

Candy Batch Control System

Case History

Opportunity

A manufacturer requires a heating control for batch processing of candy. They want one control that will do several functions. The control needs to be easy to setup and use.

Problem

The manufacturer needs to heat up their candy to a temperature of 200°F using the “ramp to set point at start” to prevent damage to the candy at start up. Once it reaches 200°F, two things need to happen: 1) Inform the operator “batch finished” via a pilot light and remain “on” until this batch is removed. 2) Automatically change the set point from 200°F to a cooler 170°F until this batch is drained, which could be hours later. This prevents the candy from being over cooked.

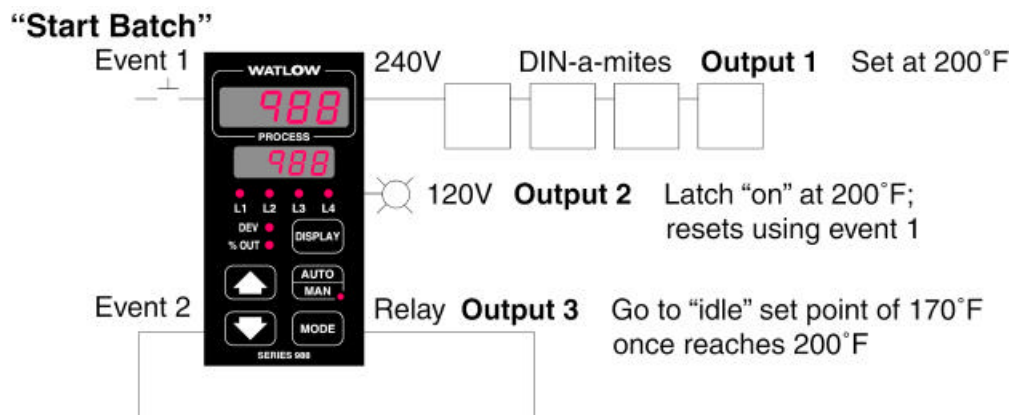
Solution

The 988B-25BD-JARG, DB1C-3027-K200 DIN-a-mite(s), along with a Gordon sanitary RTD probe for direct immersion into the candy was a perfect solution!

With our three isolated outputs we were able to...

- 1) Output 1...240v control voltage to four DIN-a-mites wired in parallel set at 200°F.
- 2) Output 2...120v control to a pilot light and latch it on at 200°F, (event 1 input resets it).
- 3) Output 3...to be used as an input for “event 2” which tells the control to go to an idle set point of 170°F.

Once we have removed this batch and a new batch is filled, we simply press the “start batch” input and the “pilot light” is turned off and the main set point of 200°F is re-installed.

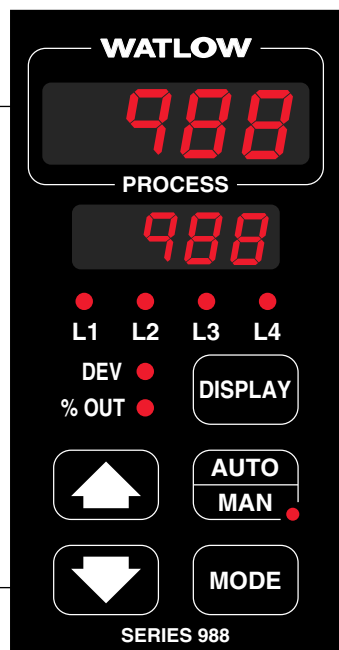
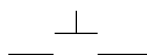


Watlow Controls
1241 Bundy Boulevard
P.O. Box 5580
Winona, Minnesota
55987-5580
www.watlow.com
Phone: 507-454-5300
Fax: 507-452-4507

Series 988 Batch Candy Processing Control System.

“Start Batch”

Event 1

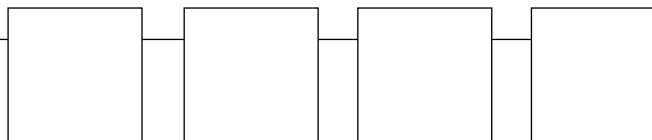


240V

DIN-a-mites

Output 1

Set at 200°F

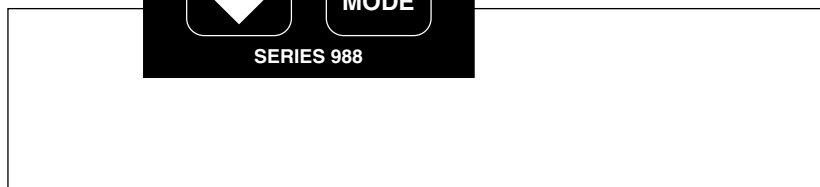


120V

Output 2

Latch “on” at 200°F;
resets using event 1

Event 2



Relay **Output 3**

Go to “idle” set point of 170°F
once reaches 200°F

Series 988 Batch Candy Processing Control System