SERIES 102 LIQUID LEVEL CONTROLS
INSTALLATION AND OPERATING INSTRUCTIONS

OPERATING CHARACTERISTICS
When the float rises to the operating point, the mercury switch or switches are actuated by the mutual attraction between a magnetic plunger attached to the float within the float chamber and a magnet attached to the switch operating assembly. When the float drops, the magnetic plunger is moved out of the field of the magnet on the switch operating assembly and the switch or switches are restored to their original position by gravity.

The magnetic plunger attached to the float moves within a tube within the switch enclosure. The switch unit is mounted on the tube.

SPECIFICATIONS

<table>
<thead>
<tr>
<th>SPECIFICATION</th>
<th>MAX. TEMP.</th>
<th>MINIMUM LIQUID LEVEL CHANGE (WATER)</th>
<th>MATERIAL</th>
<th>FLOAT CHAMBER</th>
<th>SPECIFY CODE</th>
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</thead>
<tbody>
<tr>
<td>Minimum Specific Gravity</td>
<td>300</td>
<td>425°</td>
<td>Cast Iron</td>
<td>C-60</td>
<td></td>
</tr>
<tr>
<td>600°</td>
<td>5/8&quot;</td>
<td></td>
<td>Steel</td>
<td>C-60</td>
<td></td>
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<td>C-60</td>
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</tbody>
</table>

*Not for use with lethal or flammable substances either liquid or gaseous.

CIRCUITS AND ELECTRICAL RATINGS
MERCURY SWITCH CONTACTS OR SNAP-ACTION CONTACTS

SWITCH TYPE

<table>
<thead>
<tr>
<th>SWITCH ACTION</th>
<th>ELECTRICAL RATINGS IN AMPS</th>
<th>ORDERING CODE</th>
<th>TWO STAGE</th>
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<tbody>
<tr>
<td>AC 120 V</td>
<td>240 V</td>
<td>SINGLE STAGE</td>
<td>LOWER</td>
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<tr>
<td>DC 125 V</td>
<td>250 V</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>3T</td>
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</table>

*Magnetically independent
210 Amp Inductive (Polarized) at 125 V DC—
for temperature limits.

AVAILABLE CONSTRUCTION
ALL TYPES — STAINLESS STEEL REMOVABLE FLOAT AND TRIM

General Purpose (NEMA 1): Type 102G. For indoor service and other general applications. Switch assembly is enclosed in a heavy gauge steel case, finished in charcoal gray.

Weather Resistant (NEMA 2, 3): Type 102WR. For outdoor service and other applications. Steel conduit connection can be rotated 360° to facilitate wiring.

Explosion-Proof: (Class 1, Group C and D) (NEMA 7 and NEMA 9). Type 102E. For hazardous locations. Steel conduit connection can be rotated 360° to facilitate wiring.

Vapor-Proof—Explosion-Proof enclosures are identified by the letters “EV” in type number as in 102EVE.

SPECIAL FEATURES
WIDE DIFFERENTIAL: Identified by the letter “D” in type number as in 102GD. Single stage only. Provides approximately double the fixed level change between “on” and “off” switch operation.

Semi-Automatic with manual reset. Identified by the letters “RU” after type number. Example: 102G-RU. Operates automatically on level FALL only. Manual reset required on level RISE.

Note. Cold shock or water hammer must be avoided, as this condition may damage the float and prevent proper operation of the control.

INSTALLATION

LOCATION — MOUNTING
Select location recommended by equipment manufacturer. Use 1” pipe and mount all controls VERTICALLY and be sure that control switch mechanism is LEVEL.

WIRING
Wire in accordance with local electrical codes or follow equipment manufacturer’s instructions.

Align wiring block to face conduit opening and tighten CLAMP screw of switch assembly.
The 3/4” NPT conduit connection (on all types) can be rotated 360° to facilitate wiring.

Do not overload electrically. See rating stamped on nameplate.

LEVEL ADJUSTMENT
See page 2