Quick Start Guide
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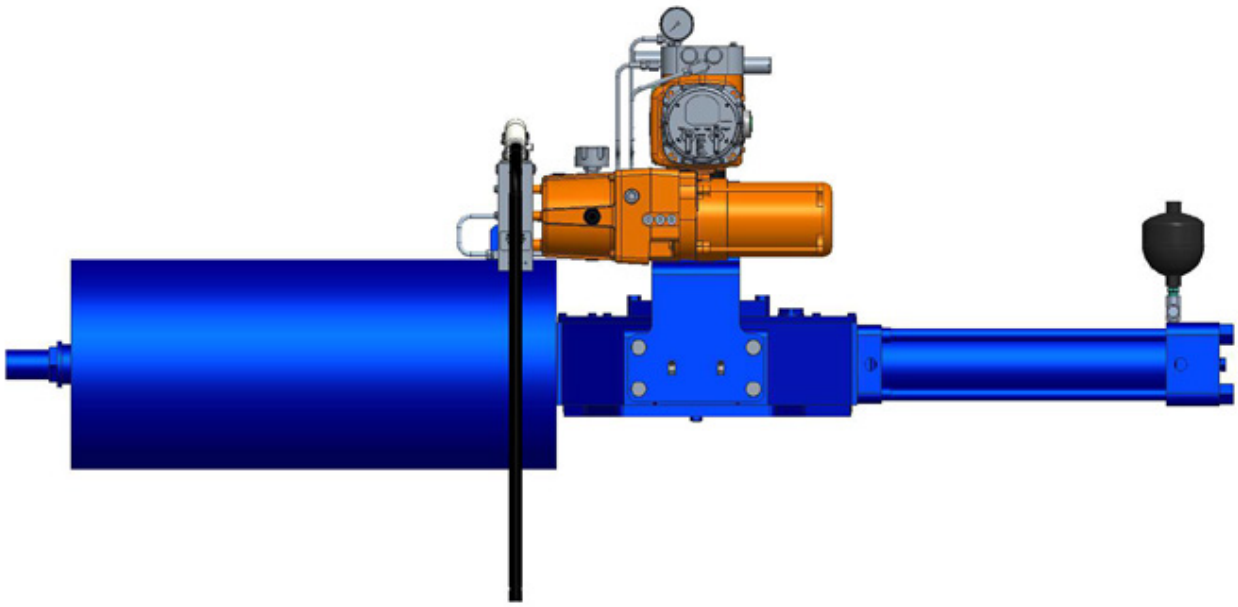
Biffi EHO (Electro-Hydraulic Solution)

Quick Start Guide



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NOTICE

Before starting to setup and commission the EHO, please make sure you read the Biffi™ EHO Installation and Operation Manual (IOM) (VCIOM-15345-EN) to understand how to take proper safety measures and have an overview of the EHO.

NOTICE

The EHO quick start-up guide is for general information only. Your EHO may be customized outside of the scope of the EHO quick start-up guide, make sure to contact your general arrangement, schematic drawings and wiring diagram for your specific unit. If you have any questions about your unit, please contact the factory.

Make sure you have the following tools and information before you get started:

Table 1.

Materials List	
Standard Allen wrench set	Power source
Small adjustable crescent wrench	Deep socket set with a small impact drill
Small zip ties	Nitrogen charging kit
Small Phillips and flathead screwdriver	Supplemental quantity of hydraulic fluid
Multi-meter	IOM (VCIOM-15345-EN)
Bill of material	General arrangement drawing
Schematic drawing	Wiring diagram

1. Uncrate the unit and check the unit for any damage. Check and re-tighten all fittings to ensure they have not loosened during shipment.
2. Pre-charge all accumulators with the proper pressure using nitrogen gas. Pre-charge pressures are indicated on the Thermal Compensator Accumulator (TCA) nameplate and on the actuator data sheet provided during the order development. Operating the unit with insufficient charge on the accumulators could result in equipment damage and may affect the functional reliability of the unit.
3. Make all electrical connections with suitable sized gauge wires along with the appropriate voltages. Complete the ESD power connection (if applicable) as required by the site needs.
4. Check the hydraulic fluid level to ensure there is appropriate fluid level. Review Section 2.7 of the IOM. Ensure that the reservoir breather is installed before operating the EHO.
5. Verify hand pump operation. Review Section 4.4 of the IOM.
6. Bump the motor to ensure proper rotation. Review Section 4.6 of the IOM.
7. Adjust the actuator mechanical stops according to the valve. Review Section 2.6 of the IOM.
8. Open bypass valve(s) before operating the electric motor and the hydraulic pump.
9. Operate the electric motor to cycle fluid through the actuator. Allow the fluid to circulate for a minimum of 30 seconds to purge air from the system.
10. Slowly shut each bypass valve.

11. Stroke the actuator open and close.
12. If it is a smart unit, calibrate the analog channels if the unit is setup for analog control mode. Review the IOM as a reference.
13. Adjust mechanical limit switches. If it is a smart unit, run a self-calibration. Review Sections 4.7 and 4.8 of the IOM.
14. Do not operate the electric motor more than 15 minutes per hour.

After commissioning, conduct periodic maintenance per the recommendations found in the EHO IOM Manual. Make sure to also check the fluid levels with the sight level gauge and the accumulator pre-charge levels with the pressure gauges.

If you have any questions on the setup and commissioning process, please contact Biffi at biffiservice@emerson.com.

https://www.biffi.it/en-us

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