



## System 1-2-3

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AquaMatic's System 1-2-3 is comprised of a utility cabinet, a pre-piped fire protection system and a pre-wired fan and light electrical control panel. Both fire protection and electrical control components are contained in the utility cabinet.

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### UTILITY CABINET

The utility cabinet is UL Listed for integral left or right side mount on the AquaMatic ventilation hood. It is welded directly to the hood and fabricated of the same material as the hood. To conceal fire extinguishing and wiring apparatus, the fire cabinet is equipped with a full length, removable door with a center handle. UL tests confirm temperatures do not exceed 120°F inside the cabinet during a fire condition. (120°F is the maximum allowed storage temperature for the UL Listed fire suppression system and the UL Listed industrial control panel.)

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### PRE-PIPED FIRE PROTECTION SYSTEM

The fire extinguishing system is a pre-engineered distribution network. The extinguishing agent is a low pH liquid, non-corrosive type. The system is capable of automatic detection and activation or manual activation through a remote manual pull station. It is Listed with Underwriters Laboratories, Inc. The tank(s) can be contained in the AquaMatic UL Listed utility cabinet. The cabinet is fabricated with a full length, removable door and center handle and is an integral part of the canopy. The system is completely factory pre-piped by trained personnel in accordance with UL 300, NFPA #96, #17 and #17A. Each exposed fitting is chrome plated. Exposed piping is covered with heavy gauge stainless steel sleeving. System is capable of fuel shut down upon discharge. A mechanical or electrical gas valve can be provided. A microswitch is provided for connection to the pre-wire package for the automatic shut down of supply air fans in the event of system discharge. Field hookup and testing will be subcontracted by AquaMatic to a qualified and insured fire distributor and will be performed after hood installation. A CAD generated drawing will be custom produced for each installation, indicating all drop locations and piping schematic in accordance with local requirements. As provided under Section 16, electrical wiring requirements are provided by the jobsite Electrical Contractor.

Inspections and routine maintenance at the specified 6-month intervals shall become the responsibility of the customer. The basic fire system components shall include:

- **Release Assembly:** Actuates extinguishing system, shuts down cooking equipment, supply fan and fuel supplies.
- **Agent Tank:** Contains the special liquid fire extinguishing agent.
- **Detectors:** Fusible link spaced throughout hood(s) to activate the automan in case of fire.
- **Nozzles:** Placed throughout the hood(s) according to cooking equipment and system guidelines, the nozzles direct the extinguishing agent onto the fire hazard areas such as the duct, plenum and cooking equipment.
- **Pull Station:** Mounts near the kitchen exit and allows manual activation of fire system.

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### ELECTRICAL CONTROL PANEL

The control panels, three phase or single phase, are available in various sizes depending on the number of fans controlled by the panel. The control panel and the control switching have two mounting options:

- [Inside Hood's UL Listed Utility Cabinet](#) with switches face mounted on the utility cabinet.
- [Inside Stainless Steel Box](#), wall mounted (recessed or surface mounted) with switches mounted on the face of the stainless steel box. (All control connections must be field wired with this option.)
- [Inside NEMA-1 Box](#) (gray) with switches mounted on hood or shipped loose. (All control connections must be field wired with this option.)

All control panels are thoroughly tested before leaving the factory. For most applications, the electrical control panels are UL Listed.

#### Field Wiring Requirements:

- Motor power, single or three phase, to the control panel.
- Motor wire from the control panel to the fans.
- Power to the control panel for the lights.
- Control panel circuit power.
- Wiring from the control panel to the lights, and fire system microswitch (if the control panel is wall mounted).

#### Single Phase Control Panels:

- The maximum horse power for a 120V is 1 1/2 HP; the maximum horse power for a 220V is 2 HP. The minimum NEMA control box dimensions are 8" x 8" x 4", with 1/2" and 3/4" knockouts.

#### Three Phase Control Panels:

- The minimum NEMA control box dimensions are 12" x 18" x 6", with 1 1/2" and 3/4" knockouts. The motor overloads are factory set to the size of the motors ordered for the system. The contactor and overload combination (Starter) are DIN rail mounted.

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#### FEATURES

- UL Listed Utility Cabinet Welded directly on end of hood to conceal fire system and electrical apparatus
- UL Listed Pre-Piped Fire Extinguishing System Minimizes field installation requirements. Field certification subcontracted by AquaMatic, eliminating all fire system installation related costs to customer.
- UL Listed Pre-Wired Electrical Minimizes cost and complexity of field wiring requirements.
- Control Panel with Color Coded Wiring
- Numbered Terminal Blocks
- Grounding Bar
- Spare Terminals Controlled by Fire System Microswitch
- Factory Pre-Wired to Shut Down Fans During Fire Condition
- Illuminated Pilot Lighted Fan Switch; Enclosed in Flexible Conduit or EMT
- Wiring Diagram
- Relays and/or Starters

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#### AQUAMATIC'S INTEGRATED SYSTEM

AquaMatic® offers a total system to insure maximum installation and operating efficiencies. Components consist of the ventilator, fire system and electrical controls contained within an integral utility cabinet, and fan packages including exhaust, untempered and tempered make-up air packages. Also available are air purification and energy management systems. Fire suppression systems include final hookup and inspection. Call your AquaMatic Representative for more details.

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#### SECTIONAL VIEWS

