

# Bowl-Tronics Enterprises Incorporated

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## Solid-State Contactor BRC (SSRBRC A-1)

### Solid-State Contactor BRC Theory

This solid-state contactor is designed to replace the main contactor relay and motor start relay in a Brunswick A-1 Chassis. Instead of using relay points the SSRBRC utilizes solid-state triac switching instead. This contactor will outlast any normal mechanical type contactor.

### Installation Instructions

*Remember to remove power before performing any installation!!*

#### Removing the motor start relay.

Note!!!! Wires 18, 35 and 36 are Bowl-Tronics numbers view schematic for more details.

Remove wire # 18 & from coil that goes to "C" on the manager's control plug and fasten it to terminal 1. The other wire from the motor start relay coil that goes to TS-2 "9" will be removed. Make sure wire "35" from the ball accelerator plug is wired to terminal 1 and wire "36" to terminal "9".

#### Installing the new SSRBRC contactor.

Remove the old contactor and replace it with the new SSRBRC contactor. Follow the wire diagram for all your wire connections. Remove both black wires off terminal "D" on the high voltage strip. One wire comes from the motor socket and will plug into the new contactor or breaker. The other wire is not used. The new circuit breaker is only used if you have a motor without a thermal overload or klixon breaker. To mount the new breaker punch a 1/2" hole in the bottom of your electrical chassis. The black wire from the breaker should be plugged into the SSRBRC 4-OUT terminal. Crimp a new 1/4" female connector to the black wire coming from the motor socket and connect that wire to the other side of the breaker. If you don't need the breaker hook the black wire from the motor socket directly in to the 4-OUT terminal of the SSRBRC contactor. The other black wire off the motor socket plugs into TS-1 (D). It is very important that all high voltage connectors be crimped on solidly. On a 208 VAC system H-5 from the transformer is hooked to 5-IN on the SSRBRC contactor. The wire from the pin deck light socket hooks to 6-OUT. **Note!!!!** On a 220 VAC system the wire from the pin deck light socket hooks to 4-OUT. The H-5 wire from the transformer is not used. Add a 1/4" connector to the cross conveyor switch wire and plug it into 3-OUT. Hook the black and red wire coming from C1 & C2 on the SSRBRC contactor to TS-2 (1 & 9) on the low voltage terminal strip. **Note!!!** The SSR reset relay can be installed instead of the normal contact relay for added reliability. It is an option and does not have to be installed.

**Checking installation to be sure all wire connections are correct.**

**Check all you're wiring to be sure it is correct before turning power back on!!!! Plug in the power cord and turn on the breaker there are two small relays on the contactor that remove the current from the triacs when the machine is running. The triacs do all the high current switching so there will never be any burning of these contact points of the small relays. You will be able to see them open and close when the machine is turned on or off.**

**For repair visit: [www.bowl-tronics.com/service](http://www.bowl-tronics.com/service)**

**Fill out our service request form and ship to the address that is shown.**

**Notes:**

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# Solid-State Contactor BRC A-1 Diagram

