



PRODUCT DATA BULLETIN

BULLETIN
SC101E
SIMPLEX
CONTROLLER



STANDARD FEATURES

- MANUAL-OFF-AUTO SELECTOR SWITCH
- RUNNING AND FAILURE PILOT LIGHTS
- SEAL FAILURE PILOT LIGHT
- LEVEL INPUT PILOT LIGHTS
- HIGH/LOW LEVEL ALARM PILOT LIGHT
- COMMON ALARM LIGHT WITH DIM GLOW
- COMMON ALARM DRY CONTACT OUTPUT
- ADJUSTABLE MOTOR FAILURE DELAY
- ADJUSTABLE POWER ON DELAY TIMER
- ADJUSTABLE PUMP START DELAY
- ADJUSTABLE SEAL FAILURE DELAY
- ADJUSTABLE SHORT CYCLE DELAY
- LAMP TEST
- 120VAC POWER

DESCRIPTION

The model SC101E board is a 115 VAC powered solid-state instrument that controls one fixed speed motor. The board is panel mounted with integral terminals for field contacts. Front panel indicators are provided for seal failure, motor failure, motor running and high level. The seal failure and high level inputs can be used as auxiliary inputs in the event the default functions are not needed. Variable rate delays are provided for motor failure, seal failure, power-on, motor start and short cycle. A Manual/Off/Auto switch allows either fully automatic or manual operation. There is a relay output that closes when this switch is in the 'Automatic' position. This feature is useful in SCADA systems. Alarm indicators and outputs are provided for motor failure, seal failure and high level.

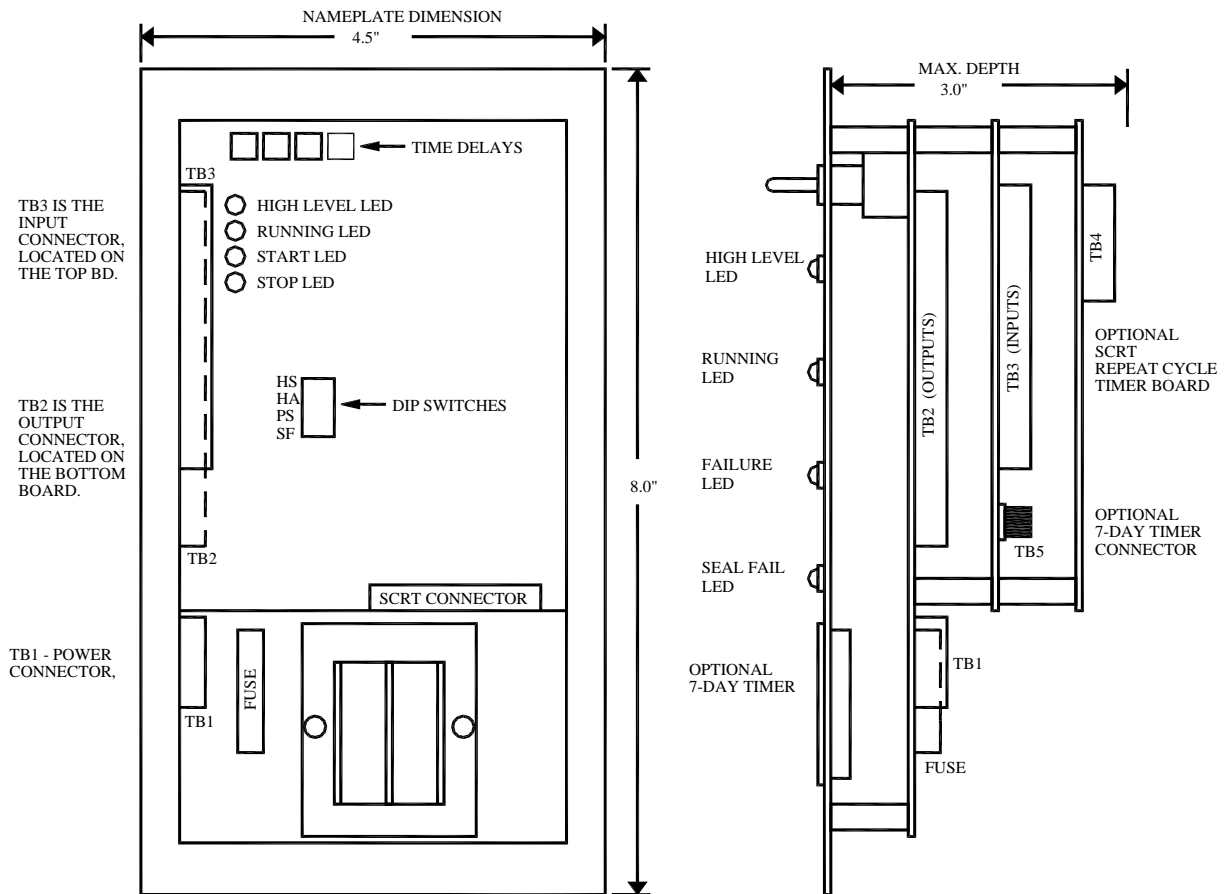
All inputs are operated on 30 vdc or less. CSI's Master Controller (MC101) board can be tied into this unit for remote operation over a multiplexer system. An optional Repeat Cycle Timer (SCRT) board and Seven Day Programmable Timer (SC7DP) version of the board add to its functionality.

SUGGESTED SPECIFICATIONS

Provide a simplex motor controller with a panel mounted Man-Off-Auto switch, green running pilot light, red motor failure pilot light and red seal failure pilot light. Inputs shall be provided for motor stop, start, running and high level with pilot light indications as well as a seal failure input which may be used for an auxiliary input. All of the electronic controls shall be bypassed when the Man-Off-Auto switch is placed in the Manual or Off position to allow motor control even in the event of a circuit failure. Provide a relay output that closes only when the Man-Off-Auto switch is in the 'Automatic' position. Level input power should be limited to 30 Vdc with a maximum current of less than 14madc. All outputs shall activate dry type contacts. A common alarm dry contact output will be activated under any alarm condition including board power failure. Individual dry-contact outputs shall be provided for each alarm. A field adjustable motor failure delay shall be provided in the range of 5 seconds to 6 minutes. The motor failure alarm will be held energized until manually reset by the operator. A motor start delay shall also be supplied which will delay pump start during initial startup, after a power failure and, optionally, during every motor call-for. The motor start delay shall have a range of 5 seconds to 4 minutes. Provide a Seal Failure alarm delay range of 3 seconds to 2 minutes. There shall also be a short-cycle (pump off) delay adjustable from 0 to 4 minutes. Each alarm function shall flash individual red pilot lights as well as activate the common alarm and common alarm light. In addition, when not used in their default modes, the seal failure and high level pilot lights can be made to indicate an auxiliary condition by flashing or steady operation without interfering with the simplex controller operation. Provide an exterior alarm light output which allows the light to dim glow under normal conditions to indicate power on and lamp good. The light shall flash brightly (on and off) during any alarm condition. Provide a lamp test feature to light all front panel pilot lights.

SPECIFICATIONS

- SUPPLY VOLTAGE: 115/120 VAC, 50/60 Hz
- SUPPLY CURRENT: 190 ma
- POWER CONSUMPTION: 23 Watts
- INPUT CONTROL VOLTAGE: 30vdc @ 12 made and 12vdc @ 4made
- OUTPUT CONTACT RATING: 5 Amps @ 120 VAC, Resistive
- DUTY CYCLE: Continuous
- NAMEPLATE DIMENSIONS: 4 1/2" Wide X 8" High



ORDERING INFORMATION

Simplex Controller: SC101E
with 7-day timer: SC101E-7DT

OPTIONAL BOARDS

Repeat Cycle Timer : SCRT

WARRANTY: Control Systems, Inc. (CSI) warrants equipment of its own manufacture to be free from defects in material and workmanship, under normal conditions of use and service, and will replace any component found to be defective on its return to CSI, transportation charges prepaid, within one year of its original purchase. CSI will extend the same warranty protection on accessories which is extended to CSI by the original manufacturer. CSI also assumes no liability, express or implied, beyond its obligation to replace any component involved. Such warranty is in lieu of all other warranties express or implied.



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