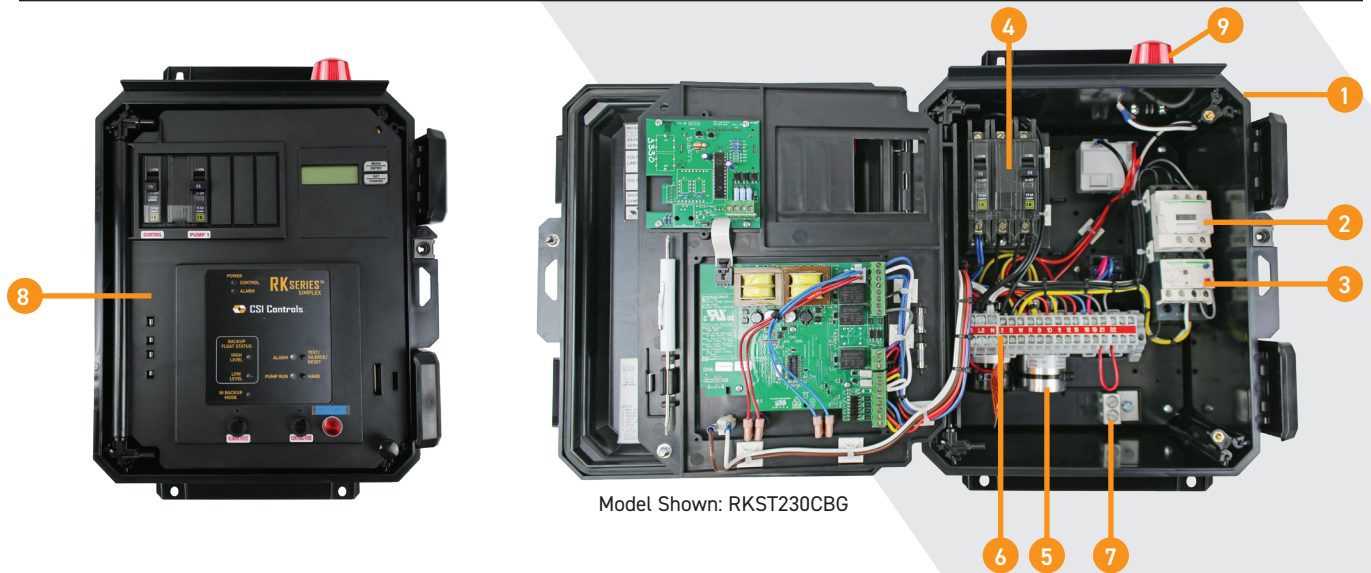


# RK Series™ Single Phase Simplex 4-20mA Capacitor Start/Run

## Single Phase, Simplex 4-20mA Continuous Level Control with External Start/Run Capacitors



Model Shown: RKST230CBG

The RK Series™ Single Phase Simplex 4-20 mA continuous level sensing panel is designed to control one 230 VAC single phase pump with external starting components 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
2. IEC motor contactor controls the pump motor load by switching the electrical lines
3. IEC overload provides pump motor current overload protection
4. Circuit breakers provide pump and control/alarm disconnect and branch circuit protection
5. Capacitor kits includes start relay, start capacitor, and run capacitor
6. Terminal strip easy field wiring of incoming power, backup floats, submersible level transmitter, and pump
7. Ground lugs
8. 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 button operates the pump manually
  - h. Alarm Test/Silence reset button
  - i. Red LED indicate high water alarm
9. 360° red alarm beacon for visual alert
10. Piezo audible alarm (not shown)
11. Alarm silence touch pad (not shown)



# CSI Controls®

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## RK SERIES™ SINGLE PHASE SIMPLEX 4-20mA CAPACITOR START/RUN CONTROL PANEL

Model	FLA Range	Enclosure Type	Input Power VAC - PH	Circuit Breakers
RKST230CBG	0-12	NEMA 4X	230-1	Motor & Control/Alarm, Capacitor Circuitry*
RKST230ACBG	0-12	NEMA 4X	230-1	Motor, Control & Alarm, Capacitor Circuitry*
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: Increase breakers and wire gauge to allow 12-18 FLA			
HD2	Heavy Duty 2: Increase breakers and wire gauge to allow 18-24 FLA			
HS	Heat Sensor Terminals			
HTR	Anti-Condensation Heater			
LA	Lightning Arrestor			
OL##	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)			
X	Auxiliary Alarm Contacts			

\*Contact factory for capacitor circuitry details.

**SEE PRICE BOOK FOR LIST PRICE.**

### SPECIFICATIONS

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

**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:** IEC motor overload and IEC motor contactor

**PUMP AMPS:** 0-12 Amps, 12-18 Amps, 18-24 Amps

**LCD DISPLAY:** 2-16 character lines, backlight

**ALARM HORN:** 83-85 decibel rating

**FLASHING RED LED ALARM LIGHT 360°**



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California Prop 65 requires the following: WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov