



Limited service pump controller
Full voltage across-the-line starter
3-phase and single phase

The model GPL across-the-line starter (full voltage) limited service pump controller built to the latest NFPA 20 and UL218 Standards provides for:

- Full voltage across-the-line starting. Peak inrush current is approximately 6 times the full load motor current. Inrush current and starting torque are not reduced.
 NOTE: Voltage at the controller line terminal shall not drop more than 15% below controller rated voltage under motor starting conditions.
- 3-phase - 3-wire or 1-phase - 2-wire motor connection assures error free field installation and simple change of motor rotation. The limited service pump controller is limited to 30HP max. and across-the-line starting. It does not provide accurate "locked rotor" protection and is subject to acceptance by the "authority having jurisdiction".

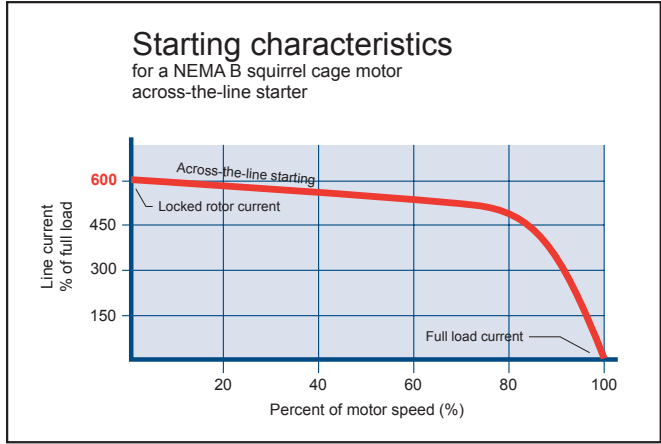
This controller can only be utilized where the capacity of the electric power source and the electric supply utility permits full voltage starting of a squirrel cage motor. (Not recommended for use on generator set installations due to high inrush current.)

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 automatic transfer switch (Model GLG or GLU). Pump controller and automatic transfer switch will be supplied as one unit.



CONTROLLER PROTECTION LEVEL:

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

CONTROLLER DIMENSIONS:

- 30" (762mm) high
- 24" (610mm) wide
- 10" (254mm) deep

OPERATIONAL TEMPERATURE LIMITS:

- 41°F to 122°F (5°C to 50°C)

WITHSTAND RATING (short circuit current):

	STANDARD	OPTIONAL
208V. to 240V.	65,000 A.Sym.	NOT AVAILABLE
380V. to 480V.	25,000 A.Sym.	65,000 A. Sym.
600V.	18,000 A.Sym.	25,000 A. Sym.

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STANDARD FEATURES:

MANUAL OPERATORS (DOOR MOUNTED)

- Circuit breaker operator door interlocked in the "ON" position
- Start and Stop push buttons

MANUAL OPERATOR (SIDE MOUNTED)

- Emergency manual start handle, providing for manual across-the-line starting of motor start contactor

CONTROL FEATURES

- Across-the-line motor start contactor HP rated
- Voltage surge suppressor connected to load terminals of the circuit breaker
- Remote start circuit
- Minimum running period timer
- Sequential start timer
- Weekly test
- Built-in pressure transducer

DRY ALARM CONTACTS - 8A. - 250VAC

Three phase model:

- Power or phase failure and/or circuit breaker in open position - DPDT
- Phase reversal - DPDT
- Pump run - 1N/O - 1N/C

Single phase model:

- Power and/or circuit breaker in open position - DPDT
- Pump run - 1N/O - 1N/C

OPTIONAL FEATURES:

Type A: OPERATIONAL MODIFICATIONS

Option A3: **Deluge valve provision** required when remote water control equipment is connected to the fire pump controller
Option A4: **Flow switch provision** required when the fire pump motor has to start upon the detection of a water flow prior to a pressure drop and not to stop until there is no more flow detection in the system.

Option A8: **Concentrate foam pump application:** Removal of pressure transducer and installation of two terminals for connection of a remote fire pump start contact.

Type B: ADDITIONAL ANNUNCIATIONS

Option B7: **Low suction pilot light.** (Pressure switch not included. See Options D1 and C5.)

Type C: EXTRA ALARM CONTACTS

Option C4: **Weekly exercise cycle alarm contacts.**

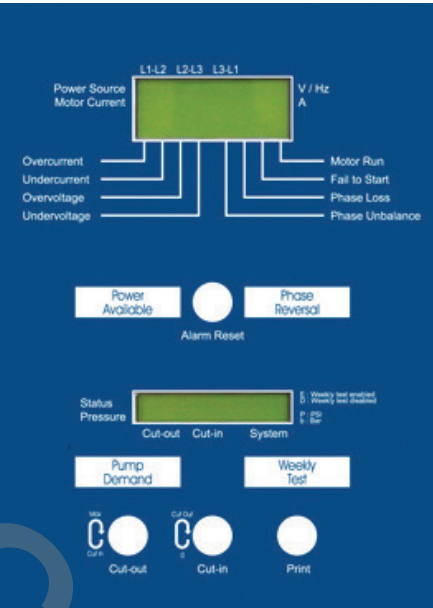
Option C5: **Low suction pressure alarm contacts.** (Pressure switch not included. See Options D1 and B7.)

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

Tornatech inc., 7075, Place Robert-Joncas, # 132, Montreal, Quebec, Canada H4M 2Z2

Tel.: + 1 514 334 0523 + 1 800 363 8448 (Canada & U.S.A.) Fax: + 1 514 334 5448

E-mail: tornatech@tornatech.com



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)

Type D: MISCELLANEOUS

Option D1: **Low suction pressure switch** for fresh water mounted inside the controller.
(See Options B7 and C5.)

Option D10: **Mounting feet**

Option D11: **NEMA 4 - assembly** for pump section only.

Option D12: **NEMA 4X - assembly** for pump section only.

Option D13: **High withstand rating** for fire pump section only. 65 kA for 380V. to 480V. ; 25 kA for 600V.

Option D17A: **Printer**

Option D18: **CE listing**

Option D19: **French labeling**

Option D20: **Spanish labeling**

Option D21: **Labeling in language other than English, French or Spanish**

Option D22: **NEMA 3 - assembly** for pump section only.

Option D23: **NEMA 12 - assembly** for pump section only.

Type H: EXPORT PACKING

Option H1: Export packing for 1 controller Model GPL