Series DF
Dual Function Controls

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

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.

Series DF

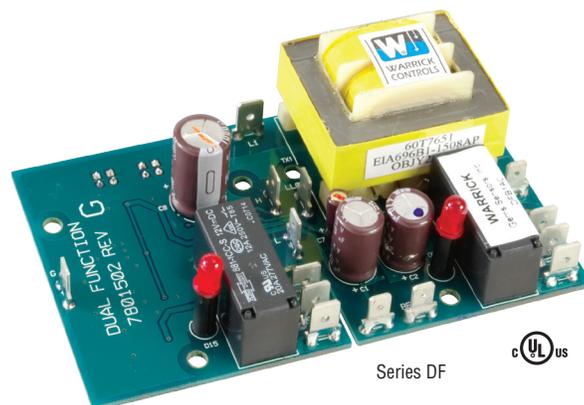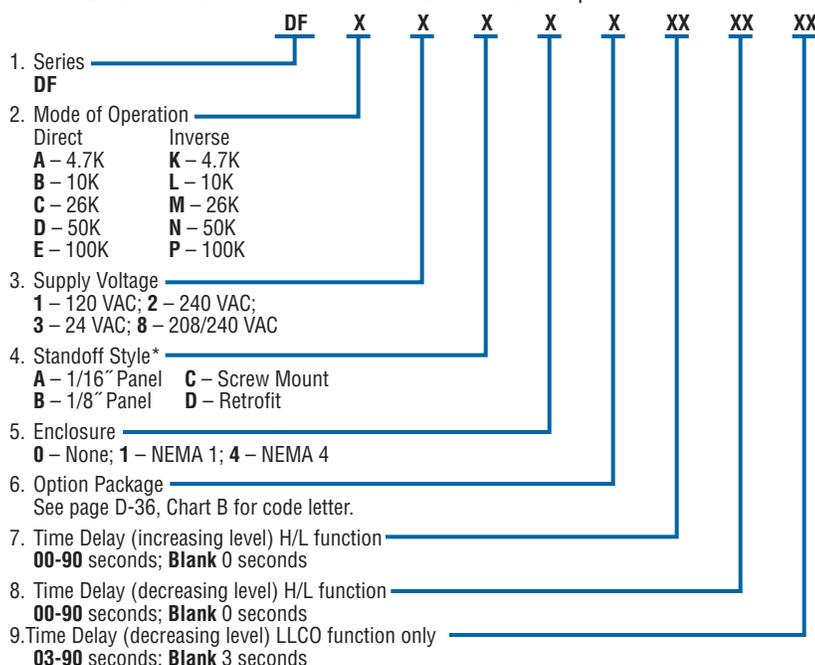## Applications

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

Specifications

Contact Design	1 N.O. & 1 N.C. (1 form C) extra function
Contact Rating (120, 240 VAC)	10 amp Resistive 1/3 hp
Mode of Operation	H/L Direct/Inverse, LLCO – factory set
Sensitivity	0-26K ohm, factory set
Primary Voltage	120 VAC, 240 VAC[1], 24 VAC (+10%/-15%) 208/240: 187 V min. to 255 V max. VAC 50/60 Hz
Secondary Voltage	12 VAC
Temperature	-40°F to +150°F (-40°C to +65°C)
Approvals	U.L. 508 File # E44426, U.L. 353 File # MP1430
Terminal Style	Spade connection
Options	Time Delays, Manual Reset, Power Outage, Retrofit Plate, Test Feature, Dirty Electrode Detection; See page E-11 for descriptions

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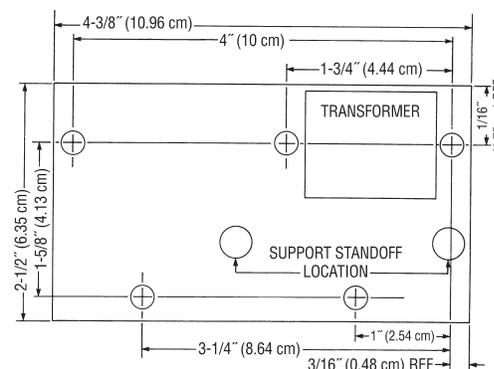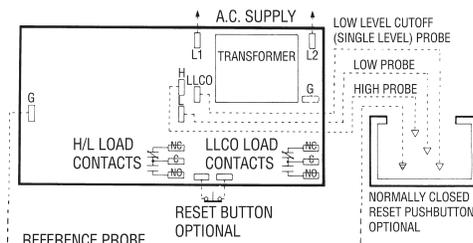1. 240 VAC and 208/240 VAC units do not carry U.L. Limit Control recognition.

Dimensions

How to Order

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

DF X X X X X XX XX XX

1. Series
   DF

2. Mode of Operation
   Direct   Inverse
   A – 4.7K   **K** – 4.7K
   B – 10K   **L** – 10K
   C – 26K   **M** – 26K
   D – 50K   **N** – 50K
   E – 100K   **P** – 100K

3. Supply Voltage
   1 – 120 VAC; **2** – 240 VAC;
   3 – 24 VAC; **8** – 208/240 VAC

4. Standoff Style*
   A – 1/16″ Panel   **C** – Screw Mount
   B – 1/8″ Panel   **D** – Retrofit

5. Enclosure
   0 – None; **1** – NEMA 1; **4** – NEMA 4

6. Option Package
   See page D-36, Chart B for code letter.

7. Time Delay (increasing level) H/L function
   00-90 seconds; **Blank** 0 seconds

8. Time Delay (decreasing level) H/L function
   00-90 seconds; **Blank** 0 seconds

9. Time Delay (decreasing level) LLCO function only
   03-90 seconds; **Blank** 3 seconds

Wiring

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

Socket Details and Option Availability are located on web site.

WARRICK CONDUCTIVITY SENSORS