



CSI Controls™

We've Got Panels
Under Control

www.csicontrols.com

Standard Panels



Patents #7,075,443 B1 and #7,151,459 B1

The RK Series™ is an innovative approach to today's sump pump control system. Through the use of a standard sub-door and raised backpanel, the RK Series offers a revolutionary design for housing common control panel features such as circuit breakers, start components, contactors and a terminal strip. The RK Series panels provide many of the most requested items as standard features. RK Series panels allow the user to see a sub-door control center with important system monitoring information.

RK Series™ Control Panels

- Red flashing alarm beacon and horn with variable flashing modes to indicate specific alarm faults
- Separate control and alarm fuses
- Lockable latches
- Raised terminal strip for easier installations
- Sub-door control center:
 - LED indicators for control and alarm circuit power
 - Pump run indicator light
 - Float status (high level, lag pump on, lead pump on, pumps off)
 - External touch to silence/touch twice to test pad
 - Push to run hand button
- Options:
 - Auto dialer
 - Elapsed time meters
 - Cycle counters
 - Seal fail indicator
 - Auxiliary alarm contacts
 - Timed dose operation
 - Pump and control/alarm circuit breakers
- Single Phase and Three Phase Simplex, Duplex and Capacitor Start/Run models available

The RK Series™ offers optional digital displays for viewing system information (factory-installed option or as an accessory to be easily field installed later):

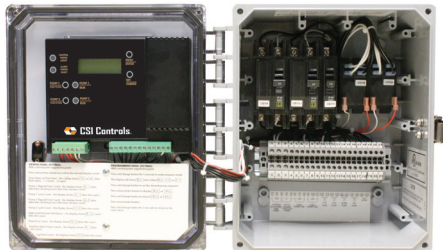
- Digital Interface Board (DIB) incorporates a two line, 16 character display screen for a more complete read-out by the user
- Digital Display Center (DDC) has a 4 character LED display screen



Optional Digital Interface Board (DIB)



Optional Digital Display Center (DDC)

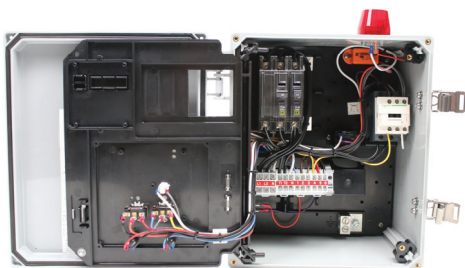


Patents #7,075,443 and #7,224,283

Power Zone™ Control Panel

The **Power Zone Single Phase Simplex/Duplex** panels are designed to control one or two 120/230/240V single phase pump in water and sewage installations. The easy to read LCD display provides for simple menu navigation, site setup, and access to critical alarm events, pump run times, and pump cycle times.

- NEMA 4X weatherproof enclosure for indoor/outdoor use
- Exterior touch to silence/touch twice to test circuitry
- External alarm & control power lights
- External pump run light(s)
- Internal hand run button(s) with latching feature
- Internal pump run indicator light(s)
- Alarm & control short circuit indicator lights
- No holes drilled or cut for lights, audible alarm, or silence devices
- Quick disconnect circuit boards - simple field troubleshooting
- Field wiring terminal strip
- Lockable latch
- Standard digital display center includes:
 - Elapsed time meter for each pump (resetable)
 - Cycle counter for each pump (resetable)
 - High level counter
 - Float status indication
 - Alternation with lead pump selection (duplex panels)
- Optional time dose version:
 - Pump run/off timer
 - Timer override counter
 - Override timer with settable override run and off time
 - Duplex time dose available (consult factory for details)



FUSION Control Panel

The **Fusion™ Single Phase Simplex/Duplex** control panels package traditional relay logic component-style design into a NEMA 4X engineered thermal plastic enclosure. Applications include sump and sewage basins, septic tanks, aeration systems, cisterns, atmospheric storage tanks, chemical solution tanks and more.

- NEMA 4X weatherproof enclosure for indoor/outdoor use
- Inner door for added safety
- Red flashing alarm beacon and horn
- Separate control and alarm fuses
- Lockable latches
- Pump run light
- Hand/off/auto heavy duty toggle
- Alarm on/off/test heavy duty toggle
- Raised field wiring terminal strip for easier installations
- Pump and alarm/control circuit breakers
- Options:
 - Auto dialer
 - Elapsed time meters
 - Cycle counters
 - Seal fail indicator
 - Auxiliary alarm contacts
 - Timed dose operation

Standard Panels



Patents #7,224,283

Minuteman Level Alert

The **Minuteman Level Alert™** is a pedestal mounted, plugger control panel level alarm. The pedestal features an easy access door allowing quick installation and wiring. It is equipped with an internal outlet for piggyback pump operation and battery back-up alarm system.

- 120V receptacle for pump/pump switch
- Long lasting flashing red LED alarm light
- Piezo audible alarm
- Low voltage to alarm float switch
- External Test/Silence/Normal operation switch
- Weatherproof poly enclosure and pedestal
- All wiring concealed in pedestal (no exposed wires)
- Stainless steel lockable latch
- Pedestal fits over a 4 x 4 or is ready for direct burial to 2 ft below grade
- Access door allows installer to quickly run required wires up the pedestal
- Battery back-up alarm system (9V battery not included)
- Installs and wires quickly
- Alarm float switch included (15 foot cord)m

H2Oil Alarm™

The **H2Oil Alarm™** system is designed to provide pump control and alarm notification of potentially threatening water and oil levels in simplex pumping applications. The system features an innovative **Oil Water Switch** that **senses the difference between water and oil** to remove water from the tank, while preventing oil from being pumped into the environment.

As water and oil enter the tank, the oil rises to create a floating layer on top of the water. The water level rises to reach the **Start Probe**, activating the pump to remove water from the tank. It continues pumping water out of the tank until the water level falls below the **Stop Probe**, deactivating the pump. If the water level continues to rise and reaches the **High Water Probe**, the red High Water LED indicator illuminates and auxiliary contacts close (activating an optional Tank Alert® alarm or other remote device). If the oil level rises to activate the mechanical **High Oil Float**, the red High Oil LED indicator illuminates and auxiliary contacts close (activating an optional CS1200 alarm or other remote device). Helps satisfy the requirements of an ASME A17.1 compliant system.

- H2Oil Alarm™ Panel with LED indicators for:
 - High Water Indicator
 - High Oil Indicator
 - Pump Run Indicator
 - Power Indicator
- Receptacle to plug in pump power cord
- Factory-installed 10 ft. power cord
- Factory-installed Oil Water Switch includes:
 - High Water Probe
 - Start Probe
 - High Oil Float
 - Stop Probe
 - Reference Probe
- Optional CS1200 audible alarm system

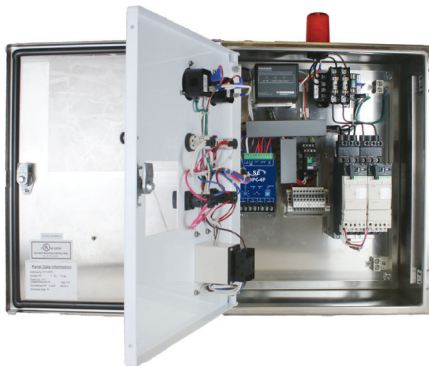




VIP-331 Control Panel

The **VIP-331 Control Panel** is designed to alternately control two three phase pumps in industrial and commercial water and sewage systems using standard 4 float operation (off, lead start, lag start, high level). Simply add the appropriate overload modules (two required) to complete your installation.

If a high water alarm condition occurs, the high water alarm float activates the audible/visual alarm system along with auxiliary contacts for remote alarm. Common applications include lift stations, pump chambers, and irrigation systems.



- Padlockable wall mount NEMA 4X enclosure
- Single-point power connection (NE models include 120V power connection for alarm circuit)
- IEC HP rated motor starter with "Fit and Click" overload modules
- 10HP max @ 208V, 240V; 20HP max @ 480V
- Class 10 ambient compensated overload relay
- Pump short circuit disconnect/overload reset accessible through inner door
- Tri-voltage step-down control transformer
- Separate alarm/control fuses (NE models include separate breaker for circuit protection)
- Override circuit to operate lag pump if lead float fails
- Alternator relay for even run time
- Seal leak circuits for single or double probe pumps
- Red flashing alarm beacon and audible horn (NE models include an amber beacon)
- Seal leak lights
- Alarm silence/test push button
- Hand-Off-Auto selector switches
- Overtemp shutdown for motor winding temperature switches (auto reset)
- 16 AWG MTW control wire
- Color coded control wires for troubleshooting
- Lag delay timing relay
- Elapsed time meters
- Auxiliary contact
- Standard 4 float operation

Standard Panels



VIP-XR Control Panel

The **VIP-XR** 3 phase duplex control panel is designed to be rugged, simple and versatile. One panel handles three voltages and a wide range of pump motor amperage requirements by simply field installing overload modules - up to 32 amps each. The VIP-XR operates with a 4-20mA level transducer which can be configured for either 1 or 2 backup float switches. The VIP-XR features the simple to operate TPC-X controller with an intuitive menu and graphic display.

TPC-X Controller:

- Simple, intuitive controller operation
- Works with standard 4-20 mA level transmitters
- Easily scalable for different depth ranges
- Configurable display units: ft, in, cm, bar, etc.
- Pump run indicators
- Fault displays, including pump seal fail and overtemperature
- Pump up/down and alternation selection

Control Panel Specifications

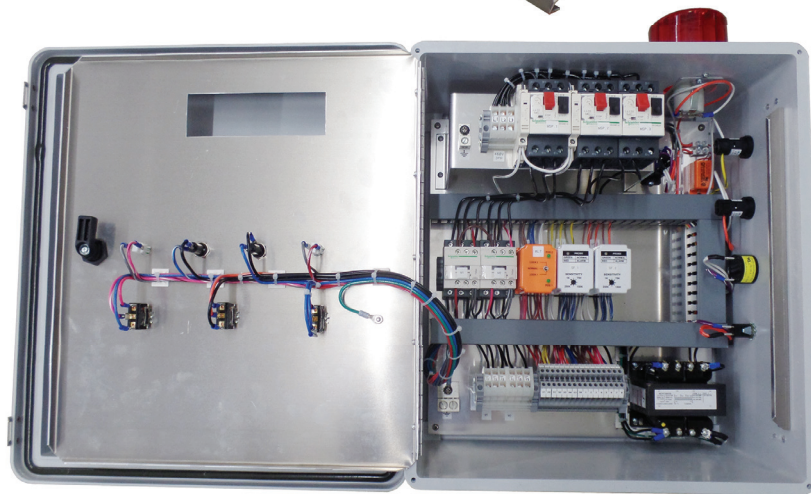
- Padlockable NEMA 4X fiberglass enclosure, 18 x 16 x 10 inches
- 208, 240 or 480V 3-phase power input
- IEC motor starters with interchangeable overload modules up to 32 FLA
- Pump disconnect/overload reset accessible through inner door
- 22mm HOA controls on inner door
- Supports 1 or 2 float independent backups
- LED alarm beacon

Fusion Plus™

Expanded Fusion Plus Program



- Quality, flexibility and versatility
- Economical control solution
- 24-hour quote response
- 3-5 week build-to-ship
- Larger enclosure sizes
- Multiple pumps



Our Fusion Plus Program is designed to benefit customers who require additional options beyond what our standard control panel line offers.

Options Include:

- Motor starters up to 100 Amps per pump
- IEC or NEMA rated starters
- Soft starters or VFD's
- Enclosure sizes up to 60 x 36 x 16 inches
- Inner door with indicators and operators
- Circuit breakers with maximum SCCR 5KA
- Generator receptacles, up to 200 amps (limited brands)
- Phone landline auto-dialers
- CSI Controls dedicated pump controllers
- Two-year limited warranty
- And more!

Alarms



Patent #7,224,283

CS2004E Alarm

- Red alarm light
- Audible alarm
- External T/N/S toggle switch
- 15 ft. control switch
- Power cord with 3/8" seal-tight cord connectors
- UL Listed NEMA 4X enclosure for outdoor use
- Latching lockable enclosure (no screws required)



Patents #7,075,443 & #7,224,283

CS2004 Alarm

- Water-tight enclosure
- LED alarm lights
- Audible alarm
- Touch to silence, touch to test circuitry
- 15 ft. control switch
- Power cord with 3/8" seal-tight cord connectors
- UL Listed NEMA 4X enclosure for outdoor use



CS1200 WiFi Alarm

- Monitors and reports any residential alarm condition (contact closure) using existing WiFi or Ethernet network
- Local notification (audible and visual alarms) and remote notification to smartphone, tablet or computer
- Provides 24/7 notification via text and/or email for alarm, power lost, power restored, low battery, and alarm offline
- Notifies up to 4 contacts (2 text, 2 email)
- Relies on existing WiFi or Ethernet connection; does not require cellular service:
 - NO monthly fees to pay or contracts to sign
 - Excellent solution for areas with poor cellular service
- NEMA 1 enclosure rated for indoor use
- Automatic alarm reset
- LED indicators for alarm (red), power on (green) and network status (blue)
- Alarm test, horn silence and WPS connection buttons
- 9 VDC battery backup (not included) with low battery chirp
- External terminal block for easy float switch installation
- Auxiliary contacts included to connect to remote device
- Easy installation and setup
- CSA Certified



CS1000 Alarm

- NEMA 1 rated indoor alarm
- Red alarm light
- Green power light
- Alarm test switch
- Horn silence switch
- 15 ft. control switch
- Power cord with 3/8" seal-tight cord connectors
- UL Listed, CSA Certified



CS1200 Alarm

- NEMA 1 rated indoor alarm
- Red alarm light
- Green power light
- Auto reset
- Battery backup
- 15 ft. control switch
- Power cord
- UL Listed, CSA Certified

Pump Switches



Medium Duty Mechanical Pump Switch

- Wide angle, mechanically-activated pump switch directly controls pumps
- Electrical: 125/250 VAC
Max. pump run current: 13 Amps
Max. pump start current: 78 Amps
- Pump up or pump down; with or without plug
- Pumping Range: 8-36 inches



Medium Duty Limited Space Pump Switch

- Limited space, mechanically-activated pump switch directly controls pumps
- Electrical: 1/2 HP, 120 VAC
Max. pump run current: 13 Amps - 120V
Max. pump start current: 60 Amps - 120V
- Pump up or pump down; with or without plug
- Pumping Range: .75-6.5 inches



Heavy Duty Mechanical Pump Switch

- Wide angle, mechanically-activated pump switch directly controls pumps
- Electrical: 120/230 VAC
Max. pump run current: 15 Amps
Max. pump start current: 85 Amps
- Recommended Pump HP:
120V: 3/4 HP or less; 230V: 2 HP or less
- Pumping Range: 7-36 inches



Medium Duty Dual Mechanical Pump Switch

- Wide angle, mechanical-activated pump switch directly controls pumps
- Electrical: 15 FLA, 90 LRA; 120 or 240V
Max. pump run current: 15 Amps - 120V; 15 Amps - 240V
Max. pump start current: 90 Amps - 120V; 90 Amps - 240V
- Pump up or pump down; with or without plug
- Pumping Range: 3-48 inches



Medium Duty Mercury Pump Switch

- Wide angle, mercury-activated pump switch directly controls pumps
- Electrical: 1 HP, 120 VAC; 2 HP, 230 VAC
Max. pump run current: 15 Amps - 120V; 12 Amps - 230V
Max. pump start current: 55 Amps - 120V; 35 Amps - 230V
- Pump up or pump down; with or without plug
- Pumping Range: 6.5-13.5 inches



High Temperature Pump Switch

- Rated for use in sump applications up to 200°F (93°C)
- Twin wall design of float housing protects internal components from heat and moisture (patent pending)
- Controls pumps up to 13 FLA, 78 LRA
- Adjustable pumping range of 8-36 inches
- Mechanically-activated to provide reliable alternatives for areas restricting mercury
- Pump down applications
- Options include 125V or 250V models, with or without piggy-back plug, various cord lengths
- Float dimensions: 3.18" diameter x 5.5" long



Medium Duty Mini Mercury Pump Switch

- Wide angle, mini mercury-activated pump switch directly controls pumps
- Electrical: 1/2 HP, 120 VAC; 1 HP, 230 VAC
Max. pump run current: 13 Amps - 120V; 8 Amps - 230V
Max. pump start current: 40 Amps - 120V; 20 Amps - 230V
- Pump up or pump down; with or without plug
- Pumping Range: 6.5-19 inches

Control Switches



Speed-E Connect™ Float Connection System

- 3 or 4-port quick release float connection ports makes installation and maintenance easy
- A single multi-conductor direct burial cable with shield
- Manifold features color coded system to match cable wire pairs for easy float identification
- Rated for short term water submersion
- Includes mounting bracket
- Designed for use with Speed-E Connect™ float switches (not included with manifold; sold separately)
- Rubber boot provides a dual seal design for an extra layer of protection to keep connections clean and dry
- Patented, CSA Certified



Control Duty XL Control Switch

- Internally weighted mechanical control switch designed for applications up to 1 Amp
- Large twin wall tear drop shape design offers increased buoyancy
- Two-color float housing for easy identification of float position
- Gold cross-point contacts provide precision and reliable control signals up to 1 Amp
- 3 wire cable - SPDT (Single Pole, Double Throw) can be wired as normally open or normally closed. Wire color: Common (white); N.O. (black); N.C. (red)
- Common applications include lift stations, non-potable water, PLC (programmable logic controllers), intrinsically safe, and applications with high grease content



Control Duty Mechanical Control Switch

- Narrow angle, mechanically-activated control switch activates control panels and alarms in high or low levels
- Electrical: 125/250 VAC, 5 Amps
- Control differential: approx. 1.5" above or below horizontal



Control Duty Mechanical Low Current Control Switch

- Narrow angle, mechanically-activated control switch activates control panels and alarms in high or low levels
- Electrical: 125 VAC and 30 VDC
Maximum electrical load:
0.1 Amps
Minimum electrical load:
0.160 mA
5 VDC: Minimum electrical load:
1 mA
- Control differential: approx. 1.5" above or below horizontal



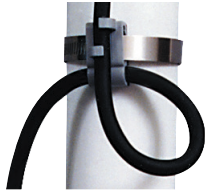
Control Duty Mercury Control Switch

- Narrow angle, mercury-activated control switch activates control panels and alarms in high or low levels
- Electrical: 120/230 VAC, 5 Amps
- Control differential: approx. .5" above or below horizontal



Control Duty Mini Mercury Control Switch

- Narrow angle, mini mercury-activated control switch activates control panels and alarms in high or low levels
- Electrical: 120/230 VAC, 5 Amps
- Control differential: approx. .5" above or below horizontal



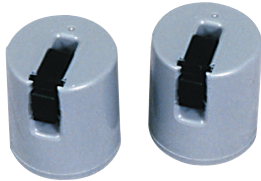
Pipe Mount

- Includes cable clamp and stainless hose clamp for anchoring float cable
- Secures 18/16 gauge, 14 gauge and 12 gauge cable in vertical direction



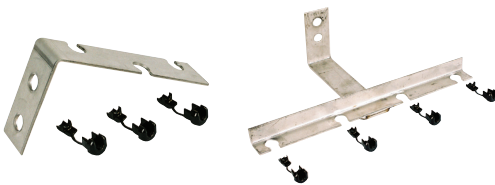
Control Duty Vertical Reed Switch

- Vertical reed switch activates control panels and alarms in high or low levels
- 250mA, 12-125 VAC, 50/60 Hz
- 500mA, 6-12 VDC, 50/60 Hz
- Maximum Angle from Vertical: 5°
- Control differential: approx. .375"



Cable Weights

- Provides accurate pivot point for suspended float switches
- Clips to cable



Float Brackets

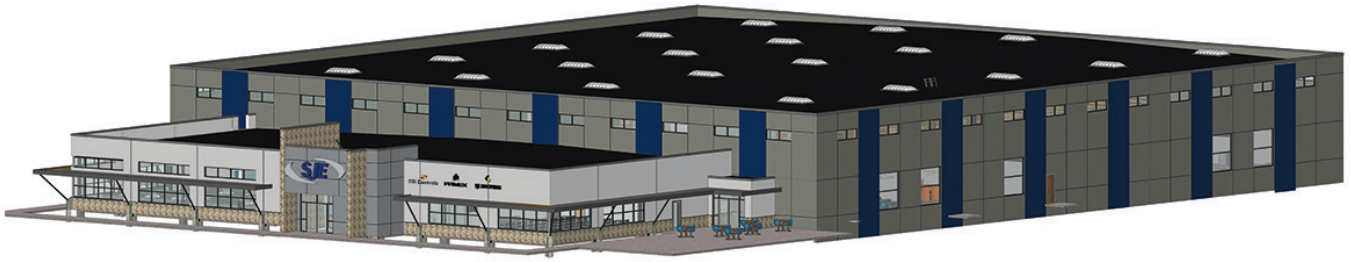
- 304 Stainless steel
- Secures float and power cords inside of tanks
- Compact design requires minimum space
- Available with 3 or 4 black cord snubbers



Poly Pedestal

- Convenient mounting base for indoor/outdoor use
- For use with 10" x 8" enclosures
- Covered access opening
- Installs and wires quickly

New Facility Coming Soon!



When you think of on-site, think CSI Controls®. We offer a complete line of quality, affordable on-site control products for residential and commercial water and wastewater applications, including electro-mechanical and digital control panels; indoor and outdoor alarm systems; control switches; pump switches; and accessories to complete any on-site installation. CSI Controls will also work with you to design special configuration panels for your application, including three phase, start kits, auto dialers and more.

Founded in 1993, we apply our company philosophy to deliver outstanding performance while always striving to exceed our best in every aspect of our business. We believe in service beyond expectation, achieved through a constant desire to anticipate and satisfy evolving customer needs.

As a UL Listed panel shop with over 55,000 square feet of manufacturing space in Ashland, Ohio, CSI builds each and every product to the highest standards. We test our products in-house prior to shipment for optimum performance.

In 2008, CSI Controls® became an ESOP company (Employee Stock Ownership Plan). Each and every employee is an “employee-owner” and has a vested interest in the success of the company. This ensures you are getting the absolute best that CSI Controls® has to offer.

In addition to on-site applications, CSI Controls specializes in custom control panels built to individual specifications for a wide variety of applications, including sewage lift stations, irrigation systems, pressure booster systems, flood control, aerobic treatment, grinder stations, process control and more. Our innovative engineering team designs complete control systems to meet your specific needs, no matter how unique.

With our industry knowledge and experience, we can help you with any on-site installation. Call us toll free at 1-800-363-5842 or visit us on-line at www.csicontrols.com to learn more about our complete line of control products.

We've Got Panels Under Control



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