

# Eden and Pluto

## Supervision of multiple hatches for food and beverage industry with Eden and Pluto

Industry: Food and beverage and packaging  
 Application: Multiple hatches  
 Customer: GEA Food Solutions



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 An automated  
 PowerPak line from GEA

### Customer and application description

GEA Food Solution (formerly CFS Convenient Food Solution) is a German company known as a producer of packaging machines. The machines can be anything from 5 to 25 meters long by connecting different modules that e.g. cut, vacuum, thermoforms, portions or labels the food.

### Problem and requirements

A machine could have 30 to 50 different covers and hatches to safely monitor. Using a conventional safety solution at least 60 to 100 safety inputs would be required. In addition comes high requirements of the IP protection class because of rigorous cleaning with cleanser. The status of each sensor must be given to the control system of the machine.

### Solution

The Eden safety sensors (Adam and Eva) connected to Pluto safety PLC using the DYNlink

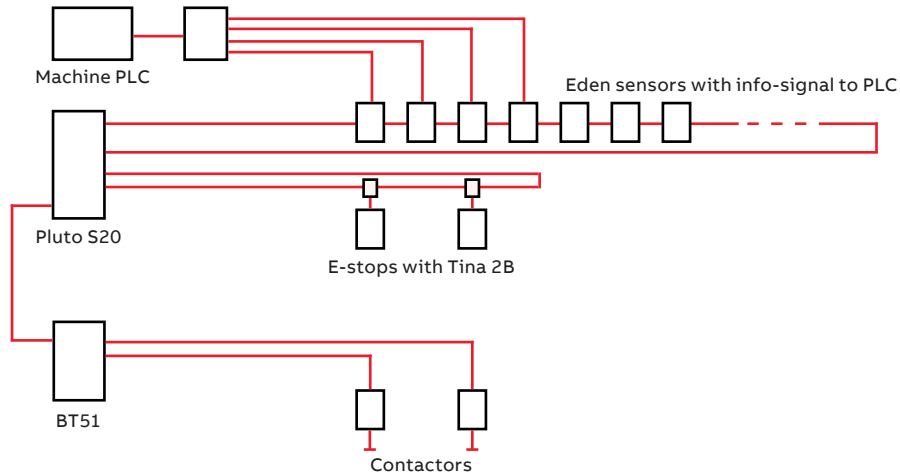
circuit is the perfect solution for GEA. Up to 10 sensors can be connected in series to one safety input.

The information outputs of the sensors are connected to a separate module that informs the machine PLC of the status. This means that a small Pluto S20 with 16 safety inputs is sufficient for almost all machine sizes. If more inputs are necessary a Pluto S46 is used.

Standard E-stops are connected to the DYNlink circuit using Tina 2B. To increase the number of safe outputs from Pluto, a BT51 expansion relay is used.

### Products used

Product	Order code	Quantity
Pluto S20 v2	2TLA020070R4700	1
Adam DYN-Info M12-5	2TLA020051R5100	30-50
Eva General code	2TLA020046R0800	30-50
BT51 24DC	2TLA010033R2000	1
Tina 2B	2TLA020054R1100	2-10



Simplified product connection



#### Cost effective solution

Cost effective solution using a minimum number of inputs while flexible to enable easy future modifications



#### Reliable in harsh environment

Reliable in harsh environment thanks to sensors with the highest IP rating



#### Continuous operation

Continuous operation guaranteed by well tried components in food and beverage industry

#### Conclusion

By using Pluto and Eden with the DYNlink circuit, GEA gets a well tried solution, perfectly suited for the harsh environment in food and beverage industry, while saving money by minimizing the safety inputs needed.

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