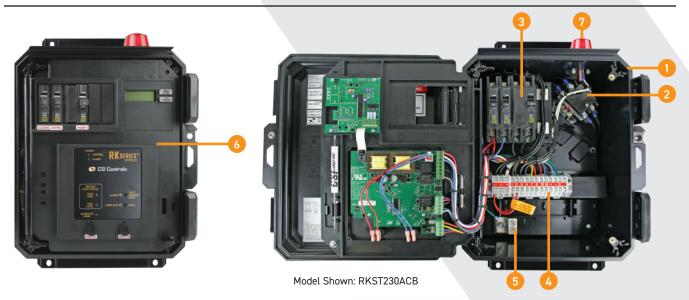
# RK Series™ Single Phase Simplex 4-20mA Control Panel

Single Phase, Simplex 4-20mA Continuous Level Control System for Pump Control and System Monitoring



The RK Series™ Single Phase Simplex 4-20 mA continuous level sensing panel is designed to control one 115/230 VAC single phase pump in water and sewage installations. The protective inner door features panel operating status indicators, LCD display, control buttons and provides access to the pump and control circuit breakers. Panel is designed for 4-20mA input and 2-float backup control.

## **FEATURES**

- 4-20mA input for continuous level sensing
- High level backup float input with LED status indicator
- High level backup float mode provides pump timer control activation
- Low level redundant off float input with LED status indicator
- Digital backlit LCD for easy setup and system monitoring
- · Timed dose or demand dose field programmable
- Flashing red 360° alarm beacon with horn, includes innovative touch to silence pad, touch to test
- Pump push to run with low level protection when activated manually
- Includes easy access touch safe fuses
- Five-year limited warranty on panel
- Two-year limited warranty on 4-20mA transmitters



US Patent No. 7,075,443 and 7,471,207

### **COMPONENTS**

- 1. NEMA 4X enclosure rated for indoor or outdoor use
  - a. Padlockable cover with quarter turn stainless steel set screw and (2) heavy duty latches that can be secured for added safety
  - b. Drip shield
  - c. Integral mounting flanges
- Magnetic motor contactor controls the pump motor load by switching the electrical lines
- Circuit breakers provide pump and control/alarm disconnect and branch circuit protection
- 4. Terminal strip for field wiring of incoming power, backup floats, submersible level transmitter, and pump
- 5. Ground lugs
- Molded inner door provides access to circuit breakers, and mounting location for indicators, display, and control buttons
  - a. Digital 32-character backlit LCD display
  - b. Green LEDs indicate control and alarm circuit power
  - c. Red LEDs indicate when either control or alarm fuse is blown
  - d. Backup Float Status LED indicator (green=low level redundant off, red=high level)
  - e. Amber LED indicates backup float control mode activated
  - f. Green Pump Run LED indicates when pump is called to run
  - g. Pump Hand/Run buttons operate the pump manually
  - h. Alarm Test/Silence reset button
  - i. Red LED indicate high water alarm
- 7. 360° red alarm beacon for visual alert
- 8. Piezo audible alarm (not shown)
- 9. Alarm silence touch pad (not shown)



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| Model      | FLA Range   | Enclosure Type | Input Power VAC - PH | Circuit Breakers       |
|------------|---|----------------|----------------------|------------------------|
| RKST115CB  | 0-12  | NEMA 4X        | 115-1                | Motor & Control/Alarm  |
| RKST115ACB | 0-12  | NEMA 4X        | 115-1                | Motor, Control & Alarm |
| RKST230CB  | 0-12  | NEMA 4X        | 230-1                | Motor & Control/Alarm  |
| RKST230ACB | 0-12  | NEMA 4X        | 230-1                | Motor, Control & Alarm |
| Options    | Description   |                |                      |                        |
| AMB        | Amber beacon (red beacon is standard)   |                |                      |                        |
| FC20       | (2) 20 foot (6.1m) mechanical control switches / pipe clamp   |                |                      |                        |
| FC20CW     | (2) 20 foot (6.1m) mechanical control switches / cable weight   |                |                      |                        |
| FR20       | (2) 20 foot (6.1m) mercury control switches / pipe clamp  |                |                      |                        |
| FR20CW     | (2) 20 foot (6.1m) mercury control switches / cable weight  |                |                      |                        |
| FC30       | (2) 30 foot (9.1m) mechanical control switches / pipe clamp   |                |                      |                        |
| FC30CW     | (2) 30 foot (9.1m) mechanical control switches / cable weight   |                |                      |                        |
| FR30       | (2) 30 foot (9.1m) mercury control switches / pipe clamp  |                |                      |                        |
| FR30CW     | (2) 30 foot (9.1m) mercury control switches / cable weight  |                |                      |                        |
| FC50       | (2) 50 foot (15.2m) mechanical control switches / pipe clamp  |                |                      |                        |
| FC50CW     | (2) 50 foot (15.2m) mechanical control switches / cable weight  |                |                      |                        |
| FR50       | (2) 50 foot (15.2m) mercury control switches / pipe clamp   |                |                      |                        |
| FR50CW     | (2) 50 foot (15.2m) mercury control switches / cable weight   |                |                      |                        |
| GR         | Gray enclosure (black enclosure is standard)  |                |                      |                        |
| HD1        | Heavy Duty 1: Increases breakers and wire gauge to allow 12-18 FLA                                    |                |                      |                        |
| HD2        | Heavy Duty 2: Increases breakers and wire gauge to allow 18-24 FLA                                    |                |                      |                        |
| HS         | Heat Sensor Terminals   |                |                      |                        |
| HTR        | Anti-Condensation Heater  |                |                      |                        |
| LA         | Lightning Arrestor  |                |                      |                        |
| 0L##       | Pump Overload - specify amperage after OL (Example: OL02 = 2 amp pump, OL20 = 20 amp pump)            |                |                      |                        |
| SF         | Seal Failure Indicator Light  |                |                      |                        |
| TC25       | (1) CS4-20 transmitter 100 inWC with 25 foot cable (backup floats recommended, add float code option) |                |                      |                        |
| TC50       | (1) CS4-20 transmitter 100 inWC with 50 foot cable (backup floats recommended, add float code option) |                |                      |                        |
| TS25       | (1) SLX transmitter 16.7 ftWC with 25 foot cable (backup floats recommended, add float code option)   |                |                      |                        |
| TS50       | (1) SLX transmitter 16.7 ftWC with 50 foot cable (backup floats recommended, add float code option)   |                |                      |                        |
| Χ          | Auxiliary Alarm Contacts  |                |                      |                        |
|            |   |                |                      |                        |

#### SEE PRICE BOOK FOR LIST PRICE.

## **SPECIFICATIONS**

**VOLTAGE SUPPLY:** Pump: 115 VAC or 230 VAC 50/60 Hz 1Ø

Control/Alarm: 115 VAC 60 Hz 10

**ENCLOSURE:** 12 x 10 x 6 inch (30.5 x 25.4 x 15.2 cm)

NEMA 4X ultraviolet stabilized thermoplastic rated for indoor/outdoor use with integral mounting flange, padlockable cover

with (2) heavy duty thermoplastic latches, and stainless steel 1/4 turn set screw

INNER DOOR: molded thermoplastic FLOAT CONTROL VOLTAGE: 115 VAC MOTOR STARTER: magnetic motor contactor

PUMP AMPERAGE: up to 24 Amps

LCD DISPLAY: 2-16 character lines, backlight ALARM HORN: 83-85 decibel rating FLASHING RED LED ALARM BEACON: 360°



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