

OVERLOAD TRIPPED / FUSE BLOWN

Issue: AquaSeal water-sealed liquid ring vacuum pump system draws amps in excess of the FLA

Each AquaSeal water-sealed liquid ring vacuum pump system is tested and checked at the factory prior to shipment to ensure trouble-free operation. In the unlikely event you encounter a problem, we recommend that you consult with your local distributor for parts/service. Remember, when calling for service, parts or system information, always have the pump or system model number and serial number ready.

[Click here to find your local authorized distributor.](#)

WARNING! Before attempting any repairs, disconnect all power from the system by switching off power at the main breaker or disconnect switch. Always use appropriate Lock Out – Tag Out procedures.

If the system draws a high amp load, the overload will trip or fuses will blow.

To troubleshoot high amps, check the following items:

- Check the overload setting to make sure it is set correctly. The overload should be set at $FLA \times SF$
- If fuses are blown, replace the blown fuses with correct size. Fuse sizes are noted on the ladder diagram found inside the control panel.
- Ensure that proper voltage is supplied and the wire size is correct. A convenient wire size chart is included in the [AquaSeal Installation, Operation and Maintenance manual.](#)
- Make sure all wires are tight. Wires may vibrate loose during shipment or operation.
- Determine if the pump has seized. This can be done by turning off power to the system (be sure to use proper lock out procedures), then rotate the pump shaft by hand. If a rubbing noise or binding is observed, contact your local authorized DEKKER distributor.
- Verify the seal-fluid flow is correct. Excessive flow can increase amp load.
- Make sure the pump is not flooded. If the water level in the pump is higher than the shaft centerline, a high-amp situation can be created when the water in the pump reaches the compression stage. Shaft or impeller damage can also occur if the pump is started while flooded. In most applications, a swing check valve can be installed on the inlet side of the end housing at the pump centerline.
- Verify the backpressure gauge on the separator tank is no greater than 4 psig. If the backpressure exceeds 4 psig, look for restrictions in the discharge piping. If no restrictions are found in the discharge piping, replace the oil separator element.

