER

Terminals Diagram and Sizing

BUILT TO LATEST EDITION OF THE NFPA20 STANDARD

Power Terminals 3 Phases 3 Phases Incoming Power Incoming Power Bonding Bonding Ground Ground 00 000 00 000 L1 L2 L3 L1 L2 L3 Gnd Gnd IS IS 1M 2M 1M T1 T2 T3 T1 T2 T3 T7 T8 T9 T6 T4 T5 Q Q QQQ999 000 000 M M

Notes:

1 - For proper wire sizing, refer to NFPA70 and NEC (USA) or CEC (Canada) or local code.

MODEL: GPx

- 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.
- 5 Field wiring and lug sizes base on copper conductors only. Do not use aluminium conductors.

Model: GPP Models: GPW & GPY

(Use Copper Conductors Only) Isolating Switch (IS) Field Wiring according to Bending Space (AWG or MCM). TERMINALS L1 - L2 - L3 Bending 8 " (203 mm) 5 " (127 mm) Space ΗP 7.5 10 15 20 25 30 40 60 50 Voltage 1x (10 to 1/0) 1x (8 to 1/0) 1x (1/0 to 250) 1x (3/0 to 250) 1x (4/0 to 250) 208 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 (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 250) 1x (2/0 to 250) 1x (3/0 to 250) 220 to 240 1x (10 to 1/0) 1x (10 to 1/0) 1x (8 to 1/0) 1x (3 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 (3 to 1/0) 380 to 416 440 to 480 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 (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 (10 to 1/0) 1x (8 to 1/0) 1x (6 to 1/0) 1x (4 to 1/0) 1x (8 to 1/0) 1x (6 to 1/0) 600 Bending 12 " (305 mm) 16 " (406 mm) Space ΗP 100 250 400 75 125 150 200 300 350 450 500 Voltage 208 1x (300 to 500) 1x (500) 2x (4/0 to 500) 2x (250 to 500) 2x (400 to 600) 1x (250 to 500) 1x (350 to 500) 2x (3/0 to 500) 2x (4/0 to 500) 2x (350 to 500) 220 to 240 2x (500 to 600) 2x (400 to 500) 1x (1/0 to 250) 1x (3/0 to 250) 1x (300 to 500) 2x (3/0 to 250) 2x (4/0 to 500) 380 to 416 1x (250) 2x (300 to 500) 2x (500 to 600) 2x (600) 440 to 480 1x (1 to 250) 1x (2/0 to 250) 1x (3/0 to 250) 1x (4/0 to 250) 1x (350 to 500) 2x (3/0 to 250) 2x (4/0 to 500) 2x (300 to 500) 2x (350 to 500) 2x (400 to 600) 2x (500 to 600) 1x (3 to 1/0) 1x (2/0 to 250) 2x (4/0 to 500) 2x (300 to 500) 2x (350 to 500) 1x (1 to 250) 1x (3/0 to 250) 1x (250 to 500) 1x (350 to 500) 2x (3/0 to 250) 2x (250 to 500) 600 Bending 5 " (127 mm) 12 " (305 mm) 8 " (203 mm) Space

		Wiring Size	for motor connec	tion for Model G	PP, GPW and GP	(AWG or MCM).	TERMINALS T1 -	T2 - T3 - T4 - T5 -	T6 - T7 - T8 - T9	(Use Copper (Conductors Onl
HP Voltage	5	7.5	10	15	20	25	30	40	50	60	
208	1x (14 to 10)	1x (12 to 10)	1x (10)	1x (8 to 2)	1x (8 to 2)	1x (6 to 2)	1x (6 to 1/0)	1x (4 to 2/0)	1x (2 to 3/0)	1x (1 to 3/0)	
220 to 240	1x (14 to 10)	1x (12 to 10)	1x (10)	1x (8 to 2)	1x (8 to 2)	1x (6 to 2)	1x (6 to 1/0)	1x (4 to 2/0)	1x (3 to 2/0)	1x (2 to 3/0)	
380 to 416	1x (14 to 10)	1x (14 to 10)	1x (14 to 10)	1x (12 to 10)	1x (10)	1x (10)	1x (8 to 2)	1x (6 to 2)	1x (6 to 2)	1x (4 to 1/0)	
440 to 480	1x (14 to 10)	1x (14 to 10)	1x (14 to 10)	1x (12 to 10)	1x (12 to 10)	1x (10)	1x (10 to 2)	1x (8 to 2)	1x (6 to 2)	1x (6 to 2)	
600	1x (14 to 10)	1x (14 to 10)	1x (14 to 10)	1x (14 to 10)	1x (12 to 10)	1x (12 to 10)	1x (10)	1x (10 to 2)	1x (8 to 2)	1x (8 to 2)	
HP Voltage	75	100	125	150	200	250	300	350	400	450	500
208	1x (2/0 to 3/0)	1x (3/0)	1x (250 to 300)	2x (1/0 to 300)	2x (3/0 to 350)						
220 to 240	1x (1/0 to 3/0)	1x (3/0)	1x (4/0 to 300)	1x (300)	2x (2/0 to 300)	2x (4/0 to 350)					
380 to 416	1x (4 to 2/0)	1x (2 to 2/0)	1x (1/0 to 3/0)	1x (2/0 to 3/0)	1x (4/0 to 300)	1x (300)	2x (2/0 to 300)	2x (3/0 to 300)	2x (4/0 to 350)	2x (4/0 to 350)	
440 to 480	1x (4 to 2/0)	1x (3 to 2/0)	1x (2 to 3/0)	1x (1/0 to 3/0)	1x (2/0 to 3/0)	1x (4/0 to 300)	1x (300)	2x (1/0 to 300)	2x (2/0 to 300)	2x (3/0 to 350)	2x (4/0 to 350
600	1x (6 to 2)	1x (4 to 2/0)	1x (3 to 2/0)	1x (2 to 3/0)	1x (1/0 to 3/0)	1x (2/0 to 3/0)	1x (4/0 to 300)	1x (250 to 300)	1x (300)	2x (1/0 to 300)	2x (2/0 to 300

Drawing for information only.

Manufacturer reserves the right to modify this drawing without notice.

For drawing for approval or installation, please contact manufacturer.









4.	13/11/11	FIELD PROGRAMMABLE	DES.	Drawing No.
3.	13/01/04	DATA ADDED TO TABLES	VER.	GPX-T
REV.	DATE	DESCRIPTION	APP.	

Remote Alarm Terminals (I/O board) Control Terminals (I/O board) Normally open Ø J19 - 14 Remote 23 J25 Motor Closes to alarm Normally closed J19 - 11 Manual Close to start pump Running Opens to alarm Start ⊘l J19 - 12 Normally closed Ø J40 - 14 25 J25 Opens to alarm Normally open J40 - 11 TB1 Lockout Close to block start Available (Fail Safe) Signal Closes to alarm Ø J40 - 12 Automatic Start Normally open 27 J25 Ø J42 - 14 Remote Phase Closes to alarm Open to start pump Normally closed Ø J42 - 11 Automatic Reversal If used, remove jumper J Start Opens to alarm) J42 - 12 (RE-ASSIGNABLE) Deluge Valve Normally open Ø J37 - 14 Deluge 29 J25 Closes to alarm Pump Valve Open to start pump Ø J37 - 11 Normally closed Room Signal If used, remove jumper J2 Opens to alarm Alarm (RF-ASSIGNABLE) Normally open Ø J39 - 14 Motor Closes to alarm Filed Connections for External Devices Normally closed J39 - 11 Trouble Opens to alarm √ J39 - 12 (I/O board) Water Reservoir Low Water Reservoir 31 J25 Low Close to signal alarm Normally open J41 - 14 Signal 32 (Field* Closes to alarm Normally closed J41 - 11 Programmable) Opens to alarm Ø J41 - 12 Flow / Zone Flow / Zone Ø 33 Close to signal alarm Start / Stop Ĵ25 Ø 34 Signal

Drawing for information only. Manufacturer reserves the right to modify this drawing without notice. For drawing for approval or installation, please contact manufacturer.









Zi	4.	13/11/11	FIELD PROGRAMMABLE	DES.	
	3.	13/01/04	DATA ADDED TO TABLES	VER.	
	REV.	DATE	DESCRIPTION	APP.	

Drawing No.

GPX-TD500 3/3 /E