



SPECIFICATIONS FOR  
**MODEL RPA** RESIDENTIAL PUMP CONTROLLER  
ACROSS THE LINE STARTER  
MICRO-PROCESSOR BASED

The residential fire pump controller shall be a Tornatech Model RPA and rated for \_\_\_\_\_ V. / \_\_\_\_\_ HP / \_\_\_\_\_ Phase / \_\_\_\_\_ Hz. The controller shall be listed with UL and meet CSA 22.2 No.263.09. The withstand rating of the controller shall be 10kA.

The minimum rating of the enclosure shall be NEMA 2. The power circuit of the controller shall incorporate a circuit breaker disconnect switch with door interlocked operating mechanism, a voltage surge arrestor and a contactor for across the line starting of the electric motor. The control circuit of the controller shall incorporate a control transformer for 24VAC control power and a combined start and emergency start pushbutton, stop pushbutton and alarm buzzer and an alarm bell that sounds when the fire pump is in operation (motor running). A provision for the remote starting of the residential fire pump shall be provided.

The controller shall be micro-processor logic based. Automatic operation of the residential fire pump shall be achieved through an electronic pressure monitoring module in conjunction with a pressure transducer. Both the module and the pressure transducer shall be mounted inside the controller to prevent unauthorized adjustments or tampering. The module shall have a four (4) digit digital display and eight (8) high luminosity LED's which can be viewed by the operator without having to open the controller door. The digital display shall continuously display the system pressure and, when required, the start and stop pressure settings. The eight (8) high luminosity LED's shall indicate power available, system pressure above cut-out, system pressure between cut-out and cut-in, system pressure below cut-in, motor run, any two (2) alarm conditions and timer counting. An adjustable minimum run period timer and a delay start timer shall be provided. The pressure transducer shall be of 304 stainless steel construction and have a range of 0-300psi.

Individual dry alarm contacts for remote monitoring shall be provided for pump run and loss of power conditions.

The controller shall be supplied with the following options;

- Extra AC power failure alarm contacts
- Extra motor run alarm contacts
- Low reservoir alarm contacts
- High reservoir alarm contacts
- Anti-condensation heater and thermostat
- Low pump room temperature sensor with visual indication
- Weekly test time clock with visual indication
- Provision to connect level transmitter for water tank level indication