Series DF
Dual Function Controls

- Solid State Reliability
- Compact Size
- Meets CSD1 Requirements
- U.L. “Motor Control”
- AC Current Minimizes Electrolysis
- Optional Test Feature
- Optional Dirty Electrode Detection
- Spade Terminals for Easy Wiring
- Manual Reset (optional)
- Power Outage Feature (optional)
- U.L. “Limit Control”
- Time Out Option

Dual function Series DF models are designed to control two independent level functions, one single-level control operation and one differential-level operation.

Optional Power Outage feature resets after nuisance outages. Optional Reset Button is used when device has been deactivated due to low water condition. Reset is activated only after water has returned to normal level. This control is ideal in applications on boilers, food service equipment, and chemical delivery systems.

Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact Design</td>
<td>1 N.O. &amp; 1 N.C. (1 form C) extra function</td>
</tr>
<tr>
<td>Contact Rating (120, 240 VAC)</td>
<td>10 amp Resistive 1/3 hp</td>
</tr>
<tr>
<td>Mode of Operation</td>
<td>H/L Direct/Inverse, LLCO – factory set</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>0-26K ohm, factory set</td>
</tr>
<tr>
<td>Primary Voltage</td>
<td>120 VAC, 240 VAC, 24 VAC (+10%/-15%)</td>
</tr>
<tr>
<td>Secondary Voltage</td>
<td>0-26 V max. VAC 50/60 Hz</td>
</tr>
<tr>
<td>Temperature</td>
<td>-40°F to +150°F (-40°C to +65°C)</td>
</tr>
<tr>
<td>Approvals</td>
<td>U.L. 508 File # E44426, U.L. 353 File # MP1430</td>
</tr>
<tr>
<td>Terminal Style</td>
<td>Spade connection</td>
</tr>
<tr>
<td>Options</td>
<td>Time Delays, Manual Reset, Power Outage, Retrofit Plate, Test Feature, Dirty Electrode Detection; See page E-11 for descriptions</td>
</tr>
</tbody>
</table>

Notes:
1. 240 VAC and 208/240 VAC units do not carry U.L. Limit Control recognition.

How to Order

Use the **Bold** characters from the chart below to construct a product code.

1. Series
   - DF

2. Mode of Operation
   - Direct
   - Inverse

3. Supply Voltage
   - 1 = 120 VAC; 2 = 240 VAC
   - 3 = 24 VAC; 8 = 208/240 VAC

4. Standoff Style
   - A = 1/16” Panel
   - B = 1/8” Panel
   - C = Screw Mount
   - D = Retrofit

5. Enclosure
   - 0 = None
   - 1 = NEMA 1
   - 3 = NEMA 4

6. Option Package
   - See page E-11, Chart B for code letter.

7. Time Delay (increasing level) H/L function
   - 00-99 seconds; Blank 0 seconds

8. Time Delay (decreasing level) H/L function
   - 00-99 seconds; Blank 0 seconds

9. Time Delay (decreasing level) LLCO function only
   - 03-99 seconds; Blank 3 seconds

Applications

- Dual Function
- Single-Level Service
- Differential Service
- Feedwater Control / Low-Water Cutoff
- High Level / Low Level
- Pump Down / High Level

Dimensions

![Dimensions Diagram](image)

Wiring

![Wiring Diagram](image)

Note: For single level service, use “H” and “G” connections.

Socket Details and Option Availability are located on web site.