Customer and application description
Susteco AB is a Swedish compost systems manufacturer and market leading provider of solutions for on-site composting of food waste. The composting machines, called Big Hanna, have several hatches for adding food waste to the system and accessing the process.

Problem and requirements
All hatches needs to be monitored on the machine to guarantee that no dangerous parts can be reached while the machine is running. Inside the machines the biodegrading microorganisms can create a heat of over 60°C, and the machines are often placed outdoors, requiring sensors that can withstand harsh environments. It should also be possible to easily add more sensors if more hatches are required.

Solution
Pluto safety PLC was chosen as a control unit and for the hatches the non-contact Eden sensors were used. Up to 10 sensors can be connected in series to one safety input on Pluto.

Products used

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<tr>
<th>Product</th>
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<tr>
<td>Pluto S20 v2</td>
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<td>Adam DYN-Info M12-5</td>
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<td>Eva General code</td>
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Safety and protection
Highest level of safety for the operators

Reliable in harsh environment
Reliable in harsh environment thanks to the IP69K Eden sensor

Cost effective solution
Cost effective solution that is flexible to enable easy future modifications

Conclusion
By using Pluto and Eden with the dynamic circuit, Susteco AB gets a well tried solution perfectly suited for the harsh outdoor environment.

“The system ensures that the people who use Big Hanna feel perfectly safe,” says Cecilia Ek, sales director at Susteco AB. “When you work with Big Hanna you can focus entirely on what’s going on inside the machine without having to think about safety.”