

Recognized Component Marking Data Page (RCMDP)

(FILE IMMEDIATELY AFTER AUTHORIZATION PAGE)

RECOGNIZED COMPONENT MARKING

Products Recognized under UL's Component Recognition Service are identified by marking elements consisting of:

1. The Recognized Company's identification specified in this document.
2. A catalog, model or other applicable product designation specified in the descriptive sections of this document.
3. The UL Recognized Component Mark shown below is optional unless required elsewhere in the Procedure.

Only those components, which actually bear the Marking, should be considered as being covered under the Recognition Program. The UL Listing or Classification Mark is not authorized for use on or in connection with Recognized Components.

Recognized Component Mark



Minimum size of the Recognized Component Mark is not specified as long as it is legible. Minimum height of the registered symbol ® shall be 3/64 inch but may be omitted if it is out of proportion to the Recognized Component Mark or not legible to the naked eye.

The manufacturer may reproduce the Mark electronically. Any decision regarding the acceptability of the manufacturer's Mark reproduction will be made at the Reviewing Office.

## DESCRIPTION

## PRODUCT COVERED:

USR, CNR Component (Not for General Use) - Model **RECIL**-10R,-12R,-20R feed water control unit.

USR indicates evaluation to UL 353 - Limit controls.

CNR indicates evaluation to C22.2, No. 24-93 - Temperature-Indicating and -Regulating Equipment.

Component (Not for General Use) - Model **ECIL**-10R,-12R,-20R feed water control unit.

## GENERAL:

The Electro Eye-Hye water level limit control unit is intended for use with a water column, which measures the water level of a boiler, and is used to activate or deactivate alarms, fuel cutout circuits and feed water pumps when liquid levels reach predetermined limits. The water column is fitted with a series of conductivity probes along its vertical length. Each conductivity probe is electrically connected to a detection module housed within the control unit. As the water level immerses the conductivity probe, a circuit path is formed through the water and sensed by the detection modules. Similarly, conductivity probes above the water level fail to provide an electrical circuit due to the relatively non-conductive properties of steam as compared to water.

The control unit consists of a printed wiring board, a transformer, the detection modules and terminal blocks mounted inside an enclosure. Cutouts in the enclosure are needed for field installation (done by others).

## MODEL NUMBER NOMENCLATURE:

\* **RECIL #-##R-#**  
I II-III-IV

- I - **RECIL** - Basic Model Number
- II - **Options**
  - M = 4-20 mA
  - S = Slave Relay Option
- III - **Number of Standard ECID Detection Modules**
- IV - **Options (More than one suffix may appear)**
  - SMI = Door Mounted Indicator
  - N4, 4, NEMA4 = NEMA 4 Enclosure
  - N4X, 4X, NEMA4X = NEMA 4x Enclosure
  - 1 = NEMA 1 Enclosure
  - V = Victory Energy Unit Lighting Scheme

## RATINGS:

Ambient: -40 to 65°C.

## Electrical:

Input - 120 VAC 50/60 Hz (standard), 240 VAC 50/60 Hz (optional),  
4.4 VA

Outputs - Nominal 12 Vac supply (to probes)  
- Two sets of normally open and normally closed, non-  
powered contacts with a load rating of 5A.  
- Nominal 24 Vac supply (to indicator lamps)

## ENGINEERING CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

Use - The controls units are intended for use only in products where the acceptability of the combination is determined by Underwriters Laboratories Inc.

1. The control unit may be mounted up to 1000 feet away from the water column.
2. The suitability of the probe used in conjunction with the control unit shall be determined in the end-use application.
3. The control unit is to be mounted in an area that is accessible for inspection and below 150°F.

## MANUFACTURER'S TESTS:

Each control shall be subjected to the following tests:

1. Undervoltage - Each control unit is adjusted such that it operates properly at a supply voltage at 85 percent of rated voltage.
2. Dielectric Withstand - Each control unit is subjected to a dielectric withstand test with the following potentials:

A potential of 1,000 plus twice rated input voltage for 120 and 240 V ac controls for a period of 1 min between line voltage circuits and low voltage circuits.

A potential of 1480 is applied for a period of 1 min between output circuits and low voltage circuits.

MARKING:

A metal nameplate, permanently attached to the cover of the control unit housing, secured by two screws, denotes the manufacturer's name and address, trademark, model number, serial number, voltage, current and power consumption.

\*Products manufactured at Clark-Reliance will be marked with a CR on the printed circuit board.