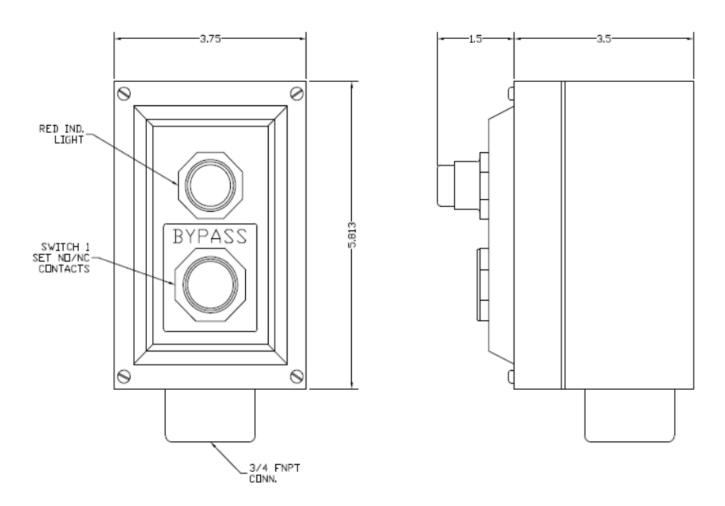


Instructions for Installing and Operating Reliance HS Series Holding (Bypass) Switches



This manual covers the following model numbers: HS-0 and HS-1 Series Holding Switches (Model HS-1-NEMA4X is shown. See the applicable drawing for other models)



STORAGE and HANDLING

All units should be inspected upon receipt to ensure that no damage has been incurred during transit. If there is a claim due to damage, it should be filed with the carrier immediately. Reliance® Boiler Trim products should be stored in a dry and sheltered area prior to installation. The equipment provided may consist of electrical items that are intended for either indoor or outdoor use. As a matter of good practice, dry storage will prevent the products from exposure to the outdoor elements. This will eliminate the potential for water damage. The temperature of the storage area should not exceed 150 Deg. F (84 Deg. C) or drop below 32 Deg. F (0 Deg. C).

OPERATION

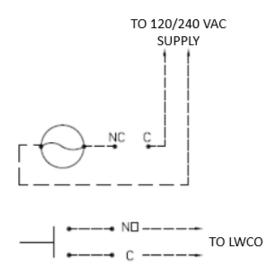
Any trip or alarm circuits that are actuated by the equipment being blown-down should be bypassed to prevent false alarms during the blowdown process. During probe column or Levalarm blowdown, the Holding Switch (Model HS-1) provides a bypass around the Low Water Cut Out (LWCO) relay. This simple switch maintains relay circuit continuity momentarily, while being held in the bypass position during blowdown. The Holding Switch also provides an indicator light to verify that the fuel cut-out relay is functioning properly. The switch can be installed for bypass functions with probe-type Levalarm on columns, boilers, or tanks. Also available without indicator light (Model HS-0). Note: When using a switch without an indicating light, the operator must be able to confirm that it is safe to release switch push button to prevent a false alarm or trip. This is done by observing the water level returning in the gage glass. If the installation makes this difficult, we recommend using a model with an indicating light.

INSTALLATION

<u>Caution:</u> Before proceeding, follow all plant lock out - tag out procedures required. During installation of the equipment, verify the alarms and/or trips are by-passed, or the boiler is shut down before proceeding with the installation. Verify that the power is shutoff to the units before wiring the equipment. All inspection and installation steps should be performed by a qualified technician and should be executed in accordance with all applicable national and local codes.

WIRING THE HS-1 SERIES HOLDING SWITCHES

The HS-1 Series Holding Switches should be wired per the diagram below. Note that the switch contacts identified are independent switches.

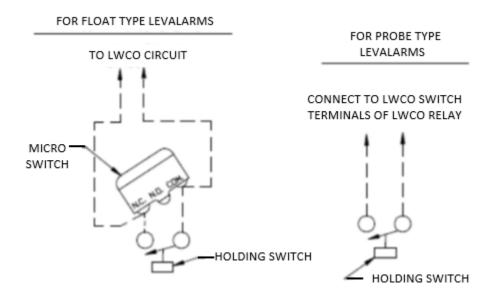


HS-1 Series Instructions:

Press and hold the switch button during the blowdown procedure in order not to interrupt the LWCO device. The indicator light will illuminate during the blowdown procedure when the boiler water level drops below the LWCO probe. When the procedure is completed and the water level rises above the LWCO probe, the indicator light will go out signaling that it is safe to release the bypass button.

WIRING THE HS-0 SERIES HOLDING SWITCHES

The HS-1 Series Holding Switches should be wired per the diagram below. Note that the switch contacts identified are independent switches.



HS-0 Series Instructions:

Press and hold the switch button during the blowdown procedure in order not to interrupt the LWCO device. Carefully observe the water level in the gage glass to verify the water level. When the procedure is completed and the water level rises above the LWCO probe, release the bypass button.

Notes:		

<u>Warning:</u> If this equipment is used in a manner not specified by Clark-Reliance, the protection provided by the equipment may be impaired. Only replacement parts manufactured by Clark-Reliance should be used to ensure safety and reliable operation.

The use of non-Clark-Reliance parts will void the factory warranty and any agency approvals.

Order genuine Clark-Reliance replacement parts at: http://parts.clark-reliance.com or contact your local Clark-Reliance Representative.

Any additional questions should be directed to your local Clark-Reliance Representative, or to the Factory: Phone: (440) 572-1500 or email at RelianceAppEng@clark-reliance.com.

Visit our resource library at www.RelianceBoilerTrim.com for other IOMs, drawings, product catalogs, and videos.



