

## Cooking System

SOLID STATE

AP 00230

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### PRODUCT

103SR and Ring Magnet

### APPLICATION DESCRIPTION

It's easier to earn a tastier slice of the quick foods market thanks to CTX infrared cooking systems. A MICRO SWITCH 103SR Hall effect sensor, used along with a small ring magnet, automatically adjusts cooking times for a variety of foods: pizza, hamburgers, steaks, sandwiches, seafood, quiches, cookies, bread and others.

### MARKET

Industrial

Each CTX unit is equipped with time controls for variable speed conveyors and separate controls for top and bottom infrared heating elements. CTX Manufacturing Manager Mark Weinberg designed a controller that brings temperature and conveyor belt timing together without mechanical linkages.

Weinberg mounted a four-pole ring magnet on the rotor shaft of the one-tenth horsepower DC motor that powers the conveyor. Responding to every quarter turn of the magnet the 103SR monitors conveyor speed allowing the controller to adjust for voltage fluctuations or load changes. This enables the controller to compare actual cooking requirements of the foods to programmed data, producing easy regulation of the conveyor's motor to ensure consistently cooked foods.