



The model GPS reduced voltage soft start soft stop electronic fire pump controller built to the latest NFPA20 standard and listed and approved by UL(218) and FM provides for:

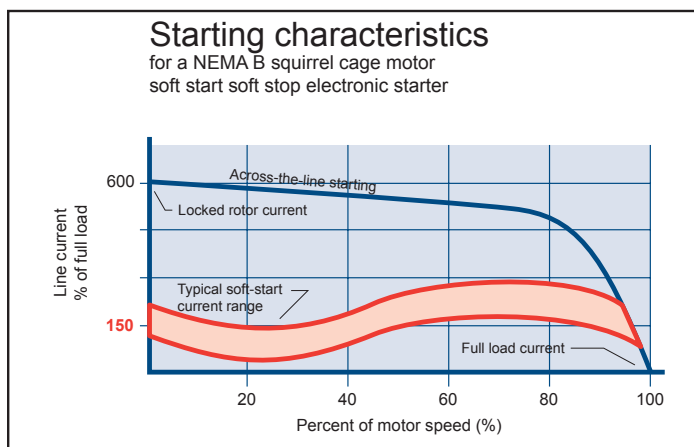
- Initial reduction of inrush current to 30% of normal. This type of controller is meant to be used where the capacity of the electric power source does not permit full voltage across-the-line starting.
- 3-phase - 3-wire motor connection assures error free field installation and simple change of motor rotation
- A gradual voltage increase (ramp up time of up to 10 seconds) from low to full voltage value provides for a smooth pump motor acceleration. Low starting voltage adjustable from 30% to 80% of normal.
- At full voltage the electromechanical by-pass contactor is energized and the pump motor is connected directly to the line voltage.
- On stop command the electromechanical contactor is de energized. A gradual voltage reduction (ramp down time of up to 10 seconds) provides the first deceleration stage. After reaching the low voltage threshold the soft start contactor maintains this low voltage value for an additional deceleration time before final stop (voltage shut off). Voltage reduction adjustable from 30 to 80% of normal.
- An additional Instant Stop push button allows the pump motor to be stopped instantly in case of emergency.

Only quality components, all U.L. listed or recognized and C.S.A. certified are used throughout to assure the best possible reliability.

The complete assembled and wired controllers are factory tested before shipping and ready for immediate installation.

**SUITABLE FOR USE AS SERVICE ENTRANCE EQUIPMENT**  
(where acceptable by local code)

This controller meets the NFPA 20 requirements for connection to a normal power source only. For normal and alternate power sources, add a listed fire pump automatic transfer switch (Model GPG or GPU). Fire pump controller and automatic transfer switch will be supplied as one unit.



**Electric Fire Pump Controller**  
**Full service reduced voltage**  
**Soft start soft stop electronic starter**  
**Micro-processor based**



**CONTROLLER PROTECTION LEVEL:**

- Standard NEMA - UL - CSA type 2
- Optional - NEMA - UL - CSA type 3R
- NEMA - UL - CSA type 4
- NEMA - UL - CSA type 4X
- NEMA - UL - CSA type 12

**POWER AND MOTOR LEAD ENCLOSURE ENTRANCE**

- Bottom gland plate

**PRESSURE / EVENT RECORDER, ANNUNCIATOR AND LCD DISPLAY**

- Accessible without opening main door
- Voltage and current indication
- Pressure settings and system pressure indication
- 7 day pressure and 15 day event data retrievable through a USB (slave) communication port

**MICRO-PROCESSOR BASED LOGIC CONTROL**

- Mechanically protected and shielded

**WITHSTAND RATING** (short circuit current):

	208V. to 480V.	600V.
Standard	100,000 A.	50,000 A.
Optional	150,000 A.	100,000 A.

**OPERATIONAL TEMPERATURE LIMITS:**

- 41°F to 122°F (5°C to 50°C)

## Electric Fire Pump Controller

Full service reduced voltage  
Soft start soft stop electronic starter  
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### STANDARD FEATURES:

#### MANUAL OPERATORS (FLANGE MOUNTED)

- Single operator for both isolating switch and circuit breaker door interlocked in the "ON" position complete with interlock defeater screw
- Emergency manual start handle providing for manual across-the-line starting
- Start and Stop pushbuttons

#### ELECTRICAL FEATURES

- Molded case isolation switch
- Molded case circuit breaker
- Motor starter HP rated
- 3 phase voltage surge suppressor

#### CONTROL FEATURES

- Micro-processor logic based
- Factory set (no field programming)
- Locked rotor protection
- Phase sequence / loss
- Provision for remote or deluge valve start
- Automatic start sequence
- Pressure transducer (0-300psi)
- Manual and emergency control circuit independant of micro-processor

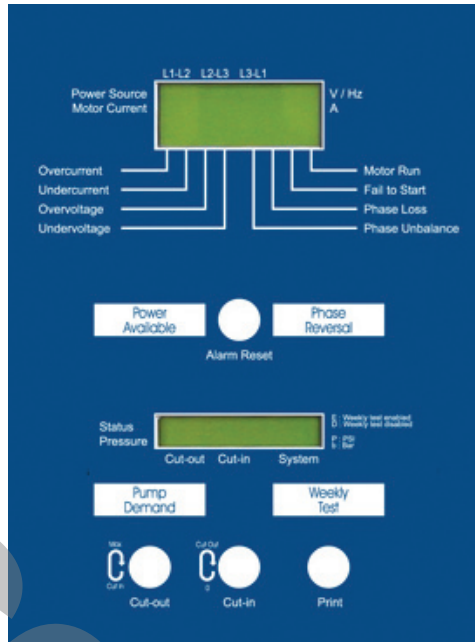
#### DRY ALARM CONTACTS - 8A. - 250VAC

- Power or phase failure and/or circuit breaker in open position - DPDT
- Phase reversal - DPDT
- Pump run – 1N/O – 1N/C
- Trouble (alarm conditions) - DPDT

#### OPTIONAL FEATURES:

(Refer to GPO Brochure for details)

- **Option Type A:** Operational modifications
- **Option Type B:** Additional annunciations
- **Option Type C:** Extra alarm contacts
- **Option Type D:** Miscellaneous
- **Option Type E:** Load shedding provisions
- **Option Type F:** Automatic transfer switch options
- **Option Type H:** Export packing



### ANNUNCIATOR AND LCD DISPLAY

#### Voltage and amperage module

Provides for:

- Phase sequence / Loss monitoring & alarms
- Individual phase-to-phase voltage indication
- Individual phase current indication
- True elapsed run time
- Motor run visual indication
- Over & under current visual indication
- Over & under voltage visual indication
- Fail to start visual indication
- Phase loss visual indication
- Phase unbalance visual indication
- Power available LED
- Phase reversal LED

#### Pressure and Sequencer module

Provides for:

- Cut-In & Cut-Out pressure setting
- System pressure indication
- Run period timer
- Sequential start timer
- Weekly test setting
- Pressure recording
- Alarm & events recording
- Pump on demand LED
- Weekly test LED
- USB (slave) communication port
- Printer (optional)
- Modem (optional)



#### BOTTOM GLAND PLATE

For ease of power and motor lead entrance

208V.-240V.	380V.-416V.	440V.-480V.	600V.
HP	HP	HP	HP
5 to 30	5 to 50	5 to 60	5 to 75
40-60	60-100	75-150	100-150
75-150	125-350*	200-400	200-500

\* If FLA is equal to or less than 500 A.

GPA - GPP - GPY			GPR - GPS - GPW			APPROX. WEIGHT
WIDTH	HEIGHT	DEPTH	WIDTH	HEIGHT	DEPTH	
in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	Lbs. (Kg)
20 (508)	36 (914)*	12 (305)	26 (660)	36 (914)*	12 (305)	275 (125)
24 (610)	54 (1371)	14 (355)	30 (762)	54 (1371)	14 (355)	375 (170)
30 (762)	68 (1727)	18 (457)	36 (914)	68 (1727)	18 (457)	600 (270)

\* Height does not include mounting feet.

**HOW TO ORDER:** GPS - V / HP / Ph / Hz + options  
Ex.: GPS - 208 / 20 / 3 / 60 + options

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