

The Manual Wound Rotor Motor Standpipe Fire Pump Control Panel shall be factory assembled, wired and tested, in accordance with the specific requirements of the Standpipe Rules, City of New York, Department of Buildings, Material & Equipment Acceptance Division.

The controller shall be U.L. Listed & NYC Approved MEA Department.

The controller shall be designed for manual starting and speed regulated and shall be of the reduced voltage secondary resistance type with five (5) steps of speed control for operating the wound rotor motor driving the Fire Pump.

All controller components, including circuit breaker and contactors, shall be front mounted, front wired and front accessible for maintenance. The minimum withstand rating of the controllers shall not be less than 100,000 Amps RMS Symmetrical at 200-480 Volts, and 22,000 Amps RMS Symmetrical at 550-600 Volts.

The controller shall consist of sectionalized panels enclosed in a drip proof, free standing cabinet constructed of not less than No. 12 gauge sheet metal.

The rear of the enclosure shall be provided with ventilated removable cover plate and the front shall have a hinged door with 3 point catch and handle.

On the front section of the cabinet, to be visible with the doors closed, there shall be mounted:

- 1- AC Ammeter
- 1- AC Voltmeter
- 1- Pilot light with white lens to indicate "Control Power Available"
- 1- Pilot light with red lens to indicate "Pump Running"

The controller shall include the following components mounted on panels within the cabinet:

- 1- Manually operated motor rated isolating disconnect switch, 3 pole, 600 volt.

- 1- Main line manually operated circuit breaker, 3 pole, 600 volt. The breaker shall permit normal starting without tripping and shall provide stalled rotor and short circuit protection per NFPA 20 requirements.

The isolation disconnect switch and circuit breaker shall be mechanically interlocked to assure the circuit breaker "makes" and "breaks" the load.

- 1- Primary line contactor that may be manually operated from the front of the enclosed in emergencies.
- 1- Power available signal relay for remote alarm.
- 1- Auxiliary contact for pump running remote alarm.
- 1- Phase failure/reversal monitor to sense loss of line power, loss of any one phase, phase reversal, and undervoltage.
- 1- Surge suppression on input lines to protect against voltage transients.

In the rear of the enclosure and accessible from the back of cabinet, shall be mounted edgewound, heavy duty speed regulating resistors having continuous current ratings of 125% of F.L.C., the resistors shall be mounted in racks and insulated from ground.

The controller shall be one complete unit provided with solderless connectors at line and load terminals. Size and types of feeder and load cables shall be as specified in the electrical specifications.

The control panel shall be installed near the fire pump and motor with access space not less than 30 inches allowed at the rear as per NFPA-20 requirements.

The controller shall be Bulletin LXi-1600 as manufactured by Hubbell Industrial Controls, Inc.

